GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY

LOK SABHA STARRED QUESTION NO. 147

ANSWERED ON 30/07/2025

WIND ENERGY CAPACITY ADDITION

*147. ADV GOWAAL KAGADA PADAVI

Will the Minister of New and Renewable Energy be pleased to state:

- (a) whether the Government has assessed the current status of wind energy capacity addition and if so, the details thereof;
- (b) the details of States contributing the maximum share in wind power generation in the country;
- (c) whether land acquisition and transmission bottlenecks are being faced by developers and if so, the details thereof;
- (d) the steps taken by the Government to promote repowering of old wind turbines with new technology;
- (e) whether offshore wind power projects are being developed actively and if so, the details thereof; and
- (f) the measures taken by the Government to attract foreign and domestic investment in large-scale wind parks?

ANSWER

THE MINISTER OF NEW & RENEWABLE ENERGY AND CONSUMER AFFAIRS, & FOOD AND PUBLIC DISTRIBUTION

(SHRI PRALHAD JOSHI)

(a) to (f) A statement is laid on the Table of the House.

Statement referred to in reply to parts (a) to (f) of the Lok Sabha Starred Question No. 147 to be answered on 30.07.2025 regarding 'Wind Energy Capacity Addition' asked by Adv Gowaal Kagada Padavi

(a): As on 30.06.2025, the installed wind energy capacity in the country is 51.67 GW. The wind energy capacity addition in last three Financial Years is as under;

Financial Year	Wind Energy Capacity Addition (in MW)
2022-23	2275.55
2023-24	3253.39
2024-25	4151.31
2025-26 (as on 30.06.2025)	1637.02

The details of the State/UT-wise wind energy capacity addition in the country during last three Financial Years are given at **Annexure-I**.

(b): The top three states contributing maximum share in wind power generation capacity are as under;

S.N.	State	Installed Power Generation Capacity (in MW)
1	Gujarat	13816.68
2	Tamil Nadu	11830.36
3	Karnataka	7714.74

The details of the State/UT-wise wind power generation capacity as on 30.06.2025 are given at **Annexure-II**.

(c) Land is a State subject and land acquisition is done by the project developers.

Further, the target of 500 GW non fossil fuel based power generation by 2030 includes 340 GW of Ground Mounted Solar and Wind. This comprises 110 GW connected to Intra-State Transmission System (In-STS) and 230 GW to inter-state transmission system (ISTS). As on 30 April 2025, ISTS connectivity applications for about 338 GW has been received by Central Transmission Utility (CTU), out of which connectivity for 283 GW application has been granted/agreed. About 228 GW ISTS is already existing/under construction/under bidding for RE integration. In addition, margins of about 37 GW are available at existing ISTS locations which can be utilized for ISTS connectivity by prospective RE developers.

- (d) In order to promote repowering of old wind turbines with new technology wind turbines, Government has issued 'National Repowering & Life Extension Policy for Wind Power Projects' on 07.12.2023 providing a facilitative framework for repowering/refurbishment of old wind turbines.
- (e) Government has taken several steps to develop offshore wind power projects in the country. These, inter alia, include;
 - Notification of 'Offshore Wind Energy Policy' in October 2015 to provide framework for the development of offshore wind energy in the country.
 - For initial phase of developments, potential offshore wind zones off the coast of Gujarat and Tamil Nadu have been identified through meso-scale study.
 - Installation of a LiDAR by NIWE off the coast of Gujarat in Nov, 2017 and collection
 of 02 years wind data. NIWE has also conducted Geophysical, Geotechnical study,
 Rapid EIA study, Oceanographic study (Wave, Tide & Current) for a site equivalent to
 1 GW capacity off the coast of Gujarat.
 - Geotechnical study at three bore hole locations carried out off Tamil Nadu coast.
 Further, 4 LiDARs off Tamil Nadu coast installed for wind resource measurement.
 Geophysical study for 500 MW site off TN coast has also been completed.
 - Issuance of a 'Strategy Paper for Establishment of Offshore Wind Energy Projects' in July, 2022 indicating various development models.
 - 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.
 - Central Transmission Utility (CTU) has completed the planning for initial 10 GW offshore transmission capacity (05 GW each off Gujarat and Tamil Nadu coast).
 - Government through Solar Energy Corporation of India (SECI) has issued first tender for 'Leasing out Seabed for development of 4 GW of Offshore Wind Power Projects' under Captive Mode/bilateral agreements/Open Access Mode.
 - The Union Cabinet has approved the 'Viability Gap Funding (VGF) scheme for offshore wind energy projects' on 19.06.2024 at a total outlay of ₹ 7453 crore, including an outlay of ₹ 6853 crore for installation and commissioning of 1 GW of offshore wind energy projects (500 MW each off the coast of Gujarat and Tamil Nadu), and grant of ₹ 600 crore for upgradation of two ports to meet logistics requirements for offshore wind energy projects. The scheme guidelines for implementation of "VGF Scheme for Offshore Wind Energy Projects" issued on 11th September 2024.

- SECI has issued tender for 500 MW offshore wind energy project off Gujarat coast on 13.09.2024 under VGF scheme. The amendment to Request for Selection (RfS) also issued on 10.07.2025.
- Offshore Wind has been included in the list of activities to be considered for trading of Carbon Credits under bilateral/co-operative approaches as per Article 6.2 Mechanism of Paris Agreement.
- Waiver of Inter-State Transmission (ISTS) Charges has been extended for offshore wind power projects commissioned on or before 31.12.2032 with graded ISTS charges thereafter.
- Waiver of additional surcharge is granted for electricity produced from offshore wind projects commissioned up to December, 2032 and supplied to Open Access Consumers.
- (f) The Government has taken several measures to attract foreign and domestic investment in renewable energy sector including large-scale wind parks. These, inter alia, include;
 - 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.
 - 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.
 - Viability Gap Funding (VGF) Scheme for Offshore Wind Energy Projects have been launched.
 - 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.
- Identified wind potential zones in Gujarat, Karnataka, Tamil Nadu, Andhra Pradesh,
 Maharashtra, Rajasthan, Madhya Pradesh and Telangana and have been classified as under;
 - i) MoD NOC not required zones,
 - ii) MoD NOC required zones, and
 - iii) No WTG zone.
- 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-I referred to in reply to part (a) of the Lok Sabha Starred Question No. 147 for 30.07.2025

State/UT-wise details of installed wind energy capacity (in MW) during last three Financial Years (FYs)

	Wind energy capacity addition (in MW) Financial Year wise			
STATE	2022-23	2023-24	2024-25	2025-26 (as on 30.06.2025)
Andhra Pradesh	0	0	280.5	20.63
Gujarat	769.7	1743.8	954.76	1139.2
Karnataka	164.05	724.66	1331.485	363.645
Kerala	0	1	7.775	0
Madhya Pradesh	324.4	0	350.86	0
Maharashtra	0	195.15	76.63	23.1
Rajasthan	866.6	2.4	12.925	0
Tamil Nadu	150.8	586.375	1136.375	90.45
Telangana	0	0	0	0
Others	0	0	0	0
Total	2275.55	3253.39	4151.31	1637.025

Annexure-II referred to in reply to part (b) of the Lok Sabha Starred Question No. 147 for 30.07.2025

State/UT-wise details of installed wind power generation capacity

S.N.	STATE	Cumulative wind power generation capacity as on 30.06.2025 (MW)
1	Gujarat	13816.68
2	Tamil Nadu	11830.36
3	Karnataka	7714.74
4	Maharashtra	5307.71
5	Rajasthan	5208.74
6	Andhra Pradesh	4397.78
7	Madhya Pradesh	3195.15
8	Telangana	128.1
9	Kerala	71.275
10	Others	4.3
	Total	51674.84