

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO. 2693
ANSWERED ON 11.08.2026

RENEWABLE ENERGY CAPACITY INSTALLED IN THE COUNTRY

2693. SHRI R. DHARMAR

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

- (a) the total renewable energy capacity installed in the country during the last three years, source-wise, i.e. solar, wind, bioenergy and small hydro;
- (b) the details of funds allocated, released and utilized under major renewable energy schemes during the said period in Tamil Nadu;
- (c) the progress made in achieving the national target of 500 GW of non-fossil fuel-based electricity capacity by 2030;
- (d) the steps taken to promote rooftop solar installations under PM Surya Ghar: Muft Bijli Yojana; and
- (e) the measures taken to strengthen energy storage, grid integration and domestic manufacturing of solar modules and batteries?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER

(SHRI SHRIPAD YESSO NAIK)

- (a) A total of 102.67 GW renewable energy capacity has been installed in the country during the last three years. Source-wise details are given below:

Source	Capacity installed during the last three years (GW)
Solar power	83.48
Wind power	13.46
Bio power	0.94
Small Hydro power	0.23
Large Hydro power	4.56
Total	102.67

- (b) No State-wise allocation of funds is made by the Ministry. The funds are released in accordance with the respective scheme guidelines. Details of funds released for setting up renewable energy projects in the State of Tamil Nadu during the last three years under the major ongoing renewable energy schemes/programmes being implemented by the Ministry are given below:

Scheme/Programme	Funds released (in Rs. Crore)
Rooftop Solar	469.95
PM-KUSUM	19.53
CPSU	82.73
Biogas	7.68
Biomass	1.30
Waste to Energy	21.62
Green Energy Corridor	10.47

- (c) As on 30.6.2026, a total of 297.36 GW non-fossil fuel-based electricity capacity has been installed in the country.

- (d) The Government has taken various steps to promote rooftop solar installations under PM Surya Ghar: Muft Bijli Yojana as given at **Annexure-I**.

- (e) The Government has taken various steps to strengthen energy storage, grid integration and domestic manufacturing of solar modules and batteries. These, inter alia, include as given at **Annexure-II**.

Annexure-I referred to in reply of part (d) of the Rajya Sabha Unstarred Question No. 2693 to be answered on 11.08.2026

Steps taken to promote rooftop solar installations under PM Surya Ghar: Muft Bijli Yojana

- Online process from application to disbursal of subsidy directly into the bank account of the residential consumer through the National Portal. With all credentials are entered correctly on the National portal, the average time taken in releasing the CFA is around 15 days after redemption request made by the consumer.
- Availability of collateral-free loan from nationalized banks at a concessional interest rate of repo-rate plus 50 bps, i.e., 5.75% per annum for the present, with a tenure of 10 years.
- Simplified the regulatory approval process by waiving technical feasibility requirement and introducing auto load enhancement upto 10 kW.
- Net metering agreement has been made part of application in the National Portal eliminating the need for separate agreement.
- Simplified process for registration of vendors to ensure sufficient and qualified vendors are available.
- Capacity building and training programmes being conducted for creating skilled manpower.
- 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.
- Regular monitoring of the progress of the scheme at different levels including with States/DISCOMs.
- Conducting regional review meetings from time to time.
- Established grievance redressal mechanism for timely resolution of grievances. A Call Centre with telephone number 15555 is operational in 12 languages.

Annexure-II referred to in reply of part (e) of the Rajya Sabha Unstarred Question No. 2693 to be answered on 11.08.2026

Steps taken to strengthen energy storage, grid integration and domestic manufacturing of batteries

- The Electricity Rules were amended in December 2022 to explicitly recognise Energy Storage Systems (ESS) as an integral part of the power system, enabling their participation across generation, transmission and distribution functions.
- In October 2022, ESS were included in the Harmonised Master List of Infrastructure of the Ministry of Finance, facilitating access to long-tenure and lower-cost financing.
- In June 2023, the Government issued Guidelines for Preparation of Resource Adequacy Plans by State utilities, under which energy storage has been incorporated as a key planning resource for meeting peak demand and ensuring system reliability.
- A National Framework for Promotion of Energy Storage Systems was issued in September 2023, providing a comprehensive roadmap for deployment, market integration and regulatory facilitation of storage technologies.
- Waiver of Inter-State Transmission System (ISTS) charges has been provided for co-located BESS projects commissioned and PSPs awarded up to June 2028, to improve project viability. For other BESS projects, 100% waiver of ISTS charges was provided for the BESS commissioned till June, 2025, with 25% annual reduction thereafter.
- In January 2022, CERC allowed storage-based resources to provide ancillary services, including secondary and tertiary reserves, enabling ESS to support real-time grid balancing alongside conventional generators.
- Tariff-Based Competitive Bidding (TBCB) Guidelines for procurement of BESS and Hydro PSP by distribution licensees were notified in March 2022, and February, 2025, respectively, creating a transparent mechanism for large-scale storage procurement.
- Under the Electricity (Rights of Consumers) Rules, 2020, amended in December 2022, consumers using diesel generator sets have been mandated to shift to cleaner backup solutions, including energy storage, within timelines specified by State Commissions.
- Electricity supplied from BESS has been allowed to participate in the High-Price Day-Ahead Market, launched in March 2023, enabling storage to respond to peak price signals similar to gas-based generation.
- The Government is implementing two Viability Gap Funding (VGF) schemes to support development of approximately 43.8 GWh of Battery Energy Storage Systems, to accelerate early-stage deployment.

- The Ministry of Heavy Industries is implementing a Production Linked Incentive (PLI) Scheme with an outlay of ₹18,100 crore for establishing 50 GWh of Advanced Chemistry Cell manufacturing capacity, of which 10 GWh is earmarked for grid-scale storage.
- For pumped storage projects, a grant for enabling infrastructure is provided at the rate of ₹1 crore per MW for the first 200 MW and 70.75 crore per MW thereafter.
- CERC has allowed separate grid connectivity during non-solar hours, enabling additional renewable capacity at existing substations and facilitating storage-based shifting of power to evening and night hours.
- Statutory concurrence of the Central Electricity Authority has been dispensed with for closed-loop, off-stream pumped storage projects to expedite project development.
- Through amendment of the Electricity Rules in September 2025, energy storage systems have been permitted to be developed, owned, leased or operated by consumers, expanding the range of ownership and business models.
- In February 2025, CEA issued an advisory on co-location of ESS with solar power projects, recommending storage capacity of at least 10% of installed solar capacity for a minimum duration of two hours, to improve dispatchability of solar power.

To strengthen domestic manufacturing of solar modules, the Ministry of New and Renewable Energy (MNRE) has been consistently bringing out policies. Various initiatives taken, inter-alia, include the following:

(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 and modules: The Government has imposed Basic Customs Duty (BCD) on import of solar PV cells and solar PV modules.

(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.