



Boosting India's Natural Gas Market

What is the issue?

India aims to increase the share of Natural Gas in its energy basket from the current 6.7% to 15% by 2030.

What is the status of India's natural gas market?

India is the 3rd largest energy and oil consumer in the world.

- The oil and gas sector is among the eight core industries in India.
- **Consumption** - According to the International Energy Agency (IEA), consumption of natural gas in India is expected to grow by 25 billion cubic metres (BCM), registering an average annual growth of 9% until 2024.
- **Import** - India is the 4th largest importer of liquefied natural gas (LNG) with 44% from Qatar, 34% from USA, 15% from Russia and 7% from Australia.
- **FDI** - According to Department for Promotion of Industry and Internal Trade (DPIIT), FDI inflows in India's petroleum and natural gas sector stood at US \$ 7.98 billion between April 2000-March 2022.
- As of June, 2022, Gas Authority of India Ltd. (GAIL) had the largest share of the country's natural gas pipeline network (33,815 kms).

What about the government schemes in the gas sector?

- **Pradhan Mantri Urja Ganga** - This is the national gas grid project which aims to provide piped natural gas (PNG) connection in the eastern part of the country by developing additional 15,000 km of gas pipeline network.
- **City Gas Distribution Network (CGD)** - It aims to distribute natural gas to domestic, industrial and commercial customers as Piped Natural Gas (PNG) and to the automotive segment as Compressed Natural Gas (CNG).
- **Promotion of CNG/LNG in transportation** - The Government is promoting the usages of environment friendly transportation fuel CNG.
- **Pradhan Mantri Ujjwala Yojana** - It is a scheme of the Ministry of Petroleum & Natural Gas for providing LPG connections to women from Below Poverty Line (BPL) households.
- **One Nation One Gas Grid** - India targets increasing the pipeline coverage by 60% by 34,500 km by 2024-25.

- All states are intended to be connected by a trunk national pipeline network by 2027.
- **FDI** - 100% FDI is allowed in exploration activities of oil and natural gas fields under automatic route.

What are the major issues in the sector?

- **Pricing** - Most of the gas produced in India is priced today on the basis of the weighted average of gas price consumed in USA & Mexico (Henry Hub), Canada (Alberta Hub), Europe (National Balancing Point) and Russia.
- However, the pricing environment prevailing in these locations is entirely different to that in India.
- **Allocation and marketing** - The current government guidelines for the allocation of gas produced in the nomination blocks of ONGC and Oil India Ltd. allow freedom for its marketing but affix an artificial ceiling price for the same.
- This distorts the market and creates a risk of manipulation in the government's royalty revenue.
- **GST** - Natural gas is currently outside the ambit of GST, and existing legacy taxes.

How to boost the natural gas sector?

- **Structural reforms** - Long-term gas purchase agreements through innovative trading mechanisms with adequate flexibility is key for India to ensure long-term energy security and affordability.
- India may create a system similar to Europe's EU Energy Purchase Platform that will consist of big players for gaining negotiating power to secure long-term contracts.
- **Price discovery** - Transparent and competitive market structures can help to ensure optimal allocation of natural gas to consumers and facilitate transparent price delivery.
 - India's first gas exchange, established in 2020, is playing an important role in transparent price discovery.
- **Removal of barriers** - Barriers to gas trade can be reduced by improving access to transport network and other infrastructure.
- Harmonised procedure is essential for giving access to a network that is independent of ownership, endowing flexibility in access and sale of unutilised capacity.
- **Oversight** - A statutory body can oversee the gas system for maintaining safety, and bring a common platform for transport capacity access, scheduling, nomination and allocation.
- The system operator may be mandated to carry out annual assessments of gas supply security, similar to European Network of Transmission System Operators-Gas.
- **Taxation** - It is essential to implement GST to let gas flow across the country purely on economic basis, without limitations of State boundaries.
- **Storage** - The government may enable creation of gas storage using underground mines or salt caverns.
- These storages can be strategic in nature and can be used to protect important gas users like fertiliser units and CGDs (city gas distributors) from gas price volatility.

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