

Services by the BDTC, IIT Delhi

- ❑ Fundamental research & development in area of anaerobic digestion of various kinds of biomass resources, and biogas upgradation.
- ❑ HRD programmes of all levels in biogas sector.
- ❑ Providing technical support and consultancy services for biogas production, upgradation and bottling technologies.
- ❑ Testing and evaluation of biogas and compressed biogas quality, plants etc.
- ❑ Evaluation of bio-materials for estimation of biogas production potential of alternate feed materials.

BDTC, IIT Delhi provides technical support to states nodal agencies of Uttar Pradesh, Haryana and Delhi & NCR

Technologies Developed by IIT Delhi

- ❑ Water Scrubbing based Biogas Upgradation and Bottling system for Compressed Biogas (CBG) production for vehicular application.
- ❑ Efficient biogas production from Jatropha and Pongamia de-oiled seed cakes; De-oiled rice bran; Agricultural biomass residues; Kitchen waste biomass.
- ❑ Engine performance evaluation of compressed biogas (CBG) as transportation fuel.
- ❑ Rice straw based biogas plants & power generation.



About BDTC, IIT Delhi

The IIT Delhi is one of the "Institutes of Eminence" conferred by the Government of India for higher academic education training, research and development in science and technology in India. The institute is located in Hauz Khas, South Delhi. In 2008 a special BDTC was started in IIT Delhi with the support of Ministry of New and Renewable Energy (MNRE) under National Biogas and Manure Management Program (NBMMP) for research and development in biogas sector, providing technical training and support for quality implementation of various biogas programs engaged in research and development of biogas related technologies.



BDTC, IIT Delhi

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Biogas Development & Training Centre IIT Delhi

[For Delhi, Haryana and Uttar Pradesh States]



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सत्यमेव जयते

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Objectives of the BDTC

- ❑ To provide technical support for National Biogas Manure Management Program (NBMMP now “NNBOMP”).
- ❑ To organize training courses and to demonstrate new biogas technologies for new and developing enterprises and for staffs of state departments and implementing agencies.
- ❑ To carry out research and development on new scopes of biogas technologies involving biogas upgradation and bottling techniques.
- ❑ To develop multidisciplinary network program in the area of biogas technology and to provide consultancy services to manufactures, NGOs, implementing agencies etc. for developing and testing of new systems.



National Biogas Day on 15th Sept. 2018 Organized at IIT Delhi



Visit of BDTC–IITD & MNRE Team to Shri Mataji Gaushala (world largest cowshelter), Barsana, Mathura, Uttar Pradesh

Major Research & Thrust Areas

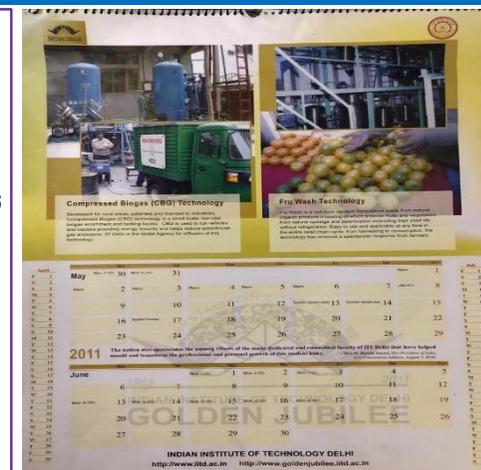
- ❑ Promotion of compressed biogas (CBG) in India. First time the name “CBG” was given by the IIT Delhi. On the basis of our efforts the Ministry of Petroleum & Natural Gas, Govt. of India has launched a national programme on “Sustainable Alternative Towards Affordable Transportation” on 1st October 2018.
- ❑ Biomass pretreatment and biogas production from alternate feedstocks, deoiled rice bran, kitchen waste, minor forest tree based seeds.
- ❑ Use of waste water for substitution of fresh water demand in biogas production process, and recycling of digested liquid slurry.
- ❑ Biogas slurry handling and application machineries, value addition, and efficient slurry management.
- ❑ Thrust on development of compressed biogas (CBG) operated tractor for sustainable rural energy demand.



Some glimpses of research and training activities

Other Outreach Activities

IIT Delhi Golden Jubilee Year Calendar 2011 depicting Compressed Biogas (CBG) Technology



SATAT (Sustainable Alternative Towards Affordable Transportation): The MoPNG, Govt. of India has started SATAT programme as a developmental effort that would benefit both vehicle-users as well as farmers and entrepreneurs. It is planned to roll out 5,000 compressed biogas plants across India 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. At an investment of approx. INR 1.7 lakh crore, this initiative is expected to generate direct employment for 75,000 people and produce 50 million tonnes of biomethane for crops.

Compressed Biogas (CBG) Projects Established at Gaushala's

The projects of biogas upgradation and bottling systems have been installed under various field projects, such as at Jaipur, Jodhpur, Nathdwara, Bhilwada Gaushalas, and at Sharada Vihar Jan Kalyan Samiti, Bhopal.



100 Nm³/day cow dung based compressed biogas (CBG) plant at Bhopal, Madhya Pradesh