Indian Biogas Association

Fertilizing Energy

COVERAGE REPORT FOR THE MONTH OF JUNE 2023

FIFTH ARCHER

BUILDING BRAND STORIES

CONTENT

S.No.	PUBLICATION	STORY	READERSHIP	DATE
1.	The Times of India	Biogas industry needs SATAT-like umbrella scheme for bio fertilizers	132,785,220	June 10, 2023
2.	BQ PRIME	India's Biogas Sector Poised For Growth	80,7000	June 27, 2023
3.	Deccan Chronicle	How increase in domestic organic fertiliser production will lower the cost of imports	1,632,630	June 27, 2023
4.	India CSR	The Biogas Industry Can Lead the Change in Polluted Indian Cities	213,160	June 29, 2023

THE TIMES OF INDIA

Biogas industry needs SATAT- like umbrella scheme for bio fertilizers

June 10, 2023, 3:47 PM IST / Gaurav Kedia in Voices, Environment, TOI

The government has announced several initiatives to transform India into a green economy. The focused green growth actions aim to bring futuristic and sustainable reforms that will lead the country to 'Amrit Kaal'. Several schemes such as the Green Hydrogen Mission, the MISTI initiative (Mangrove Initiative for Shoreline Habitats and Tangible Incomes), PM-PRANAM (PM Program for Restoration, Awareness, Nourishment, and Amelioration of Mother Earth), and the "Atma Nirbhar Clean Plant Programme" were proposed to put the country on the path of green growth. Apart from the emphasis on the green economy, these schemes aid in achieving the government's aspiration of doubling the farmer's income. The government's focus on green growth is significant in light of the climate concerns caused by depleting natural resources, increased use of fossil fuels, and exponential population growth.

The government's push to encourage natural farming by promoting the use of organic fertilizers and limiting the use of synthetic fertilizers, aims to convert 10 million farmers to take up natural farming over the next three years by establishing 10,000 bio-input resource centres to create a national distribution channel for micro-fertilizers and pesticides.

The biogas industry can play a crucial role in India's green growth as well as in increasing farmers' income. Apart from providing clean and green fuel that can be used for multiple purposes such as heating, cooking, and as fuel for transportation purposes, the industry can also contribute to the production of good-quality organic fertilizers and organic pesticides. The bio-slurry, which is the by-product of the biogas digesters, can be used as the base to manufacture nutrient-rich organic fertilizers that can restore the biodiversity of the soil and improve crop yields.

BQ PRIME
Powered by Bloomberg

India's Biogas Sector Poised For Growth

Government initiatives are propelling sector growth with the target of achieving a 15% contribution to the energy mix by 2030.

For decades, India has been harnessing the potential of biogas as a viable alternative to LPG and biomass burning, particularly in rural areas. However, the lack of technological advancements and high setup costs have impeded the widespread adoption of biogas.

But now, things are changing as the Indian government focuses on increasing the natural gas contribution to the total energy mix to 15% by 2030, from the current 6.9%.

Recent data from the Sustainable Alternative Towards Affordable Transportation portal and the Ministry of New and Renewable Energy shows that 58 compressed biogas plants with a total capacity of 271 tonnes per day were commissioned in India as of March 31. Also, during the same period, approximately 3,694 investors were issued letters of intent to set up biogas plants, and around 9,019 tonnes of compressed biogas was sold.

According to Gaurav Kedia, chairman of the Indian Biogas Association, India currently has 50 lakh small biogas plants, though a large number of them remain non-operational due to lack of social and technical support. Efforts are on to enhance the plants' performance by utilising "different feedstock mixes" and optimising their "upgradation systems and compressors to minimise methane slip", Kedia said.

In contrast to other biomass projects, biogas initiatives—particularly compressed biogas—have been prioritised by project developers.

Over the past few years, the Indian Renewable Energy Development Agency has been approving and disbursing loans predominantly for biogas and waste-to-energy projects, Kedia said.

According to the most recent annual report of the Ministry of New and Renewable Energy, IREDA approved biogas and waste-to-energy projects worth Rs 773 crore and paid out Rs 345 crore.

"Because of market demand, local resource availability, governmental policies, and environmental advantages, we can consider biogas or CBG projects as the prioritised projects by the developers," Kedia said.

The ministry reported that in 2022, approximately 1,36,828 kg per day of CBG capacity was added mainly in states such as Haryana, Gujarat, Uttar Pradesh, Madhya Pradesh, Maharashtra, Tamil Nadu, Punjab, Telangana, and West Bengal.

Numerous new companies—both national and international—are entering the field and covering the entire value chain. "Financial institutions are quite positive about the sector and are trying to figure out ways to have smooth funding possibilities," Kedia said.

According to him, it is important to use a different approach in modelling the plants as compared with the past. The focus should be on a structured supply chain that prevents any sudden rise in feedstock prices once the plants become reliant on suppliers. In previous instances, plants struggled to maintain sustainability when suppliers hiked the feedstock prices, he said. "This should not happen again."

It is also important to develop India and region-specific biogas plant technology that takes into account the regionwise requirements of farmers as well as commercial specifications, Kedia said. "Instead of importing one-size-fits-all type of digesters, we should have region-specific digesters."

DECCAN Chronicle

How increase in domestic organic fertiliser production will lower the cost of imports

Deccan Chronicle. | DC Correspondent Published on: June 27, 2023 | Updated on: June 27, 2023

Organic fertilizers can be cheaper, more locally available, and more sustainable than chemical fertilizers. (Image: DC)

The import bill is a major concern for any nation, as imports can typically be more expensive than domestic production. One way to reduce India's import bill is by using organic fertilizers. In 2021, India imported urea fertilizer worth 6523.53 million USD, Phosphate fertilizer worth 4169.95 million USD and 1036.79 million USD worth of Potassium based fertilizers. The total amount of all kinds of fertilizers imported in 2021–2022 was 12,765.66 million USD. The country imports urea, DAP, MOP, and other fertilizers mainly from China, United Arab Emirates, and Spain.

Organic fertilizers such as fermented organic manure (the output of a biogas plant), compost, vermicompost, biofertilizers, and green manures are derived from natural sources and can be used as an alternative to synthetic fertilizers. These sources provide organic carbon apart from other essential nutrients, which is essential for healthy crop growth.

Organic fertilizers can be cheaper, more locally available, and more sustainable than chemical fertilizers. They help maintain soil fertility, improve soil structure, and increase soil microbial activity, along with a reduction in the risk of soil erosion. Organic fertilizers also help in reducing the environmental impact of chemical fertilizers, such as pollution and contamination of groundwater. All of this leads to more sustainable development goals.

Thus, considering the above fact, organic fertilizer coming out of biogas plants is one of the vital outputs apart from energy generation and waste management. One biogas bottling plant with a capacity of 100 cubic meters per day can fill 7 cylinders of 6 kg (LPG equivalent gas) capacity in a day. In one year, the plant can generate energy equivalent to 21462 litres of petrol. Increasing the number of biogas plants in the country can help India reduce its LNG import bill by 60% over the next ten years. Moreover, setting up biogas plants in rural areas can help to develop a secondary source of income for farmers and animal husbandry, as well as generate employment opportunities in both skilled and unskilled sectors.

A biogas plant based on segregated municipal solid waste (MSW) with a capacity of 1 tonne per day can generate 24 tonnes of organic fertilizer per day, which can be further upgraded and processed into liquid and solid manure. This organic fertilizer while being used for sustainable farming, will not only fit into the government's agenda but also provide the Indian population with healthier organic food.

According to the estimates, replacing one tonne of chemical fertilizer with organic digestate can save one tonne of oil, 108 tonnes of water, and 7 tonnes of carbon emissions. Farmers can reduce their expenses by switching to organic fertiliser as the prices of organic fertilizers from biogas plants are highly competitive. The average price of organic fertilizer comes around INR 4 per kg, which can be further reduced when dealing in bulk quantities. If the farmers move a step forward and set up their individual or community biogas plants, they can reduce their energy expenses and also earn additional revenue by selling excess biogas, and organic fertilizer. Promoting organic fertilizer can also help the government save money it would have spent subsidizing synthetic fertilizers, which could be used for the development of the country. In the recent budget, this intention is shown through the PM PRANAM scheme [PM Programme for Restoration, Awareness, Nourishment, and Amelioration of Mother Earth].

The Biogas Industry Can Lead the Change in Polluted Indian Cities

by INDIA CSR — June 29, 2023

AA

Gaurav Kedia

In recent years, the problem of pollution has become a major concern in India. According to a report by the Swiss company IQAir, 30 of the world's 50 most polluted cities are in India. India certainly needs to improve the quality of the air we are breathing presently.

Indian healthcare expenditure stands at USD 103.7 billion, and air pollution is responsible for almost USD 11.9 billion of the overall expenses.
However, there is hope in the form of the biogas industry, which has the potential to lead the change toward a cleaner and greener India. One-third of deaths from lung cancer, heart disease, and stroke globally are due to air pollution, according to the World Health Organization. India has been grappling with the problem of pollution for decades, with its major cities being the worst affected. However, there has been a growing recognition of the need for cleaner, greener cities that are sustainable in the long run. The biogas industry, in particular, has emerged as a potential game-changer in this regard, offering a range of benefits that can help lead the change in polluted Indian cities.

Green cities are needed of the hour: The need for green cities in India cannot be overstated. With rapid urbanization and industrialization, the country's cities have become major contributors to pollution, with air and water quality deteriorating to dangerous levels. The negative impact of pollution on public health, the environment, and the economy has been well documented, with estimates suggesting that air pollution alone costs the Indian economy billions of dollars each year.To tackle this problem, India needs to adopt a holistic approach that encompasses everything from reducing emissions to promoting sustainable practices.
Removal of organic waste for productive use: One of the most significant benefits of the biogas industry is its ability to convert organic waste into a useful resource. In India, a significant amount of organic waste up to 32 million tonnes is generated every day from households, restaurants, and other sources. This waste, if left unattended, can contribute to pollution, emit greenhouse gases, and even create health hazards.

The biogas industry offers a solution to this problem by using organic waste to produce biogas, which can be used for cooking, heating, and even electricity generation. This not only reduces the amount of waste going to landfills but also provides a sustainable source of energy that can help reduce the reliance on fossil fuels. The process of biogas production also generates bio-fertilizer, which can be used to enhance soil quality in agriculture.

Landfills: The biogas industry also offers a solution to the problem of landfills, which are a major contributor to pollution in Indian cities. Landfills are not only unsightly but also emit harmful gases such as methane and carbon dioxide, which contribute to climate change.

In a recent letter to the Delhi government, Indian Biogas Association has called for greater adoption of biogas technology to reduce the amount of waste going to landfills. The letter highlights the potential of biogas to not only reduce pollution but also create new opportunities for employment and entrepreneurship.

Bi-product to boost plantations: bio-fertilizer: Another benefit of the biogas industry is the production of bio-fertilizer, a by-product of the biogas production process. Bio-fertilizer is a natural and organic fertilizer that can help boost plant growth and soil health without the harmful chemicals found in conventional fertilizers.

By using bio-fertilizer, farmers can reduce their reliance on chemical fertilizers, which can be expensive and harmful to the environment. This, in turn, can lead to improved crop yields and higher-quality produce, which can benefit both farmers and consumers.

Overall reduction in pollution: Overall, the biogas industry has the potential to significantly reduce pollution in Indian cities, from air pollution to water pollution.

In addition, by producing biogas and bio-fertilizer, the industry can help reduce the reliance on fossil fuels and chemical fertilizers, which can have a significant impact on the environment. This, in turn, can lead to improved public health, a cleaner environment, and a more sustainable future for all.

In conclusion, the biogas industry can help to remove organic waste for productive use, reduce the amount of waste sent to landfills, generate bio-fertilizer to boost crop yields and reduce pollution levels in Indian cities. The government's recognition of the potential of the biogas industry is a positive step in the right direction, and it is crucial that more efforts are made to promote the use of biogas plants in India. With the right policies and incentives, the biogas industry can play a significant role in promoting sustainable living and reducing the carbon footprint of Indian cities.