GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY RAJYA SABHA UNSTARRED QUESTION NO. 3500 ANSWERED ON 01.04.2025

SOLAR POWER GENERATION

3500. SHRI NARHARI AMIN

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

(a) the steps taken by the Ministry to promote solar power generation in the country;

(b) the total solar power generation capacity in the country, the details thereof, State-wise;

(c) the average cost per unit for solar power; and

(d) the details of the proposed Mega Solar parks in the country, State-wise and capacity-wise?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER

(SHRI SHRIPAD YESSO NAIK)

(a) The Government has taken various steps to promote solar energy in the country. The details of major steps taken, are given at **Annexure-I**.

(b) As on 28-02-2025, the installed solar power capacity in the country is \sim 102.57 GW. The details are given at **Annexure-II**.

(c) The solar tariff discovered in the bids during the current Financial Year 2024-25 (as on 28.02.2025), is ranging from Rs. 2.15 to Rs. 3.05 per unit.

(d) The Government is implementing the scheme for "Development of Solar Parks and Ultra Mega Solar Power Projects." Under the scheme, a capacity of 39,958 MW has been sanctioned. The details are given at **Annexure -III.**

ANNEXURE-I REFFERED TO IN REPLY TO PART (a) OF RAJYA SABHA UNSTARRED QUESTION NO. 3500 FOR 01.04.2025

MAJOR STEPS TAKEN TO PROMOTE SOLAR ENERGY IN THE COUNTRY

- Notification of trajectory for RE power bids of 50 GW/annum to be issued by Renewable Energy Implementation Agencies [REIAs: Solar Energy Corporation of India Limited (SECI), NTPC Limited, NHPC Limited, SJVN Limited] from FY 2023-24 to FY 2027-28.
- Foreign Direct Investment (FDI) has been permitted up to 100 percent under the automatic route.
- Inter State Transmission System (ISTS) charges have been waived for inter-state sale of solar and wind power for projects to be commissioned by 30th June 2025, for Green Hydrogen Projects till December 2030 and for offshore wind projects till December 2032.
- To boost RE consumption, Renewable Purchase Obligation (RPO) followed by Renewable Consumption Obligation (RCO) trajectory has been notified till 2029-30. The RCO which is applicable to all designated consumers under the Energy Conservation Act 2001 will attract penalties on non-compliance. RCO also includes specified quantum of consumption from Decentralized Renewable Energy sources.
- Project Development Cell for attracting and facilitating investments has been set up.
- Standard Bidding Guidelines for tariff based competitive bidding process for procurement of Power from Grid Connected Solar, Wind, Wind-Solar Hybrid and Firm & Dispatchable RE (FDRE) Projects have been issued.
- Schemes such as Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM), PM Surya Ghar Muft Bijli Yojana, National Programme on High Efficiency Solar PV Modules, National Green Hydrogen Mission, have been launched.
- Scheme for setting up of Ultra Mega Renewable Energy Parks is being implemented to provide land and transmission to RE developers for installation of RE projects at large scale.
- Laying of new transmission lines and creating new sub-station capacity has been funded under the Green Energy Corridor Scheme for evacuation of renewable power.
- Electricity (Rights of Consumers) Rules, 2020 has been issued for net-metering up to five hundred Kilowatt or up to the electrical sanctioned load, whichever is lower.

- Uniform Renewable Energy Tariff (URET) has been introduced through which a uniform tariff will be provided to the consumer by averaging tariffs of individual RE projects of similar type awarded via tariff based competitive bidding process. Implementation of URET for "Solar Power Central Pool" and "Solar-Wind Hybrid Central Pool" from 15th February 2024 has been notified.
- Standard & Labelling (S&L) programs for Solar Photovoltaic modules and Gridconnected Solar Inverters have been launched.
- To augment transmission infrastructure needed for steep RE trajectory, transmission plan has been prepared till 2030.
- "The Electricity (Late Payment Surcharge and related matters) Rules (LPS rules) have been notified.
- Electricity (Promoting Renewable Energy Through Green Energy Open Access) Rules, 2022, has been notified on 06th June 2022 with objective of ensuring access to affordable, reliable, and sustainable green energy for all. Green Energy Open Access is allowed to any consumer with contract demand of 100 kW or above through single or multiple single connection aggregating Hundred kW or more located in same electricity division of a distribution licensee.
- Green Term Ahead Market (GTAM) has been launched to facilitate sale of Renewable Energy Power through exchanges.
- 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.

ANNEXURE-II REFFERED TO IN REPLY TO PART (b) OF RAJYA SABHA

UNSTARRED QUESTION NO. 3500 FOR 01.04.2025

State-wise installed capacity of Solar Power as on 28.02.2025

S. No.	STATES / UTs	Solar Power Total (MW)
1	Andhra Pradesh	5179.23
2	Arunachal Pradesh	14.85
3	Assam	192.34
4	Bihar	319.44
5	Chhattisgarh	1340.54
6	Goa	55.44
7	Gujarat	18125.41
8	Haryana	2025.18
9	Himachal Pradesh	170.26
10	Jammu & Kashmir	74.49
11	Jharkhand	199.87
12	Karnataka	9312.71
13	Kerala	1482.14
14	Ladakh	7.80
15	Madhya Pradesh	5012.88
16	Maharashtra	9881.37
17	Manipur	13.79
18	Meghalaya	4.28
19	Mizoram	30.39
20	Nagaland	3.17
21	Odisha	621.84
22	Punjab	1421.43
23	Rajasthan	27636.75
24	Sikkim	7.56
25	Tamil Nadu	9723.95
26	Telangana	4842.10
27	Tripura	21.24
28	Uttar Pradesh	3357.51
29	Uttarakhand	593.07
30	West Bengal	320.62
31	Andaman & Nicobar Islands	29.91
32	Chandigarh	78.85
33	Dadra & Nagar Haveli and Daman & Diu	48.12
34	Delhi	313.40
35	Lakshadweep	4.97
36	Puducherry	54.11
37	Others	45.01
	Total (MW)	102566.02

ANNEXURE-III REFFERED TO IN REPLY TO PART (d) OF RAJYA SABHA

UNSTARRED QUESTION NO. 3500 FOR 01.04.2025

Details of Solar Parks and solar projects installed (as on 28.02.2025)

Sl. No.	State	Name of Park and Location	Capacity sanctioned (MW)	Projects installed (MW)
1.		Ananthapuramu-I Solar Park, Ananthapuramu & Kadapa districts	1400	1400
2.		Kurnool Solar Park, Kurnool district	1000	1000
3.	Andhra Pradesh	Kadapa Solar Park, Kadapa district	1000	387
4.		Ananthapuramu-II Solar Park, Ananthapuramu district	500	400
5.		Ramagiri Solar Park, Ananthapuramu district	300	0
6.	Chhattisgarh	Rajnandgaon Solar Park, Rajnandgaon district	100	100
7.		Radhnesada Solar Park, Banaskantha district	700	700
8.]	Dholera Solar Park, Ahmedabad district	1000	300
9.]	NTPC RE Park, Kutch district	4750	0
10.	Gujarat	GSECL RE Park, Kutch district	3325	0
11.	1	GIPCL RE Park Ph-I, Kutch district	600	0
12.	1	GIPCL RE Park Ph-II, Kutch district	1200	0
13.		GIPCL RE Park Ph-III, Kutch district	575	0
14.	Himachal Pradesh	Pekhubela Solar Park, Una district	53	0
15.		SECI Floating Solar Park, Getalsud dam, Ranchi district	100	0
16.	Jharkhand	DVC Floating Solar Park Ph-II, Maithon dam, Dhanbad	234	0
17.		DVC Floating Solar Park Ph-I, Tilaiya Dam (Jharkhand) & Panchet Dam (in Jharkhand & partly in West Bengal)	755	0
18.	W	Pavagada Solar Park, Tumkur district	2000	2000
19.	– Karnataka	Bidar Solar Park, Bidar district	500	0
20.		Kasargod Solar Park, Kasaragod district	105	105
21.	Kerala	Floating Solar Park, Kollam district	50	0
22.		Kasargod Solar Park Ph-II, Kasaragod district	100	0
23.	Madhya Pradesh	Rewa Solar Park, Rewa district	750	750
24.		Mandsaur Solar Park, Mandsaur district	250	250
25.		Neemuch Solar Park, Neemuch district	500	330
26.		Agar Solar Park, Agar district	550	550
27.		Shajapur Solar Park, Shajapur district	450	155

Sl. No.	State	Name of Park and Location	Capacity sanctioned (MW)	Projects installed (MW)
28.		Omkareswar Floating Solar Park, Khandwa district	600	278
29.		Barethi Solar Park, Chhatarpur district	630	0
30.		Morena Solar Park, Morena district	600	0
31.		Sai Guru Solar Park, Dhule district	500	0
32.		Dondaicha Solar Park, Dhule district	250	0
33.	Maharashtra	Patoda Solar Park, Beed district	250	0
34.		Erai Floating Solar Park, Chandrapur district	105	0
35.	Mizoram	Vankal Solar Park, Champai district	20	20
36.	Odisha	Solar Park by NHPC, Ganjam district	40	0
37.		Bhadla-II Solar Park, Jodhpur district	680	680
38.		Bhadla-III Solar Park, Jodhpur district	1000	1000
39.		Bhadla-IV Solar Park, Jodhpur district	500	500
40.	Rajasthan	Phalodi-Pokaran Solar Park, Jodhpur & Jaisalmer district	750	450
41.		Fatehgarh Phase-1B Solar Park, Jaisalmer district	421	421
42.		Nokh Solar Park, Jaisalmer district	925	190
43.		Pugal Solar Park Ph-I, Bikaner district	1000	0
44.		Pugal Solar Park Ph-II, Bikaner district	1000	0
45.		RVUN Solar Park, Bikaner district	2000	0
46.		Bodana Solar Park, Jaisalmer district	2000	0
47.	Uttar Pradesh	Solar Park in UP (Jalaun, Allahabad, Mirzapur & Kanpur Dehat districts)	365	365
48.		Jalaun Solar Park, Jalaun district	1200	0
49.		Mirzapur Solar Park, Mirzapur district	100	0
50.		Kalpi Solar Park, Jalaun district	65	65
51.		Lalitpur Solar Park, Lalitpur district	600	0
52.		Jhansi Solar Park, Jhansi district	600	0
53.		Chitrakoot Solar Park, Chitrakoot district	800	0
54.		Kanpur Dehat Park, Kanpur Dehat district	75	0
55.		Kanpur Nagar Park, Kanpur Nagar district	35	0
Total	1		39958	12396