

First FPSO with Carbon Capture System Ready for Service off Angola



Conversion project including installing the first CCS system was completed in 24 months (COSCO Shipping Heavy Industries)

Published Feb 20, 2025 8:05 PM by The Maritime Executive

Yinson Production and officials from China's COSCO Heavy Industries joined with industry leaders to celebrate the completion and naming of the first FPSO in the world that incorporates carbon capture and other carbon-reducing technologies. The *Agogo FPSO* will be handed over by the end of the month, more than a month ahead of schedule setting a record for conversion speed, and will depart for Angola where it will operate for at least the next 15 years.

The Malaysian company was awarded the contract for the FPSO by Azule Energy a joint venture between BP and Eni in February 2023. Azule Energy has a 15-year charter with an option for five additional years in a deal valued at approximately \$5.3 billion.



FPSO named at the COSCO Shanghai shipyard on February 20 (Yinson)

The basis for the project is a VLCC crude oil tanker built in 2009. The 321,300 dwt vessel registered in Singapore launched a conversion that took a total of 24 months, including seven months of integration work carried out in Shanghai at the COSCO Shipping Heavy Industry yard. COSCO highlights the previous fastest conversion was 27 months for the Yinson *Maria Quiteria FPSO* delivered in April 2024. The new FPSO measures approximately 1,093 feet (333 meters) in length.

They are highlighting the advanced technologies aboard the vessel being deployed for the first time in the sector. The vessel uses an absorbent system to clean the post production gas emissions combined with a carbon storage system. It is billed as the first carbon capture and storage system of its kind deployed on an offshore FPSO.

By capturing carbon dioxide from the flue gas after the combustion of the ship's gas turbines, it significantly reduces FPSO greenhouse gas emissions. According to the shipowner, the installation of this device can reduce carbon emissions by about 27%, which based on the expected rate of crude oil production will equate to an estimated CO2 emissions reduction of about 230,000 tons per year. The Agogo FPSO has a production rate of 120,000 barrels per day.

The *Agogo FPSO* features additional cutting-edge carbon reduction technologies. These include a closed flare system, hydrocarbon blanketing, combined cycle technology, automated process controls, and an all-electric drive systems.

The Agogo field, which was discovered in 2019, is positioned approximately 100 miles from the coast of Angola. It is in the Atlantic near the northern border of Angola at a depth of approximately 1,700 meters. The field started production in 2020 and the new FPSO will become the third on the field.