

City Gas Distribution scheme

February 10, 2021

In News: Nirmala Sitharaman extends Ujjwala scheme to 1 crore more beneficiaries The Finance Minister also said the city gas distribution network, providing CNG to automobiles and piped cooking gas to households, will be expanded to 100 more districts.

About City Gas Distribution scheme

- The 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 a 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 the country's population.

Benefits Of CNG

Environmental Benefits

- No impurities, No Sulphur (S), No lead (Pb)
- Very low levels of polluting gaseous emissions without smell and dust
- Molecular structure compactness prevents the reactive processes which lead to the formation of Ozone (O₃) in the troposphere

Safety Benefits

- Lighter than air – in case of leak no dangerous puddles
- Unlikely to ignite due to:
 - High ignition temperature
 - Narrow range of ignition
- Lowest injury and death rate per vehicle mile
- CNG cylinders structurally most sound and have passed every severe tests

Monetary Benefits

- Cheaper than conventional fuel
- Pay-back period is short

Technical Benefits

- Very high anti knock power (more than 120 ON) allows greater performance compared to petrol
- Does not require refining plant or additive adding and can be used immediately after its extraction
- No evaporation leaks and spills of fuel, both during refuelling and feeding of the car
- CHG combustion produces a very low quantity of carbon deposits (permits a longer life of lubricant oil, spark plug, piston drum, valves & other components)