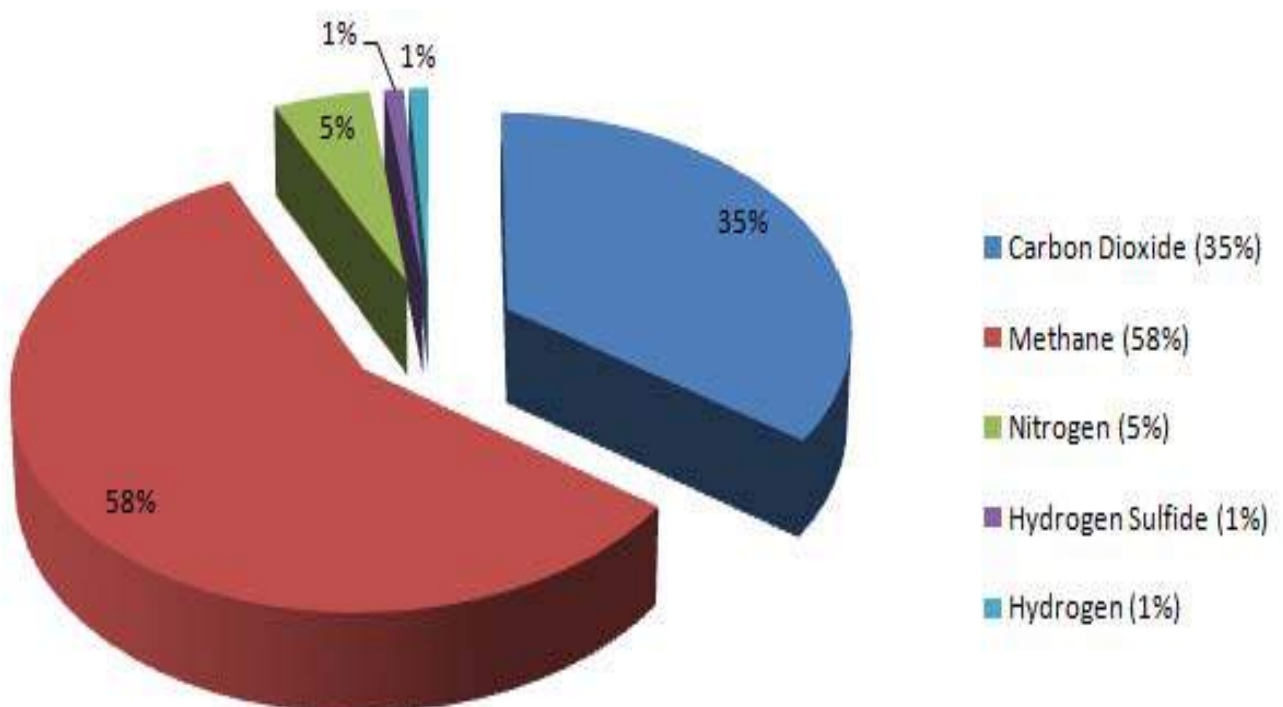


Biogas for common man

Biogas:

Biogas is a gaseous fuel generated from biological decomposition of organic waste such as cattle dung. The gas can replace cooking fuels such as wood, kerosene and Liquefied Petroleum Gas (LPG). The calorific value of the gas varies between 4500 -5500 kCal/ cubic metre (cub.m). The slurry of biogas plant can be used as organic fertilizer. The most common feed material in family size biogas plants is cattle dung.

Biogas Composition:



Biogas Usage:

- Biogas can be used in a Biogas chulhas/ burner for cooking. A biogas plant of 2 cub.m. capacity is sufficient for providing cooking fuel to a family of 4 persons.
- Biogas can be also used for lighting a biogas lamp. The requirement of gas for powering a 100 candle lamp (60 W) is 0.13 cub.m. Per hour.

Approximate Cost of Construction & Cattle dung Requirement:

Size of plant in cubic metres	Cooking fuel is sufficient for (in no. of people)	Quantity of cattle dung required daily in kg	No. of cattle heads required	Estimated cost* at 2010-11 prices worked out for Central part of country	% Capital Subsidy
1	2	25	2 to 3	Rs.12,080/-	33%
2	4	50	4 to 6	Rs.16,200/-	33%
3	6	75	7 to 9	Rs.19,405/-	33%
4	8	100	10 to 12	Rs.23,350/-	33%

(Source: <http://www.mnre.gov.in/adm-approvals/prog-ftbp.htm>)

The biogas plant cost is higher by 30 per cent and 50 per cent in hilly areas and North Eastern Region States, respectively. In general, 33% of the capital cost is the subsidy provided by MNRE for household use.

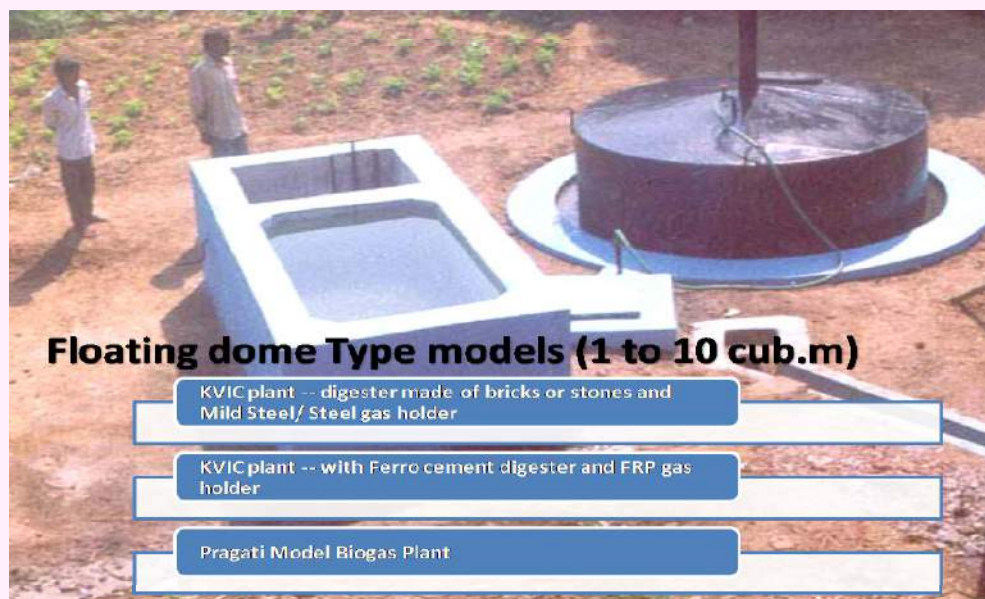
Approved Biogas Models For Government Subsidy:

Flexi Model Biogas Plant



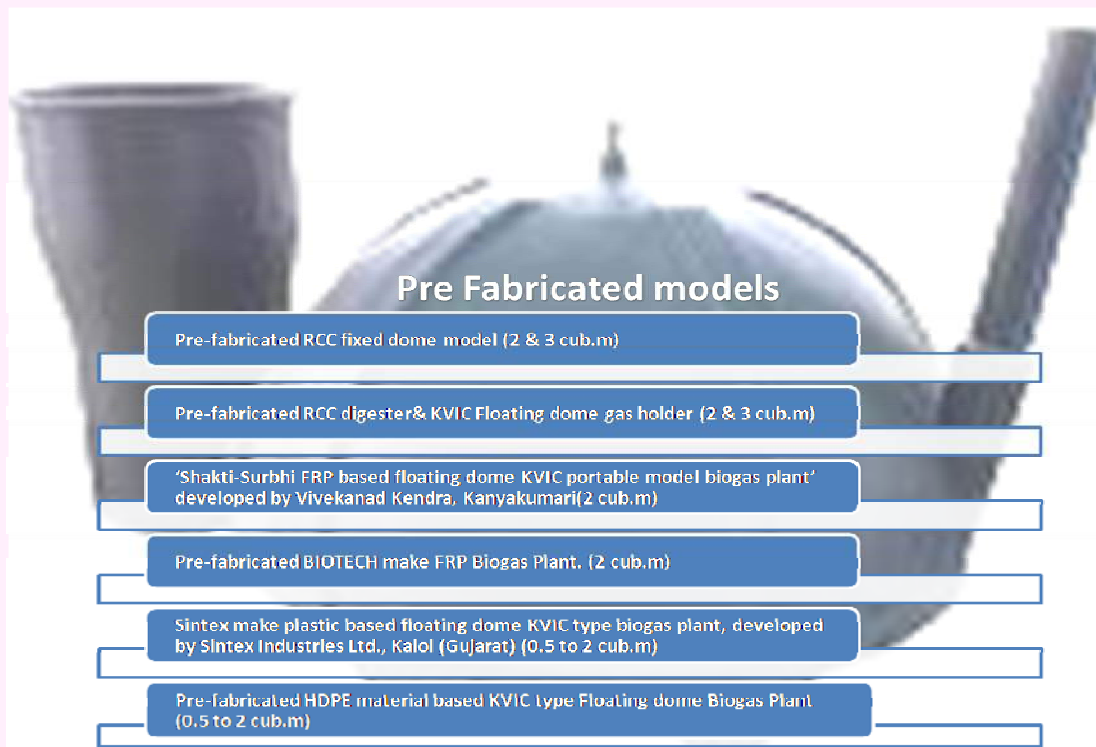
Source: IIT Delhi

Floating Dome Type Biogas Plant



Source : Venugopal Milk Dairy, Walayar, Kerala

Pre Fabricated Models



Source: IIT-Delhi

Fixed Dome Shaped Biogas Plant



Source: IIT Delhi

Scheme of the Subsidy:

National Biogas and Manure Management Programme (NBMMP).

Implementation Agency:

→ State nodal departments of MNRE

→ Khadi and Village Industries Commission, Mumbai.

Subsidy Pattern:

The subsidy pattern of MNRE under National Biogas and Manure Management Programme w.e.f. 1st November 2009 and for remaining period of 11th Plan (till December 2012) is given below:

Central Financial Assistance to beneficiaries of Biogas Plant			
S.N.	Areas	Subsidy in Rs. Per plant	
		1 cum.	2-4 cum.
1.	Major parts of India	4,000	8,000
2	NER States, Sikkim (except plain areas of Assam)	14,700	14,700
3	Plain areas of Assam	9,000	10,000
4	Jammu & Kashmir, Himachal Pradesh, Uttrakhand, Niligiri of Tamil Nadu, Sadar Kursoong & Kalimkpong Sub-Divisions of Darjeeling, Sunderbans (W.B.) and Andaman & Nicobar Islands	4,000	10,000
5	Additional CFA for toilet linked Biogas Plants	1,000	
6	Incentive for saving diesel and other conventional fuels by using biogas in engines/ gensets and/ or biogas based refrigerators	5,000	

(Source: <http://www.mnre.gov.in/adm-approvals/prog-ftbp.htm>)

Biogas based power generation subsidies are also available for factory scale plants above the capacity of 25 cub.m under the MNRE scheme Biogas based Distributed / Grid Power Generation Programme. The central financial assistance for such projects will be limited to a maximum of Rs. 30000 to Rs. 40000 per kW power for power generating projects in the range of 3 kW to 250 kW of different rating, and the subsidy is limited to 40% of the plant cost.

By

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