

GOVERNMENT OF INDIA  
MINISTRY OF POWER

RAJYA SABHA  
UNSTARRED QUESTION NO.955  
ANSWERED ON 08.12.2025

**PROCUREMENT AND POLICY SUPPORT FOR PELLETS MADE FROM  
AGRICULTURAL STUBBLE**

**955 DR. VIKRAMJIT SINGH SAHNEY:**

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

- (a) whether Government has procured pellets made from agricultural stubble for thermal power plants;
- (b) the procurement details during the last three years, plant-wise;
- (c) whether any impact assessment has been conducted regarding environmental and economic benefits of using stubble-based pellets;
- (d) whether Government proposes subsidy or assistance for industries producing such pellets; and
- (e) if so, the timelines and modalities for implementing such support?

**A N S W E R**

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

**(a) :** No, Government of India doesn't procure any pellets made from agricultural stubble for thermal power plants. Biomass pellets from agricultural residue are procured by the respective coal-based Thermal Power Plants (TPPs).

**(b) :** The plant-wise biomass pellets procured and co-fired in coal based Thermal Power Plants during the last three years i.e. FY 2022-23, FY 2023-24 and FY 2024-25, are given at **Annexure**.

**(c) :** No such impact assessment has been carried out regarding environmental and economic benefits of using stubble-based pellets. However, Agro-residue (Biomass) are now utilized for power generation through Ministry of Power's policy on biomass co-firing in coal-based thermal power plants. Co-firing of biomass pellets in TPPs reduces the amount of coal required by the power plant. This leads to a reduction of carbon dioxide emissions as biomass is a renewable source of energy. To some extent, it mitigates air pollution cause due to stubble burning. Also, the development of biomass supply chain shall generate source of revenue for the farmers through procurement of raw biomass by pellet manufacturers/aggregators.

As on 31.10.2025, approximately 34.21 Lakh Metric Tonnes (LMT) of biomass pellets have been co-fired across the country, leading to reduction of around 40 LMT of carbon dioxide (CO<sub>2</sub>) emissions.

**(d) & (e) :** The Government has taken various steps to promote establishment of biomass pellet manufacturing units across the country. Following financial Subsidy Schemes have been issued by Ministry of New & Renewable Energy (MNRE) and Central Pollution Control Board (CPCB):

- (i) **MNRE Biomass Programme-** *“Scheme to Support Promotion of Manufacturing of Briquettes & Pellets and Biomass (Non-Bagasse) Based Cogeneration in Industries in the Country”* to support setting up of Biomass Briquette/Pellet manufacturing plants across the country for the period of FY 2021-22 to 2025-26. The scheme provides financial assistance as:
- a. **For Briquette manufacturing plant:** Rs. 09 Lakh per Metric Ton per Hour (MTPH) production capacity (subject to maximum Rs. 45 Lakh per project).
  - b. **For Non-Torrefied Pellet manufacturing plant:** Rs. 21 Lakhs per MTPH production capacity or 30% of the capital cost, whichever is lower (subject to maximum Rs. 105 Lakhs per project).
  - c. **For Torrefied Pellet manufacturing plant:** Rs. 42 Lakh per MTPH production capacity or 30% of the capital cost, whichever is lower (subject to maximum Rs. 210 Lakh per project)
- (ii) **CPCB -** *“ Guidelines for providing one-time financial support for setting up of paddy straw based pelletisation and torrefaction plants”* using only paddy straw generated in the NCT of Delhi, States of Punjab & Haryana, and NCR districts of Rajasthan & Uttar Pradesh, provides financial assistance as:
- a. **Pelletisation plant:** Rs. 28 Lakh per Ton per Hour (TPH) production capacity or 40% of the capital cost considered for plant and machinery of a 1 TPH plant, whichever is lower (subject to maximum Rs. 1.4 Crore per proposal)
  - b. **Torrefaction plant:** Rs. 56 Lakh per TPH production capacity or 40% of the capital cost considered for plant and machinery of a 1 TPH plant, whichever is lower (subject to maximum Rs. 2.8 Crore per proposal).

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**ANNEXURE REFERRED IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 955  
ANSWERED IN THE RAJYA SABHA ON 08.12.2025**

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**Biomass Procured and co-fired in coal based Thermal Power Plants during the last three  
years**

Sr. No.	Organization/ Power Utility	Name of the Plant	State	FY 22-23 (Metric Tonne)	FY 23-24 (Metric Tonne)	FY 24-25 (Metric Tonne)
1	HPGCL	Rajiv Gandhi Thermal Power Station, Khedar, Hissar (RGTPS)	Haryana	0	418	86,074
2	HPGCL	Deen Bandhu Chhotu Ram Thermal Power Project, Yamuna Nagar TPS (DCRTPP)	Haryana	0	0	35,558
3	HPGCL	Panipat Thermal Power Station, Khukhrana Panipat (PTPS)	Haryana	0	0	61,809
4	Apraava Energy	Mahatma Gandhi TPS, Jhajjar	Haryana	1,956	79,477	2,15,165
5	NTPC JV-APCPL	Indira Gandhi Super Thermal Power Project (IGSTPP), Jhajjar	Haryana	8,476	96,536	2,22,963
6	Vedanta	Talwandi Sabo Power Limited (TSPL), Mansa	Punjab	50	25	26,062
7	L&T	Nabha Power Limited (NPL), Rajpura	Punjab	0	396	1,77,260
8	PSPCL	Guru Gobind Singh Super Thermal Plant Ropar (GGSSTP), Ropar	Punjab	61	3,222	94,935
9	PSPCL	Guru Hargobind Thermal Plant (GHTP), Lehra Mohabbat	Punjab	39	16,801	60,686
10	UPRVUNL	Harduaganj TPS	Uttar Pradesh	2,645	26,147	43,461
11	NTPC	National Capital Power Station, Dadri	Uttar Pradesh	575	35,750	2,73,829
12	NTPC	Tanda Thermal Power Station, Ambedkar Nagar	Uttar Pradesh	1491	167	28,213
13	NTPC	Feroze Gandhi Unchahar Thermal Power Station, Raebareli	Uttar Pradesh	154	0	0
14	UPRVUNL	Parichha Thermal Power Station, Jhansi	Uttar Pradesh	0	0	210
15	Bajaj Energy Limited	Lalitpur Power Generation Company Limited, Lalitpur	Uttar Pradesh	0	0	1,350
16	NTPC	Gadarwara Super Thermal Power Station, Narsinghpur	Madhya Pradesh	1,836	6,881	32,731
17	NTPC	Khargone Super Thermal Power Station, Khargone	Madhya Pradesh	4,259	19,379	54,615
18	NTPC	Vindhyachal Thermal Power Station, District Singrauli,	Madhya Pradesh	0	0	852
19	Hindalco Industries Ltd.	Mahan Al. Unit- CPP	Madhya Pradesh	14,771	49,743	25,694
20	Jaiprakash Power ventures	Jaypee Nigrie Super Thermal Power Plant,	Madhya Pradesh	400	588	526
21	Jaiprakash Power ventures	Jaypee Bina TPS	Madhya Pradesh	339	147	687
22	Reliance Power	Sasan Power Ltd	Madhya Pradesh	44	0	0
23	NTPC	Mauda Super Thermal Power Station,	Maharashtra	2,580	4197	71,129

24	NTPC	Solapur Super Thermal Power Station	Maharashtra	0	0	7502
25	RPSG Group	Dhariwal infrastructure limited	Maharashtra	0	24	101
26	GMR Warora Energy Limited	GMR Warora Energy Limited	Maharashtra	20	0	3241
27	JSW Energy Limited	JSW Energy - Ratnagiri	Maharashtra	5	0	0
28	Sai Wardha	Sai Wardha Power Generation Private Limited, Warora	Maharashtra	0	10	0
29	Tata Power	Trombay Thermal Power Station	Maharashtra	0	0	499
30	NTPC	LARA Super Thermal Power Station, Raigarh	Chhattisgarh	139	0	23
31	Adani Power	Raipur Energen Limited.	Chhattisgarh	77	0	0
32	NTPC	Sipat Super Thermal Power Station, Bilaspur, Chhattisgarh	Chhattisgarh	3,676	0	5,880
33	DB Power Ltd	Badadarha TPP	Chhattisgarh	25	60	0
34	Adani Power	Raigarh Energy Generation Ltd.	Chhattisgarh	25	0	0
35	Vedanta Ltd	Bharat Aluminium Company Limited	Chhattisgarh	4,755	14,500	2,973
36	NTPC	Korba Korba Super Thermal Power Station	Chhattisgarh	0	0	449
37	NSPCL-SAIL	NSPCL Bhilai Power Plant	Chhattisgarh	0	250	3513
38	Jindal Power	JINDAL SUPER THERMAL POWER PLANT Tamnar	Chhattisgarh	0	264	0
39	TRN ENERGY	TRN ENERGY PRIVATE LIMITED, NAWAPARA, Raigarh	Chhattisgarh	0	0	25
40	Maruti Clean Coal and Power Limited	BANDAKHAR TPP, Bandha Khar, Tah- Pali, PO- Nunera, Distt-Korba	Chhattisgarh	0	0	24
41	Lanco	Lanco-Amarkantak Power Limited	Chhattisgarh	0	50	0
42	DVC	Raghunathpur TPS	West Bengal	0	21	9012
43	DVC	Mejia Thermal Power Station (MTPS)	West Bengal	0	56	13,405
44	DVC	Durgapur Steel Thermal Power Station (DSTPS)	West Bengal	49	452	10,616
45	RPSG Group	Budge Budge Generating station	West Bengal	111	49	24
46	RPSG Group	Haldia Energy Ltd	West Bengal	0	80	0
47	WBPDC	Bakreswar Thermal Power Station	West Bengal	22	0	0
48	WBPDC	Sagardighi TPS	West Bengal	25	0	0
49	NTPC	Simhadri Super Thermal Power Station, Visakhapatnam	Andhra Pradesh	464	0	0
50	Vedanta	Jharsuguda Captive Power	Orissa	44	329	0
51	GMR Kamalganga	GMR Kamalganga Energy Limited	Orissa	20	0	0
52	NLC India Limited	Barsingsar Thermal Power Station, Bikaner	Rajasthan	0	0	424
53	Shree Group	Shree Mega Power Bawar	Rajasthan	0	17,647	0
54	DVC	Bokaro Thermal Power Station - A (BTPS)	Jharkhand	0	0	7,761
55	DVC	Koderma Thermal Power Station (KTPS)	Jharkhand	0	0	18,268
56	Tata Power	Jojobera Power Plant	Jharkhand	0	23	0
57	NTPC	Kahalgau Super Thermal Power Station, Bhagalpur, Bihar	Bihar	6	0	0
58	GSECL	Bhavnagar Lignite Thermal Power Station	Gujarat	0	0	3,612

59	GSECL	Gandinagar Thermal Power Plant, Gandhinagar	Gujarat	0	45	33,26
60	GSECL	Wanakbori Thermal Power Plant, Kheda	Gujarat	0	20	9,280
61	GSECL	Ukai Thermal Power Plant, Tapi	Gujarat	0	10	3,893
62	JSW Energy Limited	JSW Energy - TPP -Toranagallu	Karnataka	336	0	0
63	IL&FS TPCL	IL&FS Tamilnadu Power Company Limited, Parangipettai, Cuddalore,	Tamil Nadu	0	0	39
64	NLC	NLC Tamilnadu Power Limited, Tuticorin.	Tamil Nadu	0	37	36
65	OPG Power	OPG Power Generation Pvt Ltd.	Tamil Nadu	618	1,055	717
	<b>Total</b>			<b>50,093</b>	<b>3,74,856</b>	<b>16,18,452</b>

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