

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 4292
ANSWERED ON 26/03/2025

WIND ENERGY GENERATION

4292. SHRI CHINTAMANI MAHARAJ

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

- (a) whether the Government has taken any initiative for the generation of wind energy in the country;
- (b) if so, the details of installed capacity of wind energy and power generation therefrom at present, State-wise;
- (c) whether there has been an increase in wind energy generation during the last three years;
- (d) if so, the details thereof and if not, the reasons therefor; and
- (e) the details of the ranking of India in wind energy installation at international level?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER

(SHRI SHRIPAD YESSO NAIK)

(a) to (d): Government has taken several initiatives to promote the generation of renewable energy including wind energy in the country. The details of initiatives are given in **Annexure – I**. The total installed capacity of wind energy projects in the country is 48.58 GW, as on 28.02.2025. The State wise details of installed capacity of wind energy projects are given in **Annexure – II**. There has been an increase in wind energy generation of the country during the last three years. The details of annual wind energy generation during last three years and current year are as under;

Financial Year (FY)	Wind Energy Generation (in million units)
2021-22	68640.07
2022-23	71814.16
2023-24	83385.35
2024-25 (Up to 31 st January 2025)	73621.08

The State wise details of wind energy generation are given in **Annexure – III**.

(e) As per IRENA's Renewable Energy Statistics 2024, India stands at fourth position globally in terms of installed wind energy capacity.

Annexure I referred to in reply to part (a) to (d) of the Lok Sabha Unstarred Question No. 4292 for 26.03.2025

Initiatives to promote the generation of RE including wind energy

- Ministry of New & Renewable Energy (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.
- 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.
- 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.
- 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.
- 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.

In addition to the above, the following steps have been taken specifically for promoting wind energy:

- Declaration of trajectory for Wind Renewable Consumption Obligation (Wind RCO) up to the year 2030.
- Concessional custom duty exemption on certain components required for manufacturing of wind electric generators.
- Generation Based Incentive (GBI) is being provided to the wind projects commissioned on or before 31 March 2017.
- “National Repowering and Life Extension Policy for Wind Power Projects, 2023” has been issued.
- Technical support including wind resource assessment and identification of potential sites through the National Institute of Wind Energy, Chennai,
- “Strategy for Establishment of Offshore Wind Energy Projects” has been issued.
- The Offshore Wind Energy Lease Rules, 2023 have been notified to regulate the grant of lease of offshore areas for development of offshore wind energy projects.

- “VGF Scheme for Offshore Wind Energy Projects” has been launched.

Annexure II referred to in reply to part (a) to (d) of the Lok Sabha Unstarred Question No. 4292 for 26.03.2025

State wise installed capacity of wind energy projects

STATE	Cumulative installed wind energy capacity as on 28.02.2025 (MW)
Andhra Pradesh	4096.65
Gujarat	12583.88
Karnataka	6878.29
Kerala	63.50
Madhya Pradesh	2844.29
Maharashtra	5279.08
Rajasthan	5195.82
Tamil Nadu	11514.64
Telangana	128.10
Others	4.30
Total	48588.55

Annexure III referred to in reply to part (a) to (d) of the Lok Sabha Unstarred Question No. 4292 for 26.03.2025

State wise wind energy generation of last FY and current FY

STATE	Wind Energy Generation during FY 2023-24 (in million units)	Wind Energy Generation during FY 2024-25 (Up to 31st January, 2025 (in million units))
Andhra Pradesh	8644.00	6454.68
Gujarat	24794.50	21623.73
Karnataka	10950.20	12115.20
Kerala	214.53	107.64
Madhya Pradesh	4949.78	3988.24
Maharashtra	8228.97	7098.30
Rajasthan	8390.67	5949.11
Tamil Nadu	16908.08	16028.86
Telangana	304.63	255.32
Total	83385.35	73621.08