Major LNG Projects to Keep an Eye on in 2022

Several major LNG projects are in progress in 2022. These are coming at a crucial time when experts predict a steadily increasing demand for LNG and a need to increase production and storage capacity.

LNG results from cooling natural gas until it becomes a liquid, is primarily used for transport. Once it is liquified, natural gas takes up only $\frac{1}{600}$th of its original volume. Condensing natural gas, transporting it, and re-vaporizing it is not easy. It requires expensive infrastructure and highly specializing systems.

What is the role of an LNG Terminal?

An LNG Terminal refers to an onshore installation that acts as a local storage and transport hub for LNG between land and sea. These terminals are usually quite large and near major ports or high-density residential areas. Terminals often have harbours where they can offload LNG from ships into designated storage on-land. From here, LNG is transported to a plant for processing into energy or sent to other hubs or storage facilities using pipelines, trains, or trucks.

Source: LNG Prime
LNG terminals are essential infrastructure that helps determine supply and regulate prices. Having several hubs increases capacity while ensuring a more stable natural gas supply. As demand for LNG has grown, so has the need for more terminals. This is being met with new projects across the globe that focus on major regional hubs to quickly, efficiently and cheaply provide natural gas.

How Long does it take to build an LNG Terminal?

The average LNG terminal takes 3-5 years to complete depending on surrounding infrastructure and supply chains. This means that the LNG projects starting now may not operate until 2027, while the ones online in 2022 and 2023 are from around 2019 - before the rising prices and demand currently gripping the market. Considering how high LNG prices have been over the past year and the projected doubling of LNG demand by 2040, the need for new LNG terminals has never been higher.

However, as a recent study points out, the build times for LNG terminals has also grown. “Over the past 10-15 years, the trend has been for longer LNG liquefaction project execution times, with the average contractual schedule duration of projects under construction at any specific point of time increasing from around 46 months in 2004 to 55 months as of 2018.” While nations are more insistent on rapidly building these terminals, longer construction times could lead to a supply bottleneck.

Source: Econnect Energy
5 Major LNG Projects to Look Forward to in 2022

Several major LNG projects are underway globally, with most earmarked to come online in the next few years. However, a few will be operational before then. Here are 5 major LNG projects to keep an eye on in 2022.

North Field Expansion Project – Qatar

The North Field Expansion Project is the world’s largest LNG project. When it comes online in 2025, it will make Qatar the largest LNG exporter globally, with a production capacity of 110 million tons per year (tpy). This LNG project will also use renewable energy and carbon capture to limit its emissions.

Jafrabad Floating Storage & Regasification Unit - India

Set to boost India’s LNG shipping capacity by 12%, the Jafrabad FSRU can challenge Singapore for Asia’s LNG hub crown. The 47.5 million tonnes per annum it will be able to process and ship across the region makes it one of the most exciting LNG projects on the market.

Rio Grande LNG - United States

Set to produce the greenest LNG in the world, the Rio Grande LNG in Brownsville, Texas, represents the next step in LNG infrastructure. It will produce 27 million tpy, and the LNG plant will reduce emissions by over 90% with carbon capture storage. The Rio Grande LNG project is expected to be operational in 2023.

Arctic LNG 2 - Russia

Projected to produce 19.8 million tpy by 2025, Novatek’s Utrenneye onshore field will be online in 2023 and will employ new technologies to make the natural gas liquefaction process more efficient. This LNG project is part of a larger trans-arctic LNG shipping development being pursued by Novatek.

Brunsbüttel LNG Terminal - Germany

Heavily reliant on imports for over 90% of its domestic natural gas consumption, Germany is seeking to become more self-reliant with the construction of its Brunsbüttel LNG Terminal in 2023. The terminal will have an operational capacity of 5.1 million tpy and be one of many LNG projects to come.

Many major LNG projects are currently underway globally as the world shifts towards a low-carbon future. The projects outlined above will help shift several regions’ energy portfolios.