

GOVERNMENT OF INDIA
MINISTRY OF POWER

RAJYA SABHA
UNSTARRED QUESTION NO.1753
ANSWERED ON 15.12.2025

ASSESSMENT OF ENERGY REQUIREMENTS FOR DATA CENTRES

1753 SHRI KARTIKEYA SHARMA:

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

- (a) whether Government has done any assessment of energy requirements for upcoming data centres and AI related infrastructure, if so, the details thereof;
- (b) the power consumption matrix of the country and the variance across the States, per capita power consumption and trends being observed;
- (c) whether Government is planning to provide captive power to data centres, details of the power being consumed by Data Centres across the country; and
- (d) the steps being taken by Government to enhance monitoring and forecasting mechanisms in the power sector?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a): Presently, power requirement of Data Centres in the country is approximately 1 GW which is estimated to increase upto 13.56 GW by FY 2031-32 on account of upcoming data centres.

(b): The State-wise and category-wise Energy Consumption details for FY 2023-24 indicating variance across the States are given at **Annexure-I**. Per capita power consumption in the country during the last five years is given at **Annexure-II**. This data indicates the rising trend of per capita consumption in the country.

(c): Captive Power is arranged for self consumption by the users on their own. As of now, details of electricity consumed by the Data Centres are not centrally maintained.

(d): Government of India has taken following steps to enhance monitoring and forecasting mechanisms in the power sector:

- (i) SCADA (Supervisory Control and Data Acquisition)/ DMS (Distribution Management System) systems help in reducing outages and improving response times to faults through remote monitoring and control, thus improving the efficiency and reliability of power distribution networks.

- (ii) 12 number of Renewable Energy Management Centre (REMCs) and one EMC at South Andaman have been established to forecast, schedule and monitor the wind and solar Variable Renewable Energy (VRE) resources.
- (iii) Ministry of Power (MoP) and Ministry of Earth Sciences (MoES) have been working together to ensure sharing of accurate weather data to stakeholders for RE generation forecasting. As a result of close coordination between the two Ministries, India Meteorological Department (IMD), National Centre for Medium Range Weather Forecasting (NCMRWF) and Indian Space Research Organisation (ISRO) are sharing weather forecast data to various stakeholders which is being utilised for Renewable Energy (RE) and demand forecasting.
- (iv) CEA has issued guideline for installation of Automatic Weather Station (AWS) in RE Plants for using the recorded weather data for data assimilation and validation for further improving the weather forecast.
- (v) In addition, IIT Bombay has been engaged for development of indigenous RE Forecasting Tool. In this regard, Memorandum of Understanding (MoU) has been signed by Grid India with IIT, Bombay in December, 2024 for development of Forecasting Tool. The forecast model development is in progress by IIT Bombay and will commence forecast for Western Region from January, 2026.

ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. -1753 TO BE ANSWERED IN THE RAJYA SABHA ON 15.12.2025.

The State-wise and category-wise Energy Consumption details for FY 2023-24:

(All figures in Million Units (MUs))

State / UTs	Domestic	Commercial	Industrial Power		Public Lighting	Traction	Agriculture	Public Water Works & Sewage Pumping	Miscellaneous	Total Energy consumed
			(Low & Med. Voltage)	(High Voltage)						
Chandigarh	749.77	495.84	111.52	116.37	15.21	2.76	1.26	16.10	86.60	1,595.43
Delhi	18,009.65	8,404.40	2,312.41	617.66	313.73	259.07	38.99	711.56	1,651.27	32,318.75
Haryana	15,796.55	2,791.67	1,130.91	25,405.13	165.40	717.06	9,894.53	1,346.21	2,008.67	59,256.14
Himachal Pradesh	2,724.49	737.67	211.70	6,681.14	12.97	2.20	79.40	738.93	434.76	11,623.25
UT of J&K and Ladakh	4,762.52	1,631.65	474.84	1,263.74	122.31	91.31	416.07	684.04	1,166.16	10,612.63
Punjab	17,826.49	4,599.49	1,044.30	24,700.10	156.37	763.60	12,797.35	0.00	1,278.13	63,165.84
Rajasthan	15,956.70	5,578.39	3,318.32	27,210.74	335.83	951.47	33,671.17	2,825.80	2,539.61	92,388.03
Uttar Pradesh	51,745.40	9,916.70	5,318.40	27,158.68	1,580.30	4,718.29	20,689.50	1,907.40	10,501.30	1,33,535.97
Uttarakhand	3,730.33	2,069.85	365.81	7,535.19	74.35	79.89	426.66	537.92	0.52	14,820.53
Sub-Total (NR)	1,31,301.90	36,225.67	14,288.22	1,20,688.76	2,776.47	7,585.65	78,014.91	8,767.95	19,667.03	4,19,316.56
Chhattisgarh	6,762.43	2,029.90	747.87	29,721.47	135.10	2,732.81	7,540.57	886.98	0.00	50,557.13
Gujarat	18,174.88	7,655.53	14,996.76	84,534.48	202.96	1,222.08	21,439.36	2,577.43	485.69	1,51,289.16
Madhya Pradesh	18,723.21	5,023.78	1,563.92	19,875.16	467.40	2,959.22	28,617.11	2,391.49	379.01	80,000.32
Maharashtra	34,945.05	15,639.77	14,125.08	63,060.56	1,171.79	3,748.70	40,925.77	3,355.42	4,786.32	1,81,758.45
DNH & DD	332.41	113.89	554.65	9,196.94	5.75	0.00	8.23	5.07	18.85	10,235.79
Goa	1,495.25	798.09	94.00	2,491.66	13.32	0.00	41.63	0.00	43.11	4,977.06
Sub-Total (WR)	80,433.23	31,260.95	32,082.28	2,08,880.27	1,996.32	10,662.81	98,572.68	9,216.39	5,712.98	4,78,817.91
Andhra Pradesh	17,454.73	5,525.55	1,356.49	29,490.83	274.42	2,572.09	15,541.18	1,165.60	4,295.47	77,676.35
Telangana	15,032.79	8,323.11	1,318.40	20,762.85	931.02	1,219.45	26,811.50	1,210.98	3,591.47	79,201.57
Karnataka	16,673.88	8,660.37	6,322.48	18,970.69	1,285.83	805.90	31,911.94	5,049.96	1,397.34	91,078.38
Kerala	13,895.43	7,107.74	1,339.57	5,060.89	376.72	435.27	459.26	0.18	46.24	28,721.31
Tamil Nadu	32,622.61	12,501.02	9,473.31	40,314.49	0.00	1,473.83	15,959.28	3,301.07	3,771.44	1,19,417.05
Puducherry	858.79	221.81	132.28	1,838.87	18.22	0.00	59.24	45.94	4.42	3,179.57
Lakshadweep	39.80	8.12	0.66	0.00	0.78	0.00	0.00	0.00	5.12	54.48
Sub-Total (SR)	96,578.01	42,347.72	19,943.19	1,16,438.63	2,886.99	6,506.54	90,742.40	10,773.73	13,111.50	3,99,328.70
Bihar	16,667.93	3,457.82	943.91	3,907.45	474.86	1,618.72	5,673.03	990.38	5,848.47	39,582.57
Jharkhand	6,024.71	1,229.64	11,041.62	10,648.69	100.19	1,714.72	100.98	0.00	605.54	31,466.10
Odisha	8,245.22	3,496.26	262.51	68,308.24	210.63	2,363.60	694.52	486.68	593.31	84,660.97
West Bengal	21,756.83	8,305.39	9,850.01	19,552.02	843.28	3,260.52	1,547.79	1,334.67	3,033.83	69,484.35
Sikkim	122.92	48.37	1.51	279.37	0.30	0.00	0.00	0.00	37.94	490.41
A & N Islands	168.19	60.34	0.00	11.02	4.86	0.00	1.72	0.00	53.41	299.54
Sub-Total (ER)	52,985.80	16,597.82	22,099.56	1,02,706.81	1,634.11	8,957.56	8,018.05	2,811.73	10,172.50	2,25,983.94
Arunachal Pradesh	243.10	98.29	2.59	280.98	0.00	0.37	0.08	9.83	38.54	673.78
Assam	4,855.16	1,597.01	121.71	2,355.80	21.12	200.21	69.62	177.45	1,899.26	11,297.34
Manipur	521.97	134.72	25.93	19.10	16.98	0.12	5.90	82.91	42.01	849.64
Meghalaya	600.71	139.35	7.02	601.25	1.27	0.10	0.20	48.22	355.88	1,754.01
Mizoram	315.37	52.99	2.49	11.20	2.53	0.50	1.08	97.87	19.36	503.40
Nagaland	567.07	89.29	19.36	0.21	0.00	0.42	0.02	0.23	146.10	822.70
Tripura	657.18	79.38	24.27	26.29	14.98	3.38	60.02	149.96	223.54	1,239.00
Sub-Total (NER)	7,760.56	2,191.03	203.38	3,294.82	56.89	205.11	136.91	566.47	2,724.70	17,139.86
Total (All India)	3,69,059.50	1,28,623.20	88,616.63	5,52,009.29	9,350.78	33,917.67	2,75,484.96	32,136.27	51,388.71	15,40,586.99

ANNEXURE-II**ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. -1753 TO BE ANSWERED IN THE RAJYA SABHA ON 15.12.2025.**

All India Per Capita Electricity Consumption (in kWh) for last five years:

FY	Per Capita Consumption
2020-21	1161
2021-22	1255
2022-23	1331
2023-24	1400
2024-25*	1460

*Provisional