

THE FIRST SIEMENS GAMESA WIND TURBINE FOR THE 25 MW PROVENCE GRAND LARGE FLOATING OFFSHORE WIND FARM HAS BEEN ASSEMBLED IN FRANCE The floating wind farm will comprise three Siemens Gamesa 8 MW wind turbines installed on tensioned line floats and designed by SBM Offshore and IFP Energies Nouvelles.

The turbine components, manufactured at Siemens Gamesa's factory in Le Havre, arrived in Port-Saint-Louisdu-Rhône in April this year.

The floating foundations that will house the wind turbines are being assembled at Eiffage Métal's site in Fos-sur-Mer by the French company and Smulders, its Belgian subsidiary.

The Provence Grand Large is located 40 kilometres west of Marseille and 17 kilometres off the coast of Port-Saint-Louis-du-Rhône, in water depths of around 100 metres.

The project is scheduled to be completed this year when it will produce the equivalent of the annual electricity consumption of 45,000 inhabitants.

The Provence Grand Large floating offshore wind farm is owned by Parc Eolien Offshore de Provence Grand Large – a subsidiary of EDF Renouvelables, and Enbridge Eolien France 2 S.à.r.I (EEF2), a subsidiary of Enbridge Inc. and CPP Investments.



## STARGATE SECURES GRANT FOR GREEN HYDROGEN PROJECT OFFSHORE GRAN CANARIA

Stargate Hydrogen Solutions OÜ (Stargate) has been awarded a grant from the European Commission under the Horizon Europe programme to deliver an electrolyser that will be part of an offshore wind energy project aiming to demonstrate the complete green hydrogen value chain on the Canary Islands.

Coordinated by the Oceanic Platform of the Canary Islands (PLOCAN), the project will receive EUR 10.7 million for demonstrating the full value chain of green hydrogen.

The project will utilise renewable energy from a 6 MW offshore wind facility to produce green hydrogen using a marinized high-efficiency electrolysis unit.

A 1 MW Gateway series electrolyser from Stargate will be installed in the onshore hydrogen production plant at the PLOCAN site on Gran Canaria. The generated green hydrogen and oxygen will be used at the local hospital complex. The EUR 3 million grant awarded to Stargate will include the delivery and installation of the company's 1 MW electrolyser system including Stargate Stellar series stacks as well as H2/O2 compression and storage equipment.

"Stargate looks forward to delivering our Gateway series electrolyser specifically developed for maritime applications. Being part of this important demonstration project brings Stargate to the technological forefront of the rapidly developing field of maritime electrolysis, paving the way for future on-shore and off-shore installations," said Rainer Küngas, Stargate CTO.



# THE FIRST MONOPILE FOUNDATION INSTALLED IN NEW YORK'S FIRST OFFSHORE WIND FARM

New York's first offshore wind farm has reached a significant milestone with the start of offshore construction.

Governor Kathy Hochul announced Thursday that South Fork Wind project has marked its first "steel in the water" with the installation of the project's first monopile foundation. In the coming days, crews will install the project's U.S.-built offshore substation.

The project remains on-track to become the first utilityscale offshore wind farm to be completed in U.S. federal waters when it begins operations by the end of this year. It is being developed by a 50/50 partnership between Ørsted and Eversource.

Once completed, the 132-megawatt (MW) wind farm, consisting of 12 wind turbines, will generate enough

renewable energy to power roughly 70,000 homes.

The project's construction will support hundreds of U.S. jobs and involve three Northeast ports, including New London, Connecticut and New Bedford, Massachusetts, through late fall. Foundation components for South Fork Wind were fabricated in Providence, Rhode Island.

Foundation installation is being performed by Boskalis's Bokalift 2, a Cyprus-flagged DP-2 crane vessel. During the construction phase, construction and transport barges, tugboats, crew vessels, and protected special observer monitoring vessels will be active at the offshore construction site approximately 35 miles east of Montauk, New York.





Orsted

### ØRSTED INVENTS & PATENTS UNCREWED SURFACE MEASURING VESSEL

900

#### Technical specifications

Length x width x height Draft Dry weight Hull material Propulsion

900 x 227 x 400 cm 0.8 m 6.8 T (fuelled) GRP construction Twin Mercury 130 h.p Ørsted, the world's leading developer of offshore wind farms, has designed and developed the first uncrewed surface vessel (USV) in the industry for offshore met-ocean measurement campaigns. The measurement data will help lower uncertainties in the expected annual energy production for new offshore wind farms. Ørsted, who has patented the USV concept, sees enormous potential in the technology and has initiated a serial production based on their successful prototype USV.

The prototype USV is named Hugin USV. It is designed for continuous operation in the harshest offshore conditions for a year at a time. The USV has a builtin navigation system, which enables it to transit from shore at various degrees of autonomy, and it can be controlled both in line-of-sight or from a beyond-line-ofsight remote control centre.

The USV is designed as a generic sensor platform and can collect large amounts of data on, among other things, the wind conditions, the state of the seabed, and biological and ecological measurements, all dependent on the sensor instrumentation chosen for a given operation. The broad range of measurements collected by the USV is essential for Ørsted's early-phase development activities prior to the construction of new wind farms.

-1

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## WORLD'S LARGEST SINGLE CAPACITY OFFSHORE WIND TURBINE SUCCESSFULLY INSTALLED

The world's largest 16-megawatt offshore wind turbine was successfully installed off the coast of East China's Fujian Province on Wednesday and is about to be put into commercial operation soon, marking an important breakthrough in China's offshore wind power production in high-end equipment manufacturing capacity and farreaching offshore wind power construction capacity.

Located approximately 35 kilometers from the shoreline of Pingtan county, the 16-megawatt offshore wind turbine is currently the largest single capacity wind turbine that has been installed in the world. The center height of the wind turbine hub is 152 meters, the weight of the engine room and the generator combination is 385 tons, the blade is 123 meters long, and the impeller sweeping area is about 50,000 square meters, the equivalent of about seven standard soccer fields.

The Global Times learned that the main components of this 16-megawatt offshore wind turbine are completely independent development by China. The research and development teams of the China Three Gorges Corporation (CTG) and Xinjiang Goldwind Sci and Tech Co. have overcome a series of key technical challenges, including ultra-long flexible blades, large-scale main shaft bearings, and miniaturization of ultra-large capacity generators.



### RAMBOLL

## RAMBOLL WINS NEW MULTIMILLION ENERGY ISLAND CONTRACT

In a new project win, we will develop the electrical infrastructure for the planned energy island in the Danish North Sea. The contract has a value of DKK 225 million over 10 years.

Fully developed, the energy island will have a capacity of 10  $\ensuremath{\mathsf{GW}}$ 

The Danish government has announced that the concept of Energy Island North Sea will be examined thoroughly. Before the government initiates a public tender, it must be analyzed if there is a better or cheaper way to realize the concept. One of the possibilities that will be examined in the coming analysis is a platform solution. The Danish government's ambitions of realizing an offshore infrastructure solution in the North Sea stands, and Ramboll's consultancy to the Danish transmission system operator Energinet on the artificial island's electricity infrastructure continues.

The energy island in the North Sea will be key to powering Europe with renewable energy. By 2033, the island will have a capacity of 3 GW zero carbon electricity, equivalent to approximately half of Denmark's electricity consumption today. By 2040, this figure rises to 10 GW– enough to power 10 million homes in Northern Europe.

"The North Sea energy island positions Denmark as a frontrunner in the implementation of renewable energy at large scale. Not only will this transformative project be crucial in helping achieve Denmark's national climate targets, it will also serve as an energy hub for Europe," says Hannes Reuter, managing director for Ramboll's global Energy division.



# VESSELS OF THE MONTH

#### AHT for Sale #1128938

A newly built Anchor Handling Tug (AHT) vessel, featuring a length overall (LOA) of 40 meters, a powerful 45-ton bollard pull (BP), and a 150 cubic meters of free deck area. This vessel is well-suited for a range of offshore operations. Contact us for more details and inquiries, referencing the unique identifier #1128938.

#### Tug for Sale #1128940

A newly built ASD tug available for sale. With a length overall (LOA) of 53 meters, a bollard pull (BP) of 55 tons, and a 63 square meters of free deck area. Suitable for a variety of maritime operations. Contact us for more details and inquiries, using the designated reference code #1128940.

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

Check out our extensive vessel database of over 100,000 vessels and request yours now!

Or contact us: info@grs.group





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