

India LNG Market & Import Outlook 2025

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Abstracts

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India's rapidly expanding economy and a growing population has resulted manifold increase in consumption of primary energy resources such as coal, crude oil and natural gas in recent years. Now India is one of the largest energy consumer as well as importer, particularly in case of oil and natural gas. As a part of its policy for sustainable development, India has recently made reforms in policy by shifting to greater use of gas from its traditional practice of coal and oil based energy sector. As of now, natural gas comprises of nearly 10% India's total primary energy consumption but India aims to enhance the proportion to 25% - similar to global average in next 10 years. But India's meager domestic production compels it to import about 40% of its domestic gas requirement.

India's existing natural gas reserves occupy only 0.7% of total global reserves though India's natural gas consumption has already touched nearly 4% of total global consumption. More than two-thirds of India's domestic natural gas reserves are in offshore and even the onshore reserves are also heavily concentrated in few states of west and north-eastern parts of the country. Gas production from the offshore reserves is declining fast due to over exploitation throughout the years. Besides, due to lack of proper technology, onshore production is also not growing substantially. That is why India's domestic production of natural gas fell by nearly 40% in last six years – from FY'11 to FY'16. But at the same time, domestic demand for natural has increased substantially – mainly due to India's push towards a gas based energy industry. Hence natural gas imports in the form of Liquefied Natural Gas (LNG) surged by more than 65% in the same period. As currently there is no pipeline infrastructure from gas exporting countries to India, 100% of imports of natural gas is transported as LNG. As of now India is the fourth largest LNG importer – just after Japan, South Korea and China. But the rate of increase of India's LNG import is lower only to China and in the coming



years India's LNG import is very likely to go up more quickly due to projected strong growth of natural gas demand in domestic market.

Power, fertilizer, city gas distribution (CGD), and refineries and petrochemicals are the key gas-consuming sectors in India. In last few years, all these sectors, particularly power and fertilizer industries are not receiving gas as per the demand. As a result most of the gas based power plants in India are running at average 30% PLF. The fall in domestic gas production and low price affordability of imported gas in the power sector has resulted in gas-based power plants remaining under-utilized. Average PLF for FY16 was 25% and nearly two-thirds of the total gas-based installed capacity (24GW) was stranded.5 However, the recent drop in oil prices has made spot LNG imports relatively cheaper and the power sector is expected to consume higher regassified LNG (RLNG) supplies. The growth of fertilizer industry has also stopped despite growing demand fertilizer in country's efforts for increased crop production. Recently, the Government of India has taken various positive initiatives to revive the stranded gas-based capacities in the power and fertilizer sectors by making imported LNG affordable. The initiatives include pricing subsidy of gas to enable the power plants use RLNG, introducing pooled price of gas by averaging domestic and LNG gas prices to increase fertilizer production by 3.7 MMTPA till 2019. Furthermore, India's increasing urbanization and desperate efforts to curb pollution in cities has already prompted increased use of gas as cleaner alternative. Hence natural gas in the form of CNG is being increasingly used in industries, transportation, and domestic sector which form City Gas Distribution(CGD) sector.

Currently, India has four LNG import terminals at Dahej(Gujarat), Hazira(Gujarat), Dabhol(Mahrashtra) and Kochi(Kerala)– for receiving, storing and re-gasifying the LNG duly imported. Total capacity of the terminals is about 25 MMTPA but due to due to lower utilization of the Kochi and Dabhol terminals on account of pipeline connectivity issues and incomplete marine facilities, the effective capacity is less than 20 MMTPA. India envisages the need to scale up import of LNG and that is why it is building at least six more terminals. By adding those new terminals – in both eastern and western coasts of the country, capacity of India's LNG terminals is likely to reach more than 40 MMTPA. Andhra Pradesh and Gujarat – two states in eastern and western coast respectively will have the maximum number of terminals once all the upcoming terminals become reality in next 6-8 years.

Considering the growth of India's LNG import since FY'11, the import has been growing at Compound Annual Growth Rate (CAGR) 8.74%. Estimates based on this CAGR of LNG import, implies by FY'22, India's LNG import will reach more than 20



MMTPA. The capacity of LNG terminals in the country will be more than 40 MMTPA by FY'22. The pipeline infrastructure to transport the Re-gasified LNG (R-LNG) from the terminals to other areas is very likely to grow substantially by then considering the recent push by Government of India to increase the use of natural gas and plans to provide natural gas to every corner of the country. Hence despite the present below capacity utilization of the LNG terminals due to lack of transmission infrastructure to cater to the demand, the upcoming LNG terminals are expected to operate at substantially fair utilization factor.

"India LNG Market & Import Outlook 2025" Report Highlights

India Natural Gas Sector Indicators

India LNG Market Overview

India LNG Import Terminal Infrastructure

India Natural Gas/LNG Pricing Analysis

Regulatory Landscape: Authorities & Policy Framework

India LNG Import Forecast Outlook



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