

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 5119
ANSWERED ON 02/04/2025

IMPLEMENTATION OF NATIONAL BIO-ENERGY PROGRAMME

5119. SHRI ARUN GOVIL
SHRI BASAVARAJ BOMMAI
SHRI KOTA SRINIVASA POOJARY
SMT. BHARTI PARDHI
SHRI DILIP SAIKIA
SHRI LUMBARAM CHOUDHARY
SHRI SHRIRANG APPA CHANDU BARNE
SHRI KANWAR SINGH TANWAR
SMT. SHOBHANABEN MAHENDRASINH BARAIYA

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

- (a) the details of the major objectives and timelines set for the implementation of the National Bio-energy Programme (NBP);
- (b) the total installed capacity of Bio-energy across the country and the steps being taken to increase the same in future;
- (c) whether the Government has notified any guidelines for development of bio-energy projects across the country, if so, the details along with salient features thereof;
- (d) whether any special provisions have been made under the said programme in Gujarat, North-Eastern States and the Aspirational districts in the country particularly Sirohi and if so, the details thereof;
- (e) the details of financial assistance provided by the Government particularly during the last three years under the said programme;
- (f) the details of the steps taken by the Government during the last five years for the development of bio-energy across the country; and
- (g) the details of bio-energy projects set up/being operated during the said period in the country, State-wise including Karnataka, Maharashtra and Madhya Pradesh particularly in Amroha Parliamentary Constituency?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER

(SHRI SHRIPAD YESSO NAIK)

(a)&(b) The Ministry of New and Renewable Energy (MNRE) has notified National Bioenergy Programme (NBP) along with guidelines on 02.11.2022 for the period from 2021-22 to 2025-26. The details of the major objectives of the various components of the National Bioenergy Programme are given below:

- (i) Waste to Energy Programme:** Programme on Energy from Urban, Industrial and Agricultural Wastes /Residues. This aims to support the setting up of Waste to Energy projects for generation of Biogas/ BioCNG/ Power/ producer or syngas 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). This aims to support setting up of Biomass Briquette/Pellet manufacturing plants and to support Biomass (non-bagasse) based cogeneration projects in Industries in the country. The broader objectives of the scheme are to reduce stubble burning by utilizing surplus agricultural residue, to provide additional source of income to farmers through sale of surplus agro residue and to enable better environmental practices and reduce pollution.
- (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). This aims to support setting up of biogas plants for clean cooking fuel, lighting, meeting thermal and small power needs of users. Fermented Organic Manure produced from the digested slurry from biogas plants, benefits farmers in supplementing / reducing of use of chemical fertilizers.

The details of Central Financial Assistance(CFA) provided under the Scheme is given at **Annexure-I**.

The total cumulative installed capacity of Bio-energy projects across the country, is given at **Annexure-II**.

(c) MNRE has notified the guidelines of NBP on 02.11.2022 for the period from 2021-22 to 2025-26. The salient features of the Scheme are given as under:

- i. Online application for availing CFA under Bioenergy Programme.
- ii. Implementation through designated programme implementing agency.
- iii. Requirement of minimum documents at the time of application for grant of in principle approval.
- iv. Both Bank financed and self-financed projects are eligible for availing CFA.
- v. Grant of CFA for new plants as well as expansion of capacity of existing plants for the enhanced capacity.
- vi. Multiple Inspection Agencies for plant performance inspection before release of CFA.
- vii. Provision of service charge to implementing agency and inspection agency.
- viii. Provision of 20 % of higher than standard CFA under Waste to Energy Programme for Gaushalas, North-Eastern States, Islands and Hilly States.
- ix. Monitoring of plant performance through SCADA/ Remote Monitoring System.
- x. Provision of graded CFA pattern as per the plant performance.
- xi. Provision of higher than standard CFA under Biogas Programme for Gaushalas, North-Eastern States, Islands and Hilly States and beneficiaries of Scheduled Castes/ Scheduled Tribes.

(d) Yes. Special provisions have been made under Waste to Energy Programme and Biogas Programme components of the said programme for North-Eastern States. The component wise details are given below:

- i. Waste to Energy Programme, 20 % higher CFA is provided for installation of waste to energy plants in NER States.
- ii. Under the Biogas Programme, higher CFA is provided for installation of biogas plants in NER States.

The Scheme is implemented in the country including in Gujarat, North-Eastern States and the Aspirational districts in the country. However, for Gujarat and the Aspirational districts in the country particularly Sirohi, no special provisions have been made under the said programme.

(e) During the last three years, CFA amounting to Rs.240.1 Crore has been provided by the Government under the said programme.

(f) & (g) Ministry has supported installation of Waste to Energy, Biomass and Biogas projects during the last five years. The details of bio-energy projects set up under the National Bioenergy Programme during the last five years, State-wise, including in the State of Karnataka, Maharashtra and Madhya Pradesh is given at **Annexure-IIIa, IIIb & IIIc**. In the Parliamentary Constituency of Amroha, one Biomass(Non-bagasse) Cogeneration project has been set up at **M/s Umang Dairies, Gajraula Hasanpur Road, Gajraula, Amroha** with a capacity of 1.75 MW.

REFERRED TO IN REPLY TO THE LOK SABHA UNSTARRED QUESTION NO. 5119, Part (a) to (b), TO BE ANSWERED ON 02.04.2025 on 'Implementation of National 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 LOK SABHA UNSTARRED QUESTION NO. 5119, Part (a) to (b), TO BE ANSWERED ON 02.04.2025 on 'Implementation of National Bio-energy Programme'

The cumulative installed capacity added under the National Bioenergy Program is given as under:

Name of the Scheme	Cumulative Achievement as on 28.02.2025
Waste to Energy Program	711.29 MWeq
Biomass Program	10743 MW (including Bagasse)
Biogas Program	51 Lakh small biogas plant (1-25 m ³ /day /day), 361 medium sized biogas Plants (above 25-2500 m ³ /day /day), 11.5 MWeq

REFERRED TO IN REPLY TO THE LOK SABHA UNSTARRED QUESTION NO. 5119, Part (f) & (g) TO BE ANSWERED ON 02.04.2025 on 'Implementation of National 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:

Sl 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.