

News Release

P298/21e
September 02, 2021

First Floating LNG project for BASF's Gas Treatment technology

- **PETRONAS selected OASE purple technology for FLNG project**
- **Performance Test Run in May 2021 successfully completed**
- **Highly efficient gas treatment with low energy demand**

The latest Floating Liquefied Natural Gas (FLNG) project of the Malaysian oil and gas company PETRONAS (PFLNG DUA) has selected BASF's OASE[®] purple for its Acid Gas Removal Unit process. This is the first FLNG reference worldwide for BASF's OASE Gas Treatment technology. Together with PETRONAS and the Japanese engineering partner JGC Corporation, PFLNG DUA has been successfully started up in February 2021 and completed its Performance Test Run in May 2021. The floating LNG facility opens a new source of supply for cleaner energy as it is designed to extract natural gas from deepwater gas reservoirs in depths up to 1,500 meters.

OASE purple is an amine-based solution that is utilized for the removal of acid gases such as carbon dioxide (CO₂) and hydrogen sulfide (H₂S) from natural gas. The removal of acid gases is necessary to prepare the gas for the liquefaction and subsequent pipeline transportation. The highly efficient and environmentally friendly BASF-technology provides flexibility and low capital expenditure (CAPEX) for its customers. Additionally, the low energy demand of the process combined with the non-corrosive nature of the solvent keeps operating and maintenance costs (OPEX) low. The process also provides a high level of gas purity and product gas recovery while keeping solvent losses to a minimum.

Andreas Northemann, Head of BASF's Gas Treatment business, says: "We are proud to now have our first FLNG reference in operation and running at 100 percent capacity, which is the fruit of many years of research. We applied our on-shore LNG expertise and conducted motion studies and Computational Fluid Dynamics (CFD) to ensure a high reliability, low maintenance design which meets our customer's stringent off-shore specifications and challenges."

With PFLNG DUA, PETRONAS owns and operates two floating LNG facilities, following the success of PFLNG SATU which has been in operation since 2017. Construction of PETRONAS' latest – second – floating LNG facility started in 2015 and will be moored over the Rotan Gas Field at a water depth of 1,300 meters, located 140 kilometers offshore Kota Kinabalu, Sabah, Malaysia in the South China Sea with the capacity to produce 1.5 million tons of LNG annually.

About BASF

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. More than 110,000 employees in the BASF Group contribute to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio is organized into six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions. BASF generated sales of €59 billion in 2020. BASF shares are traded on the stock exchange in Frankfurt (BAS) and as American Depositary Receipts (BASFY) in the U.S. Further information at www.basf.com.

About OASE

With more than 50 years of experience, BASF offers its customers efficient gas treating solutions for a variety of applications such as natural gas, synthesis gas, and biogas. Worldwide, these solutions have been proven and demonstrated in about 500 reference plants. BASF markets its range of gas treating technologies, the corresponding solvents and complete technical services including the digital platform OASE connect under the brand OASE® – Gas Treating Excellence by BASF. As an "accelerator" in the BASF portfolio, the OASE products are part of the system solutions that make a significant contribution to sustainability in the value chain. Compared to conventional technologies, OASE offers the highest efficiency in gas treatment and thus makes important contributions to conserving resources and reducing emissions by saving energy. For more info please visit www.oase.basf.com