

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO. 2540
ANSWERED ON 17/12/2024

**POTENTIAL OF POWER GENERATION THROUGH WIND ENERGY IN TAMIL
NADU**

2540.Dr. KANIMOZHI NVN SOMU

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

- (a) whether Government has calculated the State-wise data of the power that can be generated potentially through wind energy in coastal areas, especially in Tamil Nadu;
- (b) if so, the details of the extent to which this potential has been realized so far;
- (c) whether Government has a national policy in this regard;
- (d) if so, the details thereof and if not, whether Government proposes to formulate such a policy; and
- (e) if so, the steps taken by Government to promote wind energy production?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER

(SHRI SHRIPAD YESSO NAIK)

(a) & (b): The State-wise data of the power that can be generated potentially through wind energy in coastal States, including Tamil Nadu, vis-a-vis wind power installed capacity, is given at **Annex – I**. In addition, the offshore wind energy potential of around 70 GW has also been identified off the coast of Gujarat and Tamil Nadu.

(c) & (d): Government has notified Renewable Consumption Obligation (RCO) trajectory till FY 2029-30 with a separate wind RCO. The RCO, which is applicable to all designated consumers under the Energy Conservation Act 2001, will attract penalties on non-compliance. Ministry of New and Renewable Energy has issued ‘Guidelines for Development of Onshore Wind Power Projects’ with an objective to facilitate the development of wind power projects in an efficient, cost effective and environmentally benign manner taking into account the requirements of project developers, State and national imperatives. Further, Ministry of New and Renewable Energy has also notified ‘National Offshore Wind Energy Policy - 2015’ to explore and promote deployment of offshore wind farms in the Exclusive Economic Zone (EEZ) of the country, including those under Public Private Partnership.

(e): Government is promoting all renewable energy sources, including wind and solar energy, in order to achieve the country’s commitment of 500 GW non-fossil energy capacity by 2030 and has taken several steps and initiatives as given in **Annex – II** to promote and accelerate renewable energy capacity, including wind energy, in the country.

Annex – I referred to in reply to part (a) & (b) of the Rajya Sabha Unstarred Question No. 2540 for 17.12.2022

State	Wind potential at 120 m above ground level (MW)	Wind potential at 150 m above ground level (MW)	Installed wind power capacity as on 30.11.2024 (MW)
Andaman & Nicobar Islands	1277	1245	0
Andhra Pradesh	74906	123336	4096.65
Daman and Diu	0	0	0
Goa	8	14	0
Gujarat	142560	180790	12368.48
Karnataka	124155	169251	6724.36
Kerala	2311	2621	63.5
Lakshadweep	31	31	0
Maharashtra	98213	173868	5216.38
Odisha	8346	12129	0
Puducherry	382	408	0
Tamil Nadu	68750	95107	11317.24
West Bengal	1050	1281	0

Annex – II referred to in reply to part (e) of the Rajya Sabha Unstarred Question No. 2540 for 17.12.2022

The Government of India has taken several steps and initiatives to promote and accelerate renewable energy capacity, including wind energy, in the country to realize the commitment of 500 GW non-fossil energy capacity by 2030. These include, inter-alia, the following:

- 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.
- 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 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.

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

- declaration of trajectory for Wind Renewable Consumption Obligation (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.
- “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.
- Technical support including wind resource assessment and identification of potential sites through the National Institute of Wind Energy, Chennai.
- Viability Gap Funding (VGF) scheme for offshore wind energy projects.
