GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 1667
ANSWERED ON 10.12.2025

DOMESTIC MANUFACTURING OF SOLAR MODULE

1667. SHRI KALI CHARAN SINGH

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

(a) whether India has achieved target of 50 GW domestic solar module manufacturing capacity as recently announced and if so, the details of operational, under-construction and PLI-supported capacities;

(b) the details of domestic manufacturing capacity across solar modules, solar cells, wafers and polysilicon along with the extent of import dependence for upstream components;

(c) the present status of the offshore wind projects announced in Tamil Nadu and Gujarat, including tendering milestones, seabed surveys, grid evacuation planning, availability of port infrastructure and timelines for commencement of construction;

(d) the steps taken by the Government to address supply-chain constraints affecting renewable energy deployment; and

(e) whether the Government has proposed or approved an integrated Green Hydrogen–Renewables Corridor and if so, the details of planned green hydrogen hubs, dedicated transmission corridors, storage systems and co-location of Renewable Energy generation with hydrogen production and port-based export facilities?

ANSWER
THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER

(SHRI SHRIPAD YESSO NAIK)

(a) The installed solar PV module manufacturing capacity in the country, as per the Approved List of Models and Manufacturers (ALMM), issued on 25.11.2025 is 121.7 GW, which includes 26.6 GW capacity under Production Linked Incentive (PLI) Scheme for High Efficiency Solar PV Modules.

(b) Presently, the installed solar PV module manufacturing capacity in the country, as per the Approved List of Models and Manufacturers (ALMM), issued on 25.11.2025 is 121.68 GW. The solar PV cell manufacturing capacity in the country as per the information provided by the Solar PV Manufacturing Associations, is around 27 GW. The installed Ingot and Wafer manufacturing capacity in the country is around 2 GW. At present there is no commercial production of Polysilicon in the country. The country's solar PV module manufacturing capacity is sufficient to cater to domestic demand. However, for upstream stages like solar cells, wafers and polysilicon, domestic manufacturing capacity is not sufficient to meet domestic demand which necessitates imports. As per the website pertaining to export-import data bank of Department of Commerce, the values of solar PV cells, wafers, and polysilicon, imported in the country during financial year 2024-25, are around 1641 million US Dollar, 156 million US Dollar, and 0.03 million US Dollar respectively.

(c) 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 Rs. 7,453 crore, including an outlay of Rs. 6,853 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 Rs. 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 by the Ministry of New & Renewable Energy (MNRE) on 11th September 2024. Solar Energy Corporation of India Limited (SECI) has issued tender for 500 MW offshore wind energy project off Gujarat coast on 13.09.2024 under VGF scheme. However, the tender was closed without any response from developers.

Further, National Institute of Wind Energy (NIWE) has installed floating Light Detection and Ranging (LiDAR) buoy for the wind resource assessment off the coast of Tamil Nadu. NIWE also carried out Geophysical study for Tamil Nadu site.
Central Transmission Utility (CTU) has completed the planning for initial 10 GW offshore transmission capacity (05 GW each off Gujarat and Tamil Nadu coast).

(d) The Ministry of New and Renewable Energy (MNRE), Government of India, has been consistently bringing out policies to promote indigenous manufacturing of renewable energy equipment. Various initiatives taken, inter-alia, include those mentioned at **Annexure-I.**

(e) The Government of India is implementing the National Green Hydrogen Mission (NGHM), with an objective to make India a global hub of production, usage and export of green hydrogen and its derivatives.

The Ministry of New and Renewable Energy (MNRE) has recognised Deendayal Port (Kandla, Gujarat), V. O. Chidambaranar Port (Tuticorin, Tamil Nadu) and Paradip Port (Odisha) as green hydrogen hubs under the National Green Hydrogen Mission (NGHM).

Government of Andhra Pradesh has issued an order for establishing the State as India's green hydrogen hub and outlining a roadmap to transform Andhra Pradesh into a Green Hydrogen Valley by 2030.

MNRE has also endorsed the proposal by NTPC for setting up of the Green Hydrogen Hub at Pudimadaka, Andhra Pradesh.

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Annexure-I

Annexure referred to in reply of part (d) of the Lok Sabha Unstarred Question No. 1667 for 10.12.2025 regarding 'Domestic Manufacturing of Solar Module'

Initiatives taken to promote indigenous manufacturing of renewable energy equipment, 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. Under the Scheme, Letters of Award have been issued for setting up of 48,337 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) Imposition of Basic Customs Duty on import of solar PV cells, modules, Solar Inverters and Solar Glass: The Government has imposed Basic Customs Duty (BCD) on import of solar PV cells, solar PV modules, solar inverters, and solar glass.

(iv) Exemption of Custom Duty on capital goods for manufacture of Solar Cells and Modules: The Government has exempted Basic Customs Duty on import of goods specified in List 18 of Notification No. 45/2025-Customs dated 24th October 2025, for the manufacturer of solar PV cells and modules.

(v) Domestic Manufacturing in Wind Sector: Ministry has put in place a procedure to enlist type and quality certified wind turbines under 'Approved List of Models & Manufacturers (Wind) (i.e. ALMM (Wind)). It mandates Hub and Nacelle assembly / manufacturing facility shall be in India. Further, an amendment to ALMM (Wind) issued mandating sourcing of Major Wind Turbine Components like blade, tower, Gearbox, Generator and Special Bearings (Yaw, Pitch and Main Bearing) only from manufacturing facilities enlisted in Approved List of Models & Manufacturers (Wind Turbine Components) after inspection. Presently, 15 Manufacturers with 34 models with capacity ranging from 225 kW – 5.3 MW are available in the country for installation. Around 70-80% indigenization has been achieved with strong domestic manufacturing in the wind sector. The current annual production capacity of wind turbines in the country is around 20,000 MW.

(vi) Renewable Energy Research and Technology Development Programme (RE-RTD): The Ministry is also implementing a "Renewable Energy Research and Technology Development Programme (RE-RTD)" through various research institutions and industry to develop indigenous technologies and manufacturing for widespread applications of new and renewable energy including solar modules, wind turbines battery technologies and smart grids in efficient and cost-effective manner in the country.