

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 523
ANSWERED ON 23/07/2025

POLICY FRAMEWORK FOR SOLAR POWER SUPPLY

523. SHRI TATKARE SUNIL DATTATREY

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

- (a) the details of the policy framework to manage the intermittency of solar and wind power supply in the country;
- (b) the details of States that have been identified for tapping solar and wind energy;
- (c) the details of the battery energy storage systems deployment in the country to support renewable energy integration;
- (d) the details of steps taken by the Government to expand the reach of new and renewable energy to the people in the country, especially in Maharashtra;
- (e) whether Maharashtra has been prioritized for large-scale solar parks; and
- (f) if so, the targets set for solar capacity addition in the current year?

ANSWER

**THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER
(SHRI SHRIPAD YESSO NAIK)**

- (a) Government has taken several policy measures to manage the intermittency of solar and wind power supply in the country, including the following:
 - i. Government has set up thirteen Renewable Energy Management Centres (REMCs) for better forecasting and real time monitoring of RE generation.
 - ii. Load dispatch centres ensure that electricity demand is fully met using dispatchable sources such as hydro and thermal power when the wind does not blow and sun does not shine.
 - iii. Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations lay down the minimum technical requirements for RE generating plants to ensure the safe, secure and reliable operation of the grid.
 - iv. Promoting deployment of energy storage systems through waiver of ISTS charges, providing VGF and other policy measures.
 - v. Promoting Hybrid RE Projects, RE-Round the Clock Projects, Firm and Dispatchable RE projects, etc.
- (b) The state/UT-wise potential of solar and wind energy is given in **Annexure-I**.
- (c) As on 15.7.2025, battery energy storage systems of capacity aggregating to 505 MWh is in operation in the country. Further, Government has taken following measures for deployment of energy storage systems including battery energy storage systems:

- i. Published a National Framework for promoting & developing Energy Storage Systems.
- ii. Granted waiver on Inter-State Transmission System charges for renewable energy projects with energy storage systems commissioned till June 2028.
- iii. Approved Viability Gap Funding for development of approximately 43 GWh of Battery Energy Storage Systems.
- iv. Issued an 'Advisory on co-locating Energy Storage Systems with Solar Power Projects to enhance grid stability and cost efficiency'.

(d) Government has taken several steps to expand the reach of new and renewable energy to the people in the country including in the state of Maharashtra. The detail of these steps is given in **Annexure-II**.

(e) & (f) Under the scheme for "Development of Solar Parks and Ultra Mega Solar Power Projects" implemented by Ministry of New and Renewable Energy (MNRE), the parks are sanctioned based on the proposals received from the State Governments. Accordingly, the Ministry has approved four solar parks of 1105 MW aggregate capacity in the state of Maharashtra. State-wise annual targets for solar capacity addition are not fixed by the Ministry, however, the obligated entities have to meet the renewable consumption obligation of 33.01% during the current year i.e. in 2025-26.

Annexure-I referred to reply of part (b) of the Lok Sabha Admitted Unstarred Question No. 523 to be answered on 23.07.2025 for “Policy Framework for Solar Power Supply”

State/UT-wise potential of solar and wind energy

Sl. No.	STATES / UTs	Wind Power (MW) @ 150m	Solar (MW)
1	Andhra Pradesh	123336	38440
2	Arunachal Pradesh	246	8650
3	Assam	459	13760
4	Bihar	4023	11200
5	Chhattisgarh	2749	18270
6	Goa	14	880
7	Gujarat	180790	35770
8	Haryana	593	4560
9	Himachal Pradesh	239	33840
10	UT of Jammu & Kashmir (including Ladakh)	1 (Ladakh)	111050
11	Jharkhand	16	18180
12	Karnataka	169251	24700
13	Kerala	2621	6110
14	Madhya Pradesh	55423	61660
15	Maharashtra	173868	64320
16	Manipur	0	10630
17	Meghalaya	55	5860
18	Mizoram	0	9090
19	Nagaland	0	7290
20	Orissa	12129	25780
21	Punjab	428	2810
22	Rajasthan	284250	142310
23	Sikkim	0	4940
24	Tamil Nadu	95107	17670
25	Telangana	54717	20410
26	Tripura	0	2080
27	Uttar Pradesh	510	22830
28	Uttarakhand	49	16800
29	West Bengal	1281	6260
30	Andaman & Nicobar	1245	0
31	Chandigarh	0	0
32	Dadar & Nagar Haveli & Daman and Diu	17	0
33	Delhi	0	2050
34	Lakshadweep	31	0
35	Pondicherry	408	0
36	Others	0	790
	Total	1163856	748990*

*Solar potential is as per old assessment.

Annexure-II referred to in reply of part (d) of the Lok Sabha Unstarred Question No. 523 to be answered on 23.07.2025

Major steps taken by the Government to expand the reach of new and renewable energy to the people in the country including in the state of Maharashtra are as follows:

- MNRE has issued Bidding Trajectory for issuance of RE power procurement bids of 50 GW/annum by Renewable Energy Implementing Agencies (REIAs) [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.
- Waiver of Inter State Transmission System (ISTS) charges for RE projects.
- Renewable Consumption Obligation (RCO) trajectory has been notified till 2029-30.
- 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, New Solar Power Scheme (for Tribal and PVTG Habitations/Villages) under Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (PM JANMAN) and Dharti Aabha Janjatiya Gram Utkarsh Abhiyan (DA JGUA), National Green Hydrogen Mission, Viability Gap Funding (VGF) Scheme for Offshore Wind Energy Projects have been launched.
- Scheme for setting up of Solar Parks and Ultra Mega Solar Power projects 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.
- National Repowering and Life Extension Policy for Wind Power Projects, 2023 has been issued.
- “Strategy for Establishments of Offshore Wind Energy Projects” has been issued indicating a bidding trajectory of 37 GW by 2030 and various business models for project development.
- The Offshore Wind Energy Lease Rules, 2023 have been notified vide Ministry of External Affairs notification dated 19th December 2023, to regulate the grant of lease of offshore areas for development of offshore wind energy projects.
- Standard & Labelling (S&L) programs for Solar Photovoltaic modules and Grid-connected 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.