

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 3866
TO BE ANSWERED ON 08.12.2016

LARGER BIOGAS PLANTS

3866. SHRI KONDA VISHWESHWAR REDDY

Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

- (a) whether the Government is aware that mid-sized and large sized biogas plants are found to be more effective and efficient than family plant, if so, the details thereof;
- (b) whether the Government is planning to conduct any comparative assessment of different types of biogas plants mentioned above; and
- (c) the steps taken by the Government to promote setting up of larger biogas plants?

ANSWER

THE MINISTER OF STATE FOR POWER, COAL, NEW AND RENEWABLE ENERGY
& MINES (INDEPENDENT CHARGE) (SHRI PIYUSH GOYAL)

(a): The Ministry of New and Renewable Energy (MNRE) is implementing the programmes for promotion of family sized biogas plants for domestic cooking and mid – sized and large-sized biogas plants for off-grid/grid power generation and Bio-CNG production. The efficiency and effectiveness of a well-designed biogas plant depends on feedstock material, proper feeding and mixing of feedstock and maintenance of biogas plant including removal of spent slurry from the outlet and consumption of biogas produced. The mid-sized and large-sized biogas plant may be more effective and efficient because of their volume which enables gas evolution creating some mixing, provided they are designed and operated with the required quantity of feedstock, load management and proper maintenance. However, a detailed performance evaluation and analysis is needed to establish the effect.

(b): The MNRE has brought out a National Lab Policy for Testing, Standardisation and Certification for renewable energy sector. It strongly emphasises the need for adopting standards, performance testing and certification in all areas of new and renewable energy including biogas. The policy document will be released in a National Workshop scheduled to be held on 22nd December 2016 at Vigyan Bhawan. A proposal for performance evaluation of biogas plants is underway for scaling up the programme.

(c): The MNRE is providing support for promoting larger biogas plants for decentralised off-grid power generation applications in the range of 3kW-250kW including thermal applications utilizing cattle/food/agriculture wastes etc. in gaushalas, dairies, small farms, etc. Biogas generation from Urban, Industrial and Agricultural Wastes/Residues is also being supported for power generation and/or production of bio-CNG. Details of Central Financial Assistance(CFA) provided for promotion of biogas under Biogas Power (off-grid) and Waste to Energy Programmes is given at Annexure ‘A’ and Annexure ‘B’, respectively.

**Annexure A - Referred in reply to part (c) of the Lok Sabha Unstarred Question No. 3866
for answer on 08.12.2016**

Biogas Power (off-grid) Programme

Central Financial Assistance (CFA) pattern for setting up Biogas Power (off-grid) Projects

Power generating capacity	Biogas plant capacity	Requirement of DPR	CFA subsidy limited to the following ceiling or 40% of the cost of the system whichever is less		Administrative Charges to State Nodal Department / Agencies/BDTCs for providing technical, supervision, training support and submission of project completion and monitoring report of successful operation	
			Power Generation	Thermal applications	Power Generation	Thermal applications
3-20kW	25 M ³ to 85 M ³	No DPR required	Rs 40,000/- (Rupees forty thousand only) per kW	Rs.20,000/- (Rupees Twenty thousand only) per kWeq	10% of the CFA	5% of the CFA
>20kW to up 100kW	Any combination of above plants or approved alternate capacity/design	DPR required	Rs 35,000/- (Rupees Thirty five thousand only) per kW	Rs 17,500/- (Rupees Seventeen thousand five hundred only) per kWeq	Rs.1,00,000/-	Rs.50,000/-
>100kW up to 250 kW	Any combination of above plants or approved alternate capacity/design	DPR required	Rs.30,000/- (Rupees Thirty thousand only) per kW	Rs.15,000/- (Rupees Fifteen thousand only) per kWeq	Rs.1,50,000/-	Rs.75,000/-

**Annexure B - Referred in reply to part (c) of the Lok Sabha Unstarred Question No. 3866
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Central Financial Assistance (CFA) Under the Programme on Energy from Urban, Industrial and Agriculture Wastes/Residues

Wastes/Processes/Technologies	Central Financial Assistance
1. Power generation from Municipal Solid Waste	Rs.2.00 crore/MW (Max. Rs.10.00 crore/Project)
2. Power generation or production of bio-CNG from biogas at Sewage Treatment Plant or through biomethanation of Urban and Agricultural Waste/Residues including cattle dung	Rs.2.00 crore/MW or bio-CNG from 12000 m ³ biogas/day (Max. Rs.5.00 crore/project)
3. Biogas generation from Urban, Industrial and Agricultural Wastes/Residues	Rs.0.50 crore/MW eq.(12000 m ³ biogas/day with maximum of Rs.5.00 crore/project)
4. Power Generation from Biogas (Engine/gas turbine route) and/or production of bio-CNG	Rs.1.00 crore/MW or bio-CNG from 12000 m ³ biogas (Max. Rs.5.00 crore/project)
5. Power Generation from Biogas, solid Industrial, Agricultural Waste/residues excluding bagasse through Boiler + Steam turbine Configuration	Rs.0.20 crore/MW (Max. Rs.1.00 crore / project)

Other incentives and support measures

- i) Incentives to State Nodal Agencies: service charge @ Rs.1% of the subsidy restricted to Rs.5.00 lakh per project,
- ii) Financial Assistance for promotional activities: for organizing training courses, business meets, seminars/workshops and publicity/awareness, subject to a maximum of Rs.3.00 lakh per activity.
- iii) In addition, concessional customs duty and excise duty exemption are also provided for initial setting up of grid connected projects for power generation and/or production of Bio-CNG from waste.