Sl. No.	State/UT	2014 15	2015-16	2016-17	2017-18	2018-19*
19.	Nagaland	0	NR	0	0	1155
20.	Odisha	198891	170808	401452	382364	282755
21.	Punjab	2769	2934	5469	6845	4100
22.	Rajasthan	70423	70893	66815	43873	33194
23.	Sikkim	4095	1325	3376	365	3225
24.	Tamil Nadu	70235	45129	39790	33147	56890
25.	Telangana	80446	236598	438059	489673	276870
26.	Tripura	16403	2339	4070	4858	8360
27.	Uttarakhand	17268	17846	18251	21397	19570
28.	Uttar Pradesh	57907	165867	92128	51513	115830
29.	West Bengal	6396	12169	2722	10653	7805
30.	Andaman and Nicobar Islands	1184	1300	1125	713	1320
31.	Chandigarh	126	167	178	176	170
32.	Dadra and Nagar Haveli	220	225	220	200	240
33.	Daman and Diu	11	0	10	15	10
34.	Delhi	1468	1498	1299	0	1560
35.	Lakshadvveep	0	0	0	0	10
36.	Puducherry	75	86	250	63	150
	TOTAL	1348412	1381596	1990409	1688507	1724611

*Targets only. Achievements are yet to be Published

NR- Not Reported

Waste-to-energy plants

851. KUMARI SELJA: Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

(a) the details of the waste to energy plants working in the country, State/UT-wise;

(b) the amount of money allocated and utilised by these waste-to-energy plants during the last three years, State/UT-wise and district-wise details of Haryana; and

(c) the steps being taken by Government to ensure more decentralized way of waste management?

THE MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (SHRI BABUL SUPRIYO): (a) There are 201 Waste-to-energy projects with cumulative capacity of 330.93 MWeq for generation of Biogas/ESioCNG/ Power based on Urban, Industrial and Agricultural waste have been established in the Country as on 31.12.2019. The list of these projects State-wise is given in Statement-I (*See* below).

(b) and (c) Ministry of Environment, Forest and Climate Change has not allocated any money towards Waste-to-energy power plants. However, Ministry of New and Renewable Energy is implementing programme on Energy from Urban, Industrial and Agricultural Wastes/Residues. Under the scheme Central Financial Assistance in the form of back-ended subsidy is provided to Project Developer for setting up of waste to energy plant. Financial assistance available under the programme on energy from Urban, Industrial and Agricultural Wastes/Residues for setting up of Waste to Energy Plant is as follows:–

(i)	Biogas Generation	:	₹ 1 corer per 12,000 m3/day
(ii)	BioCNG generation (including setting up of Biogas plant)	:	₹ 4 crores per 48,000 kg/day
(iii)	Power generation Based on Biogas (including setting up of Biogas Plant)	:	₹ 3 crores per MW
(iv)	Biomass Gasifier	:	1. ₹ 2,500 per kWe with dual fuel engines for electrical application 2. ₹ 15,000 per kWe with 100% gas engines for electrical application 3. ₹ 2 lakh per 300 kWth for thermal application

The details of Central Financial Assistance (CFA) provided by the Government to Private developers in different States/UTs for installation of waste to energy plants are given in Statement-II (*See* below). So far Haryana has developed two waste to energy plants i.e. one at Ambala district having installed capacity (IC) of 0.13 MWeq and another at Panchkula district having IC of 0.30 MWeq and CFA released during 2017-18 was ₹ 0.19 crores and 0.50 crores, respectively.

The Ministry of Environment, Forest and Climate Change has notified Solid Waste Management Rules, 2016 for effective solid waste management.The State Urban Development Department and Rural Development Departments are made responsible for implementation of waste management rules. The District Magistrate/District Collector/ Deputy Commissioner are to allocate suitable land to local authorities to set up solidwaste processing and disposal facilities and review the performance of local bodies.Local authorities and Village Panchayats are given responsibility of door to door waste collection, setting up material recovery facilities, promoting decentralized compost plant or bio-methanation plant for bio-degradable waste, transportation of waste to waste processing centers, transport non-biodegradable waste to material recovery facility or storage facilities, involve Communities, Self Help Groups for integration of waste management. The local authorities shall also facilitate construction, operation and maintenance of solidwaste processing facilities and Sanitary Landfills.

Statement-I

State-wise details of installedcapacity and number Waste-to-Energy plants set up for generation of Biogas, BioCNG and Power in the country as on 31.12.2020

Sl. No.	State/UT	Biogas generation plants (A) M^3/day (No. of plants)	Bio CNG generation plants (B) Kg/day (No. of plants)	Power generation plants (C) MW (No. of plants)	Total (A+B+C) MWeq
1	2	3	4	5	6
1.	Andhra Pradesh	90,540 (7)	-	40.82 (15)	48.365 (22)
2.	Bihar	12,000 (1)	-	-	1.00 (1)
3.	Chhattisgarh	-	-	0.33 (1)	0.33 (1)

1	2	3	4	5	6
4.	Delhi	-	-	52.00 (3)	52.00 (3)
5.	Gujarat	24,800 (4)	28,338 (5)	11.275 (10)	19.25 (19)
6.	Haryana	-	4250 (3)	4.0 (2)	4.89 (5)
7.	Himachal Pradesh	12,000 (1)	-	-	1.00 (1)
8.	Karnataka	58,060 (3)	9521 (3)	7.8 (5)	14.62 (11)
9.	Kerala	2,760 (1)	-	-	0.23 (1)
10.	Madhya Pradesh	27,014 (5)	1200 (1)	15.4 (3)	17.90 (9)
11.	Maharashtra	109636 (10)	27,723 (4)	28.713 (15)	43.63 (29)
12.	Punjab	34800 (5)	1847 (1)	14.92 (7)	18.20 (13)
13.	Rajasthan	-	4000 (2)	3.0 (1)	3.83 (3)
14.	Tamil Nadu	150218 (28)	-	10.45 (6)	22.97 (34)
15.	Telangana	37,100 (5)	-	19.5 (4)	22.59 (9)
16.	Uttar Pradesh	62,320 (6)	2000 (1)	44.63 (22)	50.24 (29)
17.	Uttarakhand	67,260 (5)	5,880 (2)	1.89 (2)	8.72 (9)
18.	West Bengal	14,000 (2)	-		1.17 (2)
	TOTAL	7,02,508 (83)	84,759 (22)	254.73 (96)	330.93 (201)

Statement- II

Details of CFA provided by the Government to private developers in different States/UTs for installation of waste to energy plants

State	Project	Project Developer	Location of Plant	MWeq	CFA (₹ crore)	Release Year
1	2	3	4	5	6	7
Andhra Pradesh	12000 m3/day Biogas Generation Plantfrom Oil Extraction Industry	M/s Radhika Vegetable Oils Pvt. Ltd.	Shreeramnagar Vizianagaram Dist., A.P—535101,	1.00	0.50	2017-18
Andhra Pradesh	24000 m3/day Biogas Generation Plant from Oil Extraction Industry	M/s NavaBharat Ltd (formely Nava Bharat AgroProducts Ltd)	Uppalametta,Jangareddigudem, West Godavari Distt. A. P.	2.00	1.00	2017-18
Andhra Pradesh	9000 m3/day biogas plant and 0.26 MW biogas based power plant from Decanter cake, poultry litter, cattle dung and agricultural residue	M/s Synergy Biorefineries Pvt. Ltd.	Samalkot, East Godavari Dist., A.P.	1.01	0.635	2016-17
Andhra Pradesh	7.5MW Poultry litter	M/s Redan Infrastructure	Kallupalli Village,Gangavaram	7.50	1.500	2016-17

	basedPower Project-direct combustion	Pvt. Ltd.	Mandal, Chittoor Dist., A.P.			
Delhi	16 MW MSW based Power Project	M/s Timarpur Okhla WasteManagement Company Ltd. (TOWMCL)	Old NDMC Compost Plant, Okhla, New Delhi	16.00	10.00	2016-17 & 2017-18
Gujarat	6000kg/day BioCNG from 14000 m3/day Biogas Generation Plant fromUrban waste-163TPD (Cow dung	M/s Greenearth Biogas Pvt Ltd.	SurveyNo.442,KukudaVillage, MuliTaluka,Dist. Sur endranagar,Ahmedabad-Rajkot Highway	1.25	2.33	2017-18
Gujarat	Power Generation Plant of 1.067 MW capacity using Biogas produced from Maize effluent waste	M/s Everest Starch India Pvt. Ltd.	Samrat Industrial Area,Road No. 29, Plot 23, Gondal Road, Rajkot,Gujarat	1.067	1.567	2016-17
Gujarat	40 kW biogas based power plant industrial waste	M/s Vadilal Industries Ltd.	Vadilal House, 53, Shrimali Society, Nr. Navrangpura Railway Crossing, Navangapura, Ahmedabad	0.04	0.04	2017-18

1	2	3	4	5	6	7
Haryana	600kg/day Bio-CNG from1500 m3 /day Biogas generation plant from Poultry Litter	M/s Sarovar Agro Farms & Biogas Pvt. Ltd.	Village - Jatwar, Tehsil:- Naraingarh, Dist. Ambala (Haryana)	0.13	0.19	2017-18
Haryana	1450kg/day Bio-CNG from 4000 m3 /day Biogas generation plant from Poultry Litter	M/s Panchkula Farms Pvt. Ltd.	Village Jaspur, Distt. Panchkula, Chandigarh	0.30	0.50	2017-18
Karnataka	1800kg/day BioCNG from 5000 m3/day Biogas Generation Plant from Urban waste	M/s Mahindra & Mahindra Ltd.	Survey No.71/3, Santhehalli Village, Malur Taluk, Kolar District, Near Bengaluru, Karnataka	0.38	0.83	2017-18
Kerala	2760 m3/day Biomethanation plant from Gelatin Industry waste	M/s Nitta Gelatin India Ltd.	Kathikudam, Thrissur Dist., Kerala	0.23	0.12	2016-17
Madhya Pradesh	12000 kg/day BioCNG	M/s Shri Dayoday Urja	Vill-Dob Barkhedi Sukhi	0.25	0.5	2017-18

	from 3000 m3/day Biogas Generation Plant from cattle dung.	Evam Jaivik Khaad	Sevania, The- Huzur, Bhopal			
Maharashtra	3613kg/day BioCNG from 7200 m3/day Biogas Generation Plant from Cattle Dung	M/s Clarus Bioenergy Pvt. Ltd.	Plot No. D-5, Shirala Industrial Growth Center, MIDC, Shirala, Dist.Sangli, Maharashtra.	0.753	1.200	2016-17
Maharashtra	7920 kg/day Bio-CNG from 19200 m3/day Biogas generation plant from distillery waste	M/s Green Elephant India Pvt. Ltd.	Kisanveernagar, Bhuinj, Tal. Wai, Dist. Satara, Maharashtra	1.650	1.600	2016-17
Maharashtra	14,000 m3 /day Biogas Generation Plant from Starch Industry Effluent	M/s Universal Starch-Chem Allied Ltd.	Rawal Industrial Estate, Dadanagar, Dondaicha, Distt. Dule Maharashtra	1.167	0.580	2016-17
Maharashtra	Power Generation Plant of 1.406 MW capacity using Biogas produced from Distillery effluent waste	M/s Vitthal Coorporation Ltd.	Vitthal Rao Shinde Nagar, Post-Mhaisgaon, Tal. Madha, Dist. Sola Pur Maharashtra	1.406	1.406	2016-17

1	2	3	4	5	6	7
Punjab	1847kg/day BioCNG from 5000 m3/day Biogas Generation Plant from cattle dung	M/s Arc Biofuel Pvt. Ltd.	Handiaya, Marisa Rd. Barnala, Punjab	0.385	0.83	2016-17
Rajasthan	1000 kg/day BioCNG from 2500 m3 /day Biogas generation plant from Cattle dung	M/s NRB Bio-Energy,	2 PBN, Dabli Rathan, Teh. & Distt. Hanumangarh, Rajasthan -335 512	0.21	0.42	2016-17
Tamil Nadu	7200 m3 /day Biogas Generation Plant from Starch Industry Effluent	M/s SPAC Starch Products (India) Ltd.	Poonachi Village, Anthiyur Tk,Erode District, Tamil Nadu	0.60	0.30	2017-18
Telangana	12000 m3/day Biogas plant from Starch Industry Waste	M/s Sukhjit Starch Mills	P.B. 321, Mubarak Nagar, Nizamabad, Telangana	1.00	0.50	2016-17
Uttar Pradesh	6000 m3/day Biomethanation plant from Paper Industry waste	M/s Mohit Paper Mills Ltd.	9 Km Stone, Nagina Road, Bijnor-246701(U.P.)	0.50	0.25	2016-17

Uttar Pradesh	18,200 m3 /day Biogas Generation Plant from Yeast IndustrialWaste	M/s Kothari Fermentation and Biochem Ltd.	D6-12, Rajarampur, UPSIDC Industrial Area, Sikandrabad, Dist.	1.52	0.76	2016-17
Uttar Pradesh	13,300 m3 /day Biogas Generation Plant from Paper Mill Effluent	M/s K R Pulp & Papers Ltd.	Jalalabad Road, Shahjahanpur-242001,U.P	1.11	0.55	2017-18
Uttar Pradesh	11,000 m3 /day Biogas Generation Plant from Starch Industry Effluent	M/s H.L. Agro Products Pvt. Ltd.	Akbarpur, Kanpur(Dehat), U.P.	0.92	0.45	2017-18
Uttar Pradesh	42000cum Biogas based 2.77 MW power plant-67 kg/cm2 Pressure Boiler and TG Set of 2.077 MW Capacity Boiler	M/s SVP Industries Ltd.	Mansurpur, Pargana Tehsil Khatauli, Muzaffarnagar-251203-U.P.	2.77	0.55	2017-18
Uttarakhand	5460kg/day BioCNG from 12000 m3/day Biogas Generation Plant.	M/s Century Pulp & Paper	Lalkuan, Nainital, Uttarakhand.	1.14	1.80	2017-18
Uttarakhand	18,000 m3 /day Biogas Generation Plant from Paper mill Effluent	M/s Naini Tissues Pvt. Ltd.	Kashipur, Uttrakhand	1.500	0.90	2016-17