GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
**LOK SABHA**
**UNSTARRED QUESTION NO. 523**
ANSWERED ON 22.07.2026

## NON-FOSSIL FUEL BASED ENERGY CAPACITY

523. SMT. MALVIKA DEVI

Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:
(a) the progress made towards achieving the target of 500 GW of non-fossil fuel-based energy capacity by the year 2030 along with the details of capacity added during the last financial year;

(b) the details of solar and wind energy projects sanctioned under the Pradhan Mantri Surya Ghar Muft Bijli Yojana (PM-SGMBY), State-wise; and

(c) the details of challenges being faced in grid integration of renewable energy and the measures taken by the Government to address them?

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

**(SHRI SHRIPAD YESSO NAIK)**

(a) As on 30.06.2026, a total of 297.36 GW non-fossil fuel sources-based electricity capacity has been installed. During the financial year 2025-26, total 55.29 GW non-fossil capacity has been added.

(b) PM Surya Ghar: Muft Bijli Yojana (PM-SGMBY) is being implemented with the target of installation of rooftop solar systems in one crore households in the country by 2026-27. State-wise details of the applications for installation of rooftop solar systems submitted on the national portal of the scheme and the installation done as on 16.07.2026 are given in **Annexure-I**.

(c) Renewable energy sources particularly wind and solar are variable and intermittent in nature, and integrating a substantial share of such generation into the Grid presents challenges related to grid security, stability, and safety. Government has taken several steps to ensure grid stability and integration of renewable energy (RE) which, inter alia, include as given at **Annexure-II**:

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**Annexure-I**

**Annexure-I referred to in reply of part (b) of the Lok Sabha Unstarred Question No. 523 to be answered on 22.07.2026**

**State-wise number of applications and installations under PM-SGMBY as on 16.07.2026**

| Sl.No | State/UT | No. of applications | No. of installations |
|---|---|---|---|
| 1. | Andaman and Nicobar Islands | 681 | 378 |
| 2. | Andhra Pradesh | 913019 | 231280 |
| 3. | Arunachal Pradesh | 83 | 1 |
| 4. | Assam | 465130 | 154710 |
| 5. | Bihar | 82545 | 23498 |
| 6. | Chandigarh | 1701 | 1351 |
| 7. | Chhattisgarh | 188688 | 78821 |
| 8. | Goa | 4660 | 3290 |
| 9. | Gujarat | 1160527 | 751644 |
| 10. | Haryana | 191602 | 110169 |
| 11. | Himachal Pradesh | 17305 | 11499 |
| 12. | Jammu and Kashmir | 91593 | 38262 |
| 13. | Jharkhand | 11251 | 3134 |
| 14. | Karnataka | 60773 | 22383 |
| 15. | Kerala | 410578 | 296795 |
| 16. | Ladakh | 2592 | 1989 |
| 17. | Lakshadweep | 1367 | 1174 |
| 18. | Madhya Pradesh | 219104 | 151506 |
| 19. | Maharashtra | 1426117 | 675518 |
| 20. | Manipur | 3161 | 1483 |
| 21. | Meghalaya | 1303 | 58 |
| 22. | Mizoram | 1515 | 1324 |
| 23. | Nagaland | 888 | 425 |
| 24. | NCT of Delhi | 47970 | 10145 |
| 25. | Odisha | 289912 | 132892 |
| 26. | Puducherry | 6262 | 4570 |
| 27. | Punjab | 27011 | 16833 |
| 28. | Rajasthan | 446248 | 262336 |
| 29. | Sikkim | 176 | 57 |
| 30. | Tamil Nadu | 102574 | 83377 |
| 31. | Telangana | 85769 | 52992 |
| 32. | Dadra & Nagar Haveli and Daman & Diu | 3263 | 1073 |
| 33. | Tripura | 8331 | 4318 |
| 34. | Uttarakhand | 140406 | 94230 |
| 35. | Uttar Pradesh | 1142459 | 677363 |
| 36. | West Bengal | 44224 | 2737 |
| | **Total** | **76,00,788** | **39,03,615** |

**Annexure-II**

**Annexure-II referred to in reply of part (c) of the Lok Sabha Unstarred Question No. 523 to be answered on 22.07.2026**

## Measures being taken to address grid stability and grid integration challenges

i. Central Electricity Authority (CEA) published a plan for Transmission System for Integration of over 500 GW RE Capacity by 2030 covering all RE rich States.

ii. Inter and intra-State transmission network is being expanded to keep pace with RE capacity addition. Strong inter connection of transmission networks to ensure better reliability.

iii. Encouraging setting up of RE projects with storage facilities for optimal utilization of transmission facilities.

iv. Round-the-clock Renewable Energy (RTC-RE) and Firm and Dispatchable Renewable Energy (FDRE) tenders conducted by Renewable Energy Implementation Agencies (REIAs) will provide stable and firm power.

v. CEA (Technical Standards for Connectivity to the Grid) Regulations lay down the minimum technical requirements for the RE generating plants to ensure the safe, secure and reliable operation of the grid. The compliance to the said regulations by RE plants are verified jointly by Central Transmission Utility (CTUIL) and Grid India / RLDCs before granting connectivity/interconnection to the national grid.

vi. Indian Electricity Grid Code mandates that RE plants participate in the primary and secondary frequency control in case of contingencies. Hybrid RE power plants, Energy Storage Systems such as BESS (Battery Energy Storage System) and PSP (Pump Storage Project) are being promoted for mitigating variability in RE generation and provide adequate frequency support to the grid.

vii. Government has set up thirteen Renewable Energy Management Centres (REMCs) for better forecasting and real time monitoring of RE generation.

viii. Load dispatch centres ensure that electricity demand is fully met using dispatchable sources such as hydro and thermal power when the wind does not blow and sun does not shine.

ix. Installation of Static Synchronous Compensators (STATCOMs) to improve the grid reliability and voltage stability limit. A STATCOM acts as a voltage controller for the electricity grid, quickly adding or removing extra power to keep the system running smoothly.

x. Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations lay down the minimum technical requirements for RE generating plants to ensure the safe, secure and reliable operation of the grid.