GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY LOK SABHA UNSTARRED QUESTION NO. 2128

ANSWERED ON 12/03/2025

UNTAPPED OFFSHORE WIND ENERGY POTENTIAL

2128. SHRI CHARANJIT SINGH CHANNI

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

- (a) whether the Government concurs with the view that the country's offshore wind energy potential remains largely untapped even as nations such as Denmark, Britain and China have made significant advancements in this sector,
- (b) if so, the details of the steps proposed to be taken by the Government to develop offshore wind energy infrastructure considering the wide scope to set up renewable energy power stations utilizing salinity gradients, and
- (c) if not, the reasons therefor?

ANSWER

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

- (a) to (c) Presently, there is no installed offshore wind power capacity in the country. However, the Government has taken several steps to develop offshore wind energy infrastructure 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.
 - Issuance of 'Guidelines for Offshore wind Power Assessment, Studies and Surveys' in September, 2018 by National Institute of Wind Energy (NIWE) in order to facilitate the offshore wind studies/surveys by interested developers.
 - 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.
 - 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 13th September 2024 under VGF scheme.
- 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.

In addition, Government is implementing a "Renewable Energy Research and Technology Development (RE-RTD)" programme through various research institutions and industry to develop indigenous technologies and manufacturing for widespread applications of new and renewable energy including ocean energy salinity gradient in efficient and cost-effective manner in the country.
