

GOVERNMENT OF INDIA  
MINISTRY OF NEW AND RENEWABLE ENERGY  
**LOK SABHA**  
**UNSTARRED QUESTION NO. 6193**  
ANSWERED ON 01.04.2026

**‘SALE OF RENEWABLE ENERGY ON POWER EXCHANGE’**

6193. SHRI B K PARTHASARATHI

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

- (a) the total amount of renewable energy offered for sale on the Green Term-Ahead Market (GTAM) on power exchanges during the last five years, year and State-wise;
- (b) the total amount and value of renewable energy actually bought and sold through GTAM during the last five years, year and State-wise;
- (c) the details of transactions through GTAM including solar, wind, small hydro and other renewable sources, year and source-wise;
- (d) the list of major buyer categories (DISCOMs, open access consumers, Commercial and Industrial (C&I) buyers, etc.) participating in GTAM along with their respective procurement volumes; and
- (e) the steps taken by the Government to increase participation of States and market liquidity in GTAM?

**ANSWER**

**THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER**

**(SHRI SHRIPAD YESSO NAIK)**

(a) to (e): Based on the information received from Grid-India:

- (a) The state-wise and year-wise details of the electricity from renewable energy (RE) transacted (purchased and sold) in the Green Term-Ahead Market (GTAM) segment in the power exchanges during Calendar Year 2021 to 2025 are provided in **Annexure-I**.
- (b) The RE source-wise and year-wise details of total electricity transacted in the GTAM segment in the power exchanges during Calendar Year 2021 to 2025 are provided in **Annexure-II**.
- (c) The category wise details of the electricity from RE transacted in GTAM segment in the power exchanges during Calendar Year 2021 to 2025 are provided in **Annexure-III**.

The Government has taken several steps to increase participation of States and enhance liquidity in GTAM. Details of major steps in this regard are given at **Annexure-IV**.

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**Annexure-I referred to in reply of parts (a) & (e) of the Lok Sabha Unstarred Question No. 6193 for 01.04.2026 regarding ‘Sale of Renewable Energy on Power Exchange’**

**Table A: State-Wise Renewable Energy (in MUs) purchased through GTAM**

S. No.	Calendar Year State/Organisation	2021		2022		2023		2024		2025	
		MU Purchased	Amount In Lakh (₹)	MU Purchased	Amount In Lakh (₹)	MU Purchased	Amount In Lakh (₹)	MU Purchased	Amount In Lakh (₹)	MU Purchased	Amount In Lakh (₹)
1.	Andhra Pradesh	0	13	8	823	0	0	4	392	66	1,874
2.	Assam	11	403	0	0	0	0	0	0	0	0
3.	Bihar	129	4,275	5	176	2	121	0	38	0	21
4.	Chhattisgarh	39	2,296	332	21,053	119	6,205	5	488	0	30
5.	DD-DNH	335	13823	91	5196	160	10701	0	0	35	1227
6.	Delhi	47	2,103	150	8,948	142	9,152	180	8,567	71	3,010
7.	DVC	94	4,150	26	1,186	78	5,264	0	0	236	5,512
8.	Goa	19	761	0	0	7	452	135	6,197	529	27,893
9.	Gujarat	3	106	473	23,949	730	42,457	749	30,924	329	13,718
10.	Haryana	385	13,710	70	2,448	0	1	1	51	0	1
11.	Himachal Pradesh	7	257	12	441	0	0	12	413	0	0
12.	Jammu & Kashmir	0	0	0	0	0	0	0	0	58	2,307
13.	Jharkhand	8	303	3	115	2	141	0	0	0	47
14.	Karnataka	4	159	0	0	0	33	0	0	0	0
15.	Kerala	0	0	35	1,771	12	900	0	0	0	0
16.	Madhya Pradesh	0	1	0	0	0	0	2	103	0	0
17.	Maharashtra	83	2,819	14	1,301	37	2,184	112	7,624	66	2,032
18.	Manipur	0	0	0	7	0	0	0	0	0	0
19.	Meghalaya	0	0	0	35	0	0	0	29	0	0
20.	Nagaland	0	0	0	0	0	0	0	0	4	160
21.	Odisha	2153	97,463	963	67,271	76	4,385	23	1,141	13	569
22.	Puducherry	0	0	0	0	0	0	0	0	1	57
23.	Punjab	6	185	1	32	0	0	1	129	0	0

S. No.	Calendar Year State/Organisation	2021		2022		2023		2024		2025	
		MU Purchased	Amount In Lakh (₹)	MU Purchased	Amount In Lakh (₹)	MU Purchased	Amount In Lakh (₹)	MU Purchased	Amount In Lakh (₹)	MU Purchased	Amount In Lakh (₹)
24.	Rajasthan	0	0	0	6	0	4	0	0	0	0
25.	Sikkim	0	0	0	0	0	0	10	383	22	950
26.	Tamil Nadu	0	0	0	0	9	92	0	31	1	134
27.	Telangana	0	0	0	0	1	58	0	0	0	0
28.	Uttar Pradesh	74	3,552	135	9,593	104	6,905	108	3,476	9	632
29.	Uttarakhand	0	13	7	676	0	0	0	0	0	0
30.	West Bengal	604	26,605	11	980	8	580	63	1,638	558	31,044

**Table B: State Wise Renewable Energy (in MUs) Sold through GTAM**

S. No.	Calendar Year	2021		2022		2023		2024		2025	
	State	MU Sold	Amount In Lakh (₹)	MU Sold	Amount In Lakh (₹)	MU Sold	Amount In Lakh (₹)	MU Sold	Amount In Lakh (₹)	MU Sold	Amount In Lakh (₹)
1.	Andhra Pradesh	17	603	1	19	8	407	12	241	121	4,196
2.	Arunachal Pradesh	0	0	0	0	0	13	0	0	0	0
3.	Bihar	0	0	0	0	0	0	0	0	50	1,850
4.	Delhi	0	0	5	265	39	2,521	26	1,728	0	0
5.	Gujarat	5	249	152	11,878	225	13,882	624	24,331	296	11,368
6.	Haryana	12	384	2	76	0	0	0	0	0	0
7.	Himachal Pradesh	81	4,512	323	17,724	152	9,454	123	6,492	114	5,609
8.	Jammu & Kashmir	48	1,985	12	1,173	9	603	12	306	21	1,313
9.	Karnataka	3023	1,33,991	1804	1,14,715	910	54,812	174	8,259	389	18,571
10.	Kerala	0	0	0	24	0	0	0	0	0	0
11.	Madhya Pradesh	4	152	34	2,742	11	392	78	2,325	69	3,368
12.	Maharashtra	0	0	0	0	4	194	52	3,001	122	5,133
13.	Meghalaya	0	0	0	0	0	0	110	6,200	158	12,345
14.	Odisha	0	0	0	0	0	0	0	0	46	2,415
15.	Rajasthan	394	16,154	887	53,084	94	5,051	32	1,096	111	3,672
16.	Sikkim	0	0	7	350	26	1,946	58	3,491	73	3,358
17.	Tamil Nadu	13	578	0	0	0	0	4	252	0	0
18.	Telangana	558	18,900	79	3,504	27	1,349	10	546	9	507
19.	Uttar Pradesh	6	207	1	27	21	1,409	78	5,012	74	4,356
20.	Uttarakhand	136	6,206	222	12,572	57	3,741	6	310	220	9,736
21.	West Bengal	0	0	0	0	0	0	67	1,301	83	3,135

**Annexure-II referred to in reply of parts (a) & (e) of the Lok Sabha Unstarred Question No. 6193 for 01.04.2026 regarding ‘Sale of Renewable Energy on Power Exchange’**

**Source-wise Year-wise Renewable Energy Sold (in MUs) in GTAM**

<b>Source Type/Year</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>Total</b>
Non-Solar	2,629	1,607	1,157	685	915	6,993
Solar	1,308	687	129	600	325	3,049
Other	223	936	298	170	716	2,343
Hybrid (Wind+Solar)	138	297	0	12	0	447
<b>Total</b>	<b>4,297</b>	<b>3,528</b>	<b>1,584</b>	<b>1,467</b>	<b>1,956</b>	<b>12,832</b>

Annexure-III referred to in reply of parts (a) & (e) of the Lok Sabha Unstarred Question No. 6193 for 01.04.2026 regarding 'Sale of Renewable Energy on Power Exchange'

**Consumer Category-wise Renewable Energy Sold (in MUs) in GTAM**

<b>Buyer Category / Year</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>Total</b>
Distribution Licensee	1,903	1091	751	656	1,655	6055
Open Access Consumer	1,966.74	690.01	349.59	72.28	48.14	3127
Captive Power Plant	388	1486	70	46	13	2004
Bulk Consumer	0	106	412	687	200	1406
Independent Power Producer	39	154	0	5	39	237
Industrial Load	0	0	2		0	3
Generating Station	0	0	0	1	0	1
<b>Total</b>	<b>4,297</b>	<b>3,528</b>	<b>1,584</b>	<b>1,467</b>	<b>1,956</b>	<b>12,832</b>

**Annexure-IV referred to in reply of part (e) of the Lok Sabha Unstarred Question No. 6193 for 01.04.2026 regarding ‘Sale of Renewable Energy on Power Exchange’**

Major steps taken to increase participation of States and enhance liquidity in GTAM are given below:

- Development and expansion of power market segments on exchanges, including Real-Time Market (RTM), Day-Ahead Market (DAM), Green Day-Ahead Market (GDAM), Green Term-Ahead Market (GTAM) and High Price Day-Ahead Market (HP-DAM).
- Notification of the Power Market Regulations, 2021 by the Central Electricity Regulatory Commission (CERC), providing a comprehensive regulatory framework for efficient functioning and growth of electricity markets.
- Procurement of renewable energy through GTAM and GDAM has been recognized as eligible for meeting Renewable Purchase Obligation (RPO)/ Renewable Consumption Obligation (RCO), encouraging DISCOMs and other obligated entities to procure green power through exchanges.
- Introduction of longer-duration contracts in GTAM to provide flexibility in procurement, optimize costs and hedge against price volatility, supported by appropriate payment security mechanisms
- Introduction of the DEEP (Discovery of Efficient Electricity Price) e-bidding portal for transparent procurement of short-term power by DISCOMs.
- Facilitation of wider participation through the Electricity (Promoting Renewable Energy Through Green Energy Open Access) Rules, 2022, which enable Green Energy Open Access to consumers with contract demand of 100 kW and above, thereby allowing participation of smaller consumers.
- Notification of Renewable Consumption Obligation (RCO) trajectory up to 2029–30 under the Energy Conservation Act, 2001, to promote renewable energy consumption by designated consumers.
- Waiver on Inter-State Transmission System (ISTS) charges for renewable energy projects including green hydrogen projects, with certain timelines and conditions.