



Compressed Bio Gas (CBG) – The Fuel of the Future (Bio CNG Plant)





Introduction

The production of environmentally friendly renewable energy, biodegradable waste water treatment, industrial food waste disposal, organic fertilizer production, and cost-effective power generation are all made possible by compressed bio gas (CBG) plants and biogas to compressed natural gas (CNG) plants. This selection of gas plants has been created to treat various waste materials, turning them into fuel that burns cleanly and may be used for cooking or to power vehicles. These are also incredibly low maintenance and simple to use.

> Visit this Page for More Information: <u>Start a Business in</u> <u>Industrial Gases Industry</u>

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Uses and Application

Biogas, commonly referred to as compressed bio gas (CBG), is created when organic material ferments without oxygen. One form of gas that can be utilized in place of fossil fuels is CBGs. Bio methane is a different sort of gas that is occasionally regarded as bio-gas. This particular gas results from the transformation of organic matter into a methane-rich gas. Like regular natural gas, biome thane can be used for heating and cooking. Additionally, it can be utilized as a fuel for buses and vehicles. Bio methane emits less carbon dioxide when burned compared to other fossil fuels.

Related Business Plan: **BIOGAS PRODUCTION**







Manufacturing Process

The raw ingredients for this process, which are typically food waste, animal dung, and other biomass resources, come first. These are crushed, then cooked to a temperature of about 80 C till they become liquids. Before being run through an anaerobic digester, they are first cooled to a temperature of roughly 50 degrees Celsius. In essence, the biomass is decomposed in a sealed container by bacteria, which also releases carbon dioxide and methane gas. The following step will be to pressurize and store the gases in tanks before compressing them into liquid. It can be used to fuel trucks and buses once it has been compressed.

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Benefits of Starting Compressed Biogas Plant Business

The environmentally beneficial alternative to fossil fuels is compressed bio gas (CBG). It is made from organic resources including food leftovers, plant waste, and animal dung. CBG emits 80% fewer greenhouse gases than conventional fossil fuels and burns cleanly. It is also renewable. Methane, a biogas that may be created from organic material like manure and plants, is the main component of bio natural gas (CNG), a type of biogas. Additionally, CNG can be utilized in automobiles in place of gasoline! Compared to burning diesel or gasoline, it emits substantially less carbon monoxide, hydrocarbons, and particulate matter. This presents the ideal opportunity for you to launch a business because of all these advantages.

> Related Feasibility Study Reports: Compressed Biogas - Manufacturing Plant, Detailed Project Report, Profile, Business Plan, Industry Trends, Market Research, Survey, Manufacturing Process, Machinery, Raw Materials, Feasibility Study, Investment Opportunities, Cost and Revenue





Market Size in India

Due to their high efficiency and low costs, compressed bio gas (CBG) or bio (CNG) plants are predicted to have a rapidly expanding market in the upcoming years. CBGs had a \$2.6 billion USD global market in 2016; by 2025, that market is expected to rise to \$4.1 billion USD. The entire global revenue for CNGs was \$5.7 billion USD in 2016, and it is anticipated to increase to over \$9 billion USD by 2025. The fact that they operate more efficiently than conventional gas fired power generation systems, which results in lower fuel costs and a reduction in greenhouse gas emissions, is one of the main causes causing this rapid expansion.



Read our Books Here: <u>Handbook on Biogas and Its</u> <u>Applications (from Waste & Renewable Resources with</u> <u>Engineering & Design Concepts)(2nd Revised Edition)</u>





Global Market Outlook

The market is anticipated to expand at a CAGR of 5.4% between 2021 and 2028, rising from USD 25.61 billion in 2021 to USD 37.02 billion by 2028. This market's demand and expansion are to blame for the abrupt increase in CAGR. This is a result of expanding worldwide worries about climate change and volatile oil costs, as well as growing demand for cleaner fuels in the transportation sector. By isolating oxygen from the other gases in biogas, the plant converts biomass into biogas. In order to reach its final destination as fuel for automobiles, the compressed gas is first injected into pipelines under high pressure of up to 2,500 pounds per square inch. Passenger cars, buses, trucks and vans, agricultural equipment, and other significant end user categories all use bio gas as their primary fuel source. This market is anticipated to increase significantly throughout the projected period as more nations make large investments in green technology and place a high priority on environmental sustainability.

Watch Video: <u>How to Start Biogas Production, Biogas – An Intense Opportunity</u>

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Key Players

- GAIL (India)
- Wärtsilä (Finland)
- Clarke Energy (U.K.)
- GPS Renewable (India)
- Primove Engineering Pvt. Ltd. (India)
- Renergon International AG (Switzerland)
- Green Elephant Engineering Pvt. Ltd. (India)
- SLPP RE-NEW (India)
- SFC Umwelttechnik GmbH (Austria)
- Bharat Bio Gas Energy Ltd (India) Go Top
- Spectrum Renewable Energy Pvt. Ltd. (India)





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Major Queries/Questions Answered in Business Plan

- **1.** How has the Compressed Bio Gas (CBG) The Fuel of the Future (Bio CNG Plant) performed so far and how will it perform in the coming years?
- 2. What is the Business Feasibility Study of the Compressed Bio **Gas (CBG) - The Fuel of the Future (Bio CNG Plant)?**
- 3. What are the requirements of Working Capital for setting up the **Compressed Bio Gas (CBG) - The Fuel of the Future (Bio CNG Plant)?**



- 4. What is the structure of the Compressed Bio Gas (CBG) The Fuel of the Future (Bio CNG Plant) and who are the key/major players?
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Compressed Bio Gas (CBG) - The Fuel of the Future (Bio CNG

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18. What are Statistics of Import & Export for the Compressed Bio **Gas (CBG) - The Fuel of the Future (Bio CNG Plant)? 19.** What is the time required to break-even? **20.** What is the Break-Even Analysis of the Compressed Bio Gas (CBG) - The Fuel of the Future (Bio CNG Plant)? **21.** What are the Project financials of the Compressed Bio Gas (CBG) - The Fuel of the Future (Bio CNG Plant)? 22. What are the Profitability Ratios of the Compressed Bio Gas (CBG) - The Fuel of the Future (Bio CNG Plant)?



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Furniture & Fixtures Pre-operative and Preliminary Expenses Technical Knowhow Provision of Contingencies Working Capital Requirement Per Month......7 **Raw Material Packing Material** Lab & ETP Chemical Cost **Consumable Store**







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- ✓ The Business Plan helps you to identify a profitable project for investing or diversifying into by throwing light to crucial areas like industry size, market potential of the product and reasons for investing in the product
- ✓ This Business Plan provides vital information on the product like it's characteristics and segmentation
- \checkmark This Business Plan helps you market and place the product correctly
 - by identifying the target customer group of the product







 \checkmark This Business Plan helps you understand the viability of the

project by disclosing details like machinery required, project

costs and snapshot of other project financials

- ✓ The Business Plan provides a glimpse of government regulations applicable on the industry
- \checkmark The Business Plan provides forecasts of key parameters which

helps anticipate the industry performance and make sound

business decisions







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And before diversifying/venturing into any product, they wish to study the following aspects of the identified product:

- Good Present/Future Demand
- Export-Import Market Potential
- Raw Material & Manpower Availability
- Project Costs and Payback Period

The Business Plan covers all aspect of business, from analyzing the market, confirming availability of various necessities such as Manufacturing Plant, Detailed Project Report, Profile, Business Plan, Industry Trends, Market Research, Survey, Manufacturing Process, Machinery, Raw Materials, Feasibility Study, Investment Opportunities, Cost and Revenue, Plant Economics, Production Schedule,







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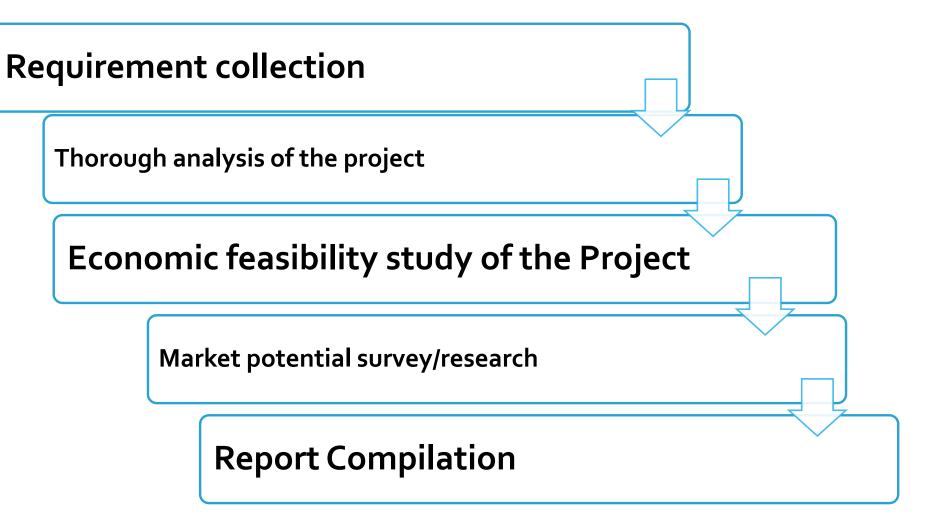
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 - Leisure & Entertainment Based Projects
 - Livestock Farming Of Birds & Animals
 - Minerals And Minerals
 - Maize Processing(Wet Milling) & Maize Based Projects
 - Medical Plastics, Disposables Plastic Syringe, Blood Bags
 - o Organic Farming, Neem Products Etc.
 - o Paints, Pigments, Varnish & Lacquer
 - Paper And Paper Board, Paper Recycling Projects
 - Printing Inks
 - Packaging Based Projects
 - Perfumes, Cosmetics And Flavours
 - Power Generation Based Projects & Renewable Energy Based Projects
 - Pharmaceuticals And Drugs
 - Plantations, Farming And Cultivations
 - Plastic Film, Plastic Waste And Plastic Compounds
 - Plastic, PVC, PET, HDPE, LDPE Etc.





- Potato And Potato Based Projects
- Printing And Packaging
- Real Estate, Leisure And Hospitality
- Rubber And Rubber Products
- Soaps And Detergents
- Stationary Products
- \circ $\,$ Spices And Snacks Food $\,$
- Steel & Steel Products
- o Textile Auxiliary And Chemicals
- Township & Residential Complex
- Textiles And Readymade Garments
- Waste Management & Recycling
- Wood & Wood Products
- Water Industry(Packaged Drinking Water & Mineral Water)
- Wire & Cable









- To get a detailed scenario of the industry along with its structure and classification
 - To provide a comprehensive analysis of the industry by covering aspects like:
 - Growth drivers of the industry
 - Latest market trends
 - Insights on regulatory framework
 - SWOT Analysis
 - Demand-Supply Situation
 - Foreign Trade
 - Porters 5 Forces Analysis
 - To provide forecasts of key parameters which helps to anticipate the industry performance
 - To help chart growth trajectory of a business by detailing the factors that affect the industry growth
 - To help an entrepreneur/manager in keeping abreast with the changes in the industry
 - To evaluate the competitive landscape of the industry by detailing:
 - Key players with their market shares
 - Financial comparison of present players







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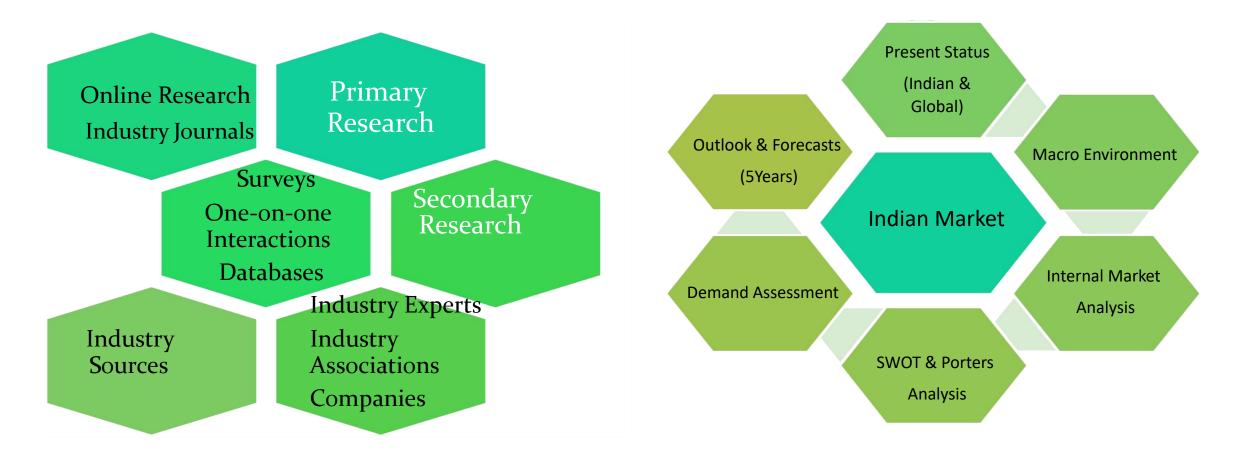
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