

**GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.1270
ANSWERED ON 27.07.2023**

PROCUREMENT OF BIOMASS PELLETS FOR CO-FIRING IN TPPS

**1270. SHRI RITESH PANDEY:
SHRI HASNAIN MASOODI:
SHRIMATI SUNITA DUGGAL:**

**Will the Minister of POWER
be pleased to state:**

- (a) whether the Government has data on the number of power plants successfully implementing the mandate to use five per cent biomass pellets in co-firing with coal, as per the revised biomass policy;**
- (b) if so, the details thereof and if not, the reasons therefor;**
- (c) whether the Government has taken any initiatives to ensure the availability and procurement of biomass pellets for co-firing in Thermal Power Plants (TPPs);**
- (d) if so, the details of Metric Tonnes of agri residues-based biomass that has been co-fired in coal based thermal power plants till May 2023, State/ UT-wise; and**
- (e) if not, the reasons therefor?**

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b): There are 47 number of Thermal Power Plants which have carried out co-firing of agro residue based biomass pellets with coal. Recently, Ministry of Power has issued modification on 16.06.2023 to revise the biomass policy dated 08.10.2021 and now it mandates 5% biomass co-firing in Thermal Power Plants (TPPs) from 2024-25. This obligation shall increase to 7% from 2025-26.

(c) : The Government has taken many initiatives to ensure the availability and procurement of biomass pellets for co-firing in TPPs like, Finance Assistance Schemes by MNRE and CPCB have been issued for biomass pellet manufacturing, Reserve bank of India (RBI) has approved 'Biomass pellet manufacturing' as an eligible activity under Priority Sector Lending (PSL), Procurement Provision of Biomass Category has been created on GeM portal, Revised Model long term contract for Biomass supply was issued by MOP, Vendor database finalized and listed on SAMARTH website, awareness programmes & Advertisement Campaign , Provision of Udyam Aadhaar on National Single Window System, Bankable Model Project Report for Biomass Pellet Plants etc.

Further, MoP through a policy Addendum dated 03-05-2023 has indicated the various type of various agro residues such as stubble/straw/stalk/husk which are surplus and not being used as animal fodder for making the biomass pellets. This includes agro-residue obtained from crops like Paddy, Soya, Arhar, Gwar, Cotton, Gram, Jawar, Bajra, Moong, Mustard, Sesame, Til, Maize, Sunflower, Jute, Coffee, etc. as well as Groundnut Shell, Coconut Shell, Castor Seed Shell etc.

In addition, pellets made from the following agro product/crop/waste can also be used for co-firing in TPPs viz Bamboo and its by-products, Horticulture waste such as dry leaves and trimmings obtained from maintenance & pruning of trees and plants and other biomass such as Pine Cone/Needle, Elephant Grass, Sarkanda, etc.

(d) & (e) : Approximately 1,64,976 Metric Tonnes of agri residues-based biomass has been co-fired in 47 no. of coal based thermal power plants till May 2023. State-wise list of thermal power plants co-firing above biomass pellets is enclosed as Annexure.

ANNEXURE REFERRED IN REPLY TO PARTS (d) & (e) OF UNSTARRED QUESTION NO.1270 ANSWERED IN THE LOK SABHA ON 27.07.2023

Biomass usage status of different Power Plants for co-firing (Till 31.05.2023)

Sl. No.	Organization/ Power Utility	Name of the Plant	State	Cumulative Biomass usage (MT)
1	NTPC	Simhadri Super Thermal Power Station, Visakhapatnam,	Andhra Pradesh	4551
2	NTPC	Kahalgaon Super Thermal Power Station, Bhagalpur,	Bihar	10
3	Jindal Power	Jindal Super Thermal Power Plant Tamnar	Chhattisgarh	24
4	Adani Power	Raipur Energen Limited	Chhattisgarh	77
5	DB Power Ltd	Badadarha TPP	Chhattisgarh	25
6	Adani Power	Raigarh Energy Generation Ltd.	Chhattisgarh	25
7	Vedanta Ltd	Bharat Aluminium Company Limited	Chhattisgarh	6942
8	NTPC	Lara Super Thermal Power Station, Raigarh,	Chhattisgarh	489
9	NTPC	Sipat Super Thermal Power Station, Bilaspur,	Chhattisgarh	3882
10	HPGCL	Rajiv Gandhi TPS, Hisar	Haryana	95
11	HPGCL	Yamuna Nagar TPS	Haryana	455
12	CLP/Apraava Energy	Mahatma Gandhi TPS, Jhajjar	Haryana	4410
13	NTPC JV	IGSTPP, Jhajjar	Haryana	16009
14	Tata Power	Jojobera Power Plant	Jharkhand	23
15	NTPC	Kudgi Super Thermal Power Station, Bijapur,	Karnataka	1912
16	JSW Energy Limited	JSW Energy - TPP Toranagallu	Karnataka	336
17	NTPC	Gadarwara Super Thermal Power Station, Narsinghpur,	Madhya Pradesh	3140
18	NTPC	Khargone Super Thermal Power Station, Khargone,	Madhya Pradesh	13417
19	Jaiprakash Power ventures	Jaypee Nigrie Super Thermal Power Plant, Sidhi	Madhya Pradesh	577
20	Jaiprakash Power ventures	Jaypee Bina TPS Madhya Pradesh	Madhya Pradesh	425
21	Reliance Power	Sasan Power Ltd, Madhya Pradesh	Madhya Pradesh	44
22	NTPC	Mauda Super Thermal Power Station, Nagpur,	Maharashtra	24167
23	NTPC	Solapur Super Thermal Power Station, Solapur,	Maharashtra	3060

24	Dhariwal infrastructure limited,	Dhariwal Thermal Power Plant Chandrapur	Maharashtra	87
25	GMR Group	GMR Warora Energy Limited	Maharashtra	20
26	JSW Energy Limited	JSW Energy – Ratnagiri Maharashtra	Maharashtra	5
27	Sai Wardha	Sai Wardha Power Generation Private Limited, Warora,	Maharashtra	10
28	Vedanta	Jharsuguda Captive Power	Orissa	44
29	GMR Energy	GMR Kamalganaga Orissa	Orissa	20
30	Vedanta	TSPL, Mansa,	Punjab	50
31	L&T	NPL, Rajpura,	Punjab	30
32	PSPCL	GGSTP, Ropar	Punjab	61
33	PSPCL	GHTP, Lehra Mohabbat	Punjab	39
34	Adani Power	Adani Power Rajasthan Limited	Rajasthan	111
35	Shree Group	Shree Mega Power-1 &2	Rajasthan	7816
36	OPG Power	OPG Power Generation Pvt Ltd, Tamil Nadu	Tamil Nadu	715
37	UPRVUNL	Harduaganj TPS	Uttar Pradesh	7392
38	NTPC	National Capital Power Station, Dadri,	Uttar Pradesh	20617
39	NTPC	Tanda Thermal Power Station, Ambedkar Nagar,	Uttar Pradesh	3806
40	NTPC	Feroze Gandhi Unchahar Thermal Power Station, Raebareli,	Uttar Pradesh	9486
41	Hindalco Industries Ltd.	Mahan Al. Unit- CPP	Uttar Pradesh	29676
42	NTPC	Farakka Super Thermal Power Plant, Murshidabad,	West Bengal	77
43	CESC Limited	Budge Budge Thermal Power Station	West Bengal	181
44	Haldia Energy Ltd	Haldia Thermal Power Plant	West Bengal	90
45	DVC	Durgapur Steel Thermal Power Station (DSTPS)	West Bengal	501
46	WBPDC	Bakreswar Thermal Power Station	West Bengal	22
47	WBPDC	Sagardighi TPS	West Bengal	25
	Total			164976
