

GOVERNMENT OF INDIA  
MINISTRY OF NEW AND RENEWABLE ENERGY  
**LOK SABHA**  
**UNSTARRED QUESTION NO. 725**  
ANSWERED ON 07/12/2023

**GENERATION OF SOLAR ELECTRICITY**

725. SHRI GAJANAN KIRTIKAR  
SHRI KRUPAL BALAJI TUMANE

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

- (a) the total electricity being generated in megawatt from solar energy in the country during last five years, State/UT-wise;
- (b) whether the Government has made any assessment of the potential of solar energy in the country and if so, the details thereof;
- (c) the details of funds allocated, sanctioned and utilized for development of solar energy sector in the country, State/UT wise;
- (d) whether the Government is aware of the constraints being faced by the said sector and if so, the details thereof;
- (e) whether the Government has addressed the constraints of the said sector;
- (f) if so, the details thereof and the steps taken/being taken by the Government to deal with the said situation;
- (g) whether the Government proposes to establish more projects to strengthen solar energy in the country; and
- (h) if so, the details thereof, State/UT-wise including Maharashtra and if not, the reasons therefor?

**ANSWER**

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

**(SHRI R.K. SINGH)**

- (a) Solar power Installed capacity in last five years, state/UT-wise, is given at **Annexure I**.
- (b) A total solar potential of 748 GWp has been estimated by National Institute of Solar Energy (NISE), on the basis of the data from Waste Land Atlas of India 2010. State-wise details are given at **Annexure -II**.
- (c) State-wise funds released for the development of solar energy sector in the last financial year is given at **Annexure III**
- (d) to (f) Primary impediments in the development of solar projects include challenges in securing land clear from GIB/Forest/Other Clearance, mismatch in the timelines between solar project development and the transmission system, delays in approving tariffs determined through the bidding process etc.

The Government has been requesting all State Governments to facilitate land for setting up solar projects. In addition, under the Solar Park scheme, the State Governments are provided with a facilitation charge of Rs. 0.05/unit of power being exported outside the State. Stakeholders' meetings are conducted to reduce the mismatch in the timelines between solar project development

and the transmission system. The delay in approval of tariffs is taken up with the SERCs through the Forum of Regulators.

(g) & (h) The Government has set a target of achieving 500 GW of installed capacity from non-fossil fuels by 2030, in line with the Hon'ble Prime Minister's announcement at CoP-26, held at Glasgow. Renewable Purchase Obligations have been laid down for various states. The details are at **Annexure-IV**

\*\*\*\*\*

**ANNEXURE- I REFERRED TO IN REPLY TO PART (a) OF LOK SABHA****UNSTARRED QUESTION NO.725 FOR 07.12.2023**

<b>State-wise installed capacity of Solar Power during last five years</b>		
<b>S. No.</b>	<b>STATES / UTs</b>	<b>Solar Power</b>
1	Andhra Pradesh	2276.26
2	Arunachal Pradesh	4.25
3	Assam	128.65
4	Bihar	39.60
5	Chhatisgarh	590.23
6	Goa	25.46
7	Gujarat	7628.37
8	Haryana	802.26
9	Himachal Pradesh	79.52
10	Jammu & Kashmir	27.25
11	Jharkhand	67.25
12	Karnataka	3276.15
13	Kerala	633.34
14	Ladakh	7.80
15	Madhya Pradesh	1479.54
16	Maharashtra	3471.50
17	Manipur	7.45
18	Meghalaya	2.13
19	Mizoram	24.33
20	Nagaland	0.20
21	Odisha	354.33
22	Punjab	253.93
23	Rajasthan	14624.04
24	Sikkim	2.82
25	Tamil Nadu	4785.57
26	Telangana	1366.83
27	Tripura	9.08
28	Uttar Pradesh	1760.00
29	Uttarakhand	305.50
30	West Bengal	130.10
31	Andaman & Nicobar	23.11
32	Chandigarh	32.68
33	Dadar & Nagar Haveli	0.00
34	Daman & Diu	30.40
35	Delhi	147.23
36	Lakshwadeep	0.13
37	Pondicherry	35.19
38	Others	1.65
	<b>Total (MW)</b>	<b>44434.13</b>
<b>MW = Megawatt</b>		

**ANNEXURE- II REFERRED TO IN REPLY TO PART (b) OF LOK SABHA****UNSTARRED QUESTION NO.725 FOR 07.12.2023****STATE/UT-WISE DETAILS OF SOLAR POTENTIAL**

<b>Sl. No.</b>	<b>Name of State/UT</b>	<b>Solar Potential (MW<sub>p</sub>)</b>
1	Andhra Pradesh	38440
2	Arunachal Pradesh	8650
3	Assam	13760
4	Bihar	11200
5	Chhatisgarh	18270
6	Goa	880
7	Gujarat	35770
8	Haryana	4560
9	Himachal Pradesh	33840
10	Jammu & Kashmir	111050
11	Jharkhand	18180
12	Karnataka	24700
13	Kerala	6110
14	Madhya Pradesh	61660
15	Maharashtra	64320
16	Manipur	10630
17	Meghalaya	5860
18	Mizoram	9090
19	Nagaland	7290
20	Orissa	25780
21	Punjab	2810
22	Rajasthan	142310
23	Sikkim	4940
24	Tamil Nadu	17670
25	Telangana	20410
26	Tripura	2080
27	Uttar Pradesh	22830
28	Uttarakhand	16800
29	West Bengal	6260

Sl. No.	Name of State/UT	Solar Potential (MW <sub>p</sub> )
30	Andaman & Nicobar	0
31	Chandigarh	0
32	Dadar & Nagar Haveli	0
33	Daman & Diu	0
34	Delhi	2050
35	Lakshwadeep	0
36	Pondicherry	0
37	Others	790
	<b>Total</b>	<b>748990.00</b> <b>= 748 GW<sub>p</sub></b>

**ANNEXURE III REFERRED TO IN REPLY TO PART (C) OF RAJYA SABHA  
UNSTARRED QUESTION NO.725 FOR 07.12.2023**

**THE DETAILS OF FUND RELEASED IN LAST FINANCIAL YEAR**

**(Rs in crores)**

<b>SL.NO.</b>	<b>State</b>	<b>2022-23</b>
1	Andhra Pradesh	68.96
2	Arunachal Pradesh	9.30
3	Andaman & Nicobar	0.00
4	Assam	14.02
5	Bihar	0.00
6	Chandigarh	0.73
7	Chhattisgarh	13.54
8	Delhi	10.07
9	Goa	0.00
10	Gujarat	1114.65
11	Haryana	118.18
12	Himachal Pradesh	15.73
13	Jammu & Kashmir	27.98
14	Jharkhand	40.64
15	Karnataka	90.98
16	Kerala	89.71
17	Ladakh	125.00
18	Lakshadweep	0.00
19	Madhya Pradesh	170.14
20	Maharashtra	304.58
21	Manipur	0.00
22	Meghalaya	0.00
23	Mizoram	1.29
24	Nagaland	6.37
25	Odisha	26.70
26	Puduchchery	0.00
27	Punjab	55.93
28	Rajasthan	258.84
29	Sikkim	0.00
30	Tamil Nadu	10.98
31	Telangana	42.81
32	Tripura	0.12

33	Uttarakhand	8.33
34	Uttar Pradesh	74.32
35	West Bengal	4.71
36	Others (CEL, REL, NABARD, Regional Rural Banks, NGOs, etc.) and other Channel Partners	17.71
<b>Total</b>		<b>2722.32</b>

**RPO Trajectory till FY 2029-30**

<b>Year</b>	<b>Wind RPO</b>	<b>HPO</b>	<b>Other RPO</b>	<b>Total RPO</b>
2022-23	0.81%	0.35%	23.44%	24.61%
2023-24	1.60%	0.66%	24.81%	27.08%
2024-25	2.46%	1.08%	26.37%	29.91%
2025-26	3.36%	1.48%	28.17%	33.01%
2026-27	4.29%	1.80%	29.86%	35.95%
2027-28	5.23%	2.15%	31.43%	38.81%
2028-29	6.16%	2.51%	32.69%	41.36%
2029-30	6.94%	2.82%	33.57%	43.33%