

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO. 3492
ANSWERED ON 01.04.2025

3492. SMT. KIRAN CHOUDHRY

Will the Minister of New and Renewable Energy be pleased to state:

- (a) whether Government has notified any guidelines for the development of bio energy projects in the country;
- (b) if so, the details thereof;
- (c) the quantum of financial assistance for the said purpose?
- (d) the details of steps taken by Government in the last five years for the development of bioenergy in the country; and
- (e) the details of bioenergy projects installed in the last five years, State-wise ?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER

(SHRI SHRIPAD YESSO NAIK)

(a) to (d) The Ministry of New and Renewable Energy has notified National Bioenergy Programme (NBP) along with guidelines on 02.11.2022, to support the installation of Bioenergy Projects in the country for the period 2021-22 to 2025-26. The NBP has a budget outlay of Rs. 858 Crore, under Phase-1 of the Programme. The National Bioenergy Programme has a provision to provide Central Financial Assistance (CFA) for setting up of Bioenergy projects in the country under the following components:

- i. **Waste to Energy Programme:** Programme on Energy from Urban, Industrial and Agricultural Wastes /Residues
- ii. **Biomass Programme:** Scheme to Support Manufacturing of Briquettes & Pellets and Promotion of Biomass (non-bagasse) based cogeneration in Industries)
- iii. **Biogas Programme:** Programme to support setting up of small (1 m³ to 25 m³ biogas per day) and medium size Biogas plants (above 25 m³ to 2500 m³ biogas generation per day).

The quantum of Central Financial Assistance being provided for the said purpose is given in **Annexure-I**.

(e) The details of bioenergy projects installed in the last five years, is given at **Annexure-IIa, IIb & IIc**.

REFERRED TO IN REPLY TO THE RAJYA SABHA UNSTARRED QUESTION NO. 3492, Part (a), (b) & (c) TO BE ANSWERED ON 01.04.2025 on 'Financial assistance under Bio-Energy Programme'.

The existing CFA Support for setting up of Bioenergy Projects

Waste to Energy Programme	CFA in Rs Crore
Biogas generation	Rs 0.25 Crore per 12000cum/day
BioCNG generation	Rs 4.0 Crore per 4800 kg/day (for BioCNG generation from new biogas plant) Rs 3.0 Crore per 4800 kg/day (for BioCNG generation from existing Biogas plant)
Power generation based on Biogas	Rs 0.75 Crore/MW (for power generation from new biogas plant) Rs 0.5 Crore/MW (for power generation from existing Biogas plant)
Power based on bio & agro-industrial waste	Rs 0.4 Crore/MW
Biomass Gasifier	Rs. 2,500 per kWe with dual fuel engines for electrical application Rs. 15,000 per kWe with 100% gas engines for electrical application Rs. 2 lakh per 300 kWth for thermal applications

Biomass Programme	CFA
Briquette manufacturing plants	Rs. 9.00 Lakhs/ TPH (Maximum CFA- Rs. 45.00 Lakh per project).
Non-Torrefied Pellet manufacturing plant	Rs. 21 lakhs/MTPH production capacity or 30% of the capital cost considered for plant and machinery of 1 TPH plant, whichever is lower (Maximum Rs. 105 lakhs per project)
Torrefied Pellet manufacturing plant	Rs. 42 lakhs/MTPH production capacity or 30% of the capital cost considered for plant and machinery of 1 TPH plant, whichever is lower (Maximum Rs. 210 lakhs per project)
Non-Bagasse Cogeneration Projects	Rs. 40 Lakhs/ Megawatt Maximum CFA- Rs. 5.00 Crore per project).

Biogas Programme	CFA
For small biogas plants (1-25 cubic meter/day plant capacity):	Rs. 9,800/- to Rs. 70,400/- per plant based on size of the plant in cubic meter
For Power generation and thermal application (25 - 2500 cubic meter/day plant capacity):	Rs. 35,000/- to Rs. 45,000/- per kilowatt for power generation Rs. 17,500/- to Rs. 22,500/- per kilowatt equivalent for thermal applications. <i>Note: 20% higher than Standard CFA in for NER, Island, Registered Gaushalas and SC/ST beneficiaries);</i>

REFERRED TO IN REPLY TO THE RAJYA SABHA UNSTARRED QUESTION NO. 3492, Part (e) TO BE ANSWERED ON 01.04.2025 on 'Financial assistance under Bio-Energy Programme'.

The details of Waste to Energy Projects installed in the country in the last five years (2019-20 to 2023-24) is given as under:

SI No	State	Nos.	Installed Capacity (in MWeq)
1	Andhra Pradesh	13	36.31
2	Bihar	2	0.32
3	Chhattisgarh	1	0.08
4	Delhi	1	25.00
5	Goa	3	1.94
6	Gujarat	13	17.43
7	Haryana	10	16.61
8	Karnataka	7	9.41
9	Madhya Pradesh	7	9.81
10	Maharashtra	11	18.37
11	Punjab	8	19.26
12	Rajasthan	1	0.56
13	Tamil Nadu	7	9.84
14	Telangana	10	38.34
15	Uttar Pradesh	24	53.56
16	Uttarakhand	3	0.89
17	West Bengal	5	3.67
	Total	126	261.40

The details of Biomass Projects installed in the country in the last five years (2019-20 to 2023-24) is given as under:

Sl No	Name of the State	No of Briquette/Pellets manufacturing Plants	Capacity (MTPH)	No of Cogeneration Projects	Capacity (MW)
1	Andhra Pradesh	-	-	1	8
2	Bihar	-	-	1	14.2
3	Chhattisgarh	-	-	3	44
4	Gujarat	3	8.5	-	-
5	Haryana	3	6.5	6	52
6	Jharkhand	-	-	2	14.8
7	Karnataka	-	-	4	88
8	Kerala	-	-	1	1.55
9	Madhya Pradesh	34	175.2	2	2.497
10	Maharashtra	6	16.5	4	67.5
11	Punjab	-	-	10	99.84
12	Rajasthan	5	21.3	-	-
13	Tamil nadu	1	8	-	-
14	Telangana	-	-	1	1.3
15	Uttar Pradesh	-	-	2	5.5
16	Uttarakhand	-	-	1	2.5
17	West Bengal	-	-	4	23.6
	Total	52	236	42	425.287

The details of Biogas Plants installed in the country in the last five years (2019-20 to 2023-24) is given as under:

SI No	State/ Union Territories	No of Biogas Plants installed
1	Andhra Pradesh	5,552
2	Arunachal Pradesh	230
3	Assam	1,181
4	Bihar	206
5	Chhattisgarh	2,015
6	Goa	19
7	Gujarat	1,764
8	Haryana	1,600
9	Himachal Pradesh	38
10	Jammu & Kashmir	6
11	Jharkhand	78
12	Ladakh	-
13	Karnataka	12,269
14	Kerala	3,215
15	Madhya Pradesh	10,899
16	Maharashtra	25,666
17	Manipur	-
18	Meghalaya	-
19	Mizoram	2
20	Nagaland	52
21	Odisha	310
22	Punjab	5,982
23	Rajasthan	1,121
24	Sikkim	-
25	Tamil Nadu	750
26	Telangana	94
27	Tripura	107
28	Uttar Pradesh	1,141
29	Uttarakhand	2,630
30	West Bengal	301
31	A&N Islands	-
32	Chandigarh	-
33	Dadra & Nagar Haveli	-
34	Daman and Diu	-
35	Puducherry	-
36	Delhi	-
	Total	77,228

Note: During the FY 2021-22, Biogas Programme was not continued, hence no achievement was made.