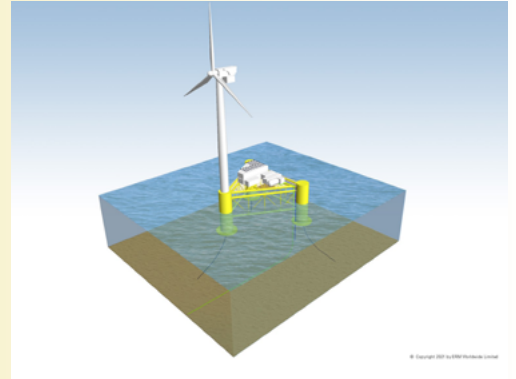


Principle Power to advance FEED for Wind-to-Hydrogen Dolphyn project

Principle Power has been contracted by ERM to advance the Front-End Engineering Design (FEED) for a Wind-to-Hydrogen Dolphyn 10 MW demonstrator project off the coast of Aberdeen. The contract was signed after ERM Dolphyn was awarded £8.62m of funding from the UK Government, via the Low Carbon Hydrogen Supply 2 Competition. ERM Dolphyn (Deepwater Offshore Local Production of HYdrogeN) has developed a concept design to produce large-scale green hydrogen from floating offshore wind. The ERM Dolphyn concept employs a modular design integrating electrolysis and a wind turbine on a moored floating semi-submersible platform based upon the proven WindFloat® technology by Principle Power to produce hydrogen from seawater, using wind power as the energy source. ERM and Principle Power have been collaborating on the development of decentralized hydrogen production opportunities since 2019. The 10 MW demonstrator project is a key step in proving the Dolphyn concept prior to commercial-scale deployment. The demonstrator project is targeting operations in late 2025. Commercial scale projects (300MW+) are under development and expected for operation pre-2030, followed by large-scale (GW) deployment post-2030. When fully deployed, at an expected 4 GW total capacity, ERM Dolphyn has the potential to supply energy to heat more than 1.5 million homes with no carbon emissions, thus avoiding the release of millions of tonnes of CO₂ into the atmosphere every year.

erm.com



Wärtsilä completes three EPC projects to Brazil in record time – enables customer to meet vital power supply commitment

The technology group Wärtsilä's engineering, procurement and construction (EPC) capabilities have been clearly demonstrated with three recent project deliveries to Brazil, which were successfully completed in record time. The orders were placed in Q4, 2021 by TEVISA, Linhares Geração, and Povoação Energia, companies held by funds managed by BTG Pactual Asset Management. The urgency for completion was the result of the need to meet the required Commercial Operation Date of the power plants as set by the rules of the Reserve Capacity Auction, which was arranged by Brazil's Ministry of Mines and Energy in October 2021. From contract signing to commencement of commercial operation, the time normally required for each project would be approximately 14 months. In this case, however, Wärtsilä completed all three projects in less than 8 months. Construction of the buildings until commissioning took just three months, and although the equipment was delivered in Q2/2022, all three plants were already in commercial operation by July 2022. Thanks to Wärtsilä's ability to meet the strict deadline requirements, the customer has been able to meet fully the Power Purchase Agreement requirements by the Brazilian energy authorities. The electricity produced by these power plants will be fed to the national grid, thereby assuring system reliability. Among the many difficulties encountered were shipping congestion difficulties resulting from logistic hold-ups and the Covid 19 pandemic, and the war in Ukraine which affected material availability. Wärtsilä was able to meet these challenges, for example, by specifically chartering a vessel to deliver equipment and materials, and using a significant number of air freight deliveries to ensure everything was on site when needed. The three power plants are part of three separate projects, all in the state of Espírito. The UTE Luiz Oscar Rodrigues de Melo plant and the UTE Povoação1 plant are both located in the city Linhares, and the UTE Viana 1 plant in the city of Viana. All three projects feature Wärtsilä 34SG gas engines, in total 16 engines with a combined output of approximately 150 MW, sufficient to provide electricity to some 280,000 households in the region.

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Nigeria energy: a new access point to Africa

Imequadri has recently been working towards a deeper development on the international market and it is focusing especially on emerging countries; participating in the 9th edition of Nigeria Energy has proven to be a successful attempt to approach the African market of energy. Nigeria has a population of more than 200 million people, and reports say it is going to become, within 2050, the third biggest country after China and India; in Imequadri we believe that this huge potential is worth an extra effort to come in contact with more than 21 African countries. Nigeria is in the top 10 oil & gas producers, and dozens of projects are underway in order to meet the government's goal of 90% electricity coverage by 2030. During the three days of exhibition, held in Lagos at the end of September, our sales team arranged meetings with potential partners from several countries; most of them had the makings of beneficial business cooperation which has led to purchase orders currently under execution.

imequadriestelle.it

