

# Indian Renewable Energy Sector: Compressed Biogas Outlook

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**Marginal CBG production despite  
Govt push**

**March 2023**



*Compressed Biogas (CBG) production is yet to scale up as IRR for CBG projects is estimated at 7-9%.*

*The Budget for 2023-24 announced a 5% CBG mandate for all organisations marketing natural gas and biogas and the setting up of 500 new CBG plants under the GOBARDhan scheme at a total investment of Rs 10,000 crore.*



During 9M FY2023, the total natural gas demand in India stood at 45,661 MMSCM, out of which imports accounted for nearly 45%; increasing production of compressed biogas (CBG) can aid in reducing LNG imports.



CBG is a renewable energy fuel with calorific value and other qualities similar to compressed natural gas (CNG) and can be produced from biodegradable urban/municipal waste and also from agricultural wastes such as sugarcane waste (bagasse and press mud), paddy straw, cow dung, chicken litter etc.



Some of the key challenges in setting up a CBG plant include high capex, difficulty in maintaining year-round supply of raw material, limited subsidy, lack of pipeline infrastructure etc.



CBG is more expensive than domestic natural gas, priced as per the modified Rangarajan formula, but offers savings vis-à-vis LNG. However, production of CBG remains miniscule compared to the domestic natural gas requirement.



The SATAT initiative was launched on October 1, 2018 with the target of developing 5000 CBG plants in India at a cost of Rs. 1.75 lakh crore by 2023-24, thereby producing 15MMTPA of CBG - equivalent to 54 MMSCMD of gas. However, as of August 2022, less than 50 CBG plants have been commissioned under this scheme.



CBG production is yet to scale up as IRR for CBG projects is estimated at 7-9%. The SATAT scheme had targeted 5000 plants till 2023 but less than 50 have been set up. The 2023-24 Budget announced 5% CBG mandate for all organisations marketing natural gas and biogas.



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