

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO. 3496
ANSWERED ON 01.04.2025

DOMESTIC MANUFACTURING OF SOLAR PANELS AND WIND TURBINES

3496.SHRI SANJAY RAUT

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

- (a) the steps being taken to increase domestic manufacturing of solar panels and wind turbines to reduce dependency on imports, particularly from China;
- (b) the status of the Solar Rooftop Programme, and the manner in which Government plans to boost adoption of the same among households and industries; and
- (c) the reasons behind the slow progress of offshore wind energy projects, and the steps taken to accelerate them?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER

(SHRI SHRIPAD YESSO NAIK)

(a) The Government has taken several steps and initiatives to increase domestic manufacturing of solar panels to reduce dependency on imports, particularly from China, as given in **Annexure-I**.

Further, the Ministry of New & Renewable Energy (MNRE) has put in place a procedure to enlist type and quality certified wind turbines under 'Revised List of Models & Manufacturers' (RLMM), which also mandates that Hub and Nacelle assembly / manufacturing facility shall be located in India. Presently, 14 Manufacturers with 31 models with capacity ranging from 225 kW – 5.2 MW are in the latest RLMM list updated as on 07.03.2025. The current annual production capacity of wind turbines in the country is around 18000 MW.

(b) The MNRE is implementing PM Surya Ghar: Muft Bijli Yojana (PMSG:MBY) across the country since February 2024. The scheme targets to achieve rooftop solar installations in one crore households in the residential sector by FY 2026-27 with an outlay of Rs 75,021 crore.

As on 19.03.2025, a total of 47.85 lakh applications have been submitted on the National Portal and 10.42 lakh households have been benefitted under the scheme by installation of rooftop solar plants.

To further accelerate the progress under PMSG:MBY, the Ministry has also taken following measures:

- Online process from registration to disbursement of subsidy directly in to the bank account of the residential consumer through a user-friendly National Portal.
- Availability of collateral free loan from nationalized banks at concessional interest rate of repo-rate plus 50 bps i.e. 6.75% for the present, with tenure of 10 years.
- Simplified the regulatory approval process by waiving technical feasibility requirement and introducing auto load enhancement upto 10 kW.
- Simplified process for registration of vendors to ensure sufficient and qualified vendors are available. A total of 13,301 vendors are registered on the portal as on 11.3.2025 and providing services.

- Capacity building and training programmes being conducted for creating skilled manpower. A total of 62,954 persons have been trained till 20.3.2025.
- Creating awareness about the scheme, through awareness and outreach program such as print advertising in leading newspapers, TV commercials campaigns, Radio campaigns across FM stations including regional channels, etc., in the country.
- Established grievance redressal mechanism for timely resolution of grievances. A Call Centre with telephone number 15555 is operational in 12 languages.

(c) Establishment of Offshore Wind Energy Projects are more complex compared to other onshore based renewable energy projects due to installation of offshore structures, foundations, turbines, export power cables and substations in marine environment. However, Government has taken several steps and initiatives to accelerate the installation of offshore wind energy projects in the country, as given in **Annexure-II**.

**Annexure-I referred to in reply of part (a) of the Rajya Sabha Unstarred Question
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Initiatives taken to increase domestic manufacturing of solar panels to reduce dependency on imports, particularly from China, and to reduce dependency on imports for key components, inter-alia, include:

(i) Production Linked Incentive (PLI) Scheme: The Government of India is implementing the Production Linked Incentive (PLI) Scheme for High Efficiency Solar PV Modules, for achieving domestic manufacturing capacity of Giga Watt (GW) scale in High Efficiency Solar PV modules, with an outlay of Rs. 24,000 crore. The Scheme is being implemented in two tranches. Tranche-I has an outlay of Rs. 4,500 crore, under which Letters of Award have been issued for setting up of 8,737 MW of fully integrated solar PV module manufacturing units. For Tranche-II with an outlay of Rs. 19,500 crore, Letters of Award have been issued for setting up of 39,600 MW of fully/ partially integrated solar PV module manufacturing units.

(ii) Domestic Content Requirement (DCR): Under some of the current schemes of the MNRE, namely CPSU Scheme Phase-II, PM-KUSUM Components B & C, and PM Surya Ghar: Muft Bijli Yojana, wherein government subsidy is given, it has been mandated to source solar PV cells and modules from domestic sources.

(iii) Preference to 'Make in India' in Public Procurement: In accordance with Department for Promotion of Industry and Internal Trade (DPIIT) 'Public Procurement (Preference to Make in India), Order', MNRE had notified Purchase Preference (linked with local content) for RE sector which, inter-alia, identified list of all goods and services or works in respect of which there is sufficient local capacity and local competition is available and mandated that only "Class-I local supplier" shall be eligible to bid for the above goods/services/works with the mandate that minimum local content should be at least 50%.

(iv) Imposition of Basic Customs Duty on import of Solar PV Cells, Solar PV Modules and Solar Glass: The Government has imposed Basic Customs Duty (BCD) on import of Solar PV Cells, Solar PV Modules and Solar Glass.

(v) Discontinuation of Customs Duty Concessions: MNRE has discontinued issuance of Customs Duty Concession Certificates for import of material /equipment for initial setting up of solar PV power projects with effect from 02.02.2021.

**Annexure-II referred to in reply of part (c) of the Rajya Sabha Unstarred Question
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Government has taken several steps and initiatives to accelerate the installation of offshore wind energy 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.
- 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 2 years wind data. NIWE has also conducted Geophysical, Geotechnical study, Rapid Environmental Impact Assessment (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 (5 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.