

LIEN / Geocean completes offshore work on second Wilhelmshaven LNG terminal in Germany - LNG <u>Prime</u>

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By**LNG Prime Staff** September 12, 2024



French marine and offshore contractor, Geocean, a unit of VINCI Construction Grands Projets, has completed its contract awarded by Norwegian technology company ECOnnect Energy on the offshore part of the second FSRU-based LNG import project in Wilhelmshaven, Germany.

ECOnnect Energy has contracted Geocean to support them in installing the IQuay readyto-use solution for importing LNG to Wilhelmshaven.

Geocean completed its work on the LNG project after nearly seven months on site.

Strengthening Germany's energy security

In 2022, ECOnnect Energy signed a contract with FSRU Wilhelmshaven, a joint venture between Belgium-based Tree Energy Solution (TES) and France's Engie. After that, ECOnnect selected Geocean to execute the offshore work for the second LNG import terminal in Wilhelmshaven.

State-owned DET (Deutsche Energy Terminal GmbH), which was established by Germany's Federal Ministry for Economic Affairs and Climate Action in January 2023 to operate FSRU-based LNG terminals, is the general client for all works, Geocean said. The second Wilhelmshaven LNG project is one of the priority projects supported by Germany's LNG Acceleration Law, passed in May 2022, to strengthen Germany's energy security by 2025.

Besides this terminal, DET's FSRU-based LNG terminals include the operational Wilhelmshaven 1 and Brunsbüttel facilities as well as the terminal in Stade.

The German government, supported by Uniper, RWE, TES, and Engie, chartered four FSRUs to serve these facilities as the fastest solution to enable Germany to start importing LNG in a record time.

One of these FSRUs is the 2005-built 138,000-cbm, Excelsior, and this vessel will serve the second Wilhelmshaven terminal.

Unlike the three other three DET FSRU-based terminals, Excelsior is the only FSRU that will be located offshore, making this project a unique development.

Excelsior will be moored at DET's new island jetty in Jade Bay and connected to the ECOnnect IQuay F-Class System.

This solution facilitates a rapid and reliable connection between the FSRU and the onshore facilities, reducing installation time and environmental impact.

FSRU anchoring and connection system

Geocean has worked with ECOnnect on designing and installing the pipeline connection from land to the FSRU, the anchoring system, and the subsea equipment. The company installed these infrastructures 1.7km from the shore at a depth of 14m. Moreover, installation of Geocean's pipe system included 2 x 12" flexible hoses (60 m long), 2 x PLEM, 6 x 7" TCP pipe in a trench, assistance with FSRU connection and commissioning, and laying the power cable to supply the project with energy.



Geocean fast-flex solutions: a modular asset-free operating model

Geocean has developed four types of modular barges for an asset-free operating model:

- "Geocean Fast Pipe" Barge: for rigid pipeline laying
- "Geocean Fast Flex" Barge: adapted for flexible flowline laying
- "Geocean Fast Cable" Barge: for umbilical and power cable laying
- "Geocean Fast Support" Barge: for offshore lifting and pulling operations.

These Geocean modular barge solutions, developed in-house, are tailored to the specific needs of each project and designed to streamline installation operations to be the most

cost-effective to fit customer inquiries about complex offshore installation projects, Geocean said.

The company deployed its fast-flex barge solution for this project, which involved TCP pipe laying.

Geocean said the choice of the fast-flex barge solution emphasizes the project's commitment to an execution plan marked by efficiency and solution tailor-made to fit the client's need.



40 years of experience

Geocean previously worked on several offshore LNG terminals, including the Moheshkhali LNG terminal and the Summit FSRU terminal in Bangladesh.

This fast-track project marks a significant step in the company's development of its capabilities for complex offshore installation services, Geocean said. The company has completed the complex fast-track project in Wilhelmshaven on time and under the highest offshore industry standards.

In addition, the key to success was found in Geocean team's adaptability, cohesion, and expertise based on 40 years of complex marine projects track record delivered in the energy industry, Geocean concluded.