

Sustainable Alternative Towards Affordable Transportation (SATAT scheme)

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In news– SATAT initiative envisages setting up of 5000 Compressed Biogas (CBG) plants for production of 15 Million Metric Ton (MMT) per annum of CBG by 2023-24.

About SATAT scheme–

- It is an initiative **aimed at setting up of Compressed Bio-Gas production plants** and make it available in the market for use in automotive fuels by inviting Expression of Interest from potential entrepreneurs.
- The **initiative was launched in October 2018 by the Ministry of Petroleum & Natural Gas** in association with Public Sector Undertaking (PSU) Oil Marketing Companies (OMC) viz.
 - Indian Oil Corporation Ltd.
 - Bharat Petroleum Corporation Ltd. and
 - Hindustan Petroleum Corporation Ltd.
- **Compressed Bio-Gas (CBG) plants are proposed to be set up mainly through independent entrepreneurs.**
- CBG produced at these plants will be transported through cascades of cylinders to the fuel station networks of OMCs for marketing as a green transport fuel alternative.
- The 1,500-strong CNG stations network in the country currently serves about 32 lakh gas-based vehicles.
- The entrepreneurs would be able to separately market the other by-products from these plants, including bio-manure, carbon-dioxide, etc., to enhance returns on investment.
- **It is planned to roll out 5,000 Compressed Bio-Gas**

plants across India in a phased manner, with 250 plants by the year 2020, 1,000 plants by 2022 and 5,000 plants by 2025.

- These plants are expected to produce 15 million tonnes of CBG per annum, which is about 40% of current CNG consumption of 44 million tonnes per annum in the country.
- As on 31st October 2022 Oil and Gas Marketing Companies participating in SATAT have issued 3694 Letters of Intent (LoI) to entrepreneurs for procurement of CBG produced by them.
- Further, 38 CBG/biogas plants with installed capacity around 225 MT per annum have been commissioned by LoI holders.

What is Compressed Bio-Gas?

- Bio-gas is produced naturally through a process of anaerobic decomposition from waste / bio-mass sources like agriculture residue, cattle dung, sugarcane press mud, municipal solid waste, sewage treatment plant waste, etc.
- The Bio-Gas is purified to remove hydrogen sulphide (H₂S), carbon dioxide (CO₂), water vapour and compressed as Compressed Bio-Gas (CBG), which has methane (CH₄) content of more than 90%.
- Compressed Bio-Gas is exactly similar to the commercially available natural gas in its composition and energy potential.
- CBG has calorific value and other properties similar to CNG and hence can be utilized as green renewable automotive fuel.