

# Country's first LNG facility plant at Nagpur

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**In news-** India's first LNG Facility plant has been set up by Baidyanath Ayurvedic Group on Kamptee Road near Nagpur Jabalpur Highway, Maharashtra.

## **About LNG-**

- Liquefied natural gas (LNG) is natural gas, predominantly methane, with some mixture of ethane, propane and butane that has been cooled down to liquid form for ease and safety of non-pressurized storage or transport.
- LNG is a **clear, colourless and non-corrosive, non-toxic liquid** which forms when natural gas is cooled to  $-162^{\circ}\text{C}$  ( $-260^{\circ}\text{F}$ ).
- The cooling process shrinks the volume of the gas 600 times, making it easier and safer to store and ship.
- In its **liquid state, LNG will not ignite.**
- The "acidic" elements such as hydrogen sulphide ( $\text{H}_2\text{S}$ ) and carbon dioxide ( $\text{CO}_2$ ), together with oil, mud, water, and mercury, are removed from the gas to deliver a clean sweetened stream of gas.
- LNG can be used to fuel internal combustion engines.
- LNG competes directly with compressed natural gas as a fuel for natural gas vehicles since the engine is identical.
- LNG offers a unique advantage over CNG for more demanding high-horsepower applications by eliminating the need for a turbocharger, thus being overall more efficient.
- China has been a leader in the use of LNG vehicles and Japan, the world's largest importer of LNG.

## **Indian scenario-**

- India has set a target to raise the share of natural gas in the country's energy mix to **15% by 2030 from the current 6.3%** to cut its carbon footprint.
- To meet that target India's gas consumption needs to rise to 640 million standard cubic metres a day (mmscmd) from the current 155 mmscmd.
- Indian companies are investing billions of dollars to strengthen gas infrastructure, including laying 15,000-kilometer pipelines to supply cleaner fuel to households and industries.
- India currently has **17,000 kms of gas pipeline network.**
- **Petronet LNG Ltd**, an Indian oil and gas company is a joint venture promoted by the Gas Authority of India Limited (GAIL), ONGC, Indian Oil Corporation Limited (IOC) and Bharat Petroleum Corporation Limited (BPCL).

It has set up the **country's first LNG receiving and regasification terminal in Dahej, Gujarat**, and another terminal in **Kochi, Kerala.**