

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 976
ANSWERED ON 08/02/2024

INSTALLATION OF RENEWABLE ENERGY PLANTS

976. SHRI NABA KUMAR SARANIA

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

- (a) whether it has been made mandatory for the State Government to undertake electricity generation through new and renewable energy sources and if so, the details thereof;
- (b) whether the Government proposes to install renewable energy plants in remote tribal areas and if so, the details thereof;
- (c) the details of renewable energy plants installed in various States of the country along with the details of the power generated from these plants
- (d) whether there are any provisions in place for special exemptions for the installations of renewable energy plants; and
- (e) if so, the details thereof?

ANSWER

THE MINISTER OF NEW & RENEWABLE ENERGY AND POWER

(SHRI R.K. SINGH)

(a): Section 86 (1) (e) of the Act mandates respective State Electricity Regulatory Commissions (SERCs) to specify a percentage of the total consumption of electricity in the area of a distribution licensee to be purchased from renewable energy sources. Accordingly, all the SERCs have specified renewable purchase obligation (RPO) for the respective electricity distribution utilities (DISCOMs). The Ministry of Power has also issued guidelines on RPO trajectory from time to time.

Further, the Section 14 (x) of the Energy Conservation Act, 2001, as amended by Energy Conservation (Amendment) Act, 2022, delegate powers to the Central Government to specify minimum share of consumption of non-fossil resources by designated consumers as energy or feed stock and specify different shares of consumption for different types of non-fossil resources for different designated consumers. The distribution licensees have also been notified as designated consumers under the Energy Conservation Act, 2001.

In terms of Section 14 (x) of the amended Energy Conservation Act, 2001, the Ministry of Power through notification dated 20.10.2023, has specified following minimum share of consumption of renewable energy by the electricity distribution licensees as a percentage of total share of energy consumption, with certain conditions:

S/N	Year	Wind RE	Hydro RE	Distri buted RE	Other RE	Total RE
1.	2024-25	0.67%	0.38%	1.50 %	27.35 %	29.91%
2.	2025-26	1.45%	1.22%	2.10 %	28.24 %	33.01%
3.	2026-27	1.97%	1.34%	2.70 %	29.94 %	35.95%
4.	2027-28	2.45%	1.42%	3.30 %	31.64 %	38.81%
5.	2028-29	2.95%	1.42%	3.90 %	33.10 %	41.36%

6.	2029-30	3.48%	1.33%	4.50 %	34.02 %	43.33%
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The above notification will come into force on 1st April 2024 and therefore the distribution licensees will have to comply with the specified renewable energy consumption norms w.e.f. FY 2024-25.

(b): All schemes being implemented by the Ministry of New and Renewable Energy aim to promote the utilization of renewable energy sources in all regions of the country, including the tribal areas.

(c): The source and state-wise details of the renewable energy capacity installed in the country as on 31.12.2023 are given in **Annexure-I**.

The state-wise details of power generation from various renewable energy sources during the current year i.e. 2023-24 (upto Dec 2023) are given in **Annexure-II**.

(d) & (e): The details of provisions in place for encouraging the installation of Renewable Energy Plants are as follows:

- i. Permitting Foreign Direct Investment (FDI) up to 100 percent under the automatic route.
- ii. Waiver of Inter State Transmission System (ISTS) charges for inter-state sale of solar and wind power for projects to be commissioned by 30th June 2025.
- iii. As per MoEFCC's provisions of the EIA Notification 2006 Solar PV Power Projects, Wind Power Projects are exempted from Environment Impact Assessment (EIA).
- iv. Accelerated Depreciation at the rate of 40% is available on Solar and Wind Power Projects.
- v. Central pollution control board has included Solar Power generation through solar photovoltaic cell plants of all capacities, Wind Power Plants of all capacities and hydel Power Plants upto and including capacity of 25 MW under white category.

Annexure-I referred to in reply to part (c) of Lok Sabha Unstarred Question No. 976 for 08/02/2024 regarding 'Installation of Renewable Energy Plants'

State-wise installed capacity of Renewable Power as on 31.12.2023							
S. No.	STATES / UTs	Small Hydro Power	Wind Power	Bio Power	Solar Power	Large Hydro Power	Total Capacity
		(MW)	(MW)	(MW)	(MW)	(MW)	(MW)
1	Andhra Pradesh	163.31	4096.65	566.39	4565.60	1610.00	11001.95
2	Arunachal Pradesh	133.11		0.00	11.79	1115.00	1259.90
3	Assam	34.11		2.00	155.81	350.00	541.92
4	Bihar	70.70		126.02	223.54		420.26
5	Chhatisgarh	76.00		275.00	1072.24	120.00	1543.24
6	Goa	0.05		1.94	35.76		37.75
7	Gujarat	91.64	11223.82	112.48	10549.07	1990.00	23967.01
8	Haryana	73.50		265.70	1240.47		1579.67
9	Himachal Pradesh	969.71		10.20	111.55	10263.02	11354.48
10	Jammu & Kashmir	161.43		0.00	54.98	3360.00	3576.41
11	Jharkhand	4.05		14.10	121.77	210.00	349.92
12	Karnataka	1280.73	5595.91	1907.72	9412.71	3689.20	21886.27
13	Kerala	270.52	62.50	2.50	859.01	1864.15	3058.68
14	Ladakh	40.99		0.00	7.80	89.00	137.79
15	Madhya Pradesh	123.71	2844.29	134.94	3170.05	2235.00	8507.99
16	Maharashtra	382.28	5157.98	2643.19	5080.28	3047.00	16310.73
17	Manipur	5.45		0.00	13.04	105.00	123.49
18	Meghalaya	55.03		13.80	4.19	322.00	395.02
19	Mizoram	45.47		0.00	30.43	60.00	135.90
20	Nagaland	32.67		0.00	3.17	75.00	110.84
21	Odisha	115.63		59.22	473.03	2154.55	2802.43
22	Punjab	176.10		530.95	1266.55	1096.30	3069.90
23	Rajasthan	23.85	5193.42	125.64	18777.14	411.00	24531.05
24	Sikkim	55.11		0.00	4.69	2282.00	2341.80
25	Tamil Nadu	123.05	10429.27	1043.70	7360.94	2178.20	21135.16
26	Telangana	90.87	128.10	220.37	4712.98	2405.60	7557.92
27	Tripura	16.01		0.00	18.47		34.48
28	Uttar Pradesh	49.10		2221.64	2740.87	501.60	5513.21
29	Uttarakhand	218.82		139.74	575.53	4035.35	4969.44
30	West Bengal	98.50		343.46	194.06	1341.20	1977.22
31	Andaman & Nicobar	5.25		0.00	29.91		35.16
32	Chandigarh			0.00	64.05		64.05
33	Dadar & Nagar Haveli/ Daman & Diu			0.00	46.47		46.47
34	Delhi			84.00	237.29		321.29
35	Lakshadweep			0.00	4.97		4.97
36	Pondicherry			0.00	43.27		43.27
37	Others		4.30	0.00	45.01		49.31
	Total (MW)	4986.75	44736.24	10844.70	73318.49	46910.17	180796.35

Annexure-II

Annexure-II referred to in reply to part (c) of Lok Sabha Unstarred Question No. 976 for 08/02/2024 regarding 'Installation of Renewable Energy Plants'

**State-wise details of power generation from various renewable energy sources during the current year
i.e. 2023-24 (upto Dec 2023)**

(All fig. in MUs)									
Name of State/UT	Wind	Solar	Biomass	Bagasse	Small Hydro	Others	Renewable Energy Total	Large Hydro*	Total RE including Large Hydro
Chandigarh	0.00	9.99	0.00	0.00	0.00	0.00	9.99	0.00	9.99
Delhi	0.00	154.90	0.00	0.00	0.00	382.05	536.95	0.00	536.95
Haryana	0.00	701.62	218.99	57.46	178.80	44.91	1201.78	0.00	1201.78
HP	0.00	44.94	0.00	0.00	2314.92	0.00	2359.86	32268.80	34628.66
J & K	0.00	0.00	0.00	0.00	347.34	0.00	347.34	13926.66	14274.00
Ladkh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	347.39	347.39
Punjab	0.00	2403.38	440.49	83.69	545.28	0.00	3472.84	3875.17	7348.01
Rajasthan	6861.59	28274.90	279.48	0.00	2.56	0.00	35418.53	609.78	36028.31
Uttar Pradesh	0.00	2966.98	24.39	1486.24	126.03	76.69	4680.33	666.83	5347.16
Uttarakhand	0.00	248.85	0.00	186.39	265.05	0.00	700.29	11884.86	12585.15
Chhattisgarh	0.00	622.30	1038.31	8.85	134.17	0.00	1803.63	257.93	2061.56
Gujarat	19804.55	9499.73	0.00	0.74	145.11	0.00	29450.12	3717.09	33167.21
Madhya Pradesh	3946.61	2696.29	64.85	27.28	355.13	19.86	7110.02	5313.27	12423.29
Maharashtra	7121.00	4130.21	228.17	1561.09	684.92	13.92	13739.31	4293.19	18032.50
Dadra and Nagar Haveli and Daman and Diu	0.00	11.10	9.71	0.00	0.00	0.00	20.81	0.00	20.81
Goa	0.00	45.72	0.00	0.00	0.00	5.92	51.64	0.00	51.64
Andhra Pradesh	7257.52	5990.90	13.38	32.57	95.97	230.68	13621.02	1112.50	14733.52
Telangana	242.92	4988.87	3.88	38.82	50.16	108.33	5432.98	1071.77	6504.75
Karnataka	9216.22	11119.16	44.20	1637.40	1297.11	0.00	23314.08	7262.83	30576.91
Kerala	196.72	840.23	0.00	60.45	612.62	0.03	1710.05	3895.44	5605.49
Tamil Nadu	15177.48	8468.41	95.56	423.43	142.21	0.00	24307.08	2860.98	27168.06
Lakshadweep	0.00	0.07	0.00	0.00	0.00	0.00	0.07	0.00	0.07
Puducherry	0.00	9.18	0.00	0.00	0.00	0.00	9.18	0.00	9.18
Andaman Nicobar	0.00	18.10	0.00	0.00	9.31	0.00	27.41	0.00	27.41
Bihar	0.00	140.65	0.00	72.73	5.51	0.00	218.89	0.00	218.89
Jharkhand	0.00	13.23	0.00	0.00	0.00	0.00	13.23	179.21	192.44
Orissa	0.00	548.77	73.21	0.00	350.59	0.00	972.57	4897.38	5869.95
Sikkim	0.00	0.00	0.00	0.00	9.27	0.00	9.27	8492.36	8501.63
West Bengal	0.00	119.30	0.00	0.00	163.65	1157.18	1440.13	2352.76	3792.89
Arunachal Pradesh	0.00	1.59	0.00	0.00	0.52	0.00	2.11	3752.98	3755.09
Assam	0.00	238.47	0.00	0.00	56.58	0.39	295.44	518.52	813.96
Manipur	0.00	5.79	0.00	0.00	0.00	1.23	7.02	248.72	255.74
Meghalaya	0.00	0.00	0.00	0.00	53.60	0.00	53.60	714.12	767.72
Mizoram	0.00	2.39	0.00	0.00	71.95	0.00	74.34	81.71	156.05
Nagaland	0.00	0.00	0.00	0.00	72.93	0.00	72.93	155.53	228.46
Tripura	0.00	3.58	0.00	0.00	0.00	0.00	3.58	0.00	3.58
All India Total	69824.59	84319.58	2534.61	5677.13	8091.27	2041.21	172488.40	114757.78	287246.18

* Large hydro generation Excluding Import from Bhutan

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