Source of December 2024 Issue 61 December 2024

The quarterly magazine for the UK offshore energy industry

Nergerman or, making the most of the UKCS Pinsent Masons lawyers analyse successful corporate trends

Blend *A positive view of the Budget*

Cyberhawk Flying drones in awkward places

Nexos Taking a new approach to an old game

Xergy How Proteus simplfies business for bidders

Draghi's warning The former banker presents a painful diagnosis for the EU

Guest column The importance of catching heartburn early

Oil and gas to remain key in the UK energy mix up to 2050 and beyond

While there will be a fundamental shift in the energy landscape in the coming decades, DNV's landmark UK Energy Transition Outlook (ETO) 2024 report forecasts that fossil fuels will still account for a third of the UK's primary energy supply by 2050.

For 160 years, DNV has built trust and confidence between parties, driven by our purpose to safeguard life, property, and the environment. This latest edition of the UK ETO provides a single forecast for how the energy transition will likely pan out, not a scenario as not all futures are equally likely. It accounts for expected developments in policies, technologies, and associated costs, as well as some behavioural changes.



Download the report to find out more

dnv.com/etouk



WHEN TRUST MATTERS

WHEN TRUST MATTERS

ENERG

TRANSITION

OUTLOOK UK 2024

A national forecast to 2050

Editorial | 4 Letter from the CEO | 5 Downstream news | 6 Upstream news | 8 Emissions | 10 Book review | 11 European news | 12 Jobs & skills | 14 Events | 16 Member news | 20 Membership focus | 26 Guest column | 28 Heartburn: how to recognise it, how to react FEATURES

Blend | 30 How to handle the aftermath from the Budget

Pinsent Masons | 34 M&A and financing upstream: reflections on 2024

Cyberhawk | 36 Drones accessing difficult places

Nexos | 38 Taking a new approach to an old game

Xergy | 40 How Proteus simplfies business for bidders

ssue 61 | December 2024

Welcome to Offshore Energies UK #61

The end of the year is the traditional time to take stock. It is a convenient juncture to reflect, to learn and to grow.

And so what are the reflections of the UK offshore energy industry and the companies, people and talents that continue to drive its success? Our final magazine of 2024 puts the year into view and sets out a path of hope for the year ahead.

In a year of continued turbulence abroad and the impacts this is having on domestic and industrial energy consumers, the case for carefully nurturing the UK's energy resource has seldom been stronger. Across the Channel, high energy costs have also impacted the region's competitiveness as the Draghi Report spells out (see page 42). There is the potential for global events to nudge the remaining oil and gas producers in northwest Europe to raise their output. But managing, not to mention increasing, production while still delivering global climate goals is not straightforward. It raises those familiar questions about security of supply, affordability and sustainability (see pp 8 & 12). Promoting oil and gas as part of the solution to decarbonisation sounds counterintuitive and will certainly take a lot of diplomacy and determination at home and abroad. But imported energy has both an environmental and an economic cost if it is allowed to displace domestic reserves.

For companies at a more mature stage, merging their oil and gas assets or acquiring new technology with those of former competitors and returning cash to shareholders is one solution to making more with less (see pp9 & 34).

In a bracing call to action (see p30), Niall Leadbeater of Blend shows the art of what is possible when industries collaborate, offer solutions and embrace opportunities. An inspiring message to keep front of mind as we look to a critical year for the sector.

And while recognising that the increased tax take will affect confidence and investment, he points out some of the good news: capital allowances remain and the government has committed to a consultation which will define the scheme to replace the levy on profits. Things should therefore be clearer early next year. And he urges companies to take constructive steps to make the most of the UK Continental Shelf but without a disproportionate rise in emissions and with less down-time, more collaboration and tool-sharing.

In this regard, the work being done by drone technology company Cyberhawk (see p36) reduces travelling times and risk as plant emissions, performance and data collection are performed remotely.

In similar vein, Nexos' CEO Terry Allan (see p38) compares the UKCS and its supply chain to a fast-paced ball game: the winner will most often be the player with the greater adaptability, agility and more forward-thinking team. Greater use of modular construction and openness to working in new areas will all help companies to thrive. There is still good work that needs to be done, he argues.

For companies that want that competitive edge in the bidding process, meanwhile, much of the software underpinning the back-office work and logistics that dependable tendering requires can be bought off the peg from Xergy (see p40). The Proteus package reduces time, money and risk by monitoring real-time market conditions.

So, what of 2025? Decisions on the UK Industrial Strategy, energy regulation, a longer-term fiscal policy and more will be consulted on with the industry, but made by government. The UK offshore energy sector has again this year shown it has the fortitude, talent and experience to realise the nation's economic, social and environmental aspirations. If there is sufficient collaboration and pragmatism between governments, regulators and the offshore industry, there is every reason to enter 2025 with hope and optimism for the year ahead.

Finally, let us wish you a happy and healthy Christmas (see p28)!

Editorial

Published by Offshore Energies UK

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

Offshore Energies UK is not responsible for any loss, injury, damage or costs resulting from the use of products or services advertised or featured.

ISSN 2053-5392 (Print), ISSN 2053-5406 (Online) Copyright © 2024 The UK Offshore Energies Association Limited (trading as Offshore Energies UK).

4th Floor Annan House 33-35 Palmerston Road Aberdeen AB11 5QP

Telephone: 020 7802 2400 www.oeuk.org.uk Editorial & Design: William Powell David Jeffree Ross Jackson

Contributors: Lucy Gordon, Lois Rogers, Ross Shewan

Cover picture: Shearwater (Credit: Shell)I

www.OEUK.org.uk



First UK CCS project to start mid-2025

The partners in the East Coast Cluster in Teesside — BP, Equinor and TotalEnergies — have taken final investment decision for their Northern Endurance carbon capture and storage (CCS)project. Financed by the 'contracts for differences' model with the state's Low Carbon Contracts Company (LCCC) as the counterparty, construction will begin in 2025.

The scheme will take CO2 from industry in the region and inject it into the Endurance saline aquifer in the North Sea, which the North Sea Transition Authority has licensed (see *also p10*). Injections will start at 4mn tonnes/yr.

The December 10 decision came hot on the heels of the government's landmark Plan for Change, which aims to drive economic growth. The CCS industry is seen as a sure-fire way to keep heavy industry running in a net-zero world where costly carbon abatement mechanisms will be needed.

Some £4bn-worth of contracts will flow to the supply chain and create around 2,000 jobs initially. Many more will follow as other clusters agree terms.

The government said its mission was to make the UK a clean energy superpower, rebuilding the strength of our industrial heartlands.

BP said the project was "another step forward" for its investment plans in the UK. The projects would stimulate economic growth by supporting thousands of jobs in the "vast supply chains" involved. It would create the infrastructure to help major industrial companies with their decarbonisation plans."

Norwegian state operator Equinor said it had a long history of delivering energy along the UK's east coast, transitioning from traditional oil and gas demand to include renewables and low-carbon options such as CCS and hydrogen. This is a major step for both Equinor and the UK, it said.

TotalEnergies said the Northern Endurance Partnership was "a frontrunner project, and we look forward to transporting and permanently storing CO2 from one of the UK's largest industrial regions."

Ofgem will be the regulator for the CCS economic licence, overseeing the construction of the country's first-ofa-kind CCS network. The LCCC will also play a vital role as counterparty to the CCS business models – the Dispatchable Power Agreement and the Revenue Support Agreement.

Scotland's Budget to support jobs, transition

Scotland published its Budget on December 5. It supports the policy of net zero emissions, saying that this "plays a critical role in supporting a just transition and creating jobs and opportunities for businesses and communities."

Capital funding of £150mn will support the offshore wind sector as part of its commitment to invest up to £500mn over five years. And it will invest over £25mn supporting the energy transition, creating jobs across the supply chain.

The troubled Grangemouth refinery will receive £7.8mn, helping "secure a long-term and sustainable future for the industrial cluster." There is also £15.9mn of funding for the Just Transition Fund for the northeast and Moray that will help support jobs, innovation and secure the highly skilled workforce of the future. Trade union Unite criticised the UK budget for cancelling most of the winter fuel allowance and for "the impending jobs disaster that workers in Grangemouth are facing.

Unite Scotland secretary Derek Thompson said: "The development of a skills passport for North Sea workers is important and long overdue. However a skills passport is not sufficient on its own: it must be backed up by sufficient well paid, skilled jobs in the renewable sector for all workers who wish to transfer to the sector."

Offshore Energies UK said that the oil and gas sector was worth £18.9bn in gross value-added. "The opportunities as we deliver net zero are even bigger. Making the most of this industry's people, companies, skills and experience is the right path to building the energy industries of the future," it said in a statement.

Message from our CEO



David Whitehouse CEO, Offshore Energies UK

This has been an important year for our industry. We have a new Labour government in place in Westminster driving a new agenda. We have a new First Minister in Scotland. In every area of national concern and opportunity, our industry provides remedies and solutions.

In my role at OEUK I have had significant engagement with many members of our new government in Westminster and politicians from across the political spectrum. This engagement matters. And although the challenges facing our sector today have not disappeared and are real, I believe that there is growing realisation of the importance of our sector and what we represent.

Skilled jobs. A world class supply chain. Economic value. Homegrown energy. Our sector has the skills, knowledge, and experience to ensure that the UK's energy future is a success with investment in wind, carbon storage, hydrogen, alongside the oil and gas that this country needs. We must build on our industrial strengths, investing in skills and innovation while at the same time provide the solutions that we need to meet our energy security and climate goals.

So, as we look ahead, the next few months are important. The UK government will consult on the future of oil and gas licensing, offshore oil and gas emissions reporting, the oil and gas fiscal regime, and broader UK industrial strategy.

It is vital that the voices of our companies and the people who work in the sector are heard. I believe that we are facing our challenges as a sector with greater unity and ambition. Operators, developers, supply chain companies of all sizes, and supportive voices from across the economy, united, speaking with one voice about what we bring. In critical times, that unity matters.

Daw Stela

Govt buys Neso from NGrid

The government and National Grid agreed the purchase of the National Electricity System Operator (Neso), with work starting October 1, in a £630mn deal. It is chaired by former E.ON CEO Dr Paul Golby, with Fintan Slye as CEO. Conceived in the 2023 Energy Act by the previous government, its extensive remit includes oversight of the national hydrogen electricity, gas and infrastructure, as well as renewable generation, storage and carbon capture and storage.

In a September 13 joint statement, Ofgem CEO Jonathan Brearley said it was a "huge step forward in ending Britain's exposure to volatile energy markets and getting clean, renewable power to every single one of us."

Energy Secretary Ed Miliband said the deal marked a "milestone for Britain's energy system". Public ownership meant it would provide "impartial, whole-system expertise on building a network that is fit for the future."

This future will be free from the influence of "expensive, insecure fossil

fuel markets." Instead UK will rely on "clean, cheap homegrown power that we control." This would lower costs but also support skilled jobs across the country, he said.

Neso will unify the planning of electricity and gas systems and have independent oversight for the design of all Great Britain's energy networks.

The move will enable investors to build out new energy infrastructure with confidence in how their project will fit into the country's wider clean energy plan. Mission Control – headed up by Chris Stark – has already given Neso one of its first tasks: advise it how the UK will hit its goal to deliver clean power by 2030.

National Grid CEO John Pettigrew said the company looked forward to working with Neso, "accelerating the decarbonisation of the energy system for the digital, electrified economies of the future."

Dr Golby said Neso would "support a more integrated and co-ordinated strategy to meet the unprecedented challenges of climate change, ensuring security of energy supply and keeping bills as low as possible."

Neso gives warning of risks to clean UK power date

Neso has published its advice on how best to achieve clean power by 2030. This is its first since its establishment, in its capacity as a strategic advisor to the government, which now owns it, and the energy markets regulator Ofgem. It makes difficult reading as it puts into context what is needed for the goal to be met.

On the upside, it says It is possible to build, connect and operate a clean power system for Great Britain by 2030, while maintaining security of supply.

But on the downside, it warns that the pace of work must accelerate at a record pace.

Several elements must deliver at the limit of what is feasible and outstrip past achievements: a key challenge will be making sure all deliver simultaneously, in full and at maximum pace, in a way that does not overheat supply chains, is sustainable and sets Great Britain on the right path beyond 2030. It also advises of the need to:

- Harness the value of flexibility for households, businesses, suppliers and aggregators by unlocking markets, promoting engagement and removing wider barriers;
- Contract as much offshore wind capacity in the coming one to two years as in the last six combined;
- Deliver first-of-a-kind clean dispatchable technologies, such as carbon capture and storage and hydrogen to power;
- And to build all planned transmission network on time, which is twice as much in the next five years as was built in total over the last decade.

New planning for Scotland

The UK and Scottish governments proposed October 28 ways to speed up the process for large energy projects without ignoring the views of communities affected.

It can take up to four years to approve large electricity infrastructure projects in Scotland, such as power lines and onshore wind farms, under UK legislation dating back to 1989.

This system can create uncertainty for investors and communities. In England and Wales by contrast, legislative have halved this period.

Energy minister Michael Shanks said: "We are modernising outdated bureaucratic processes to make sure Scotland is firmly open for business as we build the UK's clean energy future. This will help to accelerate new clean, homegrown energy – taking us a step closer to energy independence and protecting bill-payers from the rollercoaster of volatile fossil fuel markets for good."

Clean energy support

The two governments also signed an agreement to support clean energy supply chains and infrastructure, via new partnerships between Great British Energy. This state agency will be headquartered in Aberdeen — with subsidiary offices around the UK — and other public bodies in Scotland.

The changes cover the entire process from pre-application to challenging decisions, tackling issues that have already been addressed in England and Wales under previous reforms. They include pre-application requirements to involve communities at an earlier stage and so improve the quality and speed of applications. The Scottish government will also be able to charge fees for preapplication services, helping to deliver the new system effectively.

And the plan is to standardise the appeals process, with set criteria for challenging decisions and a six-week time limit to raise objections. At the moment objections must be brought by judicial review within three months and can lead to lengthy delays.

National Gas confident about winter supplies

The capacity is there and the market will provide the gas
Industrial demand has not recovered from the high prices

GB grid operator National Gas expects lower retail prices to lead to a 1bn m³ rise in household demand this winter (Oct 2024-Mar 2025). But it does not expect industrial sites to draw more gas, while the power sector will use a little less than last year as renewable electricity output grows, it said in its *Winter Outlook*.

That said, the swings between low and high gas demand days are growing, which was particularly emphasised in November-December 2023. Gas then accounted for a high of 61% ib November 30 and over 50% on four consecutive days around that date. This shows the importance of having both a diverse and flexible gas supply portfolio and the capacity to deliver.

With the usual caveats about unpredictable short shocks to supplies, Britain's gas transmission company says there is enough capability to meet 1-in-20 demand day even if a major part of the network should fail (taking up to 72mn m³/d offline). That would still leave 55mn m³/d surplus

A more resilient continent is also reason to be cheerful: it has more terminals able to take liquefied natural gas and at time of writing (early October) dry gas storage facilities are over 95% full, even excluding what Ukraine's storage – Europe's largest facilities – could deliver. So there will be less demand from the continent. Even with Ireland included, flows will be down.

It said while it was reasonably confident that the market will work, there is still the risk of events that, together or separately, could jeopardise the security of the EU and by extension Great Britain.

Origin	2023/24	2024/25	Max
UKCS	117	100	100
Norway	141	141	141
EU imports	125	112	89
LNG	150	150	150
Storage	124	121	121
Total	657	624	601

Early start for Rough storage

The Rough offshore gas storage site pumped gas into the UK for the first time this winter on November 8, during a period of still, cold weather. Overall, The depleted reservoir delivered 4.35bn ft³ to the national gas transmission system (NTS) during November 1-29.

Centrica, its operator, has also confirmed that Rough reached a new record fill level on November 5 since reopening in 2022.

Rough can provide half of the UK's total gas storage capacity but it has a longer cycle than salt caverns. The site is filled with gas when demand is lower, while salt caverns allow short-term arbitrage. If the facility had been able to operate at maximum capacity over the peak of the energy crisis – a scenario that Centrica says is unreachable without regulatory certainty – it would have saved UK consumers over £5bn.

This year's colder November has led to early withdrawal from storage sites, reducing storage capacity in the UK before winter officially starts. With gas prices high and flat, some site owners may struggle to refill as the country heads into December. There is for example a lot of uncertainty about gas prices from January when the five-year transit agreement between Russia and Ukraine ends on December 31.

Rough holds 44% of the UK's natural gas storage inventory, holding three times as much gas as the second largest facility. With the UK going through a period of low renewable generation, Rough will likely have an even bigger impact for the coming winter.

Scotland backs green industry

The Scottish government has launched a green industrial strategy, based on the principles of a circular economy, as one of its tools to accelerate the transition.

Wind turbines for example are very wasteful in terms of energy, especially given the difficulty of re-using fibre glass.

They could be made easier to take apart and repair or recycle.The 2023 Onshore Wind Sector Deal committed to deliver at least one specialist blade treatment facility in Scotland by 2030. The strategy also creates a plan for carbon capture and storage on both a local and national level. It focuses on using Scotland's extensive geographical CO_2 storage capacity to manage emissions by capturing and reusing CO_2 in industrial processes or storing it underground.

Industrial sites will produce the initial supply of CO_2 for storage in the

Acorn Project, which is expected to store at least 5mn tonnes/yr of CO_2 by 2030, with an estimated total storage capacity of 240mn tonnes.

The Scottish government has pledged to work closely with partners such as Zero Waste Scotland, enterprise agencies, and the Scottish Environment Protection Agency. It will work to ensure waste management regulations permit circularity.

Upstream E&P lags global need for more gas: GECF

- Chasing ESG ratings is limiting future supplies

- Governments have a duty to their consumers, producers

A report by the Gas Exporting Countries Forum (GECF) has warned that not enough money is being invested in upstream gas resources. While the reasons for this are understandable and 2022 saw a record annual growth spurt, it says the consequences could be grave.

Producers have been making record profits upstream, as evidenced by their share buy-backs and debt repayments. But they have not been ploughing enough back into exploration and production to provide reassurance of plentiful future supplies.

Instead they are responding to pressure from stakeholders and regulators to decarbonise in the name of the Paris Agreement.

Companies are also keen to raise environmental, social and governance (ESG) scores (*OEUK Magazine #60,* p_17). Displacing coal from Asia's power mix with imports of liquefied natural gas no longer goes down so well with Wall Street, even as the physical health of those populations worsens with air quality. It is not CO₂ that damages lungs.

Interestingly though some of the majors are already courting criticism in some sectors of the media for "rowing back" on their renewable targets.

"ESG measures are becoming one of the determinants of future energy investment including natural gas. This pressure has shifted investor

IOGP appoints decom co-chairs

John Gillies and Joe Leask are the new co-chairs of the International Association of Oil & Gas Producers' Decommissioning Committe.

Shell's Bert Fokkema has stepped down after three years as chair, following five years on the committee. Mr Gillies is the principal decommissioning engineer at ExxonMobil where he has been for 33 years. He worked on production operations, development planning and capital projects, before leading decommissioning projects.

Mr Leask is the decommissioning compliance and strategy manager for

preferences away from long-cycle upstream oil and gas projects, particularly exploration activities," the report says. Beneficiaries are projects with shorter lead times, such as shale oil and shale gas developments.

In conclusion, it says, the prolonged downturn is showing signs of changing direction as global energy demand and profitability are rising. But so too are the risks and uncertainties, including environmental policies and regulations and the world's chances of decarbonising and electrifying. Talking up its members' book, but with plenty of solid research to back it up, the body says governments and regulatory bodies should actively encourage investment in natural gas projects in order to protect the interests of both natural gas producers and consumers.

For producers, measures such as fiscal incentives, streamlined permitting processes and funding for technological innovation can reduce risks and upfront costs and spur the development needed to increase supply.

A sustained, balanced approach to capital allocation between short-cycle and long-cycle projects is essential to provide a crucial buffer against unforeseen market volatility but will also ensure a steady and reliable flow of gas supply to meet evolving energy needs.

the UK major BP's global portfolio. Since entering the industry in 2011, he has held positions in the supply chain, with operators and in Offshore Energies UK (OEUK) as decommissioning manager.

Mr Leask has been involved in the IOGP Decommissioning Committee for seven years. He said the committee was "an excellent example of industry collaboration, of which the recent comparative assessment guidelines are a great example: "Operators can now leverage international best practice while engaging with regulators on key decommissioning decisions," he said.

NSTA, Crown Estate link up

The Crown Estate and the upstream regulator North Sea Transition Authority (NSTA) have agreed informally to work together to realise the energy and carbon storage potential of the UK continental shelf they said October 10.

The scope of their areas for cooperation is outlined in a Statement of Intent to enable sustainable marine development and a co-ordinated approach to managing the seabed while extracting economic value from the users where appropriate.

The two agencies have distinct but complementary roles in relation to many aspects of offshore energy and the utilisation and management of the seabed and its resources. Where possible, they said they will try to collaborate "where relevant while recognising our individual remits."

The Crown Estate manages the seabed and renewable energy rights within the economic zone in England, Wales and Northern Ireland and provides rights to natural resources (excluding fossil fuels), electricity generation, transport and storage of natural gas and carbon dioxide on the UK Continental Shelf. In December it announced funding to help kick-start projects drawing down from a £50mn fund for UK supply chain projects servicing offshore wind.

The NSTA regulates the UK oil and gas, offshore hydrogen and carbon storage industries and supports UK energy security, drives emissions reductions and helps accelerate the transition to net zero and realise the potential of the North Sea as an integrated energy basin. Some areas overlap, such as the colocation of offshore wind with carbon sequestration wells.

NSTA portals offer free data

The Offshore Energies Digital Strategy Group has highlighted the value of free data portals, signposting where they can be found. The NSTA will host a workshop February 27 to raise awareness of the availability of data portals, the information they contain and how to access them.

NSTA spurs on M&A

The North Sea Transition Authority has issued new guidance to enable mergers and acquisitions offshore to complete faster, it said October 9.

Its recommendations are intended to "encourage buyers, sellers and interested third parties to work together to ensure that transactions go through quickly and the full potential of the North Sea is met," it said.

The NSTA says more than 100 transactions of all sizes occur annually and the guidance suggests ways of ensuring they proceed efficiently.

"The energy transition requires significant investment as well as collaborative working between the many companies operating in the North Sea. This Guidance will assist that important process," said the NSTA.

Delays to completion increase costs, prolong uncertainty and hold up operational and strategic decisions. This creates barriers to investment and is counter to the NSTA's original objective of maximising the economic recovery of the UKCS' oil and gas.

NSTA appoints new chair

Policy expert Liz Ditchburn (*below*) has succeeded oil industry veteran Tim Eggar as chair of the offshore regulator North Sea Transition Authority. A former energy minister in the 1990s, he had been in the post for over five years.

Announced October 16, the new chair has worked at a senior level for both the Scottish and UK governments, most recently leading on all aspects of the Scottish economy in its drive towards net zero. Previously, she was the director of policy at the Department for International Development, now part of the Foreign and Commonwealth Development Office.

Ms Ditchburn said: "The prize if we get this transition right is huge but the stakes for communities and individuals if we don't are high." Some 200,000 people are employed in the offshore energy industry, and the transition means this figure will be much lower.

NSTA CEO Stuart Payne said Mr Eggar had been a "strong leader, advisor and supporter to both my predecessor Andy Samuel [the CEO of the NSTA 2015-22] and myself."



Shell, Equinor UK to merge

UK major Shell and Norwegian state energy giant Equinor have agreed to combine their UK offshore oil and gas assets to form a new company. The 50-50 self-funded joint venture, yet to be christened, is expected to be approved late next year but it will take economic effect in early 2025.

It will be the UK continental shelf's' biggest independent producer and help to sustain domestic oil and gas production. It will also strengthen security of UK energy supply, they said in their December 5 statement.

Equinor's ownership stake will be equity accounted and the company will not report any investments related to the company.

They added that the combination of portfolios and expertise will allow continued economic recovery of vital oil and gas. The JV will be "more agile, focused, cost-competitive, and strategically well positioned to maximise the value of its combined portfolios on the UKCS," they said.

The JV will include Equinor's equity interests in Mariner, Rosebank and Buzzard; and Shell's equity interests in Shearwater (see cover), Penguins, Gannet, Nelson, Pierce, Jackdaw, Victory, Clair and Schiehallion. A range of exploration licences will also be part of the transaction.

Equinor said the deal would strengthen its near-term cash flow, and play a crucial role in securing the UK's energy supply."

Shell said the JV would help play a critical role in a balanced energy transition.

The JV is expected to produce over 140,000 barrels of oil equivalent/day in 2025 of which 70% will be Shell's.

Excluded are Equinor's cross-border assets, Utgard, Barnacle and Statfjord, its offshore wind portfolio and its hydrogen, carbon capture and storage (CCS), power generation, battery storage and gas storage assets.

Shell UK will retain the Fife natural gas liquids plant, the St Fergus gas terminal and floating wind projects. It will remain the technical developer of Acorn, Scotland's largest CCS project.

National Grid meets LNG emissions standard

– Operators need reliable emissions data about their plant

- Uniper cargo from US also assessed favourably for carbon intensity

US emissions certification company MiQ has certified the performance of National Grid's operations at its liquefied natural gas (LNG) import terminal at the Isle of Grain in Kent. This is the first port outside North America to be so certified. It is also Europe's largest terminal.

The 'b' rating is sufficient for buyers to choose cargoes based upon their methane emissions profile. MiQ's pioneering Supply Chain Protocol offers gas buyers a credible estimate of emissions from LNG, enabling them to avoid methane emissions from the supply chain.

Grain LNG's certification meets LNG buyers' demands for greater transparency about their purchases. This certification also comes at a time when Grain LNG is being expanded to store and deliver enough gas to meet about a third of UK demand (*see p12*).

MiQ said "National Grid and Grain LNG have shown true leadership as the first operator to receive certification outside the US." MiQ provides a credible, third-party audited and transparent verification system of methane emissions from the oil and gas sector.

Terminal owner National Grid Ventures, said its stakeholders all expected the best possible service and that the accreditation testified to that service.

MiQ certification will also enable producers to meet the EU's new

requirements for source-level reporting and third-party verification and therefore continue to access markets in the EU. MiQ has also partnered with US

shale gas producer EQT and German energy supplier Uniper in a pilot carbon intensity scheme. Uniper imported a cargo of LNG using the MIQ Supply Chain Protocol to calculate its greenhouse gas intensity – the first time it has been used for full chain reporting, MiQ said September 18.

MiQ's findings estimate that the transaction for EQT-produced gas was at least 24,123 tonnes of CO_2 equivalent using a 20-year global warming potential; or 68,904 tonnes less than today's US industry average.

MiQ CEO Georges Tijbosch said that the EU regulations that took effect in August made compliance crucial. "We look forward to partnering with LNG exporters and European buyers to ensure both compliance and market development," he said.

MiQ said achieving full supply chain transparency was difficult owing to the complex nature of LNG supply chain structures.

Uniper said the transaction was a blueprint for EU importers to demonstrate the source of imported gas to national authorities. The new EU import requirements apply to other fuels too, such as oil and coal, enabling buyers to choose lower-emission options.

Climate Change Committee hires Energy UK head

The former head of Energy UK Emma Pinchbeck is now the head of the Climate Change Committee. She succeeds Chris Stark, who left the CCC in January for the Carbon Trust after six years.

Under his tenure, the CCC recommended a UK net zero target by 2030, which the prime minister of the day, Theresa May, made a legally binding target.

Ms Pinchbeck is an expert in whole-

economy decarbonisation and the energy transition and a Fellow of the Energy Institute. From 2016 to 2020 she was the deputy CEO of Renewable UK. Before that she was the head of climate change and energy at the charity WWF-UK, where she worked on the 2015 Paris Agreement, UK coal phase out and the design of UK renewables policy.

Energy UK's deputy CEO Dhara Vyas will step up as CEO until a replacement is in the post.

UK breaks CCS deadlock

The government and two clusters of industrial emitters have reached a commercial agreement to fund and launch two hydrogen-based carbon capture and storage (CCS) projects, the Department for Energy Security and Net Zero said October 4.

The producers TotalEnergies, BP and Equinor welcomed the news as they took final investment decision as the Northern Endurance Partnership (see *p4*). The hydrogen industry body said decarbonising gas at the beach terminals was central to achieving the UK's goals and ensuring the UK remains at the forefront of the global hydrogen economy.

The government confirmed up to £21.7bn of funding over 25 years. But other projects, such as the pioneering Acorn project in St Fergus and the more recent Morecambe Bay Net Zero project, are still negotiating terms with the government.

Without CCS, industries such as steel and cement will continue to emit greenhouse gases into the atmosphere, making it harder to achieve net zero – a key part of the UK commitment to the 2015 Paris Agreement on climate change.

The expense of CCS will be partly offset by the avoidance of paying tax on carbon intensity of imports (CBAM).

Based in Teesside and Merseyside, the projects are expected to bring in £8bn of private investment and directly create 4,000 jobs and support 50,000 more as they help remove over 8.5mn metric tonnes/yr of CO2 for sequestration under the seabed.

Chancellor of the Exchequer Rachel Reeves said the announcement "follows advice from the independent Climate Change Committee, who described CCUS as a 'necessity' for the UK to reach its legally binding target for net zero emissions."

The plan will also support the oil and gas sector's transition away from high emission fossil fuels by using the transferable expertise of some of their workforce. A fully functioning carbon capture industry is expected to add around £5bn/yr to the UK economy by 2050.

Book review

Gasholders A History in Pictures Russell Thomas, Timur Tatlioglu Edited National Grid Historic England ISBN: 978-1-83553-849-4 228 pages hardback

Working gasholders have vanished from the British sky-line, following their associated gasworks into history. The advance of the natural gas transmission and storage system made them redundant. None of the successive refinements of design were fully able to justify their place for long in the 21st century, despite their seeming solidity.

This handsome large-format hardback volume, with a very high ratio of excellent plates to text, reminds us of what we have lost. It is divided up into a dozen logical sections – their evolution, construction, engineering – with an epilogue on their future repurposing. This can be a painstaking task but the effort and cost are worth it.

Fed by coal originally and hence dotted along canals and railways around the outskirts of cities across the UK, their often whimsical flourishes hinted anachronistically at classical glory.

They are gradually being decommissioned or incorporated into architectural designs such as Kings Cross – at least where their aesthetic value is considered worth preserving.



But with the advent of North Sea gas and new industrial processes, their skeletal forms, looming over the Oval cricket ground, or standing in the shadow of York Minster, have ceased to serve any purpose.

Some had a temporary reprieve, being replaced by, or converted into, storage and regasification facilities for liquefied natural gas. These were often situated at the end of the network far from the beach terminals. Most of these too have been overtaken by changing technology such as bullet tanks; or made redundant by the competitive gas trading and transport arrangements. But others have been awarded the status of listed buildings and still stand.

Described by National Grid's head of commercial property Phil Edwards

as "unique hybrid structures, part building, part machine," their familiar outlines are now of historic interest only. Nevertherless, as the foreword points out, they retain a special place within the public consciousness as symbols of a bygone era, the forerunners of full-scale industrialisation and a reminder of the transitory nature of progress.

But in a surprising footnote, the UK still supplies gasholders globally, author Russell Thomas told OEUK.

The Cape Motherwell Bridge subsidiary of Altrad Services still carries out the tradition of Clayton Walker gasholder manufacturers from Wakefield and Lazarus & Associates, a newer company. Both design gasholders for dry gas, although these are more or less the same as already existing dry gasholders.



Shell wins Dutch appeal

- Court finds that corporations have a responsibility for the Paris Agreement targets

- But consumer demand for oil and gas remains strong

The Dutch Court of Appeal overturned the District Court of The Hague's 2021 ruling brought by Milieudefensie and other non-governmental organisations against the UK major Shell.

The District Court ruled that Shell had to cut emissions by 45% by 2030 relative to 2019 and that it was responsible for both corporate and consumer CO2 emissions. No other oil companies were similarly sued.

Commenting, the energy specialist law firm Herbert Smith Freehill said the District Court's ruling was "highly significant and a substantial advance on the capacity for courts to intervene in the businesses of corporates when addressing climate change. It also served as an impetus for further climate change-related lawsuits against corporate actors across the world. It was the first time a national court had compelled a private company to align its group corporate policies with climate strategies and to reduce emissions in line with the Paris Agreement."

The Court of Appeal did affirm, as the Court had done in its 2021 ruling, that companies like Shell have their own responsibility in achieving the targets of the Paris Agreement. However, the law firm pointed out that the court acknowledged that no regulations – or the social standard of care itself – are premised on the starting point that each individual company is subject to any absolute emissions reduction.

In a November 12 statement, CEO Wael Sawan said the reversal of the first ruling was "the right one for the global energy transition, the Netherlands and our company. Our target to become a netzero emissions energy business by 2050 remains at the heart of Shell's strategy and is transforming our business. This includes continuing our work to halve emissions from our operations by 2030. We are making good progress in our strategy to deliver more value with less emissions."

Shell added that the past few years have highlighted the critical importance of secure and affordable energy for economies and people's lives. "At the same time, the world must meet growing demand for energy while tackling the urgent challenge of climate change, it said, and added that governments have introduced policies to encourage investment and drive changes in demand.

But a court ruling would not reduce overall customer demand for products such as petrol and diesel for cars, or for gas to heat and power homes and businesses. It would do little to reduce emissions, as customers would take their business elsewhere. Shell said that what would drive the change towards net zero emissions was smart policies from governments, along with investment and action across all sectors.

Europe vies with Asia, LatAm

- Demand and supply of LNG are finely balanced

- More investment is needed upstream, says the International Gas Union

Global trade has pushed up the price of both European and Asian benchmarks and supply and demand are finely balanced, according to a report by the International Gas Union (IGU). There is limited supply growth as demand rises steadily, up by 1.5% in 2023, with an expected acceleration to 2.1% by the end of 2024. Asia continues to be the key engine of this growth, while North America and the Middle East are in the lead on the exports.

The gas price at the UK hub, the National Balancing Point, is tied to the Dutch Title Transfer Facility (TTF), plus or minus the cost of transport, depending on whether the UK is importing or exporting. The TTF is the most liquid of Europe's delivery points.

Should global gas demand continue to grow as in the last four years, without additional production development, a 22% global supply shortfall is expected by 2030. If demand continues to strengthen, the shortfall will be more pronounced. This underscores the urgent need to scale up investments, the IGU report says.

Droughts in central America and war in the Persian Gulf have also hit seaborne trade canals. Any surge in demand or reduction in supply could therefore result in a further strengthening of prices.

Among the reasons for the unexpected shortfall in LNG deliveries to Europe is the later than expected start up of commercial offtakes from Venture Global (VG)'s liquefaction plants in the US Gulf.

The operator is using new, modular liquefaction technology and has been testing it out with sales of LNG on its own account, with Asian markets being among the recipients. More might otherwise have arrived in Europe. VG has signed contracts to use capacity in the UK and Greece: it has secured about 1mn tonnes/yrof regasification capacity at the new Alexandroupolis LNG receiving terminal in Greece for five years, beginning in 2025. Venture Global's capacity will account for about a quarter of the total terminal capacity, or about 12 cargoes annually.

And earlier this year VG booked 3mn tonnes/yr regasification capacity at Grain LNG, with effect from 2029 when expansion work should be complete. VG has also ordered nine super-clean carriers to deliver the LNG, the first of which, the, the 174,000 m³ Venture Gator, has been transferred to VG.

The Grain terminal will have enough regasification capacity to service about a third of the UK's gas demand, the operator said. The UK has recently seen a significant rise in LNG imports as Europe has diversified its LNG sources.

HSE Conference 2025

6 February > P&J Live, Aberdeen

The HSE Conference is a must for all health, safety & environment professionals across the energy sector. Gain insight into how you can better negotiate the challenges and pressures on the industry, enabling you to exceed HSE performance benchmarks year on year while you focus on protecting people and the environment.

Book your tickets here for the HSE conference



Principal sponsors





Celebration for award-winning Connected Competence programme.

In October, over 40 operators, contractors, training providers and industry partners gathered at OEUK's headquarters in Aberdeen to formally toast the success and growth of the industry-led Connected Competence programme.

Connected Competence is enabled by the Engineering Construction Industry Training Board (ECITB) and developed with some of the UK's largest contracting companies. Each one is committed to working together to use standardised training and testing based on the ECITB's technical tests. The programme has been developed with OEUK as a key partner.

Supporters of the initiative, including OEUK, achieved national recognition for their achievement when they won the Collaboration category at the 2024 Energy Industries Council (EIC) National Awards in October.

As he opened the celebratory event, OEUK CEO David Whitehouse said Connected Competence "is a great example of industry associations working together towards a common purpose of supporting the offshore industry and its workforce." He noted people in the sector have enabled it to power the UK for over 50 years and their skills are vital for its future aspirations.

ECITB CEO Andrew Hockey said: "Connected Competence is an exemplar of key stakeholders in the oil and gas



industry working together to push the boundaries and deliver true sector collaboration. It has led to reduced duplication of assessments when workers have moved between sites and contractors, and increased cost efficiencies."

Mr Whitehouse noted there will continue to be demand for those with technical competence in crucial skills like pipe-fitting, plating, mechanical maintenance, electrical installation and many other skilled trades.

Connected Competence is a highly effective way for time-served employees to demonstrate and future-proof their knowledge, ensure technical competence and contribute to good safety performance throughout the transition to low carbon energies.

Connected Competence has been recognised for the way it creates a workforce with recognised, transferable skills while facilitating a seamless transfer for individuals between companies and, in the very near future, other energy sectors.

ECITB is working with other sectors to achieve this goal- a crucial factor in delivering a successful transition.

To find out more www.ecitb.org.uk/news/connectedcompetence-recognised-with-award/

- Connected Competence, enabled by the ECITB, was developed in collaboration with some of the UK's largest contracting companies, each committed to using a standardised way of verifying technical competence based on the ECITB's technical tests.
- The programme has grown significantly. Ten major contractors have now signed up to the scheme including Aker Solutions, Bilfinger, Boskalis, nexos, Petrofac, Ponticelli UK, Semco, Stork UK, Wood, Worley. Together, they employ more than 75% of the craft and technician workforce in the UK's upstream oil and gas industry.
- The 20 client companies that recognise and advocate the programme include Apache, bp, Centrica Energy Storage+, CNOOC, CNR International, Dana Petroleum, ENI, EnQuest, Equinor, Harbour Energy, INEOS Energy, Neo Energy, Neptune Energy, Repsol, RockRose Energy, Serica Energy, Shell, Spirit Energy, TAQA and TotalEnergies.
- It has secured backing from Unite the Union, GMB Union and the RMT Union as well as the HSE, the Scottish Government, Step Change in Safety, Offshore Energies UK and NSTA.
- Work is underway to roll out Connected Competence to other sectors across the engineering construction industry. With a skills shortage forecast, the industry is focusing on building resilience and ensuring people in the workforce are technically competent across diverse industrial sectors.

What the budget means for jobs and skills

UK engineering institutes have responded to the October 30 Budget, where Chancellor of the Exchequer Rachel Reeves promised to "turn the page on the last 14 years."

The statement also promised record levels of government investment in research and development, with £20.4bn allocated for 2025-26

The Institute of Mechanical Engineering (IMechE) said that the government should work with the engineering sector to deliver an industrial strategy that boosts productivity, supports the development of a skilled workforce and delivers on our net zero commitments.

Green hydrogen boost

Green' hydrogen – produced using renewable energy – won significant backing in the budget, with funding announced for 11 projects.

Ms Reeves described them as "amongst the first commercial scale projects anywhere in the world" and Bridgend in Wales and Barrow in Furness in England are likely sites.

IMechE said that the transition to hydrogen would require a range of technical skills in addition to academic and industrial researchers and "must be part of a holistic approach to the energy transition and the £6.1bn support for core research funding in engineering will help nurture groundbreaking technologies and innovation in the energy sector."

Technical skills needed

Labour's commitment to 11 new green hydrogen plants will help make Britain "a clean energy superpower,"

said the Institution of Engineering and Technology. But it said this would require technical skills too, such as project management.

The settlement will provide £134mn to support the delivery of port infrastructure to facilitate floating offshore wind."

Ms Reeves also announced plans to transform the Apprenticeship Levy into a 'Growth and Skills Levy' at a cost of £40mn. "Skills England will take the time to consult with a wide range of partners to ensure that levy-funded training meets the needs of employers, providers, and learners, and secures good value for money," the budget said. EngineeringUK also welcomed Ms Reeve's commitment to education and skills as "a central pillar of the government's growth agenda."

Share Fair 2025

Wednesday 19 March P&J Live, Aberdeen

Illuminating business opportunities for the energy supply chain

Organised with the support of the North Sea Transition Authority, Share Fair aims to deliver value to participants whether buyer or supplier by encouraging early focused engagement on ways to work collaboratively on UK energy projects.



Events

OEUK Decommissioning conference

A maturing province, with a less attractive fiscal regime, means that the focus is shifting more and more towards managing end-of-life assets

More than 500 people attended the sell-out Decommissioning 2024 conference in St Andrews, Scotland, in November. Among the themes was the need for better knowledge sharing and collaboration. And there was a welcome for all the new talent and partnerships who will help advance this vital work. The event highlighted progress in removing massive offshore platforms from UK waters, some of which weigh more than 30,000 tonnes. These projects, unparalleled globally in scale and complexity, involved over 200 platforms, 2,500 wells, and 12,000 km of pipelines in 2023 alone. Conference

contributions were provided by industry leaders from across the world, but specialist UK companies are leading many of these challenging projects. With plans to plug 200 wells annually and a \pounds 2.4bn yearly spend, the industry is creating significant opportunities students professionals. for and Despite fiscal uncertainties and evolving regulations, the supply chain continues to perform, albeit under heavy financial and logistical pressures. Decommissioning work is expected to generate a total spend of around £25bn over the next decade. A specialist industry team convened by OEUK has

now published the world's first offshore wind turbine decommissioning and work breakdown structure guidelines, which were launched at the conference. Skills transferability is expected to sustain careers in the sector for decades although there will not be the need for the same numbers.

Alongside the new guidelines, the 2024 Decommissioning report detailing the sector's opportunities and challenges was also published at the conference. With some decades of experience under its belt, the industry is demonstrating it can meet its legal and regulatory obligations safely, cost-effectively and on time.

OEUK Awards

The annual event was this year marked by a bumper turn-out

An inspirational apprentice keeping his colleagues safe offshore; robotic crawlers for inspecting confined spaces and an innovative company leading the way in hydrogen hubs are just some of the people and projects to have secured accolades at last night's OEUK 2024 Awards ceremony.

Around 600 people from across the industry gathered to celebrate at the annual celebration of the sector's stars sponsored by Shell U.K. Limited, at the P&J Live on Thursday November 28.

Hosted by barrister turned broadcaster, writer and social equality advocate, Rob Rinder MBE, the OEUK Awards recognise outstanding performance from companies, as well as high-performing individuals, for their unique contributions to the sector.

Hailing the winners, OEUK's chief executive, David Whitehouse said:

"This is the largest Awards event we've had for a decade with over 40 finalists inspiring us with their achievements. These remarkable people, exceptional teams and enterprising companies are making a difference to our everyday lives and their exciting achievements are helping to ensure we can become a world leader in delivering the clean energies of the future."



Front row L-R: Barry Marshall, AISUS Offshore; Rob Fox, SLB; Amy Connelly, Shell U.K.; Hazel Paige, Centrica Energy Storage+; Amie Shewan, Ocean Installer; Jamie Dempster, OceanWinds.

OEUK Legal conference

Artificial intelligence (AI) and the regulatory path to net zero for carbon capture and storage plus hydrogen were two topical themes at OEUK's Legal Conference, which celebrated its 10th anniversary this year.

More than 150 people attended the event at Aberdeen's Ardoe House Hotel in September, which was sponsored by Clyde & Co, with CMS as supporting sponsor.

OEUK's director of external affairs Jenny Stanning gave an illuminating insight into the new political landscape, outlining the work being done to ensure the new government understands the offshore industry's crucial role in delivering the energy transition.

Topical themes included the government's proposed Industrial Strategy, GB Energy as well as Labour's first electoral test, when the Scottish government election takes place in 2026.

OEUK's energy policy head Enrique Cornejo focused on the regulatory landscape shaping the homegrown transition to low carbon energy. He noted that the UK has some 78 Gt of CO2 storage potential. He also highlighted to attendees the range of OEUK publications available on energy sustainability.

Generative AI, technology that doesn't just analyse but also creates content, was the subject of a highly imaginative and informative session presented by CMS. Noting that 75% of people now use AI at work, with take-up doubling



over the past six months, the team discussed both the risks and benefits of this rapidly evolving technology.

While AI can be seen as taking away some of the menial work involved in legal activity, such as manual comparison of documents, the CMS team suggested organisations need to consider aspects like regulatory compliance and data anonymisation as well as things like intellectual property ownership. They also noted that generative AI is a language prediction engine rather than a knowledge engine. The lively and thought-provoking session closed with Gideon Green, an associate at CMS, sharing a country and western song about the conference and the energy industry composed by generative AI.

The conference included a series of informative case law snapshots in topics ranging from termination of convenience clauses as a cap on loss of



profits claim presented by Kirsti Olson, partner at law firm Dentons; and a spotlight on whether heads of terms are binding, and what is the impact of 'subject to contract' in a case study shared by Fiona Cain, counsel, Haynes Boone.

After the lunch break, lain Clarke, a partner at Gilson Gray, presented an extensive explanation of *force majeure* and *reasonable endeavours* relating to a Supreme Court Judgement of RTI Ltd (Respondent) and MUR Shipping BV (Appellant) providing insights on a number of practical issues.

Among the afternoon sessions was a focus on contemporary issues in the North Sea through the lens of joint operating agreements and related obligations. Partners contractual from Clyde & Co discussed challenges facing investors and operators in the UK offshore oil and gas sector and recent examples of climate litigation including Client Earth and the Financial Conduct Authority; Finch on behalf of Weald Action Group that has set a precedent for scope 3 emissions and environmental impact assessments; and the judicial review commenced by activist groups Greenpeace and Uplift relating to the development of the Rosebank and Jackdaw fields.

The conference concluded with a comprehensive update on the Finch v Surrey County Council case presented by John MacGregor KC, Axiom Advocates.

OEUK Wells conference

Problem-solving wells specialists rise to the energy transition challenge at sell-out conference

'Unlocking Homegrown Energy: The Changing Role of Wells' was the theme of OEUK's sell-out conference at Aberdeen's Union Kirk in October, sponsored by the North Sea Transition Authority with additional support from Well-Safe Solutions, Stepwise and Exceed.

More than 130 delegates drawn from operators, supply chain companies, start-ups and regulators participated in the event with Archer and SLP Consulting taking exhibition stands.

OEUK Operations Manager Keith Wise co-ordinated the conference, which opened with a warning that the energy produced from the UK Continental Shelf amounted to the equivalent of only 60% of the country's demand.

In his keynote speech, Mark Wilson OEUK's director of HSE & operations observed: "We must mind the gap between the UK's energy consumption and falling levels of production, or risk becoming more reliant on imports than ever before."

Acknowledging the low level of drilling activity on the UK Continental Shelf, all speakers reiterated the role of oil and gas in the homegrown energy transition, noting that wells are being decommissioned at a rate of roughly 200/year, four times faster than production drilling.

New opportunities are emerging albeit slowly, but there was recognition that significant potential exists for using decommissioned wells for carbon capture and hydrogen. The UK has the largest potential carbon storage capacity in Europe.

Key to driving change is the offshore industry's problem-solving mindset and the event provided clear evidence of the wells community evolving to support the transition oil and gas to renewables. Sessions included innovative ways to improve current operations and engineers shared examples of technical solutions that enabled them to decarbonise wells in areas including carbon capture and storage wells plus renewable geothermal energy.

As new ventures director at the North Sea Transition Authority (NSTA), Andy Brooks delivered a humorous and lively session inspired by the adventures of Indiana Jones. Entitled 'Well, Well, Well', his presentation highlighted wells as nationally important assets. In a slide entitled 'Raiders of the Lost Wells Activity", he encouraged efforts to optimise performance, improve well integrity safety and address issues including reservoir pressures effectively. He noted the industry's well interventions on 440 wells in 2023 had been successful in burning less fuel, reducing emissions and minimising waste.

Health & Safety Executive's Grant Moody provided an update on



L-R: Alex Pirie (Serica), James Richards (WellSafe), Derek Charlton (Spirit Energy), Andy Brooks (NSTA) Margo Milne (DYWF)



regulatory matters noting that OEUK had recently produced an update on its well examination guidelines. He also highlighted the value of Well Competency Guidelines produced by OEUK and their role in ensuring teams understand their respective roles and responsibilities so that mitigation measures during well operations are understood by every party involved in operations. Emerging areas including carbon capture and storage (CCS) and onshore boreholes were also included in his comprehensive regulatory roundup.

Decommissioning wells is the most expensive phase of decommissioning and several specialists including Archer shared updates on a modular approach. New technologies play a key role in reducing costs and Lewis Harper, project manager at Aberdeen's Net Zero Technology Centre described how more than 35 technologies had been screened to help address this challenge. Through its collaborative work with industry, academia and investors, it has already completed five field trials and is currently testing a microtube retrieval tool for wells.

Delegates also heard from Alex Pirie,

Serica Energy's wells manager, about its pilot programme to reduce operational emissions as part of its collaboration with Stepwise. It was an excellent demonstration of collaboration in action to reduce emissions by significant levels with Serica passing on any savings realised to local charities. Callum Westland from Apollo outlined how emissions are being reduced through fuel switching using alternative fuels like biodiesel and renewable diesel. These methods are being applied but not yet at scale.

Renewable energy provided by geothermal wells formed a key element of the conference with Steve Pink & David Wilson from Black Reiver setting the historical context for the energy and its application in rural, industrial, urban, offshore and residential settings. Black Reiver has worked with industry to clarify the wide variety types of geothermal energy that could be used in the UK by creating a new classification process.

Looking to the future of wells, Derek Charlton from Spirit Energy described progress on its CCS well operations in Morecambe Bay. The project is aimed at capturing emissions from five cement and lime manufacturing companies in the Peak District and the plan is to install CCS equipment at the plants and transport it through pipelines to the coast and into Morecambe Bay.

Looking to the future workforce Margo Milne highlighted the importance of encouraging young people to join the industry. As Director the Developing the Young Workforce (DYWF) North East team, Ms Milne outlined some of the work being done to bridge the gap between employers and education, encouraging conference delegates to support the initiative (see left).

And Dennis Vollmar, CEO and founder of Vollmarintek, presented on the "lean machine" modular opportunities that could arise with a masterclass on Lean Modular Rig Design.

To find out more about OEUK's wells forums and work groups, click here oeuk.org.uk/membership/forumsworkgroups/

More information about the industry's wells guidelines is available here oeuk.org.uk/publicationsresources/?s=wells

Contracts

KCA Deutag secures \$900mn for drilling

Drilling, engineering and technology partner KCA Deutag has won new contracts and extensions exceeding \$900mn for on- and offshore projects, it said October 9. The work will be in Saudi Arabia, Oman, Pakistan, Angola and Europe.

Extensions for four rigs in Saudi Arabia are collectively valued at \$352mn, with contract durations ranging from five to ten years, adding up to a total of 25 years.

And for Norway, KCA Deutag has signed contracts for two awards that it announced in March this year, adding over \$410mn.

Bilfinger wins 3-year extension with Innospec

Industrial services provider Bilfinger has won a three-year extension to its maintenance contract with global speciality chemicals company Innospec in Lancashire, it said October 16.

With around 80 employees stationed at the Ellesmere Port site, Bilfinger will provide a range of services including mechanical, scaffolding, insulation, painting, electrical, instrumentation, asbestos removal, and facilities maintenance.

Bilfinger said it looked forward to continuing its 23-yr relationship with Innospec: "At the heart of this enduring partnership is an unwavering commitment to innovation and productivity enhancement," it said.

Peterson Energy Logistics, Perenco sign contract

Peterson Energy Logistics will support Perenco's operations in the southern North Sea (SNS) from the Port of Lowestoft, it said October 1.

The contract covers cargo operations, warehousing and road transport for at least three years following a successful trial in 2023, Peterson said. Up to 20 quayside and warehousing personnel will service the contract on a 24/7 basis.

The port is operated by Associated British Ports. Peterson said it has "considerable experience in port operations and control tower methodologies" and it will deliver "significant benefits over the long term." Peterson was one of the first energy logistics companies to secure Carbon Neutral PAS2060 status in 2022.

Well-Safe lands decommissioning work

International energy transition specialist Well-Safe Solutions has been awarded two new contracts totalling \$25mn for about 170 days of firm work, using the Well-Safe Protector jack-up and Well-Safe Defender semi-submersible.

The scopes comprise well decommissioning activity in the UK Continental Shelf for Spirit Energy and an additional global operator.

Both include options for a further combined duration of up to 140 days in 2025 and 2026 – worth up to \$25mn on top of the \$25mn backlog.

Nexos wins Enquest offshore work

Nexos has strengthened its service delivery to energy transition operator EnQuest, the company formerly known as Global E&C said. It landed the contract award for heating, ventilation and air-conditioning (HVAC) services on the UK continental shelf.

The contract covers the Thistle and Magnus platforms, two vital installations in EnQuest's portfolio. As part of this award, Nexos will take responsibility for core crew HVAC roles, ensuring continuity of service while complying with TUPE regulations.

The announcement follows Nexos' acquisition by SCF Partners and rebrand in September in order to better position itself for strategic growth across oil and gas and emerging energy markets.

As part of SCF's D2Zero' portfolio, it joins forces with other companies focused on clean energy including Hydrasun, Powerstar, and Score.

TAQA launches new inflow control technology

Abu Dhabi's TAQA has introduced its next-generation inflow control system, it said October 21. It will help users to optimise reservoir performance while sustainably managing fluid production even with more viscous oil.

The M4 Inflow Control System dictates the flow of the undesired fluids (water and gas) and avoids any instability or risk to production. It controls water in ultra-light and light applications and enhances gas production control in a range of reservoir conditions. TAQA said the control system was its most significant innovation so far.

Fennex, Noble lauded for digital transformation

Aberdeen-based digital solutions provider Fennex and US rig operator Noble Corporation have won the Best Digital Transformation accolade at the Gulf Energy Excellence Awards in Houston.

It celebrates their groundbreaking collaboration on the Extreme Weather Monitoring and Simulation Platform, Fennex said October 14. It significantly improves safety and operational efficiency in high-risk offshore environments.

Fennex MD Adrian Brown said:

Member News in brief

"Together, we've pushed the boundaries of digital transformation to protect offshore workers and improve operational resilience in some of the most challenging environments."

Fennex added that Aberdeen's Opportunity North East had been instrumental in fostering innovation such as its digital platform (OEUK Magazine x, py).

SMS marks 20 years of well services

SMS is celebrating two major milestones this year: 20 years of operations in the UK and a decade of success with its Malaysian subsidiary, SMS Sand Management Services.

Since its inception, SMS has grown from a sand management company to a leader offering advanced flow assurance technologies, gas analysers, sampling solutions, and specialised sand and corrosion instruments.

SMS serves international and national oil companies and contractors in 23 countries.

SMS aims to continue its growth trajectory by focusing on emerging market sectors and advancing its energy transition initiatives. With several technology projects underway, the company is poised to deliver even greater value and innovation to its clients.

Corporate

Kistos invests in tidal power company

UK-listed producer and gas storage operator Kistos has bought a stake in Spiralis Energy, a UK company developing a modular Archimedes water screw-type device generates electricity.

Kistos said the investment followed "extensive due diligence" on the business and the tidal power sector.

Spiralis Energy will use the investment to undertake a long term survivability test. All going well, it could lead to widescale deployment to provide a sustainable energy generation capability.

NV approves Digitising Reality's drones

Norwegian certification agency DNV has certified Digitising Reality's offshore remote inspection drones, the technology company said July 31.

The drones can survey structures close up, in accordance with Class Programme DNV-CP-0623.

"The energy sector is rapidly incorporating unmanned aerial vehicles for inspections, emissions monitoring, and maintenance due to their ability to enhance safety, efficiency, and costeffectiveness," said Digitising Reality. "The approval marks the next step in the growth of Digitising Reality and demonstrates our commitment to leveraging cutting-edge technology."

OEG Energy appoints new non-exec chair

OEG Energy has appointed veteran offshore engineer Ricardo Rosa as nonexecutive chairman with immediate effect, it said late October. He succeeds David Currie.

Before a number of years at Subsea7, Mr Rosa worked in various senior roles for Transocean, after 17 years in financial roles at Schlumberger. Since his retirement from Subsea7, Mr Rosa has been active as a business consultant in energy services and as a charity trustee.

OEG said: "The appointment of Ricardo as our new chairman reflects OEG's status as an established player in the offshore industries.... We look forward to benefiting from his insights regarding our industries and the global capital markets."

ModuSpec, Petrotec sign Qatar energy accord

Global rig and well control equipment specialist ModuSpec and Qatari engineerering firm Petrotec have formed a strategic partnership.

ModuSpec aims to enhance the visibility and accessibility of its services among both operators and drilling contractors in the region, and Qatar is a key target market for ModuSpec.

Petrotec's extensive network and local expertise will open up new markets for ModuSpec's ancillary solutions including HSEQ, training and real-time monitoring services.

Petrotec said in a November 11 statement that it was "thrilled to collaborate with ModuSpec and bring their industry-leading services to the Qatar oil and gas sector.

Elemental Energies, Archer form JV

Well engineering, subsurface and project management specialist Elemental Energies and drilling and well services company Archer signed a joint venture (JV) agreement November 13.

The JV will deliver integrated plugging and abandonment (P&A) services to global decommissioning projects and formalises their long term partnership.

By combining their strengths, the JV will be in the position to offer end-toend P&A solutions for both platform and subsea decommissioning projects. This will deliver integrated planning and execution for large-scale campaigns, supporting operators to maximise efficiency, maintain oversight, and reduce costs, they said.

BP, Jera form wind JV

UK major BP and Japan's Jera are to form a 50-50 joint venture for offshore wind generation. The standalone business JERA Nex bp will become one of the largest global offshore wind developers, owners and operators, they said December 9.

It will have a "balanced mix of operating assets and development projects with total 13 GW potential net generating capacity." It will enjoy better access to competitive financing and the partners are to provide capital funding for investments committed to before end of 2030 of up to \$5.8bn.

They will contribute interests comprising operating assets with around 1 GW net generating capacity, a strong pipeline of high-quality development projects with around 7.5 GW capacity and further secured leases with around 4.5 GW of potential capacity. JERA Nex bp will pursue "value-driven development of competitive projects", initially focusing on existing projects in northwest Europe, Australia and Japan.

ABP appoints CCS business manager

Associated British Ports has appointed Christine Watts as its new business development manager for carbon capture and storage (CCS) value chains and transport solutions.

Co2 shipments within UK waters could be the most economic method for some industries, although so far no CCS projects have been in a position to take a final investment decision.

Ms Watts was previously the lead commercial advisor at Neptune Energy where she developed non-pipeline transportation solutions for CO2 and opportunities for offshore green hydrogen production.

In a September 26 statement, Ms

Watts commented: "I very much look forward to diving into the world of ports and using my customer-side experience to provide our partners with the tailored services and insights they need to thrive. There is so much potential to create value in the UK CCS market. CO2 shipping will help accelerate industrial decarbonisation because not every emitter is at the end of a pipeline."

ASCO welcomes new general manager

Global logistics company ASCO has appointed William Draper as the general manager of its Teesworks operations, it said October 22. With over 34 years' experience of work on the River Tees where his career was built, Mr Draper will manage the team at Steel River Quay. His role includes overseeing operations.

The quay recently welcomed its first two vessels, which ASCO's team supported, having won the contract at Teesworks earlier this year.

Mr Draper said he understood how important the port's development was to the region's economy and the role it would play in supporting the UK's renewable energy goals. Steel for windfarms will be among the first deliveries.

For more about ASCO and Teesworks, please see our interview in Offshore Energies UK Magazine #60, p38.

Global E&C renamed as Nexos mirrors strategy

Aberdeen-based engineering, procurement and construction company Global E&C has rebranded as Nexos following its acquisition by SCF Partners, it said mid-October.

SCF has positioned Nexos into its 'D2Zero' portfolio, where it joins forces with other companies focused on

clean energy. These include Hydrasun, Powerstar, and Score.

However, Nexos' core operations in traditional energy remain a vital part of the business. CEO Terry Allan said: "Nexos will focus on helping bridge the gap between our current and future energy systems through turning the best ideas into operational reality."

Safelift Offshore marks 30th year with upgrade

Aberdeenshire-based lifting manufacturer is marking its 30th anniversary with a £1mn facilities and manpower upgrade, it said October 1.

Its range of specialist equipment for the energy sector is growing so that it can tackle bigger renewable energy projects, requiring more floor space. It will soon unveil its state-of-the-art new fabrication facility, intended for a multitude of larger projects, particularly within the offshore wind and wider renewables market.

Now based in Kemnay, the firm was established in 1994 by founder Peter Innes, who applied his expertise as a draughtsman and engineer to designing many of their products and equipment.

Safelift provides a comprehensive range of standard products, from baskets and trolleys, to crane forks and pallet trucks, as well as designing and manufacturing custom-built items for specific applications.

Peterson Energy Logistics has buoyant 2023

Peterson Energy Logistics is continuing to perform well as it rises to the challenges of the energy transition, the company said September 25. Reported revenues for 2023 were €280 (£233) mn and pre-tax profits (Ebitda) were €10mn, up 36% year-on-year.

Among its big-ticket successes in this

Member News in brief

regard was a contract with Vestas, for the Viking wind farm in Shetland. It also won major decommissioning projects.

CEO Sarah Moore said: "As a tierone supply chain company and leading provider of third and fourthparty logistics services, as well as digital and consultancy solutions, we are committed to working with our operator clients as they journey through the energy transition, delivering marketleading solutions to support them, while growing our footprint in the renewables and nuclear sectors."

Upstream

Deltic Energy announces change at the top...

Deltic Energy CEO Graham Swindells has announced his resignation with immediate effect, the UKCS exploration and production company said in a stockexchange announcement October 15. He has been succeeded by geologist Andrew Nunn.

Mr Nunn joined Deltic in 2014 and had been COO since 2015. He was key to the origination and maturation of the Pensacola discovery and Selene, where partner and operator Shell has finished exploratory drilling.

The company will continue its strategy of identifying and accessing immediate, or very near term, prospects and incubate high-impact opportunities "that will always be part of Deltic's DNA."

Chairman Mark Lappin said: "Graham will leave with the profound thanks of the board for his commitment and contribution to Deltic over the last 11 years, initially as CFO and more recently as CEO. Under Graham's leadership, Deltic was transformed into a company with an attractive portfolio of licences."

...as it cuts UKCS exposure and looks overseas

UK independent Deltic Energy is going to freeze some UK activities and look for more rewarding assets overseas, according to its October 21 stockexchange announcement. This will be enabled by plans that will cut its costs substantially as the government is expected to hike upstream taxes later this month.

CEO Andrew Nunn said: "As always, the balance of geological, operational and political risk must be considered and we are actively assessing a number of attractive opportunities in geographies where more supportive policies towards oil and gas development exist."

It is retaining its 25% stake in the Selene gas prospect and an analogous field, Blackadder, which has attracted farm-in interest.

Deltic estimates Selene to contain gross P50 estimated ultimate recoverable of 131bn ft³, although even 100bn ft³ would be enough to make it profitable after the October 30 Budget, it said.

Deltic will look to capitalise on this third-party interest to materially reduce or eliminate its cost exposure. Its Syros licence in the central North Sea is likely to expire at the end of November, as the North Sea Transition Authority has declined a request to extend it, despite farm-in interest.

NSMP supports Breagh field compression

Midstream operator North Sea Midstream Partners (NSMP) has successfully started up a new onshore electric-drive compressor at its Teesside Gas Processing Plant, it said October 10. The project involved personnel from field operator Ineos, NSMP and PX Group. Breagh, 65 kilometres offshore in the southern North Sea, and its associated export route, will continue to be among the North Sea's lowest carbon intensity fields.

NSMP CEO Sayma Cox said: "This project is testament to what can be achieved when the energy industry collaborates, and I would like to thank Ineos for providing the opportunity for us to play our part in this major boost to the UK's domestic gas supply."

Mocean Energy, Proserv work on decarbonisation

Scottish ocean energy pioneers Mocean Energy and Aberdeen-headquartered global controls technology specialists Proserv have agreed to co-operate on new technology for subsea control systems.

The aim is to replace the umbilical power cables traditionally used by the energy sector.

Eventually this customisable solution, powered by wave, solar and battery technologies, will be used to help reduce operational emissions from developments across the globe, they said in an October 8 statement.

Proserv provides innovative controls technologies to energy companies for life of field, whereas Mocean Energy is committed to designing and delivering ocean energy converters to provide clean, carbon-free, renewable energy.

Salamander wind farm calls for innovators

The Salamander Offshore Wind Farm project opened the second phase of its call for supplier innovations December 3, it said November 28. There are five areas of interest ranging from vessel optimisation to novel anchoring technology. They cover the construction and operational sides.

The 100-MW floating offshore wind development will be moored 35 km offshore Peterhead, linked to an onshore battery storage facility. The owner is a joint venture between Danish Ørsted, Simply Blue Group and Subsea7.

Through a dedicated supplier and innovation pathway, organisations can have a direct route for project consideration, the statement said. This second call runs until January 14 next year through the Salamander website.

Aquaterra RE earnings up

Integrated services provider AquaTerra Group has reached the significant milestone of £3mn in revenue from renewable energy contracts, it said October 7. The firm's first renewables contract was completed in 2020, paving the way for several subsequent renewable projects.

That was the hook-up and commissioning of the high-voltage direct current (HVDC) offshore interconnection substation, BorWin3, 130 km off Germany.

AquaTerra designed, supplied and installed its in-house modular suspended access platform QuikDeck, for easy access, supporting critical path work scopes and shorter timeframes, saving the client significant expense.

It says early engagement is the key to success and "the current studies which the team are undertaking demonstrate this perfectly."

Serica welcomes Budget clarity

UK independent explorer Serica welcomed the clarity on investment allowances in the Autumn Budget in a November 26 trading update. It said its portfolio would generate material cash to shareholders.

"The remainder of the Triton well campaign will continue to benefit from full tax relief, and the retention of allowances opens up opportunities in the wider portfolio. Our subsurface team are continuing to work up options for the untapped potential around the Bruce Hub," it said in a November 26 stock exchange notice.

"With the successful results from the B-6 well on Bittern expected to be followed shortly by the Gannet GE-o5 well, our key focus is now working to translate these results into more robust production performance than we have seen in recent months," it said. The Autumn Budget said that there would be no further changes to the Energy Profit Levy or to associated reliefs.

Mermaid finishes first part of Shell campaign

Mermaid Subsea Services has successfully completed the first stage of a multi-year UKCS decommissioning contract for Shell ahead of schedule, it said October 3.

It removed well heads and protection covers and transferred them to a vessel for shipping ashore for disposal.

For the next stage of the project, which is due to begin next year, Mermaid will use specialist tooling equipment to retrieve well head flow base structures, followed by well head severance and recovery operations in 2026. All the recovered materials from the structures will be managed to ensure maximum reuse or recycling.

Mermaid said it was "immensely proud" of the completion ahead of schedule and work is underway to prepare for the next phase, scheduled to get underway early next year."

Hartshead wins ten blocks in 33rd UK round

Australian Hartshead Resources won ten blocks in six licences offered by the North Sea Transition Authority in the 33rd UK licensing round, it said September 17.

The licences add contingent and prospective resources of 1.187 trillion ft^3 net to Hartshead.

All licences have been fully executed and formally awarded. In aggregate this is an additional 627bn ft³ 2C contingent resources and 560bn ft³ prospective resources. Prospective resources are estimated quantities of petroleum and relate to undiscovered accumulations. These estimates therefore have both a discovery and a development risk.

Mergers & Acquisitions

Ithaca Energy, Eni complete UK merger

Israeli-owned UK producer Ithaca Energy has completed its "transformational combination" with Eni's UK upstream oil and gas assets, it said October 3. Among the assets that remain in Eni's ownership are its carbon capture and storage interests in the East Irish Sea. r.

Ithaca said the details in the significant transaction announcement of late July were unchanged.

Eni's Luciano Vasques is the new company's CEO. The merger was part of a series of North Sea deals, with the Harbour-Wintershall tie-up opening up new opportunities overseas for Harbour; and Shell and Equinor merging their UK CS oil and gas assets.

Synergia seeks new partner as Harbour quits

Operator Synergia Energy is looking for a new partner for its 6.5mn metric tonnes/yr Medway Hub Camelot

Member News in brief

carbon capture and storage project following the withdrawal of 50% partner Harbour Energy. The project had been part of Wintershall Dea's portfolio, which is now owned by Harbour following the September completion of the takeover.

Synergia said late November it was committed to the project which is being progressed through the regulated work programme and solid progress is being achieved. Harbour Energy's decision to withdraw from the CCS Project is seen as part of a rationalisation of its CCS portfolio.

Subject to NSTA approval, Synergia will own all of the project and seek to identify a replacement joint venture partner. It said it remained committed to progressing the project through to commercial operations and that it was "pleased with the technical work undertaken to date on the project, which has reinforced its potential long term value to shareholders."

Health, safety and training

Comet joins new safety initiative

UK software company Comet has joined the Smarter Regulation Sandbox, a six-month initiative aimed at driving innovation in health and safety regulation, it said September 30.

The project is a collaboration between Discovering Safety, a programme led by the Health & Safety Executive and Safetytech Accelerator.

Funded by the government's Office for Technology Transfer, Sandbox brings together five companies to develop and pilot cutting-edge digital tools that leverage regulatory data to improve safety, compliance, and operational efficiency across industries.

Comet said its participation aligned

with its mission to promote better audits, investigations and root cause analysis through its intelligent, datadriven software. It uses artificial intelligence-assisted technology to analyse vast, unstructured safety data.

3t wins funding for South Tyneside training

3t Training Services has won a £1.5mn contract to deliver fully funded Green Skills Bootcamps for local people and businesses in South Tyneside.

The free courses are open to businesses and anyone aged 20 and over with a South Tyneside postcode. They will cover all the essential skills needed for onshore and offshore roles in the wind, carbon capture and hydrogen industries and include training for roles such as wind technician, offshore engineering technician and site safety supervisor.

The four-to-five-week programmes will be delivered at 3t's state-of-theart training centres in Newcastle and Teesside and include a guaranteed interview with an employer, which could potentially lead to a full-time job.

Bilfinger to chair ECITB training body...

Bilfinger's Training and Competency Manager, Stephanie Broadley, has been appointed as the Chair of the Engineering Construction Industry Training Board's (ECITB) Employer Network Steering Group (ENSG) for Connected Competence.

In a September 10 statement, the international industrial services company said Ms Broadley would implement initiatives to raise the standards and recognition of workforce skills across the industry. These include support for the transient worker scheme and collaboration with Approved Training Providers (ATP) and other key stakeholders.

The Connected Competence initiative has been instrumental in shaping and elevating the training and competency frameworks within the sector, Bilfinger said.

...and host 2025 Scotland road race

Engineering and maintenance firm Bilfinger is to host next year's Six Mile Trail Race - a new feature at next year's running festival – it said September 25. This addition replaces the previously held biathlon, responding to participants' preference for another running event, it said.

Run Balmoral will be held in April 2025, when close to 5,000 people will take part in the series of races. The president of Bilfinger Engineering & Maintenance UK Sandy Bonner said: "At Bilfinger, we believe in promoting health, wellness, and sustainability, and this event perfectly aligns with our values."

An invitation to submit your member news

Members may submit news items to: editorial@OEUK.org.uk

Selected items will be edited and published in this magazine and/or the Member News section of our website:

OEUK.org.uk/membernews. No guarantees of publication are given.

Driving the Energy Transition

Over 100 new members have joined Offshore Energies UK since the rebrand from OGUK in 2022.

As someone working in the Membership team, I have had the privilege of seeing this remarkable growth firsthand, and it truly reflects how the energy landscape is evolving in the UK and around the world.

OEUK is becoming a central player in the global energy transition. The enthusiasm from these new members is evident.

Energy transition

The rebranding marked a strategic shift toward a broader vision for the future of energy. As OGUK, formerly Oil & Gas UK – and before that, UK Offshore Operators Group – this memberled organisation had represented the UK's offshore oil and gas sector for many years. Now, we represent a diverse energy mix that includes supply chain companies within oil, gas, wind, hydrogen and the carbon capture and storage industries.

Also, alongside this we have also seen an increase in small and medium enterprises (SME) that provide vital work within the supply chain. These changes reflect our shared commitment to helping the UK achieve net-zero emissions by 2050, one of the government's commitments to the Paris Agreement of late 2015. It is inspiring to see our members embracing this vision and helping us shape the future of the energy landscape.

Our membership base has expanded significantly since the rebrand. What has been rewarding for me personally is meeting and visiting our member sites, seeing the expertise and evolving technology in action. This to me is a clear indicator of the momentum behind the energy transition.

Our diverse membership

The variety of companies joining OEUK is impressive. It is great to see innovative startups and specialist service providers, all playing crucial roles in sectors renewable energy development, hydrogen technology, offshore wind, and carbon capture. Their decision to become members speaks volumes about the attractiveness of OEUK's vision for a sustainable, integrated energy future.

It is clear that collaboration between oil, gas, and renewable energy companies is more critical than ever.



The future of energy is going to require solutions, people and investment that are efficient, scalable and sustainable for the sector and our economy. We are seeing this play out through the partnerships being formed within our work at forums, workgroups and events.

How we are leading

One of OEUK's key strengths is its ability to facilitate these collaborations through the range of member benefits that we offer. The UK's offshore renewable energy sector is at the heart of the push towards net zero, with more than 30% of the country's electricity demand on average coming from offshore wind alone, although this is not without challenges.. Every member brings expertise that strengthens our collective ability and this also helps with our advocacy work.

Supporting innovation

The growth of our membership highlights the industry's appetite for long-term sustainability and innovation. As energy companies face increasing pressures from policymakers, investors, and consumers to adopt cleaner, greener operations, OEUK membership is becoming a key strategic asset for many within the sector.

Through our role in shaping



regulatory frameworks and influencing government policy, we ensure that our members are not only able to navigate the changing energy landscape but can also lead the charge. The UK is well on its way to becoming a global leader in offshore wind and low-carbon technologies, and OEUK is here to provide the tools and support our members and their workforce need to succeed in this transition.

The road ahead

I am excited to see where this journey takes us next. The pace of innovation, sustainability, and collaboration within our growing community continues to accelerate. It is clear that OEUK is wellpositioned to lead the charge toward investment in the sector and a cleaner future.



Guest column

Why Heartburn can be #MoreThanJustHeartburn

Heartburn is a part of daily life for many people, but few are aware of the risks of experiencing heartburn long-term.

hristmastide overindulgence is a byword for heartburn – also known as acid reflux or indigestion. Almost everyone knows that uncomfortable feeling in the chest or the nasty taste in the mouth after eating something too fast or having a late-night meal. While it is easy to dismiss it as a fierce discomfort, quickly dispelled by some offthe-shelf medicine, **persistent** heartburn could be a sign of something more serious. Not a lot of people know that it can also be a sign of cancer or a potentially pre-cancerous condition – Barrett's oesophagus - that can be monitored to check that it does not turn into something more life-threatening.

In the UK, most new cases of this cancer are found in men, with the risks rising for those in their 40s and 50s. This represents the majority of the workforce in the UK's offshore energy industry, as reported in Offshore Energy UK's 2023 Health & Safety report. Additionally, in 2015, 27% of oesophageal cancer cases were linked to weight or obesity. This issue remains relevant today with the industry body noting that one in ten of the offshore workforce fail their medicals owing to their weight or body mass index.

These statistics suggest an overlap between the age and lifestyle risk factors for oesophageal cancer, and the profile of many offshore workers. Although the data does not indicate that offshore workers have a higher incidence of this cancer, it does emphasise the importance of raising awareness and encouraging regular health checks in this industry.

In an interview with Fiona Labrooy from Heartburn Cancer UK (HCUK), a charity dedicated to raising awareness of oesophageal cancer and its potential warning signs such as persistent heartburn, she was asked all the questions you would like answered about heartburn and its potential link to cancer.



What causes heartburn?

The things you eat and drink get to your stomach by travelling down the oesophagus - which is sometimes also called the gullet or the food pipe. At the bottom of the oesophagus is a muscular ring – a sphincter – which normally acts as a one-way valve, keeping food, drink and stomach acids where they should be. When this valve doesn't work properly (for lots of reasons), acid leaks back up into the oesophagus, and sometimes the mouth, and causes the pain and irritation that we know as heartburn (or indigestion or acid reflux, it's different names for the same thing).

Why is it important to find out if there's an issue early?

Oesophageal cancer is the seventh biggest cancer killer in the UK and fourth biggest for men. And, because it's often missed -- people don't know or they ignore the warning signs, such as persistent heartburn or cough

Heartburn isn't always harmless



If you suffer from persistant heartburn and/or frequent difficulty swallowing, **see a doctor**

Oesophageal Cancer, raising awareness, changing the future

01256 338 668 | www.heartburncanceruk.org

-- it is often discovered late, when it has spread. By that time, it may be too late to cure and very difficult to treat. Long term, persistent acid reflux/heartburn that's unresolved through treatment or simple lifestyle changes can cause the change in the cells that develops into cancer as well as be a symptom of oesophageal cancer.

Why is it good news... in some ways... to find out that you have Barrett's oesophagus?

Finding out you have this pre-cancerous condition could be seen as a gift. Most people with Barrett's don't go on to develop cancer. But people who have it are normally monitored regularly to check that the cell changes don't develop into cancer.

What can people do to help themselves, and where can they get more information?

Lifestyle changes are often enough to stop people getting heartburn in the first place. This can include

not eating late at night, losing a bit of weight around our bellies and avoiding or reducing triggers such as spicy food or alcohol. You can find more on this at our website www.heartburncanceruk.org where there's also a lot more advice and support.

By being aware of the early signs and symptoms and getting checked out early, we can increase early diagnosis and survival rates. In 2015, 59% of all oesophageal cancer cases in the UK were preventable and we need your help to make sure as many of those cases as possible are caught.

Getting tested if you are experiencing symptoms of Barrett's oesophagus and oesphageal cancer can help you get diagnosed early, or provide peace of mind that all is well.

> Know the symptoms, be heartburn aware and get diagnosed early. Search **www.heartburncanceruk.org** for more information.

North Sea Oil: The budget is done – let's get to work

Niall Rowantree of Blend suggests ways to extract even more value from the mature UKCS

he dust has settled on the budget. The summary from the upstream industry seems to be bad – but it could have been worse.

Bad from industry's point of view is an extension and increase of the Energy Profits Levy (EPL). Increased to 38% and extended to 31 March 2030. That means the headline rate of tax on upstream petroleum is 78% – amongst the highest in the world. Capital relief on the EPL has also been removed.

But it was also good – because some capital allowances remain and the government has committed to a consultation which will define the scheme to replace the EPL. This should happen in 2025.

Context and historical perspective

In 2022, supermajors reported adjusted earnings exceeding \$220bn, while European nations struggled with gas prices increasing ten-fold. The North Sea, long associated with "oil wealth" in British consciousness, became an obvious revenue source to address the crisis. This led to the introduction of the EPL, reinforcing the UK's reputation for fiscal volatility.

The Labour government was transparent about its intentions to maintain the EPL and revise allowances. Industry watchers were not surprised by the result. There's no doubt that an increase in government share from around one-third to four-fifths of revenues will take a toll on confidence and investment.

Challenge to the industry

I would like to offer a challenge to all of us involved in the UK North Sea though. Can we look ourselves in the mirror and say that we have done our best? In 2023, we lost 100mn barrels of oil equivalent (boe) in poor plant performance alone. That's \$7.5bn in revenue. Around \$2bn of company share that stayed in the ground.

For decades we have relied on the commodities cycle to ride to the rescue. Poor performing assets would enjoy the anticipated price spike – like we saw in 2006-2008, 2010-2014, 2018 and 2021-2024. At the same time there was always the government, the regulator, Opec, shale gas or someone else we could blame.

This is an industry that has done remarkable things. That can do remarkable things. I want to see this next phase – the swan song of conventional North Sea oil and gas – become our most remarkable era. Let's make this a moment where we show to the world what an outstanding industry we can be – delivering for the people of our country and for our shareholders. The technology is here. The assets are still here. It just needs the willingness and the courage to do things differently.

The way ahead: collaboration, data and artificial intelligence

To achieve this transformation, let's revolutionise our operational approach – because if all you ever do is all you've ever done, all you'll ever get is all you've ever got. What does "revolutionising our operational approach" (such an easy thing to type – such a hard thing to do) really mean?

It means stopping the habit of isolated innovation and embracing actual collaboration. It means breaking down the barriers that have kept our data, our learnings, and our opportunities locked in silos. Within and between our companies.

Let's consider five specific areas where collaboration and data could transform our industry's performance, extend field life, and accelerate our journey to net zero.

1. Optimising infrastructure management and output

By breaking down operational silos, might we see 5-10% production efficiency improvement across the basin, reduced operational expenditure and significantly improved infrastructure reliability?

The North Sea has one of the world's most complex networks of interconnected infrastructure, with multiple operators depending on each other's assets and third party infrastructure. Moving from manual co-ordination to automated, data-driven optimisation could unlock billions in value.



Key elements:

- Replace manual control room communications with automated data sharing
- Create a shared digital twin of the North Sea infrastructure network
- Implement production forecasting using artificial intelligence and incorporating:
 - Weather data
 - Equipment status
 - Infrastructure availability
 - Market prices
 - Processing capacity
- Enable dynamic optimisation across operator boundaries
- Develop automated well testing and allocation systems

2. Unified equipment performance & reliability

Can we reduce maintenance costs by 20-30% while improving equipment reliability and reducing unplanned downtime?

Every operator faces similar equipment challenges, yet we learn these lessons in isolation. Creating a shared understanding of equipment performance could supercharge reliability and maintenance.

Key elements:

- Build an anonymous equipment performance benchmarking cloud database covering:
 - Rotating equipment
 - Static equipment
 - Subsea systems
 - Process systems

- Develop shared AI models for:
 - Failure prediction
 - Maintenance optimisation
 - Performance optimisation
- Create common standards for equipment monitoring and data collection
- Enable collaborative maintenance scheduling across operators

3. Supply chain revolution

Could we reduce supply chain costs by 15-25% while improving material availability and reducing emergency logistics requirements?

In 2020 Amazon used machine learning and AI to save \$1.6bn in transportation and logistics costs. Almost all of us would agree that the current supply chain model is fragmented and inefficient. A collaborative approach could transform both cost and reliability.

Key elements:

- Create open data systems between operators and suppliers
- Enable predictive parts management across the basin
- Develop shared logistics optimisation including:
 - Vessel movements
 - Helicopter scheduling
 - Port operations
 - Warehouse management
- Implement automated supplier performance analytics
- Enable real-time inventory visibility across operators



4. Environmental performance & energy integration

Could we accelerate emissions reduction by 5-10 years while reducing the cost of the energy transition by 30-40%?

Meeting net zero targets is a challenge we are all facing – one that collaboration will help us meet. Shared data and systems could secure the transition while maintaining efficient operations and ensuring our social license to operate.

Key elements:

- Create basin-wide emissions monitoring and optimisation
- Enable integrated power management across assets
- Develop shared renewable energy integration strategies
- Build common carbon capture and storage optimisation models
- Implement collaborative flare and vent reduction programmes

5. Next-generation innovation

Imagine if technology deployment time was reduced by 50-70% while significantly increasing the success rate of new innovations?

To attract and retain talent while accelerating innovation, we need to create an open ecosystem for development and collaboration.

Key elements:

- Create standardised data platforms accessible to:
 - Universities
 - Start-ups
 - Technology companies
 - Operators
 - Service companies
- Develop shared testing and validation environments
- Double down on the work of the Net Zero Technology Centre to boost rapid deployment of new technologies across multiple operators
- Build common standards for:
 - Data quality
 - API interfaces
 - Security protocols
 - Performance measurement
 - Data models

Learning from other industries

The financial sector's embrace of open banking has revolutionised services, improved competition, and enhanced customer experience. With over six million people now using open banking services, it demonstrates the power of collaborative innovation. Traditional banks that delayed their response found themselves forced to spend massively to catch up - JP Morgan announced a \$12bn technology investment in 2022, while HSBC announced a \$6bn spend on digital transformation in 2022. It might not be enough to beat the FinTechs.

The aerospace industry has pioneered anonymous safety reporting and data sharing. 100,000 safety



reports are submitted through NASA's Aviation Safety Reporting System every year, and the Aviation Safety Information Analysis and Sharing (ASIAS) program connects over 250 aviation organizations. Airlines that initially resisted sharing operational data found themselves compelled to join after the dramatic improvements to safety – the U.S. commercial fatal accident rate has dropped by 60% in the last two decades. In 2023 there were no fatalities involving western-made commercial jets.

Conclusion

The open banking revolution shows us what's possible when an industry commits to collaboration. Six million customers now enjoy better services, increased competition, and enhanced transparency. Safety is a core value for almost every energy company – but we cannot boast the same standards as aviation. Our opportunity is enormous.

We're not just talking about banking apps – we're talking about securing critical energy supplies, accelerating the energy transition, and maximising the economic recovery – remember that headline phrase from the 2014 Wood Report? – of national resources that belong to all of us.

The North Sea has always been a proving ground for innovation. From the concrete deepwater structures of the 1970s to the subsea technologies of the 1990s, we have shown the world what's possible when we push boundaries. Now it's time to pioneer again – not with steel and concrete this time, but with data and collaboration. The choice is clear. We can continue to work in isolation, hoping for price cycles to rescue underperforming assets. Or we can embrace this moment to transform our industry through genuine collaboration. The technology is ready. The opportunities are clear. The potential value is enormous. What's needed now is the courage to move first, to share first, to trust first.

This next chapter of North Sea development – our 'swan song' – doesn't need to be a slow decline. Instead, it could be our finest hour.

A demonstration of how a mature basin can reinvent itself. A blueprint for how an industry can simultaneously maximise economic recovery and accelerate the energy transition. A proof point for the power of genuine collaboration and showing the way for the new technologies like carbon capture and storage, offshore wind, small modular nuclear, that will inherit our legacy of supplying safe, affordable energy to the UK.

The 78% tax rate isn't going to change until 2030. The price cycles will always be with us. But what we can change is how we work together. The future of our industry – and our ability to continue serving the nation's needs – depends not on external factors, but on our willingness to transform. The opportunity is here. The time is now. Let's make this next phase – maybe our last phase – our most remarkable yet.

What do you think? Can a different approach to data and collaboration help? Is it too late? Please share your thoughts - especially if you've seen success stories from other industries from which we could learn.

M&A and financing in the upstream and services sectors

2024 has been a busy year for deal-makers in both the E&P and the supply-chain segments as the headwinds – including rising costs and societal opposition – blow more strongly

Brian Thumath, Richard Scott and Jonathan Woolf: Aberdeen Energy Transaction Team, Pinsent Masons LLP

n 2024, Aberdeen and the North Sea region witnessed continuing shifts in the upstream and services sectors, driven by both traditional oil and gas demands and evolving appetite for investment in renewables. As North Sea oil production enters its next phase with the government giving negative signals about continued exploration and production licensing, companies are focusing on making their assets as efficient as possible and integrating lowcarbon solutions. But they are also looking overseas at countries where hydrocarbon production will be at the core of the energy mix for years to come.

The energy transition, whether it be to renewable generation or to new hydrocarbon markets, has necessitated continued merger and acquisition (M&A) activity among service providers. Capitalising on M&A activity to add advanced subsea engineering and downhole technologies; digital monitoring and efficiencies through the development of intellectual property; and decommissioning expertise – these are all essential attributes of any company looking to diversify and grow. New markets for hydrogen production and for carbon capture and storage will need to leverage the deep history of technical innovation that upstream players can draw on, as well as the supply chain in Aberdeen, in order to bring the next generation of energy projects online.

Aberdeen's firms are leading the way in diversifying service offerings to adapt to the energy transition, merging core industry knowledge with innovation. This applies both from a products and services perspective and to strategic innovation in sourcing of capital and M&A strategy. However, the energy transition will be underpinned by continuing to service upstream players for whom hydrocarbon development still serves as the cornerstone of their shareholders' returns.

At Pinsent Masons we have seen a steady stream of oil and gas M&A activity in the last year and a half. In the UKCS, there has been a continuation of the change in ownership and capital reallocation which has characterised M&A activity in the UK North Sea. Traditional US and European supermajors have continued selling assets to newer operators. One example from this year is the Italian major Eni's sale of most of its UK assets to Ithaca.

In addition, the more recent trend for the first wave of newer, often private equity-backed operators planning their exit has continued. One example is the sale of Neptune Energy to Eni, which might have happened sooner but for the "lower for longer' period after 2015. The dominant incoming or growing owners for UKCS assets are the new, listed independents such as Serica Energy who are continuing to seek scale and asset diversification. Serica has also spoken about the fiscal clarity with some enthusiasm (see px). More internationally, supermajors continue to adjust their upstream portfolios through M&A activity.

One persistent approach to that has been the creation of independent joint ventures with other supermajors, a deal structure pioneered in the UK with Aker bp, HitecVision and others, but which has been used in jurisdictions as varied as Angola with the creation of Azule Energy as a joint venture between bp and Eni. The trend looks set to continue, with Equinor and Shell's announcement in early December of another new joint venture, this time combining their upstream UK oil and gas assets (see px). Internationally, available capital for M&A acquisitions continues to be sourced from financial sponsors and increasingly Middle Eastern-led sovereign oil companies, with historically domestically-focused national oil companies such as ADNOC becoming more active in overseas M&A. Our view is that none of the factors driving the above activity is set to change. We can expect these types of M&A transactions to continue into 2025 and beyond, subject to whatever upset may come next from a macroeconomic or geopolitical perspective.

With upstream players increasingly active and looking for growth through M&A activity, we have also seen service providers develop acquisition strategies in



order to grow their business through the addition of new service lines; improved efficiencies though the acquisition of new technology and intellectual property (IP); and expansion into new geographies to ensure that the supply chain is ready to service exploration wherever activity looks set to continue apace.

In terms of the energy services M&A market in Aberdeen, 2024 has seen continued activity right into Q4 with close to 20 acquisitions in the year to date. Multiple acquisitions by DTI, Odfjell and ProServ's sponsor-backed management buyout have demonstrated that the Aberdeen services M&A market remains busy despite fiscal and regulatory headwinds continuing to impact exploration in the UK.

These transactions reflect a number of core themes:

- The acquisition of bolt-on bespoke IP/technology with strong digitalisation applications for the purposes of integrating these into wider groups to drive efficiencies and profitability;
- The expansion of geographic reach with international players including those from the US looking to add Aberdeen-located businesses for the purposes of access to opportunities on the UK and Norwegian continental shelves and adding expertise and products to service their global businesses; and
- Continued private equity interest in service companies with order books hedged across energy transition but retaining core profitability in oil and gas and with the potential for export to new markets.

The ever-increasing number of Scottish voices among the thronging crowds at ADIPEC in early November is a dynamic that is set to continue and, similar to trends in terms of access to capital for upstream companies, service companies are seeing the potential for growth in the Middle East given the understanding of, and continued commitment to, hydrocarbon production there. Closer to home, recent acquisitions involving D2Zero, Motive Offshore, Glacier and Venterra all reflect the need for businesses to diversify within the market for renewable energy services.

As always, the sources of, and cost-effective access to, alternative forms of capital are key to successful growth strategy. As traditional lenders and the equity capital markets are no longer readily accessible to independent upstream players and certain businesses within their supply chain (in large part owing to the growing consideration paid to environmental, social and governance requirements on the funder side), 2024 has seen a continued trend of companies looking to source alternative forms of financing including looking to access finance through Norwegian bonds.

Companies like TWMA and Odfjell have successfully raised debt capital this year by way of Nordic bond issues and our experience suggests this is a trend likely to continue in the short to medium term. The Nordic bond market is mature and very receptive to sectors with which Norwegians are familiar, especially energy. While this sort of debt capital on the Norwegian public markets is not cheap, with the base rate remaining at 4.75%, the reality is that there are very few cheaper accessible debt options to choose from. Whereas most of the traditional UK lenders remain supportive of the energy services sector — especially where there is a strong transition plan — they will not support every deal. And they still need to source debt capital elsewhere for M&A or growth.

UK non-bank lenders have a role to play in filling that gap. But the larger debt requirements of £50mn+ can be too big for those alternative lenders – which is where the Norwegian debt capital markets have a useful role to play. Indeed, there can be a neat fit with Nordic bond issuances providing the core (term) debt and traditional UK lenders providing revolving or working capital facilities either alongside or on a "super senior" basis. Therefore all these forms of debt capital can be deployed in the energy transition.

It will be interesting to see what oil and gas capital expenditures will look like in 2025 as large upstream players look to increase spend but remain disciplined in terms of balancing energy transition initiatives with higher shareholder returns linked to their historically core business of exploration and production. What is clear is that energy services businesses who want to keep pace with the shifting market and service their upstream clients as they pivot (and at times pivot back) will need to ensure that they have the geographic reach and breadth of products/services across these geographies to exploit continued activity.

M&A and the ability to access the capital to fund this activity will be key to continuing UKCS success. Aberdeen will be crucial as it exports expertise, products and services to other jurisdictions, making businesses attractive targets for inward M&A and funding. It will also drive buyers based in Aberdeen to look abroad to the Middle East and elsewhere to find their own targets for growth.

Cyberhawk Drones: getting to the heart of the problem remotely

s environmental reporting standards continue to rise, investors in hydrocarbons are becoming increasingly selective about where they allocate their capital. Regulators are also tightening their expectations, demanding more detailed data from the sector. Advances in technology now enable greater accuracy in measuring emissions, tracking their sources and monitoring the efficiency of flaring.

This is where Cyberhawk comes in. A private equitybacked company, Cyberhawk fills crucial gaps in emissions data and other key areas. It specialises in using unmanned aerial vehicles (UAVs) to gather, process, and store vital information, often in environments too dangerous, costly, or time-consuming for human crews. Their drone technology is revolutionising asset monitoring by offering faster, safer, and more costeffective solutions.

At the core of Cyberhawk's offering is its proprietary iHawk platform, a cloud-based inspection and asset management system. iHawk integrates drone data with satellite imagery and geospatial intelligence, providing real-time insights into asset performance. By capturing accurate, time-stamped data, it enables operators to monitor equipment deterioration and perform predictive maintenance, saving both time and money.

Outfitted with third-party sensors like optical gas imaging and emissions monitoring equipment, Cyberhawk can detect emissions in areas where human access is impractical or unsafe. These drones can even be deployed from vessels and, thanks to electromagnets, can cling to installations while collecting ultrasonic thickness measurements. This capability allows for detailed monitoring of pipelines over time, helping to ensure safe and efficient operations.

In addition to emissions monitoring, Cyberhawk's drones can perform precise measurements on installations, generate 3D models, and assess the best methods for decommissioning, such as determining where to place explosives and how much force to use.

Given the geopolitical and social landscapes of many leading energy-producing nations – such as Russia, Iraq, Nigeria, and other OPEC+ countries – Cyberhawk's primary markets are in the US and the North Sea, though the company also operates in locations such as Qatar. With its advanced drone technology and data management capabilities, Cyberhawk is setting new standards for operational efficiency and environmental compliance in the offshore oil and gas industry.





OEUK's Business & Supply Chain Outlook 2024, continuing our tradition of delivering the most comprehensive review of the UK's offshore energy sector's performance and its future trajectory.

For over five decades, the UK's offshore energy sector has been a cornerstone of national energy security. The 2024 Outlook highlights an unprecedented scale of opportunity, positioning the industry as central to the UK's ambitions for net zero.

With a projected investment of £450 billion by 2040 across oil, gas, wind, hydrogen, and carbon capture, utilization and storage (CCUS) projects, this year's report underscores the critical investments shaping a sustainable energy landscape and affirming our unwavering dedication to net zero.



Different kit, same game

Nexos takes a new approach to the UK's energy future

ave you heard of padel? If not, you will soon: it's the fastest-growing sport in the world. It looks a lot like tennis, but played on a smaller, walled-in court and with stringless racquets.

Though very different, it obviously borrows a lot from tennis - maybe even <u>some of its players</u>. Yet the growth of padel is not the death of tennis. The two sports aren't in competition, but partnership.

The strengths of each sport bolster the other, here lazy zero-sum thinking hasn't found a foothold.

And I can't help but wonder: why can't we do the same for the UK energy sector?

Radically new and different...

The oil and gas industry – like tennis – is no longer the only game in town. Fixed-base offshore wind is maturing, floating turbines are on their way, and offshore wave, tidal, hydrogen and carbon capture and storage (CCS) projects are emerging just beyond the horizon. And that's just offshore: onshore, a whole new generation of wind, hydrogen and transmission and distribution projects is in the works.

The geography of UK energy is also shifting. The traditional heartlands of northeast England and Scotland remain strong, but the distributed nature of new energy sourcing is dispersing projects and stretching the supply chain across the country. From Hynet in Liverpool Bay to turbine assembly at Avonmouth, you can now point to innovative UK energy projects at all points of the compass.

...but fundamentally the same

But really, what's changed? The UK is showcasing some of the world's leading energy engineering – as it has for

decades. The UK is pioneering new approaches and deploying new technologies for ambitious projects – as it has for decades. The UK is leaning on one of the world's most experienced energy workforces as the backbone of its economy - as it has for decades.

Just as with padel and tennis, we have two games at play that are radically different in many ways, yet fundamentally the same – industries that share similar skills and many of the same players, both companies and individuals.

Yet unlike our sporting analogy, the new and old worlds of energy are too often positioned in opposition. The success of one, the zero sum thinking goes, is the failure of the other. Of course, many have touted the potential to transfer technology, equipment and talent, but too often we see ourselves belonging to one world and not the other, to the detriment of all.

The ball's in our court

So, what can we do to change that dynamic and truly move forward a 'UK Energy plc'? I have five suggestions.

1. Invest in agility

Companies that want to survive and thrive need to be ready to pivot to next-gen energy sources as the dynamic evolves. Crucially, this is not a switch from X to Y; it's a shift to X and Y. We need a supply chain equipped to serve all subsectors.

Equally, the shifting geography presents challenges for less nimble suppliers. Previously, it was relatively easy to co-locate with your customer base in one or two concentrated regional hubs. Now an Aberdonian company must be ready to deploy in Cornwall, or an East Anglian one to the Shetland Islands. That presents concrete logistical challenges as well as attitudinal ones.





Just as padel players must adjust to new angles as the ball ricochets from the court walls, we need to be agile enough to react to whatever comes our way, turning obstacles into opportunities.

2. Tech, tech, tech

The UK is full of excellent engineers. These are natural, creative problem solvers. If we support them properly, from education through to the workplace, they do amazing things. Sometimes that means new technologies, but it very often means iterating the way we apply, combine and deploy existing technologies to create a more agile energy sector.

For example, through modularisation and a focus on off-site serial manufacturing methods, we can derisk and lower costs of onshore and offshore energy projects, learning how to assemble components like Lego bricks. This creates a supply chain equipped to redeploy effective approaches to different challenges.

3. Practise more 'wholesale thinking'

Agility and adaptability to changing market needs shouldn't be confused with opportunism and shortterm thinking. We need to keep an eye on the big picture, to practise more 'wholesale' and less 'retail' thinking. Part of that is through engagement with energy industry associations, but business leaders need to up their game too. Supply-chain companies, operators, developers and policy-makers will need more joined-up wholesale thinking.

4. Prioritise people

North of the border, much has been made of the hollowing out of the North Sea economy and the effects on communities. Serica's film <u>'A Town Called Bruce'</u> has made waves with its focus on real stories about the people working in the oil and gas industry. Elsewhere in the UK many communities still remember what happened in the wake of domestic coal mining's demise

- which North Sea gas helped to offset.

The new government has made encouraging noises about a just transition and committed to headquartering Great British Energy in Aberdeen as a mark of that commitment. The Secretary of State for energy security and net zero Ed Miliband has also confirmed work on a 'skills passport' to help transition oil and gas workers to renewables. Yet, it's too early to say what impact these policies will have. In the meantime, we need to protect the high-quality jobs we have in oil and gas and simultaneously equip our people with the skills they need to future proof their livelihoods.

5. Create a stable operating environment

Change is inevitable: the energy transition is happening and it needs to, at pace. But at the same time, constant tumult and uncertainty help no one. We'll see what is announced in the new government's first budget, but few are betting on an oil-and-gas friendly programme.

The goalposts – or court lines – need to stop constantly shifting. A stable operating environment allows for forward planning and investment. Delivering that environment is outwith industry's responsibility – that lies with the politicians – but we can and should advocate for it whenever possible.

Playing the long game

Like a tennis pro switching to padel, we need to adapt – but this isn't about starting all over again. It's about changing how we play the game while deploying our skills, expertise and technologies in new ways.

In the UK, we have a strong hydrocarbon-based energy system that ranks among the cleanest in the world. Very soon, we will have a multi-faceted, interconnected energy system that is even cleaner. We need to champion and protect both.

After all, many of those determining our future energy policy will probably play padel – and I'm guessing they still play tennis too.

Project Xcellence

Energy industry veteran James McCallum discusses the benefits that project management software Proteus brings to the market

ergy Group chairman, and co-founder, James McCallum (*right*) and fellow energy industry expert Colin Manson came together in 2018 to develop the company's Software as a Service (SaaS) solution, Proteus – a software that enables project teams to deliver end-to-end projects, from proposal management to performance review.

With more than 40 years of experience across the energy industry — having founded and led energy services company Senergy – joining with Mr Manson, formerly of Xodus, was a natural next step for Mr McCallum. Given their common understanding of the needs of the industry, the only question was whether to build another subsea technical consultancy; or go on to do something different using proprietary software. It was from this discussion that Proteus was born.

Mr McCallum explains: "Colin and I had one thread running through both our careers: a relentless focus on high performance project delivery. If a company can deliver projects to the best of its ability, whether it is a sole trader or a corporation, it will find its place in any vertical. The central foundation is its optimisation of software, hardware and people. We began our collaboration in 2018 and set up Xergy, which led to the development of Proteus," he said.

Proteus allows project managers to constantly manage margins throughout the cycle of project delivery, whether tendering out or responding to that tender.

"We saw there was a large gap between what companies did and their potential in the sector. Proteus enables small and medium enterprises (SME) to punch well above their weight when tendering for contracts," he says.

This was at a time when companies were keeping a close eye on wholesale oil and gas prices. Following the 2014 crash, the prevailing sentiment was that oil and gas prices were going to be lower for longer. And it was a time when companies were increasingly focused on the implications of the energy transition and decarbonisation.

Looking after the details

"The structure for understanding profits, margins and salaries in the oil and gas sector is incomparable to the structure for a renewable energy company. Many renewable energy companies are typically set up based on a long-term model incorporating formulaic power purchase agreements with governments, meaning that the process for understanding the same factors is different from that traditionally seen in the industry. "We also realised how important it was for a renewable company, which are typically SMEs, to be competitive at every stage; from bidding to project management. Technology had come on a long way in supporting this but there was still room for improvement.

"Prior to creating Proteus, Colin and I each had our own proprietary software that managed margins and the cycle of project delivery. We took those elements and built on them alongside the wider Proteus team, embracing the latest technologies to help streamline the project management process," says Mr McCallum. "Proteus is sold as a software licence, where each of the users in a client company needs a licence to use the software. We sell it in two package — the Sales Module and the Project Delivery Module - with many customers beginning with the former and graduating to the latter as their project management requirements grow. Proteus was designed from the outset to communicate with other software, working in tandem to pull information together and provide insights in one place. It is the glue and the heart of the digital ecosystem, helping companies to map and optimise, utilising margins. And other applications can communicate with it, including Hubspot, HR, SAP and so on.

"We saw a large gap between what companies did and their potential in the sector. Proteus enables small and medium enterprises to punch well above their weight when tendering for contracts."



"In the not-too-distant past, if you had the financial strength to access systems like Oracle, that was what you bought. It was like a closed system. Now it is possible to build a digital ecosystem made out of different tools. You can even plug in software that interprets data concerning your carbon dioxide emissions.

"Proteus uses a cost-time resource (CTR) breakdown to ensure bids are competitive and realistic. It captures the actuals versus the expectations and the information is banked for future reference as a continuous learning feature. If the bid is successful, the same software can then build the project out to the delivery phase for a contractor in the supply chain, likewise oil companies can move from the development phase.

"Enterprise resource planning (ERP) allows companies to optimise three assets: hardware, software and people. Mapping the carbon footprint is the fourth. Capital comes as a follow on: if the business is very good, then capital will come," he says.

Learn as you go

"Learning from data has, historically, been captured by the written word or by an Excel spreadsheet and these were then stored in numerous file locations. But systems like the cloud-based Proteus can store real time information in one place, which can then be understood and interrogated. This forms the basis for a learning experience. Finding and learning from your own data is the key. What makes the difference is software that allows you to benchmark your own methodology. Without that level of detail, no amount of data will help.

"Because Colin and I both have an upstream background – with my experience being in drilling and Colin's being in process engineering for oil and gas – we expected that our customers would also come from the fossil fuel vertical. However, due to the agnostic approach of the system, we have seen particular interest in the construction sector, with a key client being an Australian company in the industry and across engineering.

"Colin and I have had a wonderful cross-learning opportunity from this. Construction is typically a lowmargin industry. This has been very helpful for us as it has made us hold up a mirror to ourselves as our clients move into the low-margin renewable energy space. Installing a wind-turbine, managing the multiple supply chain companies and the thousands of strands running through the project becomes increasingly complex as the number of turbines grows. But the client needs to be able to follow all of them and give the chief financial officer the information they need, ensuring the business is performing as forecast," he said.

The future of project management tools

While artificial intelligence is playing an every bigger role in data mannagement and interpretation, it is a doubleedged sword. "High performance AI tools have been an increasingly significant part of the conversation in the digital space, with tools that incorporate AI beginning to compete with each other at an increasing degree. "However, having the basics of the data footprint of a company is essential if AI is to help to transform them and their efficiencies. AI has rumbled along, entered everyone's dialogue, but must also be considered alongside the higher energy consumption that these tools require. It's an order of magnitude.

"While it's undeniable that these types of systems have a huge potential, not just in the project management sector, we must consider the wider implications of these developments and recognise that to move forward, we must take stock and ensure we have the best systems already in place that have the capability to work with future data tools."

Draghi's warning

The former European central banker's survey of the EU's future is – even if some of its individual points are debatable.

hile Europe reels from high wholesale energy prices and in some case from self-inflicted green targets, a substantial new report by Mario Draghi on European competitiveness makes for challenging reading. Many of the European Union's original good intentions – market transparency, competitiveness and financial stability – have been kicked into the long grass by a deadly mix of excessive bureaucracy, declining production of oil, gas and coal and an evidently more hostile world. On top of these headwinds, not all the individual states are even aligned, especially where energy trade with Russia is concerned.

Without Russian pipeline gas, 42% of EU gas imports arrived as LNG in 2023, up from 20% in 2021. Starved of this – generally the cheapest, if not always cheap, supplier – European heavy industry has turned down demand in face of cheaper imports from elsewhere or lower domestic demand for goods.

This explains some of the drop in prices as more supply has become available. But there is a heavy price to pay for this: economic growth is flatlining. Volume car manufacturing, once a German forte, looks shaky as competition grows.#

Further, Europe sees taxes on energy as an important revenue-raising mechanism. And given the emissions trading scheme, the carbon intensity of the fuel consumed has also become part of the generation and manufacturing costs. Everyone may soon be on a level playing field with the carbon border adjustment mechanism but entry tickets to the game have become very expensive.

More imports are coming from countries with low energy and regulatory costs and large carbon footprints, such as China and the US. China though is also winning at decarbonisation such as clean tech and electric vehicles – thanks to a powerful combination of massive industrialisation, rapid innovation and control of raw materials production abroad through its 'bridge and road' initiative. As its own economy shrinks, its overcapacities are likely to persist and more goods will come to the EU, warns the report.

Unlike China, there are democratic principles at work in Europe and electoral cycles are generally too short for ambitious projects. Voters want to see evidence that their money is being spent well, but the effects of the policies could take a decade or more to be visible.

But despite the various campaigns calling for an end to oil and gas, the public is generally is not that interested in the transition in Europe. The costs are huge. Hungary might be castigated for its slowness to turn down Russian gas imports but it argues it has not had EU funding to pursue sustainable alternative sources.

Report 'stronger on power than gas'

Analysts at the Hague Centre for Strategic Studies agreed with some of the report's recommendations – but not all. Generally, they found it more pragmatic for the power market than for gas.

In particular, they argued that streamlined permitting procedures for the new energy system are essential not just to combat climate change but also to strengthen EU's independence from the US and China. Europe's strategic energy dependencies and excessive regulation pose significant barriers to competitiveness.

The analysts also said the EU should step away from areas where it has no advantage over China, such as solar panels.

On the negative side, they said the collective gas

purchasing, recommended by the report, will not solve the "painful consequences" of import dependency. It was high gas prices that led to lower demand as more LNG imports replaced Russian gas. Collective procurement would not have had much impact in those conditions, they said.

The Draghi report stresses the EU must accelerate the transition to renewable energy and improve energy efficiency across all sectors. It emphasises the negative impact of high prices on EU industry in terms of competitiveness and advocates an assertive industrial policy based on strategic importance.

With the LNG market expected to expand in the coming years, a new crisis is more likely to be seen in the field of electricity (severe grid congestion) than in the field of gas, the HCSS analysts argue.

Europe 'must build on strengths'

Mario Draghi told a webinar hosted by the IEA that the European Union should build on its strengths. "Our problem is that we have not done much to capitalise on low prices," he said. "We have to be consistent, have policies that are aligned with objectives and we need ambitious policies."

He also advocated group gas purchasing, a policy that has already had EC approval. "Buy gas from the rest of the world, he said. "We have market power if we act together. We don't seem able to do it, but that is one answer to high prices and volatility." Not all his readers support this view, though (see *left*).

IEA head Fatih Birol said that the EU members had made three historical mistakes: first, over-reliance on

Market rules prevent industries and households from capturing the full benefits of clean energy in their bills, says the report. While Europe uses less gas and invests more in clean energy, at the peak of the energy crisis in 2022, natural gas was the price-setter 63% of the time but only accounted for a fifth of generators' fuel mix. One solution that Mr Draghi suggested during a conversation with the IEA CEO Fatih Birol might be to decouple energy from gas prices by using different contractual arrangements: long term contracts such as power purchase agreements and contracts for differences. "Some countries do this and as a result they pay a lot less than Italy and Germany: Sweden, for example," he said. But Sweden's electricity producer and retailer is Vattenfall, a wholly state-owned entity, which allows more flexibility in pricing and billing than might be available to a commercial entity with many shareholders' interests to satisfy..

Without Russian pipeline gas, 42% of EU gas imports arrived as LNG in 2023, up from 20% in 2021.

Energy taxation has become an important source of budget revenues, contributing to higher retail prices. This cost is high and volatile, at $\leq 20-25$ /MWh for gas-fired generation), while in California the same cost stands at around $\leq 10-15$ /MWh.

Excluding the CO_2 costs paid by generators, the

Russia; then, closure of a lot of nuclear plants. With them went technology export opportunities. And third, it dropped the ball with solar energy. Solar panels had been a European speciality but now China dominates.

The IEA estimates that in southern Europe today it costs about half as much to build renewable energy capacity than gas-fired plant But there are other problems such as access to grids. Mr Birol said that the next step is to debottleneck transmission.

Climate cannot actually be considered source of growth, say economists ; if input more expensive, so is output. But if we are to lower the energy price to US price we would increase potential growth by 1%/yr, or a third or half the cost of ueaerly cost of climate change, so raise potential output and do repay the cost over time.

generation cost is in the range of 45% for households and 65% of industrial retail prices. The residual costs were split roughly equally between the network and taxes.

The first key goal for the energy sector is to lower the cost of energy for end users by transferring the benefits of the decarbonisation. The report recommends reinforcing joint procurement – at least for LNG – to leverage Europe's market power and establishing long-term partnerships with reliable and diversified trade partners as part of a genuine EU gas strategy.

Europe also needs to reduce its exposure to spot market by encouraging a progressive move away from spot-linked sourcing, the report recommends.

The second is to accelerate decarbonisation in a costefficient way, leveraging all available solutions through a technology-neutral approach, including renewables, nuclear, hydrogen, bioenergy and carbon capture and storage. It should also be backed by massive mobilisation of both public and private finance and faster permitting for installation.

Becoming more independent creates an "insurance cost" for Europe as it will no longer be buying from the most efficient supplier. But becoming less vulnerable to external leverage, the EU will also benefit from increased decision-making autonomy.

IEA hosts Slovak PM

The International Energy Agency (IEA) has been keeping a watch on the European Union's twin battles of lowering prices and boosting the security of its energy supply.

Following a meeting with Mr Draghi, it hosted Slovak president Peter Pellegrini, visiting Paris for a discussion with its head Fatih Birol on a range of European and international energy issues.

Among the themes were Slovakia's progress on expanding its nuclear power capacity and the role

of nuclear in supporting the security and stability of the European energy system while helping European industries compete internationally, the IEA said. The IEA is publishing a report on financing nuclear power early next year.

Other topics on the agenda were also related to the Draghi Report: car manufacturing in Europe; oil and gas markets; and international trade and geopolitical issues. They also discussed the energy situation in Ukraine and the key challenges it faces for the coming winter, as highlighted in the IEA's recent report.



COMMITTED TO EFFICIENT DECOMMISSIONING

