

UK FUNDING SECURED FOR INNOVATIVE LOW-CARBON FLOATING WIND INSTALLATION VESSEL

The UK government has granted funding to a consortium spearheaded by Morek Engineering to pioneer a new category of environmentally friendly installation vessel tailored for the burgeoning floating offshore wind market. This consortium, comprised of Morek Engineering, Solis Marine Engineering, Tope Ocean, First Marine Solutions, and Celtic Sea Power, clinched the funding via the UK Government's Clean Maritime Demonstration Competition.

The conceptualization of the vessel's design is underway and is slated for engagement with classification societies to attain approval in principle by early 2025. This groundbreaking vessel will be purposefully crafted to cater to the intricate installation demands of moorings and foundations for floating offshore wind farms. The overarching objective is to synchronize the specific requirements of the emerging Floating Wind sector with the mandates of the UK's maritime decarbonization agenda.

Bob Colclough, Managing Director of Morek Engineering, highlighted, "This will be a first-in-class low-carbon vessel designed specifically to meet the complex installation requirements of floating offshore wind farm moorings and foundations. The project aims to align the detailed requirements of the emerging Floating Wind sector with the objectives of the UK maritime decarbonization agenda."

Addressing the need for a cost-effective solution in the realm of floating offshore wind, Colclough added, "Floating offshore wind needs a cost-effective solution to deliver serialized installation of huge moorings and floating foundation systems, whilst minimizing carbon emissions during the construction and maintenance of the next generation wind farms. We are going to develop the next generation of offshore wind construction vessels, meeting the challenge head on."

Ian Godfrey, Managing Director of Tope Ocean, emphasized the project's focal point on conducting a meticulously detailed feasibility study into the emerging global floating offshore wind sector's requirements for a new class of low-carbon installation vessel. "The new vessel will be designed to carry out complex, high-energy construction tasks within the duty cycle constraints of future low and zero-carbon fuel systems," Godfrey stated.

This initiative forms part of the latest round of the Clean Maritime Demonstration Competition, under the aegis of the Department's UK Shipping Office for Reducing Emissions (UK SHORE) program, a \$260 million (£206 million) endeavor dedicated to cultivating the technology indispensable for decarbo uzing the UK domestic maritime sector."



SOFEC RECEIVES ABS APPROVAL IN PRINCIPLE FOR ELECTRIC CHARGING BUOY

MODEC, Inc. proudly announces that SOFEC Inc, a member of the MODEC Group, has been granted an Approval in Principle (AiP) by the American Bureau of Shipping (ABS) for its Electric Charging Buoy.

In response to global efforts to reduce carbon emissions and pollution, the marine industry is exploring avenues for expanding the use of electric shore power and renewable energy as fuel sources. Vessels at sea or in harbor, not typically connected to shore power, can now benefit from the Electric Charging Buoy, enabling them to switch off onboard fossil fuel engines or battery systems. As the offshore industry moves towards electrification, vessels like tugboats, Crew Transfer Vessels (CTVs), and Service Operation Vessels (SOVs) will increasingly rely on electric power, necessitating offshore charging stations.

As part of SOFEC's commitment to the Energy Transition and Renewable Energy, we are pleased to announce that ABS has granted AiP to our newly developed Electric Charging Buoy.

Drawing on over 50 years of experience in Marine Terminals and Mooring Systems design, SOFEC has tailored solutions for offshore power transfer. Leveraging our expertise in Catenary Anchor Leg Mooring (CALM) buoy designs, we have integrated electrical power cable management solutions to facilitate vessel mooring while utilizing externally supplied power. This innovative concept allows SOFEC to modify buoy designs to accommodate offshore electric power transfer from seaports or offshore wind farms substations to Electric Vessels.

Earlier this year, SOFEC received AiP from DNV for our Refrigerated Ammonia Jetty-less Transfer Systems, underscoring our commitment to a cleaner and sustainable planet.







ECOWENDE SELECTS VAN OORD TO CONSTRUCT GROUNDBREAKING ECOLOGICAL WIND FARM

Following the recent collaboration announcement, Ecowende is excited to confirm Van Oord as the contracted builder for the offshore wind farm Hollandse Kust (west) lot VI. Ecowende, a joint venture between Shell and Eneco, is committed to fostering a sustainable future for offshore wind that positively impacts the ecology of the North Sea.

In its role as Ecowende's contractor, Van Oord will oversee the transportation and installation of foundations, as well as the laying, connection, and burial of cables between wind turbines. Additionally, Van Oord will manage the transportation and installation of the wind turbines at sea.

As society strives to meet renewable energy targets, the development of offshore wind projects in harmony with nature becomes imperative. Ecowende and Van Oord will collaborate on implementing innovative solutions and ecological measures to mitigate the impact of the wind farm while stimulating positive ecological outcomes.

Van Oord's deployment of its state-of-the-art offshore installation vessel, Boreas, for foundation and turbine installation underscores its commitment to eco-friendly practices. To minimize noise during construction, Van Oord will utilize an alternative installation method for foundations, employing a vibro hammer to drive monopiles into the seabed. This pioneering technique marks a significant advancement in Dutch offshore wind farm construction.

Moreover, Van Oord's cable laying vessel, Nexus, will ensure the efficient installation of inter-array cables between wind turbines, contributing to the wind farm's eco-friendly operations.

In its dedication to environmental stewardship, Van Oord has advised Ecowende on incorporating nature-enhancing components into scour protection design. This approach aims to create a diverse habitat for marine life, with Van Oord's flexible fallpipe vessels deployed to accurately and efficiently install eco-friendly scour protection.





Breaking New Ground: Meet HST MILLIE, the UK's First Hybrid Crew Transfer Vessel

HS

Setting a precedent in the UK maritime industry, HST MILLIE emerges as the first-ever Hybrid Crew Transfer Vessel (CTV) compliant with IMO Tier 3 standards. Equipped with Selective Catalytic Reduction (SCR) technology, she effectively reduces NOX and SOX emissions, marking a significant leap towards environmental sustainability.

Crafted by Chartwell Marine Ltd for High Speed Transfers Ltd, HST MILLIE is currently undergoing final sea trials, gearing up for her imminent handover. Stay tuned for more updates on this groundbreaking vessel! GRS CEFSHORE RENEWABLES

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Minesto marks a significant milestone with the successful Launch and Recovery System (LARS) deployment of its Dragon 12 tidal energy kite, boasting a robust 1.2 MW capacity and weighing 25 tons, in Vestmannsund, Faroe Islands.

Utilizing the same small work vessel as its predecessor Dragon 4, which boasts a 100 kW capacity and weighs 2.5 tons, the operations for Dragon 12 proved equally effective. Despite being ten times heavier and three times larger than Dragon 4, with an extended tether and installation in deeper waters, Dragon 12's LARS demonstrated remarkable efficiency.

Martin Edlund, CEO of Minesto, expressed satisfaction with the successful launch and recovery of Dragon 12, affirming the effectiveness of the LARS for both small and large-scale kites. The seamless completion of the LARS process in under two hours underscores Minesto's commitment to operational excellence.

With the ongoing commissioning process of Dragon 12 progressing towards electricity production objectives, Minesto continues to push boundaries in tidal energy innovation while maintaining operations of smaller Dragon 4 power plants.





INTRODUCING THE 17 MW OFFSHORE FLOATING ENERGY ISLAND: A BREAKTHROUGH PROJECT BY WUPROHYD

Several years ago, a team of engineers at Wuprohyd united to conceptualize an innovative project: an Ecological Offshore Power Plant utilizing energy from three renewable sources.

According to Piotr Cieślak, President of the company, two primary factors drove the project's inception:

Securing orders for Polish production yards;

Introducing an innovative water turbine solution leveraging water molecule circulation.

Patented turbine and energy island projects represent significant innovation in the offshore energy sector. By harnessing the power of three renewable energy sources sun, wind, and waves—the Floating Isle of Wuprohyd aligns with the objectives of the Green Deal.

In the Baltic Sea, where deepwater wave parameters rank among the world's lowest, energy levels reach approximately 10 kW/m of wave crest width. Leveraging these conditions, engineers devised an effective solution to harness wave energy, presenting a promising opportunity to generate power along the 400 km section of the Polish coast.









We are thrilled to announce that GRS will be participating in the upcoming International Partnering Forum (IPF) Conference & Exhibition, set to take place in New Orleans, USA, from April 22nd to 25th.

As advocates for sustainable energy solutions, GRS is dedicated to driving innovation and fostering growth in the offshore wind industry. With our strong presence in the US, we are committed to supporting the region's transition towards a greener future.

At the IPF Exhibition, we invite you to visit our stand and discover first-hand how GRS is supporting in offshore wind farm projects. Our team will be available to discuss our latest successes and services and explore potential collaborations.

This exhibition presents a unique opportunity for industry professionals, stakeholders, and enthusiasts to engage with GRS and learn more about our commitment to sustainability and excellence in offshore renewables.

Join us at the German Pavilion Booth 2143 "made in Germany" during the IPF Exhibition at Ernest N. Morial Convention Center and be part of the conversation shaping the future of offshore renewables in the US and beyond.

For more information or to schedule a meeting with us, please don't hesitate to contact us via email at a.nikolaisen@grs.group.

We look forward to seeing you at the IPF Exhibition in New Orleans!



AN EXTENSIVE DATABASE OF OFFSHORE VESSELS

Whether you are looking for a vessel to buy or to charter, check out our easy-to-navigate vessel database and request yours now!





VESSELOF THE MONTH PSV for Sale #1049694

A DP II multi-purpose supply vessel for sale. The Vessel has been converted for IMR/ROV/Subsea operations with the addition of 60T AHC Crane, mezzanine deck, ROV, LARS, and USBL through-hull penetration. It provides accommodations for 32 persons. Contact us for more details and inquiries, referencing the unique identifier #1049694.



Our team is dedicated to providing further insights and addressing any questions related to these offerings. Write an email to h.ghandi@grs.group



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