

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 2797
TO BE ANSWERED ON 05.12.2019

ENERGY FROM ORGANIC WASTE

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

- (a) whether any study was undertaken to assess the potential of energy recovery from industrial and urban organic waste in the country and if so, the details thereof;
- (b) the number of plants that have been set up for electricity generation from urban, agricultural and Industrial waste in the country, State/UT-wise;
- (c) the details of the major challenges that are being faced by waste to energy plants with regard to generation/ efficiency;
- (d) the funds allocated/sanctioned by the Government for the said purpose during the last three years and the current year;
- (e) whether the aims and objectives of setting up of these plants have been achieved and the desired targets met; and
- (f) if so, the details thereof and the other steps taken by the Government in this regard?

ANSWER

THE MINISTER OF STATE (I/C) FOR NEW & RENEWABLE ENERGY, POWER and MoS for SKILL DEVELOPMENT AND ENTREPRENEURSHIP

(SHRI R.K. SINGH)

- (a) A study was undertaken by GEF-UNIDO in the year 2016 in consultation with Ministry of New and Renewable Energy to assess the potential of energy generation from Industrial and urban organic waste in India. As per study, the total estimated energy generation potential from urban and Industrial organic waste in India is approximately 5690 MW as on 2017.
- (b) So far 96 waste-to-energy projects for generation of electricity based on Urban, industrial, agricultural waste and Municipal Solid Waste have been successfully established in the country. The State/UT-wise details of installed waste-to-energy plants in the country, as on 31.10.2019, are given at **Annexure**
- (c) Major challenges faced by waste to energy plants with regards to generation/efficiency is given as below:
 - i). Poor quality of municipal solid waste,
 - ii). lack of an efficient mechanism to segregate waste into biodegradable/dry/wet/ carbonaceous materials, etc. components

- iii). seasonal variations in waste composition and properties
- iv). high capital and O&M costs of waste-to-energy systems,
- v). lack of indigenous technology,

(d) During the last three years, funds to the tune of Rs. 76 crore were allocated under Waste to Energy Programme out of which Rs 32.64 crore were released to various developers for setting up of Waste to Energy projects for generation of Biogas/BioCNG/Power. In the current year, funds to the tune of Rs.75 crore have been allocated under Waste to Energy and Biomass programmes and Rs.0.82 crore have been released for setting up of Waste to Energy projects for generation of Biogas/BioCNG/Power till date.

In addition to above, Under the National Clean Energy Fund (NCEF), The Department of Expenditure, Ministry of Finance in its 11th meeting of the Inter-Ministerial Group (IMG) held on 25th September, 2014 has approved a grant of Rs. 120 Crore as Viability Gap Funding to M/s East Delhi Waste Processing Company Limited (EDWPCL) for setting up of 12 MW Waste to Energy Plant in Ghazipur Delhi. The full amount of Rs.120 crore has been released to EDWPCL in two installments. The first installment amounting Rs. 60 crore was released on 19-10-2016 and the second installment amounting Rs.60 crore was released on 1st March, 2017.

(e) & (f) Objectives of the waste-to-energy plants are to utilize agricultural, industrial & urban including municipal solid waste to recover energy in the form of Power/Biogas/BioCNG. In order to recover energy from waste/effluent generated from industries distillery, paper and pulp, pharmaceutical industries etc and urban/rural areas, 199 projects with cumulative capacity of 329.43 MWeq have been set up so far meeting objectives of the scheme.

The technologies for the recovery of Biogas/Power from these wastes are well established and such plants work with supply of sufficient & quality feedstock whose Operation & Maintenance is kept properly on regular basis work well.

Annexure

Annexure referred to in Reply to part (b) of the Lok Sabha Unstarred Question No. 2797 for 05/12/2019 regarding "Energy from Organic Waste"

"State-wise details of number of installed waste-to-energy plants set up for generation of electricity in the country, as on 31.10.2019"

S.No.	State/UT	No. of plants of Waste to Energy set up for generation of electricity
1	Andhra Pradesh	15
2	Chhattisgarh	1
3	Delhi	3
4	Gujarat	10
5	Haryana	2
6	Karnataka	5
7	Madhya Pradesh	3
8	Maharashtra	15
9	Punjab	7
10	Rajasthan	1
11	Tamil Nadu	6
12	Telangana	4
13	Uttar Pradesh	22
14	Uttarakhand	2
	Total	96