



## City Gas Distribution Scheme

Prime Minister laid the foundation stone to mark the commencement of work for 9th round of City Gas Distribution (CGD).

- Government of India is pushing to promote the usage of environment friendly clean fuel i.e. natural gas as a fuel/feedstock across the country to move towards a **gas based economy**.
- Presently the **share of gas in the country's energy mix is just over 6%** and the aim is to reach the 15% figure, while the **world average is 24%**.
- Purpose for development of CGD networks is to **increase the availability of cleaner cooking fuel** (i.e. Piped Natural Gas) and **transportation fuel** (i.e. Compressed Natural Gas) in the country.
- The Petroleum and Natural Gas Regulatory Board (PNGRB) has also initiated the process of new CGD bidding round covering 124 districts in 14 States to increase the potential coverage to about 53% of the country's area covering 70% of country's population.

### Government's clean energy initiatives

- CGD will help in supporting governments various clean energy initiatives of the Union Government like **Ethanol Blending, Compressed Biogas plants, increased LPG coverage and introduction of BS-6 fuels for automobiles**.
- CGD will support **Pradhan Mantri Ujjwala Yojana** as number of cylinders will be vacated for delivery in rural areas, from the cities which will get piped gas deliveries

### Significance of the Scheme

Being an environment friendly, safer and cheaper, natural gas is a superior fuel as compared with coal and other liquid fuels.

- **Reducing Air Pollution:** India made a commitment in COP21 Paris Convention in December 2015 that by 2030 that it **would reduce carbon emission by 33% of 2005 levels**. Natural gas, as domestic kitchen fuel, as fuel for transport sector as well as a fuel for industries and commercial units, can play a significant role in reducing carbon emission.
  - As per WHO database released in May 2018, India has 14 out of 15 world's most polluted cities in terms of PM 2.5 concentration. Large number of industries also consume polluting fuels like pet coke and furnace oil which emit polluting CO<sub>2</sub>. Natural Gas is most viable alternative to coal and other liquid fuels in order to curb air pollution.
  - The expansion of CGD network will also benefit to industrial and commercial units by ensuring the uninterrupted supply of natural gas.
- **Natural Gas is cheaper:** Natural Gas in the form of CNG is 60% cheaper as compared to petrol and 45% cheaper as compared to diesel.
  - Also, natural gas in the form of PNG is 40% cheaper as compared with market price LPG and price of PNG almost matches with that of subsidised LPG based on prices in Delhi.
- **Employment Generation:** Gas networks in cities will create a new ecosystem which will enable gas based industries, generates employment to youth.

- **Address constraints of cylindered gas supply:** Natural Gas supplied through pipelines is just like water from the tap. There is no need to store cylinders in the kitchen and thus saves space.
  - Also, delivering gas through cylinders is energy intensive exercise have many layers including gas agency, distributors. Piped supply is more efficient and helps in maintaining continuous supply.

## Challenges

- **Meeting Demands of Gas:** Transition towards a gas based economy can suffer due to supply-side constraints.
- **Pricing Issue:** Imported gas should be available at affordable prices to all category of consumers be it domestic, commercial or industrial. Price should not be a hurdle in creating a gas-based economy.
- **Infrastructure:** Infrastructure requirement is a challenge as it requires both funding and acquisition of land.
  - Creating a gas-based economy will require infrastructure at various levels like LNG terminals at port, technology for re-gasification of LNG, right of way for pipelines on land and CNG stations to distribute gas to consumers in cities.

## Way Forward

- Reasonable long term contract for LNG with natural gas exporting nations can help in addressing the issue of demand-supply constraints.
- The government should **enhance the LNG terminal capacity, renegotiate Indo-Qatar Gas deal** to increase the supply of Gas.
- It is also necessary to promote production of gas through domestic ways **through agro-wastes and other products** and including the same into the CGD network.
- 100% electrification, making efficient cook stoves, relying on other renewable sources like solar can help in reducing dependence on imported gas and also save on foreign exchange.

## The Petroleum and Natural Gas Regulatory Board (PNGRB)

- The Petroleum and Natural Gas Regulatory Board (PNGRB) was constituted under the Petroleum and Natural Gas Regulatory Board Act, 2006 .
- The objective of PNGRB is to protect the interests of consumers and entities engaged in specified activities relating to petroleum, petroleum products and natural gas and to promote competitive markets and for matters connected therewith or incidental thereto.
- PNGRB authorises the CGD networks, natural gas and petroleum product pipelines, determines tariff, lays down the technical and safety standards etc.