# Global Underwater Hub News

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## IN THIS ISSUE



# DEEP IN TRANSITION

# Welcome to the latest issue of GUH News.

A warm welcome to the first issue of GUH News for 2025 and what is a bumper edition in time for Subsea Expo.

The past year has seen significant change around the world, particularly in a political context, which has had, and will have, an impact on energy policy, energy security and the drive to net-zero. Alongside this, there continues to be threats to the security of vital undersea assets, with recent incidents in the Baltic Sea and English Channel being cause for concern.

These are topics that will be debated in conference sessions at Subsea Expo, which takes place at P&J Live in Aberdeen from 18 – 20 February. Our theme, 'Deep in Transition', reflects the continued need for energy production from traditional offshore sources, bolstered by new renewable supplies and the impact this has on the subsea and underwater supply chain.

Changes in political administrations on both sides of the Atlantic have delivered differing approaches to energy policy. The Labour-led UK Government is driving forward plans to expand energy generation from renewable sources. Meanwhile in the United States, President Donald Trump has swiftly shifted the nation's energy policy back to oil and gas with the statement "drill, baby, drill".

With governments, and in turn policy, sometimes changing every four or five years, it means that businesses lack the clarity they need around future direction and investment. This is particularly true during the energy transition, where the need to balance energy generation from traditional offshore sources with that of new renewable energy is critical.

What businesses need, regardless of what industry they are operating in, is certainty. Something that was clearly evident in the results of our 2024 Business Survey. This key piece of research from GUH's market intelligence team offers an insight into the thoughts of the UK's world-leading underwater supply chain, the value of which now stands at £9.2billion, whilst supporting 51,000 jobs.

Although the industry has the capacity and the capability to deliver, it is project surety that is missing. The recommendations we outline in the document seek to highlight where support is needed, in order for the underwater industry to grow, our economies to decarbonise and ambitious net-zero targets to be met.

The team at Global Underwater Hub looks forward to welcoming many of you to Subsea Expo in February and at our programme of conferences and events during 2025.

Enjoy this latest issue.

Neil Gordon
Chief Executive, Global Underwater Hub

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## Contact the Editor

For all content submissions, advertising and sponsorship enquiries, please contact GUH News editor Dan Fearon.

**Dan Fearon**
Digital Editor | dan.fearon@theguh.co.uk | 01224 506600

CONTACT DAN

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SUBSEA EXPO

> 89% of companies are actively involved in or considering diversification

# Transition in sharp focus as companies re-imagine existing competencies in new markets

**The bells to welcome in 2025 marks the beginning of the second half of this decade, and crucially the continuing march towards many of the first of the UK's 2030 energy transition milestones. Deployment of offshore wind together with $CO_2$ and other emission reductions from conventional energy remain paramount on an agenda of aspirations while at the same time our focus on food production, connectivity and even security begins to shift from land to sea.**

Taking into account this exact midpoint in a decade of change, Subsea Expo's aim to celebrate multiple markets and diversification by showcasing an industry deep in transition, comes at a genuinely exciting time for the collective blue economy.

The underwater supply chain, of course, plays an essential role in this transition and has proven itself to be highly proactive in both considering and enacting on diversification, entering new markets and expanding into new countries. In addition, many of these national aspirations are dependent on the skills of the underwater community to make them a reality. Projects moving ever further from shore to take advantage of greater space require solutions throughout the water column from splashzone to seabed, shifting the balance of innovation from above to below the water line.

In many cases, the transition allows companies to re-imagine and deploy their existing experience and competencies into emerging markets with problem-owners who can benefit from solutions to problems which are largely unchanged. Subsea batteries, inspection ROVs, fibre optic monitoring, cranes, corrosion inhibitors and subsea cutting to name only some are all largely agnostic to the sector they mobilised to with the inherent capability being the defining factor.

Research by GUH within a member and supply chain survey found that 89% of companies were actively involved in or considering diversification. In addition, desktop analysis of 1,500 underwater-focused companies found that 87% could be considered to be active in more than one underwater sector and half of all companies could be considered in three. While in most cases this covered companies who were looking to transition across primary energy generation markets, there are also excellent examples of companies finding opportunities and value across aquaculture, defence, telecoms and marine science.

A broad underwater market with similarities across sectors allows the supply chain to focus on the 'how', rather than the 'why', and retain opportunities to enter new markets. The transition provides plenty of opportunities but also generates some turbulence throughout the journey. Opportunities in multiple markets allows companies to take a spread-risk approach whilst remaining proactive in setting their future direction.





# Aberdeen robotics firm powers into the energy transition at the world's largest wind farm

**High Performance Robotics (HPR) is powering up the world's biggest offshore windfarm after moving into the renewables market, driving down the cost of subsea inspection, intervention and repair with its growing fleet of micro Remotely Operated Vehicles (ROVs).**

The company, known for its work with clients such as Shell, Wood and EnQuest, is now making its mark in offshore wind by supporting the delivery of Dogger Bank, which will power six million homes.

HPR's robots delivered live footage of the intricate operation to land subsea power cables connecting the vast project to shore through tunnels drilled under the beach.

The contract rounds off a transformative year for HPR, which is led by former Scotland international cricketer Jan Stander.

Following investment from Ventex – the Aberdeen-base climate tech venture studio – HPR has rebranded, expanded its fleet, and grown its team.

As a result, the company has undergone dramatic revenue growth and is eagerly awaiting its year end results, which will show turnover has doubled from £1million to £2million.

Jan Stander said: "With strategic investments in our fleet and the transformative effects of deploying new miniaturised technology, such as 360 and stereoscopic cameras, we are able to create point cloud datasets and virtual environments, as well as carry out subsea cutting and sampling, saving millions of pounds for clients in inspection and intervention campaigns.

"Our push into the offshore wind market means we can apply our experience from 300 projects to assets now in construction, or in some cases starting to see signs of ageing after a decade in the water."

With a focus on efficiency and innovation enabled by the advancing miniaturisation of electronics, sensors and tools, HPR supports complex underwater projects helping clients cut operational costs, reduce emissions and enhance project safety.

The wind farm is being developed as a joint venture by Equinor, SSE Renewables and ENI Plenitude. The project is central to the UK´s ambitious goal to reach 40 GW of installed offshore wind capacity and have UK households powered by offshore wind by 2030.

Steve Gray, Chair at HPR said, "This work on Dogger Bank highlights the agility and flexibility that HPR brings to the offshore wind market. Advances in technology allow micro systems to work in conditions, and carry out tasks, previously reserved for divers or heavy work equipment.

"At my previous subsea remotely operated vehicle company we worked on 70% of all the windfarms in Europe up to 2019, using large vehicles of up to 3 tons. HPR is changing the way we work subsea using equipment with a fraction of that weight, cost, risk and carbon footprint.

"We're excited to play a role in delivering a project that will power millions of homes and look forward to supporting further projects, including the build out of ScotWind."

> "HPR is changing the way we work subsea using equipment with a fraction of the weight, cost, risk and carbon footprint. The work on Dogger Bank highlights the agility and flexibility HPR brings to the offshore wind market."

The Ventex team (Steve Gray, Stuart McLeod and Rob Aitken) with HPR's Jan Stander


FEATURE ARTICLE

SUBSEA EXPO

# Subsea Expo 2025: Deep in Transition

**Subsea Expo returns to P&J Live in Aberdeen from Tuesday, 18 until Thursday, 20 February, with thousands of visitors from across the UK and overseas expected to attend over its run.**

Organised by Global Underwater Hub


**This three-day showcase of the subsea sector and wider underwater industry highlights the latest technologies and innovative products, whilst offering a platform for debate, discussion, learning, networking and doing business.**

**Organised by Global Underwater Hub, the free to attend event features a packed programme, including an exhibition arena with over 100 companies and organisations, multiple conference sessions, and breakfast and evening networking opportunities.**

**100+** Exhibitors

**3** Days

**85** Conference Speakers

**Worldwide** Appeal

**FREE** to Attend

## Deep in Transition

The theme for this year's Subsea Expo is 'Deep in Transition'. It reflects the need for energy production from traditional and new renewable offshore sources and the resultant impact this has on the subsea and underwater supply chain. Discussions will also explore the growth of the blue economy and supporting the global drive to net-zero.

Following a year of political change, the theme mirrors a world in the midst of transition in terms of energy generation and consumption, and how the power of the oceans and seas can be sustainably harnessed to support a growing population. It also acknowledges moves to enhance and protect global communication channels and efforts to combat climate change.

## Networking breakfast

Proceedings at Subsea Expo will open on the Tuesday morning with an international focused business breakfast that will set the scene for the following three days. This ticketed session will explore the range of opportunities that exist across multiple underwater markets, both domestically and overseas.

Chairing the session is David Rennie of Scottish Enterprise, who will be joined by Kurt Foreman from Delaware Prosperity Partnership, an economic development agency working to grow business in the US state of Delaware, Barry MacLeod of offshore wind developer Flotation Energy and Anu Eslas of Ignitis Renewables, a green energy company operating in the Baltics and Poland. Tickets for the breakfast can be purchased online via the Global Underwater Hub website.

## Conference programme

The event's premium conference stream, 'Deep in Transition – addressing the energy challenge', will run over Tuesday lunchtime. It will bring together a panel of industry leaders to explore how industry can collectively work together to ensure planned global energy projects become a reality and assess ways to address the levers that can aid or impact market development.

Sharing their perspectives with session chair, Erikka Askeland, news editor of Energy Voice, will be Colin Welsh, a partner with SCF Partners, Sue Bartlett Reed, chair of the UK Marine Energy Council, Mike Killeen, chief operating officer with Serica Energy, and Adam Reed, global leader for offshore renewables and upstream energy at Allianz Commercial.

Reflective of the underwater supply chain's desire to broaden its market base, the full conference programme will highlight opportunities across the underwater industry. Sessions covering subsea decommissioning, wave and tidal energy, floating offshore wind, fishing and aquaculture, and defence aim to outline the market potential and opportunities that exists in each area.

Alongside these, a women in industry session and one featuring a panel of young industry professionals will offer perspectives on a range of topics and key industry subjects, including diversity, innovation, sustainability and the potential of artificial intelligence.

Concluding the programme are a series of sector spotlight sessions, which will see companies from across the underwater supply chain showcase innovations, highlight new technologies and discuss collaborative projects. Sessions will cover ROVs and robotics, maintaining late-life subsea assets, subsea power control systems and umbilicals, innovation, and business development.

## REGISTER NOW!

Advance registration for Subsea Expo is recommended and can be completed at **www.subseaexpo.com**, where further information on the event – including exhibition and sponsorship opportunities – can be found.

# Hydro Group supports KIOST with renewable energy project on Jindo Island in South Korea

Visit Hydro Group on **STAND 51** at SUBSEA EXPO

**Hydro Group was delighted to support KIOST with a project in South Korea on Jindo Island by providing the HRC240 & HRC140 Renewable Connectors to be utilised in a Tidal Current Energy Converter.**

The company has a strong track record in high profile marine renewable energy projects around the world, supporting customers through every stage of the product lifecycle to determine suitable subsea connector solutions for the most demanding applications. With 19 years of renewable energy experience, Hydro Group has successfully completed 20 projects for this industry.

The existing 36KV Hydro Group Renewable Connector (HRC) has been designed to connect large subsea power cables to wave and tidal energy convertors. The connectors are used to join static armoured (single contra helical, quad armour) subsea power cables to dynamic subsea umbilical's. Various types of cable can be accommodated within the geometry of the connector.

Each connector design is tailored to suit the requirements of the subsea cables which can contain fibre-optic and instrumentation connections as well as 3 phase power connections. The HRC connector bonds in less than 2 hours, in turn reducing offshore installation times. The reduced installation time means the 36kV Dry Mate HRC is a lower risk, more cost effective and safer option, due to the reduction in offshore-man hours.

Scott Sinclair, Development Technician said: "It was great having the opportunity to work with our partners in South Korea on the renewable energy project on Jindo Island, throughout the project our teams were very committed to the building and termination work of the HRC Connectors, this dedication helped all parties achieve a successful installation. We look forward to working together on future projects."

"It was great to continue working with our partners in South Korea. We have completed a number of successful projects in this region, and we are keen to continue working in this area. We value the strong relationships that we have developed with our partners and believe that this is essential to ensure projects run as smoothly as possible."

# C-Kore Systems expands sales team with new Aberdeen office

Visit C-Kore Systems on **STAND 62** at SUBSEA EXPO

**C-Kore Systems, a leading provider of subsea testing tools for the offshore oil and gas industry, is thrilled to announce the expansion of their sales team with the opening of a new office in Aberdeen. Effective from the beginning of January, this strategic move aims to strengthen C-Kore's presence in the North Sea region and provide enhanced support to their growing customer base.**

The new Aberdeen office marks a significant milestone in C-Kore's ongoing growth journey, following an exceptionally successful 2024. The company achieved their best turnover to date, with their innovative test tools being utilised by operators and installation contractors worldwide on de-commissioning, fault-finding operations, and new installation campaigns. The tools are easy to deploy and operated without the need for C-Kore personnel on-site, providing rapid and accurate feedback. This combination of simplicity, accuracy, and reliability introduces significant operational savings to testing campaigns.

C-Kore's achievements were further recognised with the prestigious King's Award for Enterprise in International Trade in 2024, underscoring their commitment to excellence and global trade. Additionally, C-Kore is excited to announce their nomination for the GUH Export Award, with the winner to be revealed at the awards dinner during Subsea Expo, adding to the anticipation surrounding this prestigious event.

Cynthia Pikaar, Sales & Marketing Director at C-Kore, said: "We are thrilled with our progress and the opening of our new office in Aberdeen. Our success in 2024, along with the recognition from the King's Award and GUH nomination, underscores our commitment to innovation and customer satisfaction. We look forward to the new year, partnering with our customers to simplify and enhance their subsea testing processes, ultimately saving them both time and money."

The C-Kore family of products





Visit Subsea Commercial Services on **STAND 99** at SUBSEA EXPO


eDNA Sampler

# Subsea Commercial Services secures exclusive representation agreement with Dartmouth Ocean Technologies

**Subsea Commercial Services Ltd (SCS) is pleased to announce an exclusive representation agreement with Dartmouth Ocean Technologies, a leader in innovative underwater technology. This partnership grants SCS the rights to represent Dartmouth's advanced underwater product range, including the groundbreaking eDNA Sampler, across Scotland.**

The collaboration aims to provide cutting-edge solutions for ocean scientists, offshore wind farm operators, aquaculture businesses, and environmental monitoring authorities. By combining SCS's local expertise with Dartmouth's advanced technology, this agreement is poised to elevate the standard of underwater research and operational efficiency in Scotland.

"As a trusted partner in the subsea industry, we are excited to bring Dartmouth Ocean Technologies' innovative products to our clients," said Callum Magee, Managing Director of SCS. "The eDNA Sampler, in particular, represents a significant advancement in environmental monitoring and biodiversity assessment, enabling more efficient and sustainable operations for industries and researchers alike."

The eDNA Sampler is a state-of-the-art solution designed for non-invasive, automated underwater sampling of environmental DNA (eDNA), enabling precise monitoring of marine ecosystems. This technology is particularly valuable for applications in environmental conservation, biodiversity monitoring, regulatory compliance, and sustainable resource management.

Tom Knox, General Manager of Dartmouth Ocean Technologies said: "Our partnership with Subsea Commercial Services Ltd reflects our commitment to expanding access to innovative underwater technologies. SCS's expertise and established relationships in Scotland make them the ideal partner to represent our product range."

With this agreement, SCS strengthens its portfolio of subsea solutions, aligning with its mission to support sustainable ocean practices and deliver unparalleled value to its clients.

The eDNA Sampler will be on display at Subsea Expo 2025.

"The eDNA Sampler, in particular, represents a significant advancement in environmental monitoring and biodiversity assessment, enabling more efficient and sustainable operations for industries and researchers alike."

# Value of UK's underwater sector grows but concerns around project surety remain

**Analysis carried out last year by Global Underwater Hub has shown the growing importance of the underwater industry to the United Kingdom economy.**

The results of the organisation's 2024 Business Survey indicate that the annual value of the UK's underwater industry now stands at £9.2billion, representing a 15% increase in five years. In addition, this vibrant industry supports 51,000 jobs across the country.

With decades of knowledge, skill and experience built up through work in the challenging environment of the subsea oil and gas sector, the supply chain rightly considers itself world leading. This is reinforced in the survey results which indicate that the UK's underwater industry continues to be in demand around the world, with 38% of the industry's value coming from exports.

Oil and gas remains the main market of interest for supply chain companies, but offshore wind continues to be of growing importance for firms, with 92% considering it a primary or secondary market for them. The survey also revealed a growing focus being placed on other markets, including wave and tidal energy, CCUS, hydrogen, aquaculture and defence. These findings illustrate how the supply chain is embracing the energy transition.

The report notes that the industry has both the capacity and capability to accelerate the global energy transition, but only if project certainty is secured, something that is influenced by many factors, including policy, consenting and investment.

Investment is required to develop the underwater sectors, particularly over the longer term – four to 10 years. However, a lack of project surety and uncertainty about project timelines is making it difficult for firms to tie business investment plans back to final investment decisions, tender awards and project sanctions.

Despite challenges, the industry continues to grow and 80% of respondents are confident about market prospects, while 57% believe any roadblocks to success can be overcome.

GUH has set out a series of recommendations that it believes are critical to unlocking the full potential of the UK's underwater industry. The organisation is calling for the creation of a national industrial strategy; initiatives to address concerns around project surety; the development of a sustainable skills economy; and targeted investment, support and policy in areas of genuine international competitiveness which encompass many areas of the underwater supply chain.

Clearly evident in the published report is the need for focused support and commitment from all stakeholders to ensure the UK's pipeline of projects can be realised.


"The annual value of the UK's underwater industry now stands at £9.2billion, representing a 15% increase in five years."

2024 Global Underwater Hub Business Survey

For more information on the 2024 Business Survey and to download a copy of the report, visit **www.globalunderwaterhub.com/business-survey** or scan the QR code.





# C-SAM Celebrates 25 years of innovation and excellence

Visit C-SAM on **STAND 74** at SUBSEA EXPO

**This year marks a major milestone for C-SAM, a global leader in asset and rental management solutions, as the company celebrates 25 years of success in delivering cutting-edge, tailored systems to the oil and gas, marine, and renewable industries.**

Founded in 1999 in the heart of Aberdeen, the Oil Capital of Europe, C-SAM started as a small, innovative company focused on solving complex asset management challenges. Over the past quarter-century, it has grown into a trusted partner for businesses worldwide, supporting over 1,000 users across 25 countries.

David Paterson, Managing Director of C-SAM, said: "From the very beginning, we were committed to helping businesses gain better control and visibility over their assets. Seeing C-SAM grow into a globally recognised name in the oil and gas sector is incredibly rewarding. This milestone is a testament to the dedication of our team, the trust of our clients, and our relentless focus on innovation."

Over the years, C-SAM has revolutionised the way companies manage their personnel, equipment, and materials. Its modular-based platform is designed to adapt to the specific needs of its clients, offering everything from asset tracking and rental management to advanced financial tools and third-party integrations. This flexibility has made it an invaluable tool for startups and multinational corporations alike.

C-SAM's success is deeply rooted in its client-first approach. The company has forged long-standing partnerships with leading names in the industry, such as Survitec, HYCAERO, and OEG, ensuring that their systems remain relevant, reliable, and robust.

"The secret to our longevity lies in listening to our clients, understanding their challenges, and providing solutions that evolve with their needs," Paterson added.

As C-SAM celebrates 25 years, the company remains committed to innovation and growth. With the rapid evolution of technology and the increasing need for sustainable practices, C-SAM is focused on delivering solutions that not only improve efficiency but also support environmental responsibility.

To commemorate this milestone, C-SAM celebrate its milestone at Subsea Expo and many more events to come.

"This milestone is a testament to the dedication of our team, the trust of our clients, and our relentless focus on innovation."

# Graduate shares perspective on Harlyn project success

**Harlyn recently completed a significant project mobilising the JD Assister vessel for loading with a state-of-the-art T3200 trencher. The trencher, vital to hard ground trenching services, was prepared at the contractor's base in the Port of Blyth and transported to the USA for deployment in a groundbreaking offshore wind farm.**

Harlyn's scope involved not only the physical mobilisation of the trencher but also its associated control rooms, generators, stores, and a Passive Heave Compensator. From preassembly and testing to meticulous planning and QHSE site management, the project demanded precision and adaptability to changing circumstances. The team executed numerous complex lifts, including a combined lifting and skidding operation, while maintaining a high bar for safety and efficiency.

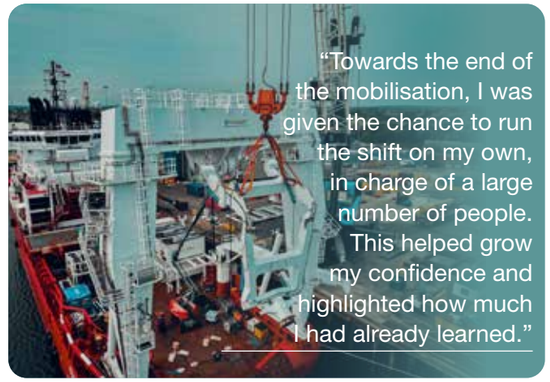
Over 10 days, Harlyn's engineers, project managers, and subcontractors worked around the clock to meet tight deadlines. Specialist partners were contracted to ensure uninterrupted uptime for lifting activities, hotworks, and electrical work, with the flexibility to adjust as needed. The trencher is now safely in the USA, ready to contribute to the ambitious offshore wind energy project.

James, a recent graduate and Harlyn team member, played a pivotal role in the project controlling the night shift operations, shortly after beginning his career. His involvement began with the initial engineering phase, applying theoretical knowledge to real-world challenges. During the mobilisation, James worked night shifts, overseeing critical tasks such as lifting cargo with port and vessel cranes, load testing equipment, and managing a team of welders.

As the mobilisation progressed, James was entrusted with running shifts independently, taking responsibility for a large team and becoming the go-to point of contact for mobilisation queries, supported by the wider Harlyn team. This experience not only allowed him to contribute meaningfully to the project but also bolstered his confidence and underscored his rapid professional growth.

James said: "Being able to do the initial work on this project and go on to be a part of carrying it out was very rewarding. Towards the end of the mobilisation, I was given the chance to run the shift on my own, in charge of a large number of people. This helped grow my confidence and highlighted how much I had already learned."

The successful mobilisation of the JD Assister highlights Harlyn's expertise in delivering complex, high-risk projects while nurturing the talents of emerging professionals like James.



"Towards the end of the mobilisation, I was given the chance to run the shift on my own, in charge of a large number of people. This helped grow my confidence and highlighted how much I had already learned."

# Charting a path of international growth
## - through the energy transition

By Aleksandra Jurczak,
Director of Strategy & Marketing

**At MDL, growth has always been about looking ahead, driven by one of our core values: "forward-thinking". From our beginnings in Peterhead, Europe's largest fishing port, to our footprint in global markets, our focus has always been on enabling safe and more efficient operations in the water column.**

MDL's story began with the fishing industry, which remains the staple of our home port of Peterhead in the North-east of Scotland. From day one, our mission was to solve our customers' challenges; at that time, they were all about ensuring a more reliable yield from equipment that was predictable and easier to manage, so that the fishermen could focus on what they were good at and what generated their daily income.

To improve on that job – and on their profitability - we focused on reducing manual handling and automating the trawl process.

MDL transpooling flexibles ahead of Australia lay

Those were the early days of MDL innovation and the blueprint for our business model: delivering advanced back-deck equipment that helped vessels operate more efficiently and safely in some of the most challenging marine environments.

This expertise in developing robust and reliable solutions lay the foundation for our success in other marine industries. Winches, tensioners, subsea cranes – MDL's fishing expertise around these assets was, in fact, at the core of critical subsea operations involving flexible lines. Since those early days, we have earned our reputation by understanding the complexities of the marine environment and working across the water column to deliver systems that operators can trust – and it is this foundation that enables MDL to meet the demands of a changing energy industry today.

### GROWTH THROUGH TRANSITION

Last October, MDL marked 25 years in business and at this milestone we updated our mission statement. Our previous commitment to solve our customers' challenges with alternative back-deck solutions is now expanded to "traditional and renewable energy sectors by delivering personalised and agile handling solutions for cables, mooring lines and flexibles."

This update reflects the very real commitment to supporting a fair and sustainable diversification of our energy mix - by leveraging our engineering and operational expertise, acquired over more than two decades of deploying and retrieving flexibles in the water column.

MDL's versatile technology is one of the key enabling factors, as it is just as relevant to floating wind farms as it has been for subsea tie-backs and pipeline installations. The same systems can be deployed to install power cables and mooring lines; and thanks to the application of MDL design philosophy, do so in an optimal way to protect the integrity of these flexibles, reducing the risk of costly failures and unforeseen maintenance requirements.

Further reassurance comes from the fact that MDL technology is heavily proven in different geographies and marine environments: from shallow to deep basins, and from calm seas to harsh waters, as well as protected areas such as California marshes or Australia's island coasts.





> "The "transition" is not the end of traditional energy sectors but a part of an ongoing process of improvement and diversification"

MDL Jumbo Mero

MDL Horizontal Lay System in South China Sea

### CONNECTING NEW MARKETS

As MDL continues to expand internationally, our commitment remains the same: we are a trusted partner for operators navigating challenging or constrained marine projects, wherever they may be and whatever sector their focus.

In Brazil, for instance, our close collaboration with local contractors has highlighted the role our technology plays in enabling cost-efficient decommissioning - an area that increasingly intersects with sustainability efforts. The MDL Wheeled Horizontal Lay System (WHLS) was deployed on an offshore supply vessel to recover SURF from deep waters that originally required a costly specialist vessel to install.

Similarly, across Asia, where offshore wind capacity is scaling at an unparalleled rate, MDL has been fostering partnerships to explore opportunities for optimised handling of cables, taking into account their increasing diameters, design complexities and connector variables.

But transition is just as much about diversifying energy sources as it is about optimising the lifespan of existing infrastructure that keeps the lights on. MDL's Asset Maintenance & Engineering division – born out of the vast technical expertise we have been honing across our business for over two decades - represents this mindset, helping operators maintain, overhaul and upgrade their offshore and subsea assets to maximise their capabilities and safely extend their lifespan - all in the name of circular economy.

### INNOVATION AT THE CORE

MDL's journey to date reflects our adaptability to the changing demands of our industry and the driving force behind this adaptability is innovation – a key part of MDL's DNA. Some of it is clear to see in the technology that proves a game-changer on first application, such as the MDL WHLS. Innovation can also be more intimate, revolving around out-of-the-box thinking to deploy existing assets in a new way – enabling operations to progress sustainably, both from the perspective of the environment as well as project budgets.

Our experience in traditional energy sectors has taught us that a partnership approach is often the differentiator in successful operations; and it will be the enabling force for the energy transition. By working together, operators, suppliers and industry bodies are able to effectively tackle diversification challenges, by scaling technology, increasing efficiency and ensuring that projects are both commercially and environmentally viable.

By bringing our proven marine expertise to new markets and sectors, MDL is helping our partners adapt to the transition while delivering on their immediate needs. Whether it is ensuring seamless operations in oil and gas or supporting the installation of next-generation offshore wind infrastructure, MDL remains at the forefront of industry evolution.

The "transition" is not the end of traditional energy sectors but a part of an ongoing process of improvement and diversification – and for MDL, it is the next step in our journey of innovation and growth.

# Lift-Rite develops unique testing equipment to enable successful installation of capstan winches at UK naval base

**Newcastle based industrial lifting and testing company, Lift-Rite Engineering Services, has developed a client specific, bespoke solution for the testing of capstan winches following their installation at a UK naval base.**

The capstan winches, which will be used to support the mooring of naval vessels at the naval base, require extensive testing of both foundations and performance prior to full commissioning.

To enable this, Lift-Rite developed and supplied a custom testing solution comprising an internal temporary anchor point to maintain pulling loads of the winches while in static and dynamic testing. This allowed for analysis of performance and lifespan under a range of operating environments.

Commenting on the project, Paul Hodgson, Operations Manager at Lift-Rite said: “This was a complex job which required us to design, develop and supply a solution that would load test the capstan winches on a naval base of great national importance.

“The focus on getting it right was therefore paramount as not only did we have to deliver the right solution, we also had to do this under significant time constraints and on a project of national significance.

“We feel very privileged to have been asked to undertake the load test and are hugely proud to have delivered an industry first that can now be rolled out not only across the naval industry but also across those that similarly rely on this type of equipment.”

As part of the contract, Lift-Rite was contracted to manage the job from initial design of the temporary anchor point to full installation and testing.

The operation took place on a naval base with all Lift-Rite personnel provided with the required security clearances to operate on the site.

Lift Rite is a single-source supplier of industrial lifting, rigging, and testing equipment. The team specialises in working across highly regulated industries with employees cleared to work in DSEAR environments.

The test involved 30t applied by way of an hydraulic pull cylinder, with tests simulated by pulling against Lift Rite’s 200t subsea clump weight cradle.





# Unlocking the path to net-zero emissions: the role of carbon capture and storage

By James Vavasour, Business Stream Director. Marine Warranty Services

**The urgent need to address climate change has put the spotlight on the importance of transitioning towards net-zero emissions. However, this transition is not without challenges. The realisation of net-zero emissions involves a vast economic transformation that would impact every sector of the economy. While renewable energy sources like solar and wind have gained prominence, it’s becoming increasingly evident that a diversified approach is necessary to ensure grid reliability.**

## Innovation and carbon capture: breathing new life into old assets

One of the most promising avenues for short to medium term emissions reduction is the innovation in carbon capture and storage (CCS). This technology involves capturing carbon dioxide emissions from industrial processes and transporting them to underground storage sites. Notably, this process not only mitigates environmental impact but also presents an opportunity to repurpose aging assets in efforts to decarbonise.

In this endeavour, the UKCS emerges as a potential game-changer. The region’s vast underground formations have the capacity to accommodate substantial amounts of carbon dioxide. This storage solution offers a proactive approach to addressing the carbon emissions challenge, allowing captured $CO_2$ from industrial processes to be stored safely beneath the ocean floor, effectively preventing it from entering the atmosphere and contributing to global warming.

This existing infrastructure opens the door to repurposing these sites for carbon storage, leveraging their established platforms, pipelines, and expertise. This strategic move could expedite the implementation of large-scale carbon capture and storage initiatives.

The effectiveness of CCS has been well-documented. According to the Center on Global Energy Policy at Columbia University, industrial facilities can reduce life-cycle $CO_2$ emissions by up to 90% through CCS implementation. Contrary to concerns about leakage, research suggests that over 98% of injected $CO_2$ remains in storage for over 10,000 years. Reservoirs are carefully selected for their geological characteristics, ensuring safe and permanent containment of the captured carbon.

## Navigating carbon capture and storage risks: leveraging expertise for a greener future

One of the keys to implementing CCS safely and at scale will be successful risk mitigation. Efficacy lies in leveraging the parallels and lessons learned against shallow and deepwater pipe-lay installation projects of the past. These types of dynamic installation campaigns, though challenging, are common in the offshore oil and gas industry and have been executed successfully for decades. The core principles of CCS deployment share a striking resemblance to these well-established offshore installation practices.

Addressing insured risks is another facet where the CCS landscape benefit greatly from the oil and gas industry’s combined experience. With a deep-rooted understanding of risk assessment in an offshore environment, energy insurers are well equipped to tailor coverage for CCS projects. Drawing from their extensive knowledge, insurers can collaborate with trusted marine warranty surveyors to leverage established scopes of work that have long served to safeguard investments and provide reassurance in the face of uncertainty.

## A multi-faceted approach to net-zero emissions

As the world races to combat climate change, the transition to net-zero emissions remains a formidable challenge. Acknowledging the necessity of renewable energy while addressing the reliability gaps using fossil fuels demonstrates a pragmatic understanding of the energy landscape. The innovation in CCS technology offers a tangible pathway to emissions reduction while repurposing aging assets. While debates and opposition persist, the potential of CCS as a decarbonisation solution cannot be understated. The potential of the UKCS as a CCS hub and the evolution of technologies like CCS point towards a future where net-zero emissions are not only attainable but also sustainable across diverse industries. The journey to net-zero is complex, but it’s one that encompasses innovation, adaptation, and a shared commitment to a more sustainable future.

> “The innovation in CCS technology offers a tangible pathway to emissions reduction while repurposing aging assets.”

James Vavasour, Business Stream Director. Marine Warranty Services

# Omicron connectors facilitate cutting edge camera system for BBC Studios' new landmark underwater TV series

**Teledyne Impulse-PDM, a leading provider of high-performance interconnect solutions, has supplied its state-of-the-art Omicron optical fibre connectors to BBC Studios for use in their upcoming underwater natural history series, set to air in 2026. Filming required custom-built camera technology designed to capture extraordinary marine footage from the depths of the Arctic, facilitated by the Rev Ocean's Aurora ROV.**

To capture groundbreaking underwater content BBC Studios and Marine Imagine Technologies designed a deep ocean-rated camera system integrated with a telemetry bottle, the central hub for communications on the submersible. However, during the Arctic expedition, the crew encountered challenges connecting the camera system to the ROV's telemetry bottle due to a missing optical fibre connector, critical to establishing communications for the system. Without this essential part, the team faced a significant delay in capturing underwater footage.

BBC Studios reached out from their expedition for support and Teledyne Impulse-PDM rapidly supplied the Omicron 5030/5070 optical connectors which deliver high-performance fibre connectivity in demanding environments.

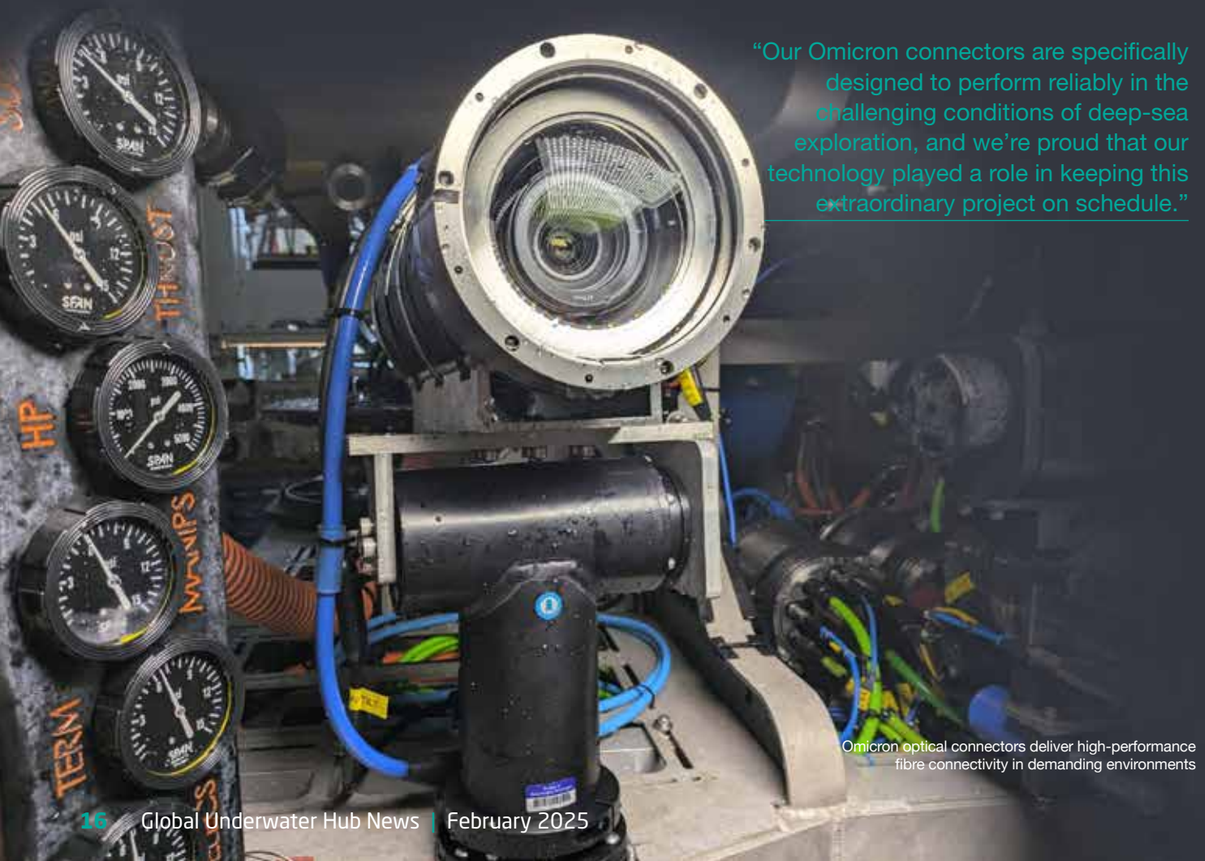
Suitable for both single-mode and multi-mode operation, Omicron connectors were ideal for the BBC Studios deep-sea application and the stringent requirements of the Aurora ROV system. Despite a tight timeline, Teledyne Impulse-PDM was able to courier the connector to Svalbard, enabling the BBC Studios research crew to proceed with their mission.

The BBC production team praised Teledyne Impulse-PDM's prompt support: "Teledyne's Omicron connectors were integral to keeping our project on track, and without the Teledyne team's quick response, we would not have been able to film in time."

Commenting on the project, Carolyn Jones, Head of Business Operations for Teledyne Impulse-PDM, said: "We're delighted to support BBC Studios in their quest to capture the world's natural wonders. Our Omicron connectors are specifically designed to perform reliably in the challenging conditions of deep-sea exploration, and we're proud that our technology played a role in keeping this extraordinary project on schedule."

This collaboration underscores Teledyne Impulse-PDM's dedication to delivering innovative solutions for underwater communications. Teledyne Impulse-PDM designs and manufactures high-reliability electrical and optical interconnection systems for a broad range of harsh environment applications. The company's products have proven their performance, even in the most demanding applications, which include oceanographic exploration, defence, offshore energy, medical devices, nuclear systems, and wastewater management.

"Our Omicron connectors are specifically designed to perform reliably in the challenging conditions of deep-sea exploration, and we're proud that our technology played a role in keeping this extraordinary project on schedule."




Omicron optical connectors deliver high-performance fibre connectivity in demanding environments





# Navigating tax challenges of remote working in a global economy

By Tom Harrison, Tax Senior Manager at Johnston Carmichael

**Remote working has transformed the global employment landscape, offering businesses and employees unprecedented flexibility. The attraction of working from anywhere, coupled with the enticing proposition of hiring talent globally, has unlocked exciting new opportunities. However, this newfound flexibility comes with its own set of tax, legal, and compliance challenges that without pro-active management, can come unravelling ex post facto.**

**Working from anywhere: individual flexibility and corporate risks**

The concept of working from anywhere sounds appealing, but it is far from simple in terms of compliance obligations. While remote work offers freedom, it also means businesses must navigate a complex web of immigration regulations, labour standards, and corporate risks.

When employees work remotely in foreign jurisdictions, businesses may create a 'permanent establishment', triggering corporate registration and tax liabilities. Other considerations include social security, income tax, and payroll regulations, which vary significantly per country.

Although a 'work from anywhere' model is appealing, businesses should invest in up-front professional advice to ensure compliance and avoid penalties or reputational damage. The costs associated with appropriate legal and tax consultation are far outweighed by the risks of non-compliance.

**Hiring from anywhere: expanding talent pool expanding complexity**

Hiring from anywhere gives companies access to global talent without requiring physical relocation. However, to do so the employer must navigate the challenges of employment law, payroll tax and reporting requirements in an unfamiliar overseas jurisdiction. For example, differing labour laws can impact employee benefits, working hours and termination rights so requires careful legal guidance.

In addition, payroll compliance presents another challenge. Hiring an individual in an overseas territory can bring about employer obligations such as payroll to account for income tax and social security liabilities, and failure to adhere to local rules can lead to penalties.

**Working from vessels: an offshore challenge**

Remote work isn't confined to land. Professionals such as engineers and maritime crew often work from vessels in foreign ports or international waters. This scenario introduces unique complexities, as jurisdictional tax rules can vary widely. For example, some countries consider the employee's residency, while others apply source-based taxation based on where the vessel operates.

**A proactive approach**

To navigate these challenges, employers should take a proactive approach to global mobility tax planning. This includes mapping out where employees are working and understanding the tax and legal implications proactively by engaging with professional advisers to address compliance risks.

While working and hiring from anywhere offer great potential, businesses must carefully negotiate the tax landscape to avoid costly pitfalls and position themselves for success.

# Toyo invests in Japan's renewable sector



**Toyo Construction has invested in Japan's emerging offshore wind sector by purchasing a market-leading trenching ROV from underwater technology and services company, SMD.**

The ROV will form part of Toyo's expanding fleet of assets, with the business having also invested in a custom-built cable-lay vessel late last year.

The new SMD trencher will be used alongside the vessel to facilitate the safe and efficient burial of subsea cables.

Discussing the collaboration, Matthew Woodward, sales and business development manager at SMD said: "Toyo is a forward-thinking company on a mission to become one of the biggest names in Japan's offshore windfarm construction sector. Among the first companies to enter this emerging market, Toyo has seized an opportunity to propel the clean energy transition forward.

"Our new partnership places Toyo firmly ahead of the curve; the trenching ROV supplied has been carefully tailored to excel in Japan's challenging subsea environments, where seabed conditions can pose additional complications when laying cables.

"Together, we are overcoming the challenges of an ever-evolving market by improving construction technology and reducing operational costs."

TATSUYOSHI NAKAMURA, COO at Toyo Construction, added: "We are delighted to be partnering with SMD; an innovative company that adds great synergy to our commitment to clean energy transition.

"We chose to invest in this technology because of SMD's prolific track recording in offshore wind, and of engineering excellence underwater globally. The team understood our unique requirements and adapted this vehicle into a bespoke product, suitable for our challenging operations.

"We look forward to using this vehicle to deliver exceptional results for our clients."

An SMD ROV Trencher

ADVERTORIAL

# BE V-LIFE READY

## – PRIORITISING PREVENTION OVER INTERVENTION

**In the demanding world of subsea operations, time is critical. Operators face challenges like cable degradation, water ingress, and falling insulation resistance (IR), risking production, safety, and profits.**

Viper Innovations believes in a smart approach where readiness and resilience are within every system to proactively prepare for challenges.

With our advanced topside Line Insulation Monitor (LIM), V-LIM, or subsea alternative V-SLIM, already installed, V-LIFE can be activated instantly, 'healing' low IR in cables and protecting system health from failure. This is the essence of being V-LIFE ready.

### WHY WAIT FOR A CRISIS?

With Intelligence Installed, Viper's V-LIFE technology empowers operators to:

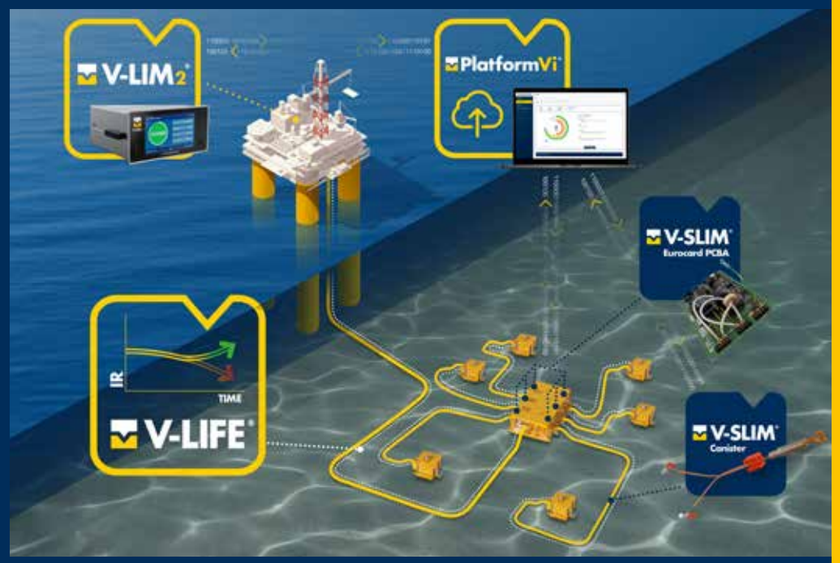
- Prevent faults before they occur
- Maintain healthy IR levels and avoid costly repairs
- Actively restore cables, extending lifespans and safeguarding production

### LAYING FOUNDATIONS WITH MONITORING

Underpinning this approach is V-LIM, Viper's advanced precision monitoring technology delivering:

- Real-time IR measurement
- Early fault detection
- Unparalleled accuracy

If IR drops to critical levels, V-LIFE recovery requires replacing the legacy LIM with V-LIM. To ensure V-LIFE activation readiness, we recommend installing V-LIM from the outset.




### A HOLISTIC SOLUTION FROM MONITORING TO MAINTENANCE

Viper Innovations delivers a suite of solutions addressing the complete lifecycle of subsea cables:

- **V-LIM:** Topside monitoring and visibility
- **V-LIM2:** Advanced, future-ready features
- **V-SLIM:** Subsea monitoring beyond transformers
- **V-LIFE:** Active fault prevention and healing

V-LIM, V-LIM2, and V-SLIM are V-LIFE enablers, with PlatformVi providing in-depth system health insights. This ecosystem gives operators unparalleled control, reliability, and security when protecting new installations or extending infrastructure life.

### THE POWER OF PROACTIVITY

Timing and technology drive success in subsea operations. Knowing when to act makes the difference between uninterrupted production and costly downtime. With V-LIFE, operators can make smarter decisions based on accurate data and actionable insights.

Be V-LIFE ready:

1. Install V-LIM, V-LIM2, or V-SLIM for real-time system monitoring
2. Use PlatformVi for insights and trend tracking
3. Activate V-LIFE to restore cable integrity

### WHY ACT NOW?

Delaying installation increases operational risks. By being V-LIFE ready, operators:

- Save costs by reducing downtime and interventions
- Increase reliability for continuous production
- Enhance safety for people and assets

V-LIFE is a proven solution with 12+ years of field-tested success, 500+ years of operational experience, the trust of 40+ global operators, and deployment in 20+ countries. By choosing V-LIFE, you're investing in your assets' futures.

### THE FUTURE OF SUBSEA

As the industry evolves, operators need solutions that evolve with it. Viper prioritises prevention over reaction. Join global operators protecting supply and assets with Intelligence Installed. **Be V-LIFE ready.**

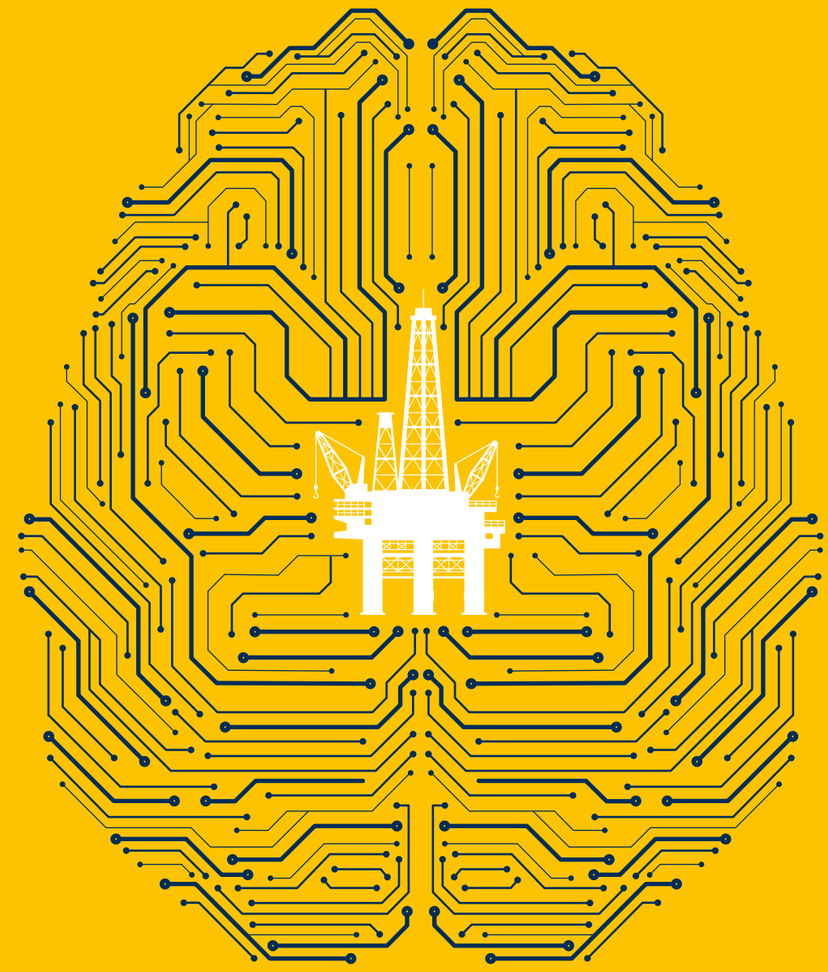
**Visit us at Subsea Expo, stand 69, to learn how our technology can maximise your operations.**

VIPER INNOVATIONS

# BE V. SMART
# BE V-LIFE READY

Visit our stand at Subsea Expo to find out more **STAND 69**

## INTELLIGENCE INSTALLED



As assets age, cables degrade, and failures happen. Low insulation resistance caused by water ingress is inevitable, compromising production and safety...but you can mitigate the risk. The power is at your fingertips.

Simply install **V-LIM** today for enhanced monitoring; with increased visibility of the health of your subsea control system, there's no need to work in the dark.

You'll also be future-proofing your system's integrity with the ability to switch on **V-LIFE**, the only preventative and active 'healing' solution for compromised cables.

It's time to be proactive to avoid risk to production and unplanned intervention. It's time to be **v.smart** and be **V-LIFE** ready.

For more information, visit:

**www.viperinnovations.com/be-v-life-ready**

V-LIFE®
A VIPER INNOVATION

# Global energy sector employment trends encouraging

By Sarah Munro, Legal Director, Pinsent Masons LLP

**A new report by the International Energy Agency (IEA) on employment trends in the global energy sector has identified encouraging trends, but also highlights areas for improvement.**

According to the World Energy Employment report, the global energy employment market outperformed broader labour market trends in 2023, with employment in global energy rising by 3.8%, compared to the economy-wide average of 2.2%.

Whilst most jobs were added in the clean energy sector (including offshore renewables) rather than the fossil fuel sector, there was some disparity across regions. In China, clean energy made up over 90% of energy job growth, while in the Middle East fossil fuels accounted for 80% of growth, and overall global employment in oil and gas is still increasing.

Energy jobs per capita are highest in Australia and New Zealand compared to all other surveyed countries. Whilst coal mining is declining globally, exploration of lithium resulted in an increased workforce in the critical minerals industry in Australia with a 6% increase in workforce year on year from 2022 – 2023.

Political attention on this sector often focusses on national energy security and environmental objectives, but governments' national labour market strategies have much to gain from encouraging this sector's job producing momentum.

The UK government is leaning into growth in the clean energy market. One of its five priorities, set out in its Plan for Change launched on 5 December, is clean energy. The government has pledged to deliver 95% clean power by 2030 by "creating hundreds of thousands of good jobs and driving investment into all parts of the UK, while protecting the planet for our children".

Job growth has also led to what the report described as intense competition for talent in clean energy sectors, which is prompting firms to "hire aggressively" in anticipation of future growth. The report also pointed to the increase in energy wage levels, which reflects increasing competition for skilled workers.

While wage premiums are sufficient to attract skilled workers from outside the energy sector, they may not always be competitive within the energy sector, the IEA report found. The average worker in the oil and gas sector, for example, earns around 15% more than a worker in clean energy sectors such as wind. Facilitating recruitment into clean energy is an industry and government focus in many countries.

In order to address skill shortages in the UK, the government is working with Offshore Energies UK to support the introduction of energy skills passports to boost the offshore wind labour market. The scheme will help workers and employers easily identify which qualifications and training standards, such as health and safety, are needed for specific roles in offshore wind.

The IEA said the transition to clean energy for workers in the global energy sector should be a "just" one. This is relevant to employers' Environmental, Social and Governance (ESG) strategies. Most large employers now have an ESG strategy and they increasingly take workforce issues into account.

With offices across the globe, Pinsent Masons are already working with multiple energy sector employers on industry themes highlighted in this report. The report's detailed analysis may be of interest to employers wanting to add a global context to regional energy sector challenges and opportunities.

The government has pledged to deliver 95% clean power by 2030 by "creating hundreds of thousands of good jobs and driving investment into all parts of the UK, while protecting the planet for our children".

# Corporate Travel Management publishes five-step guide to help organisations minimise travel emissions

**Corporate Travel Management has recently published a guide intended to support businesses in their goals to minimise their business travel-related emissions.**

In today's rapidly evolving corporate landscape, sustainability is no longer a buzzword but a crucial element of corporate strategy.

Business travel plays a valuable role in fostering company growth, nurturing corporate relationships, and seizing new opportunities. Recognising its significance to organisational success, the approach to reducing Scope 3 emissions is not about limiting travel demands, but instead optimising them through strategic and sustainable practices. By embracing more environmentally responsible choices, you can minimise emissions while maintaining the essential momentum of your business operations.

For Travel Programme Managers and ESG specialists, reducing the carbon footprint of business travel is both a challenge and an opportunity.

**Five-step plan overview**

1. **Understand your impact:** Assess your scope 3 emissions and the role of business travel.
2. **Leverage technology and data:** Improve data collection accuracy and track efforts effectively.
3. **Optimise travel policies:** Evaluate and adjust your policies to promote sustainable travel choices
4. **Engage employees:** Educate and empower employees to make eco-friendly decisions.
5. **Choose the right TMC:** Align with a TMC that supports your sustainability goals.

**Scan to read full article:**





# Quintham innovates cable guarding on Hudson River



**UK based company Quintham, with a solid track record of international guard protection, has developed a dynamic guarding framework which is proving to be a game changer in solving the complex risks of a cable guarding project on the Hudson River, USA.**

Quintham was contracted to mitigate a diverse range of risks and manage the task of providing guarding and preventative awareness work for a complex cable guarding project in the United States. The project involves protecting the cable while laying of a 110km cable in the busy Hudson River. In contrast with traditional guard boat operations, this project has the requirement to reduce the risk of the exposed cable suffering damage without using safety/guard vessels.

Quintham applied its dynamic guarding framework, which was extensively developed during operations in the United States. By reducing the total number of vessels required, Quintham improved the quality of protection and delivered a new level of analysis and historical data reporting for clients.

Quintham developed an innovative proposal for their client using their established software and hardware solutions to create land-based guarding in partnership with the local service provider Sea Services North America.

Robert Greenwood, Technical Director of Quintham said: "At short notice, we delivered a first-of-kind solution while delivering significant de-risking of the project through awareness raising and providing a strong deterrent effect. This delivered significant cost savings compared to a vessel-only based solution and with minimal carbon emissions."

The innovative solution relies on Quintham's guarding framework of integrated software and services. By providing an overview of the exposed sections online, river users could easily identify sections of exposed cable on the online map. They could download for immediate display on their navigation system, including the buffered safety zones.

Each section of the river with exposed cable is guarded by a team of competent mariners, who call and alert vessels to the necessary safety information for navigating the area and log real time AIS movements and radio communications. With over 60 miles (96 km) of cable laid and multiple guard areas along this route being operated by Quintham, the staff and client benefit from a 24-hour support team, who assist in coordination and health and safety monitoring and provide phone, email and WhatsApp-based support to mariners' queries.

Throughout the project, the teams and clients use the Quintham Hub to manage the collated data, and this is available as a live overview map with real-time and historical playback. This allows the team to manage risk dynamically and follow up instantly with vessels that raise concerns.

As the complexity of guarding requirements increases and the need to reduce carbon emissions and costs increases, Quintham has demonstrated that it can significantly improve quality, consistency and efficiency.

By providing an overview of the exposed sections online, river users could easily identify sections of exposed cable on the online map.

# Blue Abyss UK awarded match-funding by The Crown Estate Supply Chain Accelerator Fund

**Blue Abyss is delighted to announce its successful selection as a recipient of match-funding from The Crown Estate's Supply Chain Accelerator Fund.**

This funding will enable pre-development work for the pioneering Blue Abyss facility in the South West, including site selection, further solidifying the company's commitment to innovation and sustainability in extreme environments which will be an integral component for supporting the growth of the floating offshore wind supply chain.

This important funding supports Blue Abyss' efforts to enhance the UK's capacity and capability for floating offshore wind infrastructure, aligning with national priorities for renewable energy expansion. The funding will be part of the £1.5 million investment by Blue Abyss, in the early-stage development of the UK's premier research, training, and test facility.

John Vickers, CEO of Blue Abyss, said: "We are thrilled to receive this pivotal support from The Crown Estate's Supply Chain Accelerator Fund. This is a testament to the confidence in Blue Abyss as a key player in enabling cutting-edge solutions and support for floating offshore wind, UK energy security and resilience as well as net zero targets. Our UK facility will be a world-class hub for research, innovation, and talent development, and this funding brings us one step closer to making that vision a reality."

Blue Abyss UK will serve as a groundbreaking platform to support industries operating in extreme environments, from offshore wind to subsea technologies. With its state-of-the-art infrastructure, the facility will provide essential testing, training, and operational support, ensuring the UK maintains its leadership in global innovation, particularly in floating wind energy and Subsea technologies.

The Blue Abyss UK centre is forecast to create up to 200 jobs directly and contribute an estimated £80 million to the regional economy during construction, then a further £10 million annually, reinforcing the South West's status as a centre for research, innovation and industrial advancement, and its critical part in ensuring there are the right people with the right skills to support the UK's future renewable energy needs.

This initiative is aligned with the UK's commitment to achieving Net Zero and supports the ambitions of the Modern Industrial Strategy 2035. Recognising the need for such infrastructure, this funding by The Crown Estate – which manages the seabed and much of the coastline around England, Wales and Northern Ireland on behalf of the nation – underscores the importance of this development in meeting the market's demands for transformative, sustainable solutions.

By integrating world-class facilities with a vision for sustainability and economic growth, Blue Abyss is enabling a future where renewable energy thrives in harmony with the UK's environmental and industrial goals.

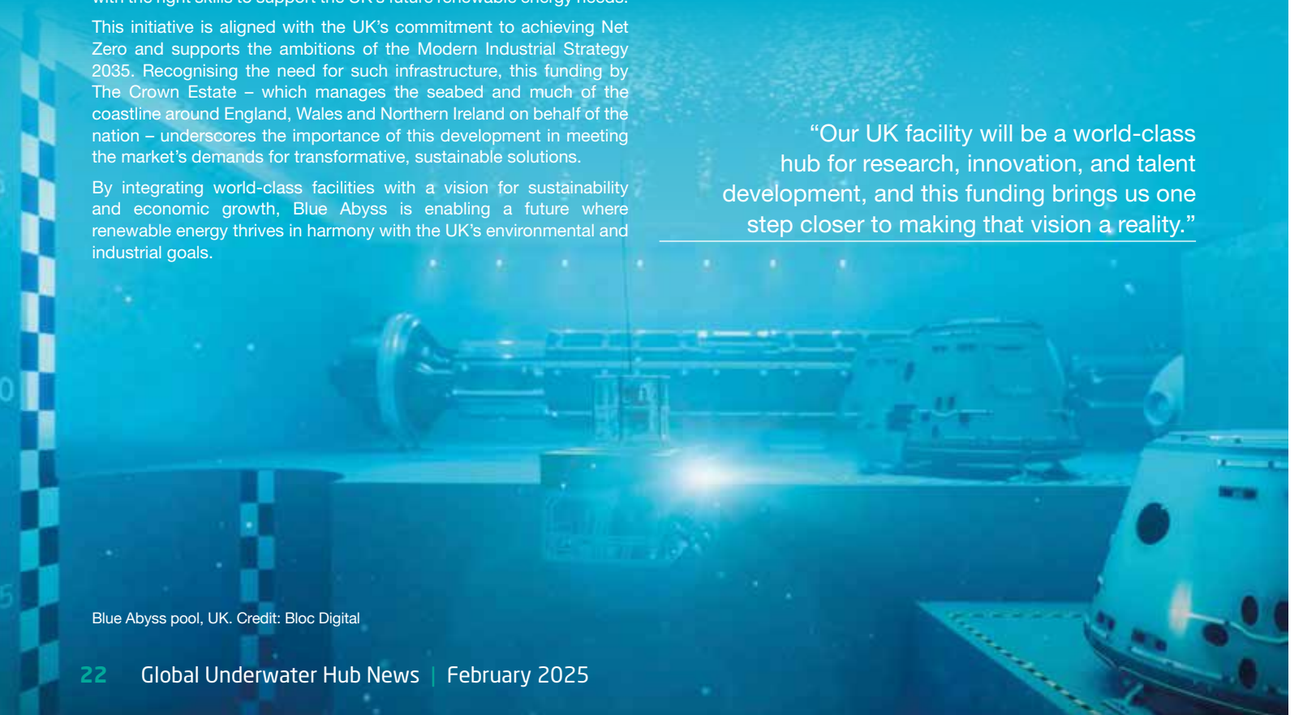
Blue Abyss building, UK. Credit: Bloc Digital

Blue Abyss aims to deliver world-Class Infrastructure for the UK, to address the challenges and opportunities in the subsea technologies, offshore wind, marine, maritime and defence sectors. Delivering a £250 million infrastructure project in the South West will help the UK achieve its strategic regional and national goals.

The Blue Abyss UK centre, alongside the first centre in Cleveland, will feature the world's largest and deepest R&D pools, measuring 40m by 50m on the surface, with a 16m wide shaft plunging to a depth of 50m. It will hold 42,000 cubic metres of water, enough to fill 17 Olympic-sized swimming pools.

The construction phase is expected to add around £80 million GVA to the local economy and provide 1,289 person-years of employment both directly and through the construction supply chain.

> "Our UK facility will be a world-class hub for research, innovation, and talent development, and this funding brings us one step closer to making that vision a reality."



Blue Abyss pool, UK. Credit: Bloc Digital





# Baker Marine Solutions and Hoytek announce strategic technology partnership to drive innovation



**Baker Marine Solutions is thrilled to announce a strategic partnership with Hoytek, a renowned innovator in technology centered around ROV design and manufacturing.**

With combined expertise in ROV operations, manufacturing and continued development of technology, Baker Marine Solutions and Hoytek will work together to provide the Americas region with additional technology to bring to the market. The partnership will bring equipment, expertise, and continued development of technology to Baker Marine Solutions' existing client base as well as new opportunities for suppliers.


HOYTEK and BMS at UI Exhibition in November 2024, New Orleans

"We are excited to partner with Hoytek as we move forward with our vision of expanding our subsea capabilities and bringing new technology to our existing clients," said Michael MacMillan, General Manager of Baker Marine Solutions' Subsea. "With Hoytek's innovative approach and technological infrastructure, we are taking a significant step closer to our goal of providing the best service to our customers."

Bertan Tezcan, CEO & Co-Founder of Hoytek said: "This collaboration aims to combine the strengths of both companies, allowing us to expand our sales, marketing, advertising, and rental services to a wider audience."

Baker Marine Solutions will not only assist with sales, marketing, and advertising, but will also provide technical, operational and project services for Hoytek's technology in the Americas region.

Hoytek is a leading international technology provider centered around the design and manufacturing of ROV's and associated technology. In addition to providing ROV's from inspection to work class, they also design and manufacture ROV components to include, cameras, lights, sensors, etc.

# RMI continues world-class medical support for the subsea and offshore industry with growth of new services

**RMI, a global leader in health and safety solutions for remote and challenging environments, has continued to support the offshore industry with the growth of its newly established RMI Guyana clinic in the country's capital of Georgetown.**

As Guyana's burgeoning oil and gas sector continues to attract international attention, RMI Guyana is strategically positioned to service both offshore operators and the local community.

A local company that is owned and operated by Guyanese nationals and staffed by a dedicated medical team of doctors, nurses, and medics with the backing and expertise of RMI's global healthcare service, the clinic has gone from strength to strength since opening in 2024. Offering a comprehensive range of medical services, including urgent care, occupational health screenings, OEUK and Liberian medicals, drug and alcohol testing, and physical agility assessments, the clinic provides a vital service to the oil and gas industry, as well as accessible, high-quality healthcare for the local community.

RMI Guyana's Country Manager, Chris Fernandes, supported by clinic owners and shareholders, Dr. Leah Niles-George and Dr. Vanita Ally, is committed to delivered world-class medical solutions that enhance worker safety and productivity.

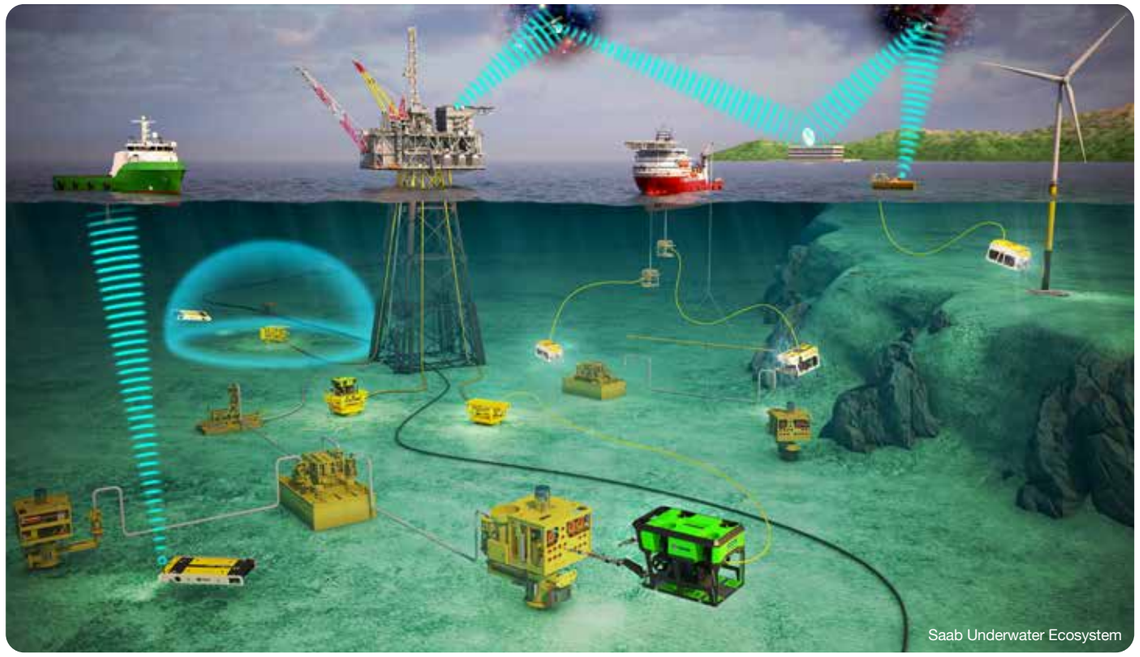
"The growing offshore industry locally has transformed Guyana into a global energy hub," said Chris Fernandes. "Our clinic is designed to meet the unique medical needs of offshore and subsea workers, ensuring their wellbeing remains a top priority for employers. We offer a range of provisions including urgent, primary and secondary care, and occupational health, with solutions tailored to the organisations that require it."

Backed by RMI's extensive international experience, global network, and proven track record of supporting offshore projects across the globe, RMI has partnered with leading subsea organisations to deliver medics, medevac coordination, 24/7 topside/diving medical advice,

occupational health and risk management services designed to address the complexities of offshore operations.

Dr. Vanita Ally, commenting on the growth of RMI's services in Guyana, said: "The growth and positive feedback we have received so far is a great step forward in supporting the critical offshore organisations that are growing in the area. Operational continuity is key in an industry like this, and we are proud of RMI Guyana's impact to ensure minimal downtime and support workers back to work as quickly as we possibly can."

> "Our clinic is designed to meet the unique medical needs of offshore and subsea workers, ensuring their wellbeing remains a top priority for employers."


Saab Underwater Ecosystem

# Subsea residency: Cutting carbon and risk in offshore operations

Visit Saab Seaeye on **STAND 31** at SUBSEA EXPO

By Jon Robertson, Managing Director at Saab Seaeye

**Offshore operations today come with a range of risks, including the safety of workers and the environmental consequences of sustaining people at sea. These operations are largely centred on offshore energy infrastructure – including windfarms, oil & gas platforms, and associated support vessels.**

Typically, an oil platform would have around 100 people on board, living and working offshore. This poses a significant health and safety risk, as well as a substantial carbon footprint from the large amounts of energy used for cooking, heating, and water purification. These workers can't remain offshore for extended periods, so there's a continuous need for transport, often via helicopters, which further increases the $CO_2$ footprint and safety risk.


Jon Robertson, Managing Director at Saab Seaeye

Subsea residency revolutionises offshore operations by reducing the number of people required at sea, subsequently lowering the impact on the environment. The key to unlocking subsea residency focuses on three areas: electrification, automation and autonomy, which brings efficiency and reliability. An all-electric ROV will require around half the fuel compared to a hydraulic vehicle doing the same job.

Electrification, autonomy, and automation combined with smart data management and shore based control enable us to run our ROVs from small, minimally crewed vessels, leading to lower operating costs, a reduced carbon footprint, and lower health and safety risks.

Saab UK's technology helps substantially reduce that carbon footprint by lowering the number of people required. The newest addition to our underwater portfolio, the Seaeye SR20, has been designed for subsea residency, meaning it will have the capability to sit on the seabed for an extended period of time, from an uncrewed or minimally crewed surface vessel. The all-electric SR20 is more efficient and reliable than hydraulic alternatives, consuming less energy and producing less waste.

This year, the SR20 will be used on Ocean Infinity's Armada fleet of optionally-crewed vessels that are designed for remote operation, helping to transform sea operations and improve sustainability.

# Brimmond roll out UK's largest marine crane rental fleet

**Specialising in the design, manufacture, rent and refurbishment of lifting, mechanical and hydraulic equipment, Brimmond offer tailored marine crane packages for the marine and offshore industries.**

Brimmond recently secured an order for its largest crane to date - a 650 tonne-meter (txm) Heila Active Heave Compensated (AHC) Offshore Subsea Lifting Crane.

This impressive high-specification model is currently in production at the Heila Factory in Italy, with an identical crane being manufactured for stock, and is due for completion early this year.

Following a £750K investment, Brimmond boasts one of the largest rental fleets of high-capacity marine cranes in the UK and is the exclusive UK and Ireland provider and servicer of global market leader, Heila Marine Cranes.

Their fleet of reliable, custom-built marine cranes is deployed across tug, workboat, research and naval vessels; offshore and wind farm platforms and vessels; fishing boats and fish farm (aquaculture) vessel cranes; offshore construction vessels, supply vessels, pipelaying tower cranes; and ROV (LARS) and dive equipment deployment.

All Brimmond cranes are installed and maintained by their team of skilled technicians. The company operates two fully equipped service vans, so that their technicians can readily carry out servicing, maintenance and inspections throughout the UK and Ireland.

Having identified that deck coverage on vessels is integral to supporting clients' marine and aquaculture projects, Brimmond invested in two high-quality marine cranes with six extensions and an impressive 27 metres outreach. As a result, they are able to offer the longest reach marine knuckle boom cranes available for hire in the UK.

New HLRM140 installed by Brimmond on site

# Mermaid Subsea Services sets benchmark for decommissioning industry

SUBSEA EXPO Sponsors

**Mermaid Subsea Services (UK) Ltd set a new industry benchmark for North Sea decommissioning in 2024.**

Across the course of the year the Aberdeen-headquartered company successfully plugged and abandoned (P&A) 30 wells in the UK North Sea using the Island Valiant vessel.

Notably, this is the highest number of vessel-based well decommissioning operations ever completed in a single year within the region.

Amongst the completed projects was a 21 well P&A campaign for a North Sea operator, believed to be the largest vessel-based North Sea decommissioning campaign in history.

Separately Mermaid completed the first stage of a major North Sea decommissioning contract for Shell U.K. Limited, with the subsequent phases to follow in 2025 and 2026.

Scott Cormack, Regional Director for Mermaid Subsea Services (UK), said: "It has been a monumental year for Mermaid, one that has cemented our position as a major player in the North Sea subsea and P&A market.

"The whole Mermaid team should be very proud of the part they have played in achieving this historic milestone and I would like to thank each and every one of them for the work they put in right through 2024.

"Recent research from Offshore Energies UK (OEUK) found that operators need to plug 200 abandoned North Sea oil and gas wells a year to stay on top of targets. If the sector is to achieve this it will require the market to deliver innovative decommissioning models, like the vessel-based solution offered by Mermaid."

With this milestone, Mermaid continues to lead the charge in delivering safe, efficient, and sustainable decommissioning services. It also reflects the company's commitment to supporting the UK's energy transition and regulatory compliance in offshore well abandonment.

Last year's P&A milestone was accompanied by an associated increase in headcount, with Mermaid growing significantly. And the company has plans to grow its presence in Westhill further this year in response to the company's swelling backlog.

After the successes of 2024 - and following a run of recent project wins - Mermaid has also agreed a deal to charter the Valiant vessel for another season. This will be supported by the introduction of Mermaid's very own dive vessel, which is due to enter the North Sea market in 2025.

Mr Cormack added: "It is clear from the demand for Mermaid's unique and tailored offering that the North Sea market requires another contractor to tackle the mammoth amount of work that is coming down the pipeline.

"With new additions, contract wins and completed projects, 2024 was an immensely successful year for Mermaid and we look forward to building on this further in 2025 when we will be bringing our own dive vessel to the region."

"Recent research from Offshore Energies UK (OEUK) found that operators need to plug 200 abandoned North Sea oil and gas wells a year to stay on top of targets.





# Petrasco celebrates 50 years of energy excellence

Visit Petrasco on **STAND 4** at SUBSEA EXPO

**A successful golden anniversary year allowed Petrasco Energy Logistics the opportunity to reflect on the growth, achievements and relationships built with clients, staff and strategic partners over the past five decades.**

Formed in 1974, Petrasco has evolved from a solely Aberdeen-focused business to a global logistics specialist with operations in the major energy hubs of Houston, Dubai and beyond where it provides expert knowledge on emerging markets to energy companies around the world.

Reaching the landmark 50th anniversary signalled an important milestone for Petrasco. A key component was the company's exhibition stand at Subsea Expo in February 2024, where celebrations officially got underway.

The occasion also presented an opportunity to show gratitude to those people who played a key role in the company's journey – with events held in each global location throughout the year, while money was raised for good causes including north-east children's charity, AberNecessities.

Kevin Buchan, managing director of Petrasco, commented: "I'm extremely proud of the business that we have built, which would not have been possible without our clients, partners and staff.

"One of the reasons Petrasco has remained successful and managed to reach this 50th anniversary milestone has been our continued focus on people, facilities and locations to help clients plan and execute their growth ambitions.

"Since 1974, we have passed many important operational and commercial milestones. Still, the team remains equally excited about the opportunities which lie ahead over the coming decades, both in traditional oil & gas and the emerging low-carbon economy.

"The energy industry has changed significantly over the past 50 years, and we have had to evolve alongside that – whether that's been through adding new services or providing specific in-country support for clients establishing operations for the first time."

Petrasco aims to be the logistics partner of choice for the global energy industry and provides specialist air, sea and road freight services. It has a wealth of expertise in consultancy, expediting, export packing, offshore logistics, warehousing and distribution.

The Petrasco team will be at Subsea Expo 2025 where they will be on hand to discuss any service requirements.


The Petrasco team at Subsea Expo 2024

# Smarter Subsea and SFF Services partnership to drive innovation for the energy transition and marine renewables sectors

**Smarter Subsea, a cutting-edge, pre-commercial subsea services company based in Aberdeen, is at the forefront of a technological revolution in the marine sector. The company has global patent ownership of ROVAR, the variable buoyancy system, powered by liquid nitrogen, which acts as a dynamic underwater crane or forklift capable of moving heavy loads weighing up to hundreds of tonnes.**

While the UK's transition to net-zero energy demands large-scale investments in offshore renewables and the decommissioning of oil and gas infrastructure, the country faces a shortage of the specialised vessels required for these operations. The ROVAR technology is poised to dramatically reduce the reliance on costly, large marine vessels with cranes.

In a pioneering move set to reshape Scotland's marine industries, Smarter Subsea Holdings Limited (Smarter Subsea) is progressing its strategic collaboration with SFF Services Limited, the commercial wing of the Scottish Fishermen's Federation (SFF), to integrate its groundbreaking cryogenic lifting technology with SFF's constituent pelagic fishing association members' state of the art fleet of vessels. This partnership aligns with both organisations' shared vision for a sustainable, efficient, and cost-effective future in fishing, renewables, and broader marine operations.

The combined team at Fraserburgh harbour in front of one of the large pelagic vessels

The partnership with SFF Services Limited is a significant step forward. By coupling ROVAR's cryogenic lifting technology with the pelagic fleet, Smarter Subsea will enable pelagic vessels to carry out more efficient underwater asset recovery, environmental remediation, and subsea infrastructure re-use. All while reducing operating costs and supporting a greener, cleaner approach to fishing.

This collaboration also promises to bring year-round jobs, skills development, and economic opportunities to Scottish communities. The introduction of ROVAR technology into the pelagic fleet represents another step in securing the future of Scotland's fishing fleet, enabling operators to diversify and stay ahead of both environmental and market demands.

The collaboration between Smarter Subsea and SFF Services marks a significant leap forward in Scotland's journey toward a more sustainable and innovative marine sector. With ROVAR at the forefront, this partnership will not only enhance the efficiency of pelagic fishing vessels but also contribute to the broader goals of net-zero emissions and marine ecosystem restoration.

As Smarter Subsea continues to innovate, the company is proving that to meet the challenges of tomorrow, we must be ready to think smarter. In the world of subsea services, that means combining cutting-edge technology with sustainable practices, creative solutions, and a strong commitment to Scotland's and the global community's future.

FEATURE ARTICLE

Visit Zetechtics on **STAND 62** at

SUBSEA EXPO

# Zetechtics Ltd recognised for outstanding international growth

Jupiter Class 4 to Petrobras Style Degraded Interface Adapter (DIA)

**Formed in 1993, Zetechtics is a leading supplier of subsea control systems, ROV intervention tooling & accessories to the global subsea energy industry. Zetechtics has become the market leader with the Jupiter Control System & is now applying this technology to well intervention & workover systems as well as other bespoke tooling applications, engineered & designed to client specifications.**

**2,000%**
Sales growth over 6 years

**Brazil** and the **Netherlands**
are the largest overseas markets for Zetechtics

Last year Zetechtics Ltd was honoured with a King's Award for Enterprise for International Trade 2024 for Outstanding Continuous Growth in overseas sales over six years. This is the most prestigious business award in the country for business performance and in this year Zetechtics was one of 252 organisations nationally to be recognised. A total of 257 Awards were given; 161 of these for their contribution to International Trade. The Awards were announced to the public in May 2024, and a reception was held at Windsor Castle in July for all the King's Awards for Enterprise recipients in the presence of His Majesty King Charles III, of which the owners of Zetechtics Ltd, Tim and Judith Overfield attended.

The total growth of international trade at Zetechtics Ltd over the six-year period was over 2,000%, with overseas sales increasing from 5% in year one to 51% in year six. Major markets within this period were Brazil and the Netherlands. Brazil has seen the most substantial growth recently, where Zetechtics has been supplying Jupiter equipment to the market for over a decade. The demand for Jupiter products in the region increases each year and are often sold as a complete package to include:

- Torque Tool Control Systems (dual & single)
- Class 1-4 Torque Tool
- Petrobras Interface Adaptor
- Petrobras Style Torque Tool Close-Fitting Hex Sockets
- Torque Verification Unit
- Manual Low Torque Tools
- Flying Lead Orientation Tool & Extender
- Complete set of spares for remote operations
- Degraded Interface Adaptor (DIA)

The Class 4 to Petrobras Style Degraded Interface Adapter (DIA) was initially developed specifically for the Brazilian market. The DIA is designed to allow the operation of Petrobras or API 17D style interfaces where the effects of corrosion, wear and historic misuse mean that close-fitting or other types of fixed sockets are ineffective.

The DIA has a Petrobras Style output, ISO 13628-8 Rotary Docking Class 4 input, and comprises easily interchangeable gripper fingers to suit a range of stem sizes. If a Jupiter Torque Tool is used to supply the drive input, the Jupiter Software can be configured to provide repeated automated torque pulses to help overcome residual breakout forces.

To meet this growing demand for Zetechtics' Jupiter products and services in South America, the opening of new business, Zetechtics do Brasil Ltda, was announced in 2022. The business is fully supported by the head office in Malton, North Yorkshire. The Macaé facility has a dedicated hydraulic and electronics workshop to provide equipment maintenance, upgrades and TVS calibration services locally. The commonly used API 17D and Petrobras tooling and control systems are also now available to hire from the new rental fleet at the premises.

Zetechtics have also started to see an increase in sales and rental opportunities throughout South East Asia & Australia. The Gulf of Mexico continues to be a busy market for Zetechtics and the company is exploring further opportunities in developing regions, for example West Africa and Suriname.

Building on the success of the industry standard Jupiter Control Systems, Zetechtics offer a wide range of subsea control solutions and subsea tooling services for high integrity applications across the Subsea Energy Sector. The Jupiter product range includes Hydraulic and Electric Torque Tools, Interface Adapters, Heavy Duty FLOTs, Data Management systems, Asset Integrity Monitoring solutions, Displays, Sensors, and Measurement devices. Zetechtics are continually looking to develop new products based on customer feedback and their needs. The new developments include a Dual High Flow Valve Pack DHFVP) and an Ultra High Flow Valve Pack (UHFVP). Details of these are available as downloadable datasheets on the Zetechtics website. All products are designed and tested to meet the demands of the most complex project requirements.

Zetechtics is committed to comprehensive, world-wide after-sales support for all products, with services ranging from 24/7 technical assistance, on-site integration, system servicing, upgrades and calibration. Zetechtics' aim is to ensure operations run smoothly with reliable and well supported Jupiter Products.

King's Award with Zetechtics' Jupiter Products

# Decentralising immigration policy: Unlocking Scotland's economic potential through regional solutions

By Kelly Hardman, Director, Fragomen

**Scottish MP Stephen Gethins' Private Members' bill, introduced in October 2024, seeks to make immigration a devolved issue for Scotland. Although the bill is unlikely to succeed in the short term (as supported by the Migration Advisory Committee's findings in 2022), it resurrects the debate around the merits of decentralised and regional immigration policies to address Scotland's unique economic and declining population challenges, as well as sector-specific demands.**

Historically, immigration policy has played a pivotal role in encouraging settlement in more rural areas, job creation and filling skills shortages in Scotland. As recently as January 7, there were further calls for the UK government to accept the Rural Visa Pilot Proposal (tabled in 2022). In 2019, the Scottish government also produced an analysis on adjustments to the Skilled Worker route, as well as the introduction of a 'Scottish Visa,' however, it's the Rural Visa proposal that's currently getting most traction, with similar models in Canada seen as trailblazers for such approaches.

For example, Canada's Atlantic Immigration Program and their Rural and Northern Immigration Pilot have enabled provinces to select immigrants with skills needed in local economies. Similarly, Australia's Designated Area Migration Agreement program caters to specific regional demands. These models show how provincial/state/territorial or regional approaches can boost local economies and address skills shortages.

In Scotland, the 2024 revamp of the Immigration Salary List (ISL), formerly known as the Shortage Occupation List, brought further challenges, specifically to the energy sector. Whilst historically, companies were able to use concessions for well workers and wind worker specialists operating in UK territorial waters, the ISL went one step further and removed several key engineering roles – which benefited both the energy and space sectors. Now, the ISL includes only a few relevant occupations—fishing boat masters, boat and ship builders and repairers (Scotland only), and high integrity pipe welders. This narrow focus does not adequately address Scotland's needs, particularly as sectors like energy and space continue to grow rapidly.

Scottish Engineering's recent Skills Gap Analysis for Scotland highlights the extent of the severe shortages of skilled workers in the sector, however coupled with the UK government's plans for AI, this throws into sharp focus how shortages of workers in the tech side of energy, as well as the space sector could restrict the growth needed in these areas.

The establishment of GB Energy in Scotland also represents a transformative opportunity for the nation's green energy ambitions. However, the sector faces a significant skills gap and attracting international talent is crucial for its success – Scottish Engineering's report also exposes the need for action to be taken in finding these skills to support the Net Zero transition by 2045. Whether the concessions mentioned earlier are reintroduced to address these challenges remains to be seen, but incentives such as reduced visa costs or other pilot programs like the introduction of an 'Energy Skills Passport', could further enhance Scotland's appeal.

While devolution of immigration powers is not likely to be imminent, targeted reforms within the existing system can still provide a pathway to economic growth and innovation. By learning from past successes and global best practices, Scotland can build a robust, sustainable workforce to secure its economic future.

> "Incentives such as reduced visa costs or other pilot programs like the introduction of an 'Energy Skills Passport', could further enhance Scotland's appeal."

# Successful GUH Moorings and Anchors Conference Returns for 2025

**Following a successful inaugural event last year, Global Underwater Hub will host the 2025 edition of its Moorings and Anchors Conference and Workshop on Thursday, 27 March.**

The venue for this year's event will be the Apex Grassmarket Hotel in the heart of Edinburgh's old town. Around 100 delegates from across the offshore wind supply chain are again expected to attend the one-day event to share knowledge, information, ideas and experiences of what is an essential component for floating offshore wind.

Setting the scene with developer perspectives, the conference will lead with panel discussions covering the key products, integrations, services and innovations which will drive these key components of floating offshore wind. The afternoon will then follow a workshop format, which is designed to draw out the main areas of opportunity and challenge in this space.

With huge national and international potential for floating offshore wind, which was pioneered in British waters, the UK has the expertise and knowledge to be the global benchmark in this area and push meaningful progress in the area of mooring and anchoring systems.

2024 conference

Last year's event featured presentations from supply chain companies and floating offshore wind developers, including BlueFloat, Bridon-Bekaert, Delmar, DOF Subsea, First Marine Solutions, Flotation Energy, Global Maritime, InterMoor, Ossian, PGS New Energy and SCHOTTEL Marine Technologies.

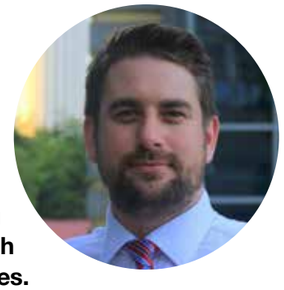
A similarly strong line up of speakers is planned for this year's conference, with announcements being made in the coming weeks via Global Underwater Hub's social media channels.

For further information on the conference programme, and to purchase tickets, visit www.globalunderwaterhub.com/events.





# Rethinking risk in an era of uncertainty



by Adam Wright, Director, Ocean Special Risks

**The subsea industry has entered an era of heightened uncertainty, driven by energy transition pressures, technological advancements, evolving regulations, and geopolitical challenges. Risk, once manageable through conventional channels, now demands a fundamental rethinking of strategies.**

While many risk advisory firms and insurers claim to provide bespoke solutions for complex operations, they often fall short. Many companies discover that what is marketed as "specialty" is frequently little more than a repackaged standard product that fails to address the nuanced needs of the subsea sector, leaving companies frustrated by inadequate risk coverage.

Insurers have long recognised the need for change but struggle to innovate at the pace required. Regulatory frameworks, particularly post-Global Financial Crisis reforms, have enhanced consumer protection but constrained flexibility. Despite access to transformative tools and vast data, the industry remains tethered to traditional approaches, leaving many offshore companies underserved.

**A Call for Innovative Risk Solutions**

The sector must embrace risk transfer solutions tailored to its unique operational realities. Collaborative efforts between insurers, advisors, and stakeholders are essential to craft models that combine advanced technology with adaptability. By mitigating risk effectively, these solutions can unlock capital and financing for ambitious projects. They are particularly crucial for companies moving from concept to commercial application, enabling them to overcome limited risk tolerance and balance sheet capacity while fostering stability for innovation to thrive.

Tailored risk strategies can mitigate volatility, providing stability for bold ventures. These solutions can enable the subsea industry to thrive despite its inherent complexities.

Ocean Special Risks (OSR), founded in 2024, addresses these challenges with a bespoke approach to marine insurance. Backed by reputable carriers, OSR offers custom solutions for subsea risks, including Equipment & Cable Risk, Trade Disruption Insurance and Contract Related Risk to name a few. OSR aims to bridge the gap between promise and practice. Everything OSR does is bespoke, designed to align precisely with the needs of each client and project - rejecting one-size-fits-all models.

**The Future Belongs to Innovators**

As the subsea industry confronts rapid change and elevated risks, innovation will define success. Companies willing to challenge norms and demand more from their partners will shape the future of the subsea industry.

The time to evolve is now. Redefining risk strategies ensures the subsea industry's progress remains sustainable.

# Saltwater Technologies Ltd (SWT) celebrates major success with innovative gasket insertion tool

**SWT has marked a significant milestone with their innovative gasket insertion tool used on three DSVs in the North Sea in 2024.**

Designed in 2023 with successful offshore trials in 2024, the stainless steel clamp design has proved highly popular with divers, dive supervisors, DSV management teams, project managers and subsea engineers.

Effective gasket insertion has historically proven to be a difficult task, with various methods used around the world with varied success rates. SWT's premise was to design innovative new ideas, while also developing proven existing elements, in such a way that would appeal to its users, particularly divers and dive supervisors.

SWT was founded by Diving Offshore Manager and Client Representative Steve Talbert to facilitate the design, production and sale of this inventive gasket insertion tool. Steve said: "We assessed that the product material and clamp design needed to be very low profile and robust enough to support large gaskets. Equally the clamp release mechanism should be simple and operated easily subsea by divers."

SWT's resulting tool is a leap forward in gasket insertion: smarter, but also simple in design and application.

Martin Smith, Saturation Dive Supervisor, who used the clamps this year for over 32 successful connections said: "The SWT gasket insertion tool is by far the best I've seen in the industry to date. The innovative elevation arms allow the diver to position the gasket, and have confidence it will remain in situ while closing the flanges - a much needed and long overdue improvement."

Mick Creedon OCM at TechnipFMC said: "This is a step change in design and engineering for safe diver gasket insertion in all visibilities."

SWT's founder Steve Talbert said; "Initial reception and success for the SWT clamp has been incredible, and there are already orders in for the new year. Our aim is to continue development and production and to further build on the positive feedback from our clients."

> "The innovative elevation arms allow the diver to position the gasket, and have confidence it will remain in situ while closing the flanges."

SWT gasket insertion tool

# Archer Knight enhances Flowline market intelligence platform with EMA data

**Archer Knight, a global leader in energy market intelligence, is enhancing its Flowline SaaS platform with data from Energy Maritime Associates' (EMA) renowned Floating Production Outlook Report Series. This integration combines EMA's expertise in floating production systems with Archer Knight's advanced analytics platform to deliver unparalleled insights into a projected $126 billion market over the next five years. The enhanced offering is made possible by a recent merger between the two companies, uniting their strengths to provide even greater value to the energy sector.**

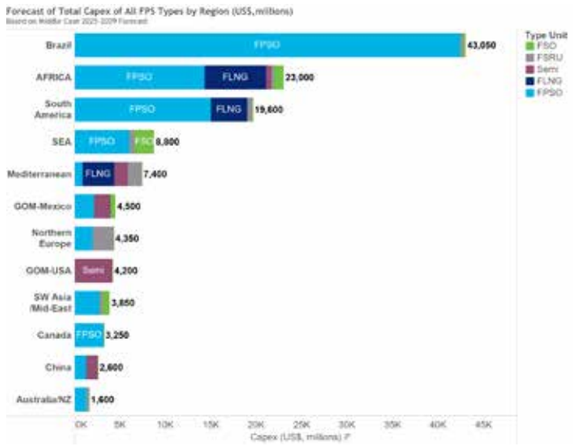
From 2025-2029, Energy Maritime Associates (EMA) expects orders for 119 Floating Production Systems, with a Capital cost of $126 Billion, in its mid-case forecast. Over 70% of this investment would go towards 54 FPSOs. Brazil will remain the largest FPSO market, more than Africa and the rest of South America combined. Newbuilt hulls will be the norm going forward, although converted tankers and re-use of existing FPSOs will play a role, particularly for smaller developments.

Floating LNG export projects worth $14.3 billion are expected in Africa, Argentina, and the Mediterranean. These also will be mostly newbuilt units, with a select few conversions and redeployments. Floating LNG import projects worth $6.3 billion are forecast predominantly for Europe and South America. This FSRU demand will be met by a combination of newbuildings, conversion of older LNG carriers, and redeployment of existing units.

Production Semisubmersibles will continue to be popular for deepwater developments on both sides of the Gulf of Mexico as well as in China. Costs for these Semis has been driven down by repeat orders of a standardised design, such as for Shell's Vito, Whale, and Sparta.

Industry capacity continues to be constrained due to high demand for traditional shipbuilding, as well as 60 floating production and storage systems currently on order. Finance remains the largest constraint for these multi-billion dollar units. As a result, fewer lease contracts will be awarded, in favour of EPC or Build-Operate-Transfer (BOT) contracts.

However, the BOT period is expected to be 5-7 years, rather than the two years seen in past awards. Insights like these will enhance Flowline's ability to provide real-time, actionable intelligence to its users.




# Tailoring subsea solutions for sustainability: Sonomatic's innovative approach to minimising environmental impact

Visit Sonomatic on **STAND 32** at SUBSEA EXPO

**Sonomatic recently delivered an innovative and sustainable subsea inspection solution for a long-standing client, setting a new benchmark in integrity management. The project revisited a water injection riser base spool last inspected in 2010, where limited access necessitated point thickness readings. New evidence of corrosion prompted the need for a more comprehensive inspection aligned with the client's goal to reduce carbon emissions.**

Sonomatic's Engineering Design & Development (E2i) team adapted the Stingray scanner to address these needs. Modifications included ROV deployment capability, enhanced access to pipe bends, and a bespoke inspection head for the 6 o'clock region. The scanner was designed to map corrosion across the pipe's extrados and, if necessary, achieve full 360° coverage by scanning the intrados. A custom lifting mechanism was integrated to protect inspection probes during deployment and recovery.

Before deployment, the solution underwent rigorous Factory Acceptance Testing (FAT) using a pipe sample replicating offshore conditions. This allowed refinements based on client and offshore representative feedback. Offshore execution in the North Sea faced challenges, including rough weather and marine growth. Despite these hurdles, the team successfully collected high-resolution corrosion data, giving the client a clear understanding of the spool's condition.

This project highlights Sonomatic's commitment to innovation, sustainability, and excellence. By leveraging advanced ROV-deployed technology, the team minimised environmental impact while delivering a tailored solution to complex inspection challenges.

Sonomatic invites delegates to explore this groundbreaking tool at Subsea Expo 2025.


Stingray bend scanner

# iconsys targets energy transition opportunity with high-profile appointment

**A Shropshire-based technology provider has thrown its backing behind the UK's desire to become a clean energy solutions superpower with its latest high-profile hire.**

iconsys, a fast-growing provider of control and automation solutions, power conversion and system integration services, has appointed Joe Howe as its dedicated Energy Transition specialist to help it target significant projects in a sector that has already had nearly £22bn ring-fenced by the UK Government for carbon capture and storage alone.

The Professor and Academic Lead for Humber's Industrial Cluster is one of the country's leading authorities in Industrial Decarbonisation, chairing the Mission Innovation Hydrogen Production Group and developing the skills agenda through his position as Trustee of the Engineering Construction Industry Training Board and COGENT Skills.

His focus will be on positioning the Telford-based company as a critical partner in this journey, supporting engineering and manufacturing businesses and industrial clusters to make the energy transition by providing a single source solution.

Andrew Rushton, Joe Howe (centre) and Andy Bunce

This will include giving management teams access to critical thinking and support to navigate the Government's agenda and funding mechanisms and understanding how iconsys' core automation and integration services can help unlock efficiencies and provide intelligent data.

"It's only going one way. Businesses can't bury their heads in the sand when it comes to Net Zero and the decarbonisation journey," said Joe, who has been involved in the sector for more than 30 years.

"There's going to be a carbon tax eventually and, on the surface, that will be another cost burden. However, we want to change the mentality to move away from seeing the 'cost' and instead focus on the opportunity presented by cleaner power."

He continued: "This will not be easy and that's where iconsys comes in. We can engage with the client to understand their energy transition challenges, working with them through their project lifecycle from concept to operation, giving them the necessary tools and the technology to realise their transition goals.

"Data is now king and with it comes major security concerns. That's another area we are experts in."

Being 'technology platform-independent' is a key differentiator for the business, which ensures the optimal automation, power and control solution is delivered, every time. Having completed over 4,500 successful projects to date, with an increasing number being rooted in the energy sector and decarbonisation projects, iconsys is well placed to help business achieve their Net Zero goals.

Joe said: "We're looking to partner with companies within energy transition infrastructure, and companies embarking on their decarbonisation journey. This includes sectors such as metals, pulp & paper, ceramics, advanced manufacturing, oil refineries, biomass and glass production as a whole – even industrial parks who might want to develop an off-grid power option."

# STEM Challenge: Popular Educational Initiative Returns for 2025

**Inspiring young people about career prospects in any industry is crucial for its future success.**

Global Underwater Hub's annual STEM Challenge does just that. It has become a popular educational programme for pupils aged 13-14 years old with an interest in science, technology, engineering and mathematics (STEM) subjects, highlighting to them potential career paths.

In 2024, the initiative saw over 300 pupils from 46 secondary schools throughout the UK apply STEM skills they had learnt in classrooms to design, build, code, operate and market model wheeled ROVs made out of Lego.

Running this national initiative requires the support of industry. Acting as a sponsor can allow a business to demonstrate its commitment to supporting future talent within the subsea sector and wider underwater industry, while offering opportunities for staff to act as mentor to pupils during the heats.

The programme's format sees six regional heats held across the UK, with teams of six pupils from up to 10 schools participating in each round. Starting in Bristol in late March, heats continue through April and May in Southampton, Inverness, Glasgow, Blyth and Manchester. The winning schools from each round then travel to Aberdeen in June for the final.

Alongside providing inspiration to pupils, STEM Challenge allows teachers to see how the skills they are teaching their pupils can be applied to the workplace, whilst learning about the scope of the UK's underwater industry.

If your company is interested in supporting the 2025 STEM Challenge, please e-mail events@theguh.co.uk for further information.


Children participating in the 2024 STEM Challenge





A TRIBUTE TO

# Alistair Birnie


1958 - 2024

**The leader of Global Underwater Hub's Fundamentals of Subsea Systems course, and former chief executive of the organisation's predecessor, Subsea UK, Professor Alistair Birnie died suddenly in November 2024.**

Alistair was a well-known and respected individual in the subsea community who devoted time throughout his working life to educating and supporting those entering the industry. After graduating from the University of Aberdeen in 1980 with a degree in electronics and mathematics, he spent his entire career involved in the subsea industry.

Alistair was a chartered engineer and for the first 28 years of his working life held roles in the oil and gas industry with companies including Aker Solutions, Fugro, ITF, Marconi, Nautronix, NOV and Schlumberger. In 2008, he became chief executive of Subsea UK, taking over from the late David Pridden. The growth the organisation witnessed over its first four years continued under Alistair's tenure. During this period, the organisation's flagship event, the annual 'Subsea' conference and exhibition, which rebranded as Subsea Expo in 2014, cemented its position as a leading industry showcase.

Prior to joining Subsea UK, Alistair also served on the organisation's board and was chairman of the Aberdeen branch of the Society for Underwater Technology.

Following three years helming Subsea UK, Alistair took up the position of visiting Professor of Subsea Engineering at the National University of Singapore. This gave him the opportunity to share his extensive knowledge and experience with those looking to enter the energy industry and in particular the subsea sector. The role saw him lecture post graduate students at both MSc and PhD levels, specialising in subsea systems and subsea construction. He also managed research programmes in the field of ultra-deep water.

After six years in academia, he returned to industry, working as a consultant with subsea and defence businesses. Alistair also supported the development of Global Underwater Hub's Fundamentals of Subsea Systems training course.

He led the one-day course, relaying his expertise to attendees who were entering the industry or looking to expand their knowledge. Such has been its popularity, hundreds of individuals have to date completed the course. With online and in person attendance options, delegates from across the UK and overseas gained from Alistair's teaching. He received many plaudits from attendees regarding the course content and his accessible, informative style of delivery.

Remembering Alistair, Global Underwater Hub chief executive Neil Gordon, said: "Alistair was a well-respected individual in the subsea sector with a wealth of knowledge and experience. His passion for the subsea industry saw him dedicate his entire 44-year career to advancing this area of the oil and gas sector, either through his work in industry, academia or championing its cause as chief executive of Subsea UK.

> "Alistair's staunch support of and commitment to the subsea sector is to be commended and we all fondly remember his warmth, wit, passion and friendship following his untimely passing."

# IK Subsea combines decades of experience to develop new, flexible Angel Lifting Tool

Visit IK Subsea on **STAND 85** at SUBSEA EXPO

**IK Subsea has designed a new multi-purpose lifting tool that focuses on the challenge of flexibles, the Angel Lifting Tool**

IK Subsea is well-known in the industry for its unique engineered approach to repairing, maintaining, and decommissioning pipeline and production systems. The company has a broad portfolio of standard and bespoke products, including subsea clamps, EPRS, Lifting and handling tools, plus, isolation tools, and custom tooling. With today's focus on safety, cost, and environmental impact, safe and efficient handling of both installation and retrieval is a hot topic among operators and suppliers.

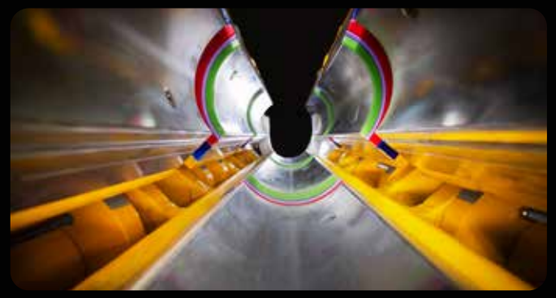
Adrian Gamman, VP of IK Subsea, said: "Our customers are focused on ensuring that we utilise robust, engineered solutions that minimise installation and retrieval time. Whether installing new subsea infrastructure or repairing or removing existing subsea installations, safety and efficiency are always at the forefront of operational requirements. Combine these elements with environmental concerns, and we have many good reasons to apply our expertise to smart, reliable and repeatable lifting solutions."

Christian Knutsen, Technical Manager at IK Subsea, expands on some of the unique features of the Angel Lifting Tool: "There are several robust lifting solutions available in the subsea market, many supplied by IK Subsea. Each has applications where they work well. However, we have always recognised that flexible pipes can be a unique challenge. The internal strength of flexibles is high, yet applying too high a load on the outside can damage pipe integrity and lead to failure, which could cause sections to fall, damaging other infrastructure or creating unsafe recovery situations. Likewise, insufficient friction and force can cause slippage or failed lifts."

IK Subsea combined more than 30 years of experience to design, test, and launch a system that allows safe, repeatable lifting operations in the most challenging subsea environments.

The Angel Lifting Tool handles rigid and flexible pipes from 2" to over 20". With loads from 1 to 150 Tons (TE), the tools are pre-configured to be application-specific. With 360-degree circumferential load transfer and machined clamping surfaces, the tools ensure a repeatable, safe lift every time without rotation or slippage.

The tool is tightened circumferentially by mechanical bolts designed for standard ROV torque tools. Its unique design allows horizontal or vertical deployments and lifts. It is easy to operate without requiring specialised crews.



"Our customers are focused on ensuring that we utilise robust, engineered solutions that minimise installation and retrieval time."





# Northern Diver unveils the Odyssey Full Face Mask: A breakthrough in diving safety

Visit Northern Diver on **STAND 18** at SUBSEA EXPO

**Northern Diver has announced the launch of its groundbreaking Odyssey Full Face Mask, designed, manufactured, and tested in the UK to set a new benchmark in diving safety and performance. Specifically engineered to meet the rigorous demands of professional divers, the Odyssey is a fully integrated system that combines innovation and reliability.**

Unlike masks that rely on components from multiple manufacturers, the Odyssey has been rigorously tested as a complete unit. This ensures compatibility across all features, from the precision-engineered side block to the optional wireless Low Air Warning System (LAWS). The mask is tailored for use in demanding environments, including military, rescue, and commercial diving.

The optional LAWS is a wireless system that provides visual alerts for critical air conditions through a universally recognised traffic light display. Designed to enhance diver awareness, it significantly reduces risks during high-pressure underwater operations.

The Odyssey also features an integrated comms port and mounting rail, allowing divers to attach mission-critical tools such as lights or cameras. Its modular design ensures versatility and adaptability for a range of underwater scenarios.

"Safety is the foundation of everything we do at Northern Diver," said Neil Tordoff, Commercial and Military Sales Director. "With the Odyssey, we've delivered a product that embodies British engineering excellence, supported by years of research and collaboration with professional divers."

Tested to EN250:2014 standards for open-circuit self-contained compressed air diving, the Odyssey is built to perform in extreme environments, including depths of up to 50 metres and temperatures as low as 4°C. Its robust design and advanced features make it a trusted choice for divers operating in high-stakes missions.

Northern Diver will be showcasing the Odyssey Full Face Mask at Subsea Expo 2025, where attendees can learn more about how it is redefining safety and performance in subsea operations.

"Safety is the foundation of everything we do at Northern Diver"

# Gessmann showcases new remote operator station at Subsea Expo

Visit Gessmann on **STAND 126** at SUBSEA EXPO

**Gessmann will unveil their latest innovation at Subsea Expo 2025: the Gessmann Remote Operator Station (ROS). Designed to replicate the feel of an in-cabin experience, the ROS offers operators precise, real-time control over subsea and offshore applications, all from the safety and comfort of an onshore or container environment. Featuring high-definition screens with adjustable positioning and intuitive controls, the ROS provides an immersive, ergonomic experience tailored to meet the demands of any industry.**

Customisation is at the heart of the ROS. Equipped with industry-leading C1 consoles, it supports Gessmann's bespoke joysticks, control elements, and a memory system that stores operator preferences. Its innovative design includes adjustable armrests with tilt, height, and lateral movement for superior comfort and functionality. Customer branding options and flexible integration of other components such as microphones, wireless chargers and integrated iPad ensure the station meets any operational needs.

ROS delivers unmatched control for critical applications. With advanced articulation, precise handling, and ergonomic design, operators experience reduced strain and enhanced productivity, even during long shifts. The system is ideal for applications requiring a blend of robust performance and operator-friendly technology.

In addition to the ROS, Gessmann will showcase its range of HMI solutions, including multi-functional joysticks, memory function chairs, and rugged control elements. Each is manufactured by Gessmann to deliver safety, comfort, and efficiency in demanding environments.

# First Webtool Hydrostatic Test Pump to launch at Subsea Expo 2025

Visit Webtool on **STAND 41** at SUBSEA EXPO

**Industry leading manufacturer of hydraulic cutting tools, Webtool, is launching its new Hydrostatic Test Pump at Subsea Expo. The portable hand-operated pump is self-contained and capable of providing up to 1000 Bar working pressure. The Webtool stand will also feature examples of the many Webtool cutters for ROV, diver, subsea installation, topside and deck applications, along with the Webtool portable emergency hydraulic system.**

Hydrostatic testing is a vital element in verifying hydraulic systems or pressure vessels such as pipelines, cylinders, boilers, and fuel tanks. The Webtool Hydrostatic Test Pump (HTP) is designed to offer a safe and controlled method for applying and monitoring pressure during testing. This minimises the risk of leaks or damage, compared to other methods, such as pneumatic testing. The Webtool HTP is supplied complete with tank, skid, handle and gauge. Hoses are also available at customer request.


The new Webtool Hydrostatic Test Pump, launching at Subsea Expo 2025.

Impaq Technologies has recently been stress testing their soon-to-market battery powered HPU with Webtool large cable cutters. Combining their technology with Webtool cutters essentially electrifies the range and offers a workable solution for operating Webtool cutters without onboard Hydraulics. The Impaq battery powered HPU is ideal for newer electrical eROVs and smaller, mid-range ROVs. Videos of their tests will be on display throughout the day.

Also featured on the stand at Subsea Expo will be examples of the many Webtool cutting tools including the industry renowned RCV75HD wire rope cutter featuring patented interlock technology.

The Webtool integrated interlock ensures that the blade cannot activate until the anvil is fully deployed, making it safer in low visibility environments. Once the cable or umbilical is positioned in the jaw and the anvil closed, the guillotine blade is activated. Unlike other cutting methods where there is a risk of the item flexing during cutting and either trapping or snapping the blade, closing the guillotine's anvil locks the rope or cable in position ensuring the cut is completed successfully, typically within a couple of minutes.

The Webtool portable emergency hydraulic system, used in conjunction with a webtool cutter, provides a quick and decisive means of responding should a vessel get into difficulties during towing. The lightweight hydraulic control is a self-contained unit including an accumulator, control valves and hoses for connection to a Webtool cutter.

# Prevco Subsea launches pioneering switch range for pressure vessels

Visit Prevco Subsea on **STAND 2** at SUBSEA EXPO

**Prevco Subsea has leveraged its technical expertise to develop a pioneering range of underwater switches designed to simplify task sets for pressure vessels.**

Engineers engaged in underwater operations often face significant challenges, particularly when it comes to the functionality of pressure vessels, ranging from the need to bring these vessels to the surface just to switch them on or off, or adjust their functions, which can lead to considerable time and resource expenditure.

Prevco's innovative underwater switches are engineered to operate efficiently across a variety of depths and conditions, addressing the market's scarcity of robust, multi-position options. With features that include up to 10 switch positions, Prevco's offerings encompass both hand-held and bulkhead-mounted switches, as well as a straightforward on/off switch that can be operated by divers or remotely operated vehicles (ROVs).

Stephen Ashley, Technical Sales Manager at Prevco said: "The construction of our switches reflects Prevco's commitment to quality and reliability. Utilising advanced materials such as Al7075-T6 and Titanium Grade 5 for the main bodies of our hand-held and bulkhead-mounted switches, we ensure that each product can withstand the rigors of underwater environments while providing versatility and ease of use.

"At Prevco, we believe in collaboration and are dedicated to working closely with our clients to understand and address their unique underwater challenges. We invite potential customers to engage with us, exploring how our customised switch solutions can be tailored to meet their specific requirements."

From L to R: Bulkhead mounted switch, Diver - ROV operated switch and Hand-help switches

"We invite potential customers to engage with us, exploring how our customised switch solutions can be tailored to meet their specific requirements."





# Revolutionising Subsea Technology: Astrimar's Innovative WATTS Solution

Visit Astrimar on **STAND 103** at SUBSEA EXPO

**Astrimar, a leader in engineering and technology innovation, has set a new industry benchmark with the design and manufacture of the Wellhead Alignment and Torque Transfer System (WATTS). This pioneering development is an industry-first solution, designed to replace bp's subsea deflector bases—equipment used for wellhead alignment and snag load transfer West of Shetland—while enhancing performance and efficiency.**

Commissioned by bp for deployment in 2024, the project presented a significant challenge: delivering a cost-effective replacement for the deflector bases traditionally used in this region's demanding subsea conditions. Astrimar rose to the occasion, leveraging its expertise in engineered solutions and technical assurance to create a reliable system tailored to bp's specific needs.

At the heart of WATTS is a revolutionary design approach that separates the functions of alignment and snag load transmission (torque transfer), enabling independent solutions for each aspect. By integrating the system with Neodrill's established CAN-ductor system, Astrimar delivered a solution that improves tolerance stack-up, alignment, and torque transfer capabilities while maintaining the fatigue life of the wellhead. This innovation not only simplifies the installation process but also reduces costs significantly.

Key features of the WATTS solution include rigorous conceptual and detailed engineering design, finite element analysis (FEA), failure modes, effects, and criticality analysis (FMECA), and comprehensive interface and manufacturing management. Astrimar also provided installation support and a complete system documentation portfolio, ensuring seamless implementation and robust reliability.

The successful deployment of WATTS demonstrates Astrimar's commitment to delivering innovative, tailored solutions that exceed client expectations. Reflecting on project success Engineering Director, Lev Roberts Haritonov comments "We are delighted to have had the opportunity to collaborate in this project to successfully deliver such an innovative solution to our client, in a tight timeframe. It is a great example of the technology solutions that we thrive on". Significant reductions in rig time—by several days—for the deployment and installation of subsea wellheads further underline the value of this solution, achieving corresponding cost savings.

This innovative project will feature in Astrimar's presentation on Day 3 of Subsea Expo 2025 during the Sector Spotlight Sessions. Businesses that are seeking reliable, cutting-edge solutions can visit Astrimar during Subsea Expo.

"At the heart of WATTS is a revolutionary design approach that separates the functions of alignment and snag load transmission (torque transfer), enabling independent solutions for each aspect."

# MEET THE MEMBERS

Each issue, GUH News hears from GUH member companies working in the underwater sectors, highlighting their role within the industry.

**Shona Hendry**
Director
Hydrus Energy Engineering Ltd

### What does your business do and where is it based?

At Hydrus, we deliver innovative and reliable engineering solutions that power the energy industry forward. Since 2000, we've been at the forefront of the oil, gas, and renewable energy markets, providing end-to-end project support that exceeds client expectations.

Headquartered in Brechin, Angus, our journey has been defined by continuous growth, a commitment to excellence, and a passion for solving complex challenges. With our state-of-the-art facilities and a team of highly skilled professionals, we are your trusted partner for comprehensive energy engineering solutions.

### Where do you see opportunities for your business in the coming years?

We see growth opportunities in Decommissioning, Renewables, and Rental markets. By refining our strategies, processes, and marketing efforts, and investing in the right resources, we aim to position Hydrus as a leader in these sectors.

### How do you foster creativity and innovation in your team?

Fostering creativity and innovation within the team by ensuring team members feel empowered and inspired to think outside the box. We as a team encourage open communication, promotion from within, encourage continuous learning and provide the resources and tools necessary to ensure we can deliver the best service. By implementing these strategies Hydrus has built a dynamic and innovative team that drives success and keeps the team motivated.

### How is your company tackling the challenges around global energy transition?

Hydrus is building their profile within the Renewable Energy market and is working in collaboration with expert consultants to support development within these markets and provide a sustainable and resilient energy system to address the global energy transition.

**Jonathan Brown CEng MRINA**
Engineering Director
Malin Marine Consultants (MMC), part of Malin Group

### What does your business do and where is it based?

Malin Group offer specialist services to the marine industry, spanning initial FEED and bespoke product design, to specialist welding, heavy lift and transportation. This diverse offering combines to deliver an end-to-end solution for our clients. The Group is headquartered in Glasgow with bases in Aberdeen, Newcastle, Barrow, and Leith.

### Where do you see opportunities for your business in the coming years?

We see major opportunities in the coming years, across the nuclear, renewables, and defence sectors. Offshore wind is likely the largest opportunity for marine logistics, with major challenges around achieving the scale of delivery required. AUKUS also offers the potential for international expansion, supporting the submarine enterprise.

### How does your company contribute to environmental sustainability?

My own business unit, Malin Marine Consultants' vision is for "ethical engineering", and this is embodied through the projects we deliver, for example our CMDC funded MariLight project – as well as wider projects across the Group. Internally we run a cross unit sustainability group to progress our internal processes to continually improve.

### How is your company tackling the challenges around global energy transition?

Malin is increasingly involved in energy projects, from feasibility work for renewables projects, to the build and delivery of the FastRig wingsail for Smart Green Shipping. We see logistics and manufacturing as a major challenge for the energy transition and are developing sustainable solutions to address these, whilst importantly also retaining desired local content.

**Gareth Black**
Managing Director
Flint Subsea

### What does your business do and where is it based?

Flint Subsea specialises in the supply and rental of high-pressure hose Emergency Quick Disconnect (EQD) devices. These devices are used in subsea and topside applications to ensure safe and efficient disconnection in the event of a drift-off or drive-off incident. Our headquarters are in Ellesmere Port in the UK.

### What are the biggest challenges facing your business and what support could help overcome them?

The biggest challenge is managing cash flow due to late payments from multinational clients. Their approach to the supply chain contradicts their marketing. The industry needs a discussion from Operators down to raw material suppliers to identify bottlenecks and ensure timely payments.

### What do you believe makes your company a great place to work?

Flint Subsea is a great place to work because, while we take our work seriously, we don't take ourselves too seriously. We are committed to innovation, offer a supportive team environment, and provide opportunities for professional growth. We value our employees' contributions and foster a culture of collaboration and continuous improvement.

### How does your company contribute to environmental sustainability?

We contribute to environmental sustainability by providing EQD devices designed to prevent the discharge of fluids into the marine environment during emergency situations. These devices protect both the environment and infrastructure by ensuring safe disconnection and containment of potentially harmful substance.

**John Kewley**
Managing Director
Concept Cables Ltd

### What does your business do and where is it based?

Concept Cables is based in Dorset, in the South of England. We design and manufacture electrical and hybrid cables for harsh environments and underwater applications.

### How did it all begin?

In 2003, I was asked to set-up a cable manufacturing company by Gemaco Holdings, our parent company. We have been going ever since with the same management team, growing from six employees in a 120m² factory, to now having more than 50 employees with a 7,000m² production facility.

### What are the biggest challenges facing your business and what support could help overcome them?

Finding shop-floor staff is always the biggest challenge, as it is with other local companies. Being located in a rural area, there is little unemployment, and we have to work hard and offer the best conditions to recruit and retain quality employees.

Also, keeping up with current technologies and continuously advancing our capabilities through research and capital investment is an important aspect of advancing the company in the coming years.

### Where do you see opportunities for your business in the coming years?

In the politically turbulent world that we are currently experiencing, the defence industry is going to be a significant growth area for the company, both for vehicles and instrumentation. Also, with the push towards renewable energy, this is also going to be an important area of growth for us.

Visit Concept Cables on **STAND 29** at SUBSEA EXPO

The D-RIT from OceanTech will optimise cleaning and inspection for flexible risers in the splash zone with no need for divers, ROVs or rope access.

# OceanTech and Sistac launch Diverless Riser Inspection Tool (D-RIT)

**The Diverless Riser Inspection Tool (D-RIT) enables cleaning and inspections of flexible risers, including riser balconies, bellmouths and bend stiffeners, without using ROVs, divers, or support vessels.**

Recognising operators' Personnel On Board (POB) constraints, the need for environmental compliance, and the challenges of safely accessing hard-to-reach riser areas, the lightweight D-RIT is designed to be operated remotely by the offshore deck crew. The new tool, offered in partnership between OceanTech and Sistac, will be deployed in the Santos Basin in January 2025 as part of a riser inspection project for a major offshore operator.

OceanTech CEO Bernt Schjetne said: "We are excited to introduce a custom-built solution that addresses the unique challenges of inspecting flexible risers. While none of our robotic solutions require divers, ROVs, or support vessels, we have placed extra emphasis on developing a lightweight tool that minimises POB."

Sistac CEO Carlos Madaleno said: "Our partnership with OceanTech to introduce the D-RIT technology in Brazil marks a major milestone for our offshore operations. We believe this cutting-edge solution will be a game changer in riser inspection and maintenance, especially in the splash zone. With D-RIT, we can deliver even more, more efficient, safer, and environmentally responsible services that are perfectly aligned with the future needs of Brazil's oil and gas industry."

"Brazil has a robust offshore oil and gas sector, particularly in the pre-salt region, which demands efficient and reliable riser inspection solutions.

**Safe access to non-accessible areas**

The remotely operated D-RIT is capable of accessing hard-to-reach areas in harsh weather conditions. This ensures safer and more efficient maintenance of flexible risers.

"The D-RIT operates effectively in adverse weather and captures high-quality data even in confined spaces. Our access robot provides a stable platform for deploying the tool in challenging areas such as riser balconies, bellmouths, and bend stiffeners," Schjetne said.

"Brazil has a robust offshore oil and gas sector, particularly in the pre-salt region, which demands efficient and reliable riser inspection solutions. In this context, diverless technologies enhance safety by mitigating the risks of underwater diving operations, improving operational efficiency, and minimising downtime during inspections," Thiago Guesse, Commercial Director at Sistac, added.

**Minimal POB and space requirements**

In Brazil, offshore platforms face a significant limitation regarding the number of available POB, which directly impacts the ability to carry out simultaneous activities. To mitigate these challenges, operators are increasingly exploring technologies like remote monitoring and diverless inspection tools to reduce the number of people needed on board.

Technologies like D-RIT not only lower operational risks and logistical challenges but also minimise the need to mobilise teams for underwater work. By reducing personnel transport to platforms, they further contribute to lowering the carbon footprint, aligning with the sustainability goals of the oil and gas industry.

Schjetne said: "The D-RIT requires minimal logistical support and occupies little space offshore. It is easy to deploy and does not require support from rope access teams."

# Viewport3 lead step change in subsea imaging with ‘zero compromise’ ZECO 60mp camera



**Viewport3, winners of the 2023 Subsea Expo “Cross Sector Diversity” award, announce the launch of their groundbreaking ZECO camera system, setting a new benchmark in subsea imaging and photogrammetry technology.**

With manually controlled digital stills cameras being the undisputed king of high-accuracy photogrammetry, Viewport3, specialists in subsea 3D scanning and dimensional analysis, decided it was time for a step change.

Recognising the efficiency and resolution limitations of many existing subsea ROV cameras, they set out to develop a superior solution, leading to the creation of the “Zero Compromise” ZECO camera.

The “Zero Compromise” ZECO camera delivers an unprecedented 60-megapixel resolution, whilst deploying a far more capable ‘full-frame’ sensor than current industry-standard ROV cameras. What sets ZECO apart is its ability to offer manual camera control and transmit full-resolution, photogrammetry ready images to topside in under three seconds, enabling immediate data verification.

This game-changing capability was successfully demonstrated during a Lloyd’s Register accredited mooring-link inspection campaign in late 2024. The ZECO camera’s superior resolution significantly reduced the number of images required for accurate 3D modelling, while its dual-strobe system proved essential in offering the power and adjustable lighting required to maximise the unit’s capabilities.

“The subsea industry has long needed a solution that combines manually controlled high-resolution imaging with real-time data transmission by taking advantage of ethernet-enabled ROV systems,” says Richard Drennan, Director at Viewport3. “ZECO doesn’t just improve image quality - it streamlines the entire inspection process and is capable of capturing the smallest of hair-line cracks with ease.”

By enabling faster, more accurate data collection, the ZECO camera helps operators save time and money on subsea projects - a valuable investment when every second counts.

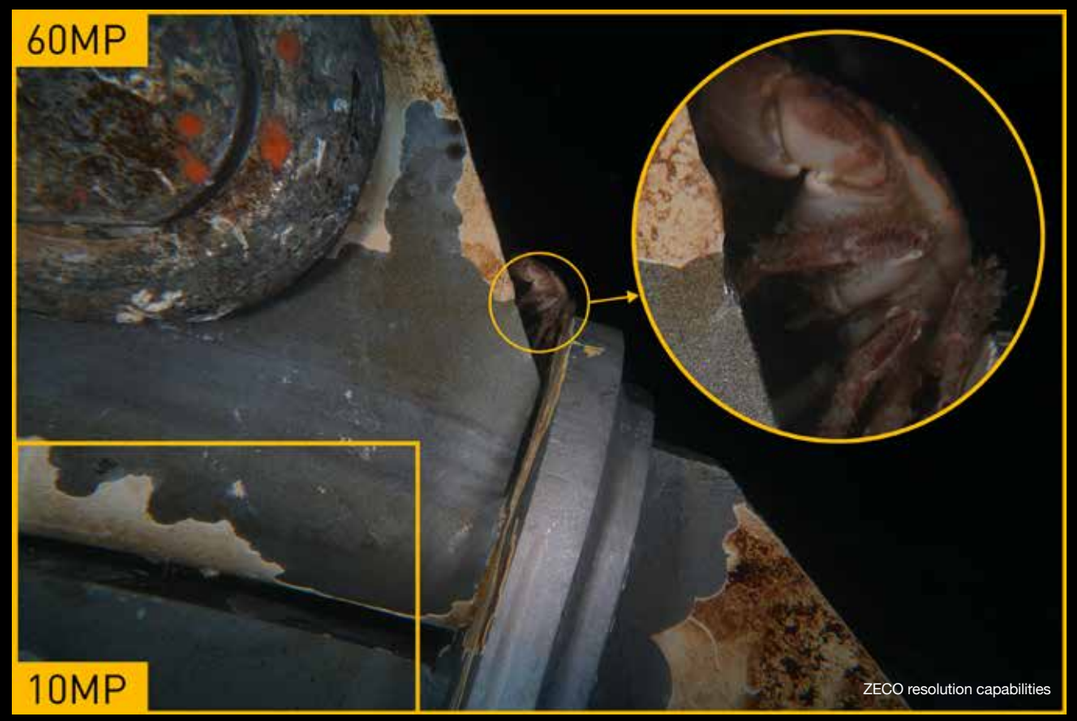
Fewer images are required to create precise 3D models, reducing the duration of offshore campaigns and minimising vessel time at sea. This leads to lower fuel consumption and a significant reduction in carbon emissions, supporting the industry’s drive toward more sustainable operations.

Viewport3’s expertise spans multiple sectors, including oil and gas, renewables, defence, and aquaculture. Their track record includes over 20 successful retro-fit design projects achieving ‘first-time-fit solutions’, alongside 80+ subsea projects delivering highly precise 3D data tailored to specific client requirements.

The company brings over 40 years of combined subsea engineering and inspection experience to their photogrammetry services, ensuring seamless integration with offshore operations.

Visit the Viewport3 team during Subsea Expo 2025 to learn more about the ZECO camera system and their comprehensive range of subsea 3D scanning solutions.

> “ZECO doesn’t just improve image quality - it streamlines the entire inspection process and is capable of capturing the smallest of hair-line cracks with ease.”



ZECO resolution capabilities





# National Subsea Centre and PlanSea Awarded Decommissioning AI-Demonstrator Grant



**The National Subsea Centre (NSC), a centre of excellence for subsea research and technology development, recently announced it has been awarded a grant to develop a subsea decommissioning optimisation software demonstrator with PlanSea, which offers world-leading marine logistics artificial intelligence (AI) technology.**

The grant was awarded to the National Subsea Centre and PlanSea by the Scottish Funding Council (SFC) in partnership with Scottish Enterprise (SE) to assist in developing a subsea decommissioning optimisation AI-Demonstrator.

As global operators face the challenges of large-scale and complex subsea decommissioning, there is an identified need for optimisation in this area to secure a cost-effective and resource-efficient outcome whilst contributing to net zero targets by reducing emissions. The UK is expected to spend £21Bn on decommissioning over the next ten years.

The National Subsea Centre and PlanSea have collaborated for many years to utilise AI to optimise marine logistics. Together the two organisations will now deploy the technology and skills developed to address the needs of the subsea decommissioning sector.

The two organisations are developing a robust task-based formalisation of offshore decommissioning activities that will extend the benefits of PlanSea marine-logistics AI in this space. As a result of this, decision-makers would have the ability to simulate with a high degree of accuracy the cause-effect relationship between different strategies and KPIs of interest. The project is set to produce a robust AI tool, fast-tracked for initial trials in Q2/2025.

Jim Cargill, CEO of PlanSea said: “The AI demonstrator is aimed at addressing both standalone and collaborative campaign optimisation of current and future decommissioning. Additionally, as in marine logistics, we offer a digitalised process for users whilst at the same time enhancing visibility of operational activity.”


The National Subsea Centre (NSC)

Prof. James Njuguna, NSC Director of Research & Innovation, added: “Our centre is uniquely positioned to address the subsea industry’s most pressing challenges. Our in-depth knowledge of marine operations offers a great opportunity to collaborate with PlanSea to provide operators with substantial savings and reduce emissions. I am confident that this collaborative project will harness our research expertise and PlanSea’s cutting-edge industrial knowledge to deliver a pioneering solution for the energy transition.”

# Introducing Ocean Catalyst: accelerating innovation for a sustainable blue economy

**The UK’s National Oceanography Centre (NOC) is launching the UK’s first accelerator program dedicated to ocean technology.**

Open for applications now, Ocean Catalyst offers early-stage marine tech start-ups a unique ecosystem to support their growth.

Starting in April, participants will benefit from expert mentorship, skill-building workshops and access to NOC’s advanced facilities in Southampton, including test tanks, pressure pots, and a deep-water test site.

This practical foundation enables start-ups to refine their technologies and overcome some of the challenges of commercialisation.


NOC is a leader in ocean technology, renowned for creating cutting-edge innovations.

“The ocean holds the key to solving some of humanity’s greatest challenges,” said Mark Hamson, Head of Innovation Centre and Events at NOC. “Unlocking its full potential while safeguarding its ecosystems demands cutting-edge innovation. With over 60 years of pioneering ocean research and innovation, we are uniquely positioned to lead this initiative. From developing autonomous underwater vehicles to commercialising breakthrough sensors like the Lab-on-Chip, NOC has a proven track record of transforming scientific and technological advancements into real-world solutions.”

The program will focus on essential areas such as business model development, product refinement, and investor readiness. A dedicated demo day will showcase participants’ innovations to industry leaders and investors, creating opportunities for funding and partnerships.

Through Ocean Catalyst, NOC aims to bridge the gap between research and industry, empowering marine tech start-ups to scale impactful solutions that enhance ocean health and advance the blue economy. This program underscores NOC’s commitment to fostering sustainable innovation and ensuring a brighter future for our oceans and the communities that depend on them.

For more information about the programme, please contact innovationcentre@noc.ac.uk.

> “The ocean holds the key to solving some of humanity’s greatest challenges”

# Flotation Energy: advancing FOW cable and mooring solutions through technology focus

**During Q4 2024 Flotation Energy, in partnership with the Offshore Renewable Energy Catapult (OREC) and Simply Blue Group, launched a series of technology challenges via Innovate UK's KTN-iX™.**

The KTN-iX™ programme creates commercial opportunities by helping technology providers with innovative solutions forge links with end customers across multiple sectors and understand customer and industry drivers. Around 100 proposals were received over multiple challenges in mooring, anchoring and array cables. Late last year, the teams of Innovate UK, OREC and Flotation Energy were privileged to listen to pitches from diverse businesses ranging from global conglomerates to agile micro startups.

The technical challenges reflected Flotation Energy's real-world experience of delivering near term, commercial scale, floating wind projects. In reviewing the proposals Flotation Energy was not just looking for technical viability but solutions and organisations with real potential to bring them to market, ensuring floating wind remains an integral part of the industrial energy transition. The challenges spanned mooring and array systems and covered connection, tensioning, integrity management and inspection. All critical ingredients to viable commercial scale floating wind but perhaps none more so than the challenge posed by tensioning and connection of mooring systems.

Floating structure at Kincardine. Scale and standardisation poses a challenge for mooring and cabling manufacturers.

The connection, disconnection and tensioning of mooring systems is a complex procedure on any floating asset. It requires the coordination of multiple mechanical processes and tensions of several hundred tonnes, all whilst the asset is in a temporary and potentially vulnerable configuration. In floating wind these challenges are magnified not just by the design of the asset itself but by logistical and supply chain complexity. Processes must be safely and reliably repeated many hundreds of times, and the equipment must be not only robust and effective but suitable for mass manufacture at a scale, not previously seen by the mooring industry.

Flotation Energy and OREC will work with the leading entrants to investigate design, performance, technology qualification and commercialisation and align technology with the specific demands of commercial scale floating wind. Whilst this initiative is driven by Flotation Energy's own learning and need for solutions, success for participants must lead to wider industry adoption. Through its Floating Wind Centre of Excellence, OREC offers a platform for technology suppliers to engage with more than 20 developers with wide ranging global portfolios.

Tim Hunter Floating Systems Technical Authority at Flotation Energy said: "This initiative is part of Flotation Energy's commitment to work in partnership with the UK supply chains and build on the learning from our industry leading projects to enable the UK supply chain to engage with the global floating wind market. We are looking forward to progressing our relationship with leading technologies and demonstrating together the opportunities to the market."

# OEG business Bluestream performs upgrades on ICCP-SAM tool

**OEG, a leading energy solutions business, is pleased to announce that Bluestream Offshore B.V, a business within its renewables division, has recently performed upgrades to their innovative ICCP-SAM tool.**

Developed in response to growing market demand and in collaboration with CORROSION, a market leader in the protection of offshore wind turbine foundations against corrosion, the ICCP-SAM (Impressed Current Cathodic Protection - Subsea Assembly Method) tool is specifically designed to remotely install ICCP anodes on monopile foundations of all sizes, anywhere on the foundation and even in the roughest ocean conditions.

The latest upgrades to the ICCP-SAM focus on optimising both the installation process and the performance of the anode system, improving the reliability of the tool in challenging offshore subsea conditions. Significant improvements include a redesigned clamping mechanism, with the system now featuring four bolts to securely clamp onto the anode by interlocking two plates. The updated design eliminates the need for bolting directly onto the foundation, ensuring greater flexibility and durability and allowing the bolts to stretch and withstand higher pressures.

Improvements have also been made to the size of the system, resulting in an even more compact design which will allow for longer anodes which can cover a larger surface area of the monopile, improving the efficiency of cathodic protection over a broader region.

Rutger Lieverse, Commercial Manager of Bluestream said: "By upgrading our ICCP-SAM tool, we're not just improving technology—we're ensuring the future resilience of offshore wind infrastructure, standing stronger against corrosion and the harshest ocean conditions."

Bluestream has several research and development projects underway alongside the ICCP-SAM, including solutions for mobilising inspection probes, performing inspections on subsea locations and sampling marine growth on offshore wind turbine foundations.

The continued investment by OEG in subsea tools and solutions demonstrates a commitment to pioneering innovation in the offshore renewables sector, providing sustainable and scalable solutions for a range of subsea challenges.

ICCP SAM tool





# Unveiling the First Level 3 Autonomous Shipping System Utilising Low-Bandwidth Video Technology

**The maritime industry is on the brink of transformation with the integration of autonomous navigation systems, and HD Hyundai's recent milestone marks a pivotal turning point. Collaborating with Videosoft Global, HD Hyundai showcased an innovative ultra-low bandwidth live monitoring solution to support Level 3 autonomous vessels. This advancement enables control switching between multiple Remote Operation Centres (ROCs), redefining operational efficiency and safety in commercial shipping.**

The implementation of Videosoft's real-time video streaming technology ensures that large vessels and container ships maintain uninterrupted live surveillance at sea. This innovative solution leverages adaptive video compression to deliver high-quality, low-latency streams despite bandwidth constraints. By enhancing situational awareness, remote control hubs can effectively respond to navigation challenges, adverse weather, and security threats—ensuring safer, more efficient operations.

The shift toward autonomous vessels is driven by the potential to reduce human error, lower operational costs, and improve safety. Equipped with Videosoft's AI-ready streaming capabilities, autonomous ships offer real-time monitoring, improved decision-making and alignment with international regulatory standards.

Videosoft's solution offers secure encrypted gateways, live edge recording, and data storage, ensuring reliable connectivity for maritime operations, even in remote or challenging areas.

HD Hyundai said: "This certification has laid a crucial foundation for the commercialisation of autonomous and remote navigation technology. Videosoft Global's expertise in autonomous video and data delivery expertise, video surveillance, and low latency video streaming has enabled us to successfully conduct the demonstration test. We will continue to proactively respond to global institutions and regulations, such as the International Maritime Organization (IMO), and take the lead in the international standardisation of autonomous navigation technology."

Autonomous technologies are improving safety while also helping to reduce emissions and optimise maritime operations. Videosoft's advanced video solutions improve port operations, streamline ship design, and boost cargo capacity, all while reducing emissions. These features position Level 3 autonomous navigation as an innovative solution for future maritime demands.

With a global autonomous ship market growth forecast of 13.5% over the next five years, the collaboration between HD Hyundai and Videosoft is a testament to the scalability and reliability of advanced technological integration in maritime operations. Videosoft's ultra-low bandwidth solutions are redefining what is possible in autonomous navigation, securing a future where efficiency, safety, and innovation lead the way.

"We will continue to proactively respond to global institutions and regulations, such as the International Maritime Organization (IMO), and take the lead in the international standardisation of autonomous navigation technology."

SUBSEA EXPO™ AWARDS

# Subsea Expo Awards 2025 Finalists Revealed

**Companies from across the United Kingdom have been announced as finalists in the 2025 Subsea Expo Awards.**

Organised by Global Underwater Hub, the prestigious annual black-tie event celebrates the achievements of companies and individuals that are leading the way in the country's £9.2 billion underwater industry.

The awards dinner will take place on Wednesday, 19 February at P&J Live in Aberdeen, with eight awards presented during the evening. Several companies have been shortlisted in multiple categories.

Winners of the 2024 Subsea Expo Awards held in February 2024





Gyles Brandreth, guest speaker at the 2025 Subsea Expo Awards

- The Company of the Year under 50 employees category sees nominations for Aberdeen companies AISUS Offshore and Verlume, which have been shortlisted alongside Torquay-based eco-engineering company ARC Marine.
- Finalists in the Company of the Year over 50 employees category, sponsored by Viper Innovations, are Norwich-based marine geoscience and offshore construction support service firm Next Geosolutions, Aberdeen-headquartered technology and energy solutions provider Proserv and Newcastle-based subsea technology and engineering company SMD.
- Recognising excellence in international trade, the Global Exports category sees C-Kore Systems, a Yorkshire firm that designs, manufactures and hires unique subsea test tools, shortlisted alongside electrical monitoring and asset integrity solutions provider Viper Innovations, which has offices in Bristol and Aberdeen.
- The Rising Star Award recognises up and coming talent under the age of 35 working in the underwater industry. Nominated are Stuart Hamilton, service line director with Fugro in Aberdeen, Toby Wilson, a mechanical engineer with Proserv based in Great Yarmouth, and Abi Thompson, a Newcastle-based sales manager with SMD.
- Shortlisted in the Technology Development category, sponsored by C-Kore Systems, are Torquay-based ARC Marine, Newcastle firm SMD and UltramapGlobal, a subsea cable monitoring company headquartered in Newcastle. This award acknowledges excellence in developing a new technology and bringing it to market.
- Acknowledging technology or innovations that can be applied in multiple underwater industries is the Cross Sector Innovation Award. This will be contested by three firms with offices in north-east Scotland, independent engineering consultancy Astrimar, geo-data specialist Fugro and marine technology company Kraken Robotics.
- In the Safety category, sponsored by J+S Subsea, the finalists are Fugro, one of the world's leading geo-data specialists, Peritus International, a Surrey-based global engineering services provider, and Quintham, a West Sussex firm working to improve fishing safety and protecting subsea assets in the energy industry.
- An eighth award will also be presented during the ceremony to an individual who has made a significant contribution to the subsea and underwater industries during their career. The recipient of the 2025 Outstanding Contribution Award will be announced on the night.

Actor, writer, broadcaster and former MP Gyles Brandreth will provide entertainment during the evening. Famed for his colourful jerseys and sharp wit, Gyles will keep guests entertained on the night with a wealth of stories from his varied career.

**Tickets for the Subsea Expo Awards can be bought online at www.subseaexpo.com, with individual places or tables of 10 available.**

Subsea Expo Awards & Dinner Sponsored by NEXTGEO

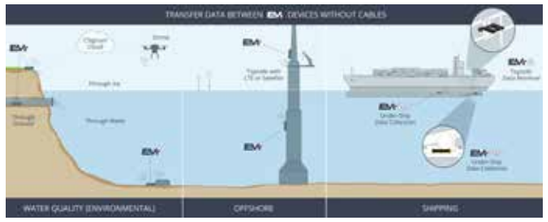
# CSignum bridges IoT and marine operations with advanced subsea connectivity

Visit CSignum on **STAND 112** at SUBSEA EXPO

**A new wireless technology from CSignum bridges the gap between cellular and satellite networks above the surface and advanced sensors below.**

The demand for seamless connectivity in subsea operations is growing as industries face increasing environmental, operational, and regulatory challenges. CSignum's wireless electromagnetic field signaling (EMFS) technology represents a significant step forward, addressing the longstanding issue of reliable data transmission through the water's surface and across the splash zone.

Unlike traditional methods reliant on surface buoys or cables, EMFS provides a robust, bidirectional communication link between underwater sensors and surface networks. The technology offers a practical solution for real-time data transfer in environments as diverse as offshore wind farms, oil and gas platforms, and carbon capture projects. Its ability to transmit through ice, soil, rock, and concrete further expands its application to ports, harbors, and environmental monitoring, where reliability and operational efficiency in challenging conditions is essential.




The adoption of CSignum's EMFS technology reflects a broader shift in how industries approach subsea data collection and analysis. For example, collaborations with Develogic GmbH have enhanced navigation and monitoring near North Sea wind turbines, while a partnership with Thordon Bearings has introduced a wireless system for monitoring propeller shaft bearing wear on marine vessels. These applications highlight the potential of EMFS to streamline operations and reduce maintenance complexities.

Jonathan Reeves, CEO of CSignum, emphasises the strategic importance of this innovation: "EMFS fills the gap between underwater sensors and surface networks, enabling continuous, real-time data flow. This is not just about improving efficiency—it's about equipping industries with the tools to make informed decisions in real-time, addressing issues proactively, and mitigating environmental impact."

As industries strive to adapt to climate challenges and operational pressures, the ability to collect and analyse data in real-time is transforming maritime operations. Beyond optimising efficiency, technologies like EMFS are enabling a deeper understanding of underwater environments, facilitating safer operations, and supporting sustainable practices.

# CONSUB announces new valve release capabilities for 2025

**Following great success with its onshore/topside valve release service, CONSUB is excited to now announce the imminent launch of a new subsea valve release capability, a move which promises to bring the proven technology below the waterline.**

In a year which saw headlines dominated by pressures on the energy sector across the globe, the CONSUB Field Services team delivered success for clients on numerous offshore and onshore valve release projects, both in the UK and globally. This has inspired CONSUB to adapt their tool design to take the seized valve release service subsea.

Throughout 2024, the expertise of the CONSUB Centre of Excellence for Valves was regularly called upon. Stuck or seized valves proved to be a common cause of headaches for many operators, particularly on late-life infrastructure in the UK Continental Shelf. Reliable operation of valves is critical, and any loss in functionality is a real concern for safety and operational efficiency.


C-VRS in operation at a site in Brunei

A recurring theme was the impact of an inoperable valve on isolations and planned shutdowns. Even the most comprehensive plans for shutdowns are rendered worthless if a valve will not actuate on demand. All too often this leads to an expansion in required isolations, bringing cost, safety and process implications.

However, developments and innovations in the field of valve remediation, spearheaded by the new Field Services Manager, Adrian Baxter, has offered a beacon of hope. Armed with the CONSUB Valve Release System (C-VRS), the team has deployed out to facilities both globally and in the UK on numerous occasions to restore the functionality of safety critical valves.

The mechanical C-VRS is safe to use in hazardous environments and requires no process isolations. The amount of torque applied is low, controlled and limited, meaning the tool is "Valve Safe". Combining the technology of the C-VRS with the vast experience of the team has proven to be a winning formula. Previously inoperable valves have been entirely remediated, axing the scope and impact of process isolations, and bringing significant financial savings when compared to the removal, replacement and reinstatement of stuck valves.

Looking forward into 2025, the team is excited to continue their good work and offer operators all over the world a solution to the headache of stuck valves. The launch of a subsea, diver-operated variant of the C-VRS will add a new string to the valve release bow, and let loose the potential to remediate stuck valves in the subsea environment.

# Seaeye SR20

Empowering eco-responsibility

Electric workclass vehicle

Thrusters each deliver 580 kgf

Saab water testing 2024

**The Seaeye SR20 is a full-sized IMCA Class III B electric ROV system with performance exceeding that of a 200HP hydraulic vehicle.**

Designed for long term persistence at sea in conventional, resident, or USV deployed configurations with over the horizon control for reduced emissions, increased safety and reduced operational costs.

Electrification is the key to delivering maximum capabilities across applications that include survey, construction, drill support, IMR and decommissioning.

Learn more at www.saabseaeye.com