

GOVERNMENT OF INDIA  
MINISTRY OF NEW AND RENEWABLE ENERGY  
**LOK SABHA**  
**UNSTARRED QUESTION NO-2775**  
ANSWERED ON-05/08/2021

**SOLAR ENERGY PRODUCTION**

2775. SHRI UNMESH BHAIYYASAHEB PATIL  
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SHRI DHAIRYASHEEL SAMBHAJIRAO MANE

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

- (a) whether the solar energy production has increased in the country during the last three years;
- (b) if so, the details thereof, State/UT-wise;
- (c) the measures taken by the Government to reduce the unit cost of solar production; and
- (d) the details of increase in the installed capacity and production of solar energy during the said period, year and State-wise?

**ANSWER**

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

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

(a)&(b) Solar Energy production has increased from 39.27 BU in 2018-19 to 60.40 BU in 2020-21 registering an increase of 53.8%. State/UT-wise details of solar energy production in the country, as reported by Central Electricity Authority, during last three years, are given at **Annexure-I**.

(c) The Government has taken several measures to reduce the cost of Renewable Energy, including solar energy, in the country. These include the following:

- permitting Foreign Direct Investment (FDI) up to 100 percent under the automatic route,
- 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,
- laying new transmission lines and creating new sub-station capacity for evacuation of renewable power,
- notification of standards for deployment of solar photovoltaic system/devices,
- setting up of Project Development Cell for attracting and facilitating investments,
- Standard Bidding Guidelines for tariff based competitive bidding for procurement of power from Grid Connected Solar PV and Wind Projects.
- Government has issued orders that power shall be dispatched against Letter of Credit (LC) or advance payment to ensure timely payment by distribution licensees to RE generators.
- Conducting skill development programmes to create a pool of skilled manpower for setting up, operation and maintenance of RE projects.

This apart, this Ministry has launched various schemes which provide financial support for development of solar power projects. The details are given at **Annexure II**.

(d) State-wise and year-wise details of installed solar power capacity are given at **Annexure-III**. The details of solar energy production have already been given at **Annexure-I**.

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**ANNEXURE-I REFERRED TO IN REPLY TO PART (A) AND (B) OF LOK SABHA  
UNSTARRED QUESTION NO. 2775 FOR 05.08.2021**

**STATE-WISE AND YEAR-WISE DETAILS OF SOLAR ENERGY GENERATION (IN MU)  
INSTALLED DURING LAST THREE YEARS**

Name of State/UT	2018-19	2019-20	2020-21
Chandigarh	13.51	13.33	10.16
Delhi	10.83	136.30	189.99
Haryana	72.47	125.14	162.95
HP	0.00	11.66	36.52
J&K			9.42
Laddakh	0.00	0.00	0.00
Punjab	1492.90	1358.22	1356.48
Rajasthan	5109.35	7776.56	10384.24
Uttar Pradesh	1235.08	1447.05	1856.19
Uttarakhand	318.29	341.51	329.64
<b>Northern Region</b>	<b>8252.45</b>	<b>11209.77</b>	<b>14335.59</b>
Chhattisgarh	335.15	326.42	370.80
Gujarat	2410.32	3631.86	4633.81
Madhya Pradesh	2982.29	3496.23	4202.03
Maharashtra	2206.62	2372.68	3089.46
Dadra and Nagar Haveli	5.76	6.19	11.96
Daman & Diu	18.94	21.83	29.52
Goa	0.00	0.82	1.46
<b>Western Region</b>	<b>7959.08</b>	<b>9856.02</b>	<b>12339.03</b>
Andhra Pradesh	4965.96	5855.11	6956.10
Telangana	6312.26	6263.92	6351.04
Karnataka	7575.83	11221.20	13238.86
Kerala	110.84	143.59	275.44
Tamil Nadu	3554.50	4946.63	6115.48
Lakshadweep	1.11	0.66	0.45
Puducherry	2.58	4.15	6.39
<b>Southern Region</b>	<b>22523.09</b>	<b>28435.26</b>	<b>32943.75</b>
Andaman Nicobar	13.86	11.60	24.82
Bihar	179.89	160.16	160.63
Jharkhand	19.15	17.47	17.16
Orissa	263.03	362.29	476.26
Sikkim	0.00	0.00	0.00
West Bengal	40.65	64.29	73.89
<b>Eastern Region</b>	<b>516.58</b>	<b>615.81</b>	<b>752.78</b>
Arunachal Pradesh	1.20	1.60	1.54
Assam	6.67	6.14	13.37

<b>Manipur</b>	1.88	2.63	7.71
<b>Meghalaya</b>	0.00	0.00	0.00
<b>Mizoram</b>	0.12	0.44	2.45
<b>Nagaland</b>	0.00	0.00	0.00
<b>Tripura</b>	7.14	3.43	6.04
<b>North Eastern Region</b>	<b>17.00</b>	<b>14.24</b>	<b>31.11</b>
<b>All India Total</b>	<b>39268.20</b>	<b>50131.10</b>	<b>60402.25</b>

**ANNEXURE-II REFERRED TO IN PART (C) IN REPLY TO LOK SABHA UNSTARRED QUESTION NO. 2775 FOR 05.08.2021**

**DETAILS OF SOLAR SCHEMES:**

- i. Solar Park Scheme for setting up of Solar Parks of 40,000 MW total capacity;
- ii. Scheme for setting up of Grid-Connected Solar PV Power Projects of 12000 MW by the Central Public Sector Undertakings (CPSUs) and the Government of India organisations with Viability Gap Funding (VGF);
- iii. Installation of Grid Connected Solar Rooftop Power Plants;
- iv. Scheme for Off-Grid Solar PV Systems;
- v. Pradhan Mantri – Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM) Scheme to support farmers to set up small solar power projects and solar pumps for irrigation purpose.

**ANNEXURE-III REFERRED TO IN REPLY TO PART (D) OF LOK SABHA UNSTARRED  
QUESTION NO. 2775 FOR 05.08.2021**

**STATE-WISE AND YEAR-WISE DETAILS OF SOLAR ENERGY CAPACITY (IN MW)  
DURING LAST THREE YEARS**

Sr. No.	State/UT	Capacity Added during 2018-19	Capacity Added during 2019-20	Capacity Added during 2020-21
1	Andaman & Nicobar	5.17	0.46	17.03
2	Andhra Pradesh	890.22	473.34	592.98
3	Arunachal Pradesh	0.00	0.22	0.00
4	Assam	9.95	18.83	1.76
5	Bihar	0.00	6.90	7.94
6	Chandigarh	9.51	2.28	4.61
7	Chhattisgarh	0.00	0.00	21.13
8	Dadar & Nagar	0.00	0.00	0.00
9	Daman & Diu	3.86	2.09	20.68
10	Delhi	57.32	29.23	27.81
11	Goa	2.98	0.89	2.66
12	Gujarat	852.13	323.42	1482.45
13	Haryana	7.67	24.75	155.69
14	Himachal Pradesh	21.95	9.89	9.80
15	J&K	13.47	4.47	1.43
16	Jharkhand	9.28	3.45	13.66
17	Karnataka	1151.43	1179.37	77.24
18	Kerala	30.65	3.16	114.77
19	Ladakh	0.00	0.00	0.00
20	Lakshadweep	0.00	0.00	0.00
21	Madhya Pradesh	534.81	397.33	204.76
22	Maharashtra	394.36	29.88	488.17
23	Manipur	3.38	1.14	1.20
24	Meghalaya	0.10	0.00	0.00
25	Mizoram	0.30	1.02	0.01
26	Nagaland	0.00	0.00	0.00
27	Odisha	315.16	3.11	3.88
28	Pondicherry	2.98	2.37	3.82
29	Punjab	0.00	41.48	12.40
30	Rajasthan	894.02	1617.42	594.67
31	Sikkim	0.01	0.06	0.00
32	Tamil Nadu	666.65	1213.14	559.33
33	Telangana	300.84	28.66	332.37
34	Tripura	0.00	4.32	0.00
35	Uttar Pradesh	265.69	85.00	617.40
36	Uttarakhand	46.67	8.74	52.51
37	West Bengal	38.63	33.46	35.38
<b>TOTAL</b>		<b>6529.20</b>	<b>5549.88</b>	<b>5457.54</b>