GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO. 1259
ANSWERED ON 10.02.2026

RENEWABLE ENERGY INTEGRATION

1259. SHRI HARSH VARDHAN SHRINGLA

Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:
(a) the steps taken to integrate renewable energy into the grid;
(b) the progress in solar and wind capacity addition;
(c) the measures to ensure grid stability and storage; and
(d) the contribution to climate commitments?

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

(a) Following steps have been taken by the Government to integrate Renewable Energy (RE) into the grid:

(i) Central Electricity Authority (CEA) had published a plan for Transmission System for integration of over 500 GW RE Capacity by 2030.
(ii) Ministry of New and Renewable Energy (MNRE) is implementing Green Energy Corridor Scheme (GEC) in 10 States viz. Andhra Pradesh, Tamil Nadu, Karnataka, Telangana, Maharashtra, Kerala, Gujarat, Rajasthan, Uttar Pradesh and Himachal Pradesh for evacuation of around 44 GW of Renewable Energy (RE).
(iii) MNRE has declared RE potential zones for evacuation of 333.6 GW beyond 500 GW in five States viz., Andhra Pradesh, Gujarat, Karnataka, Madhya Pradesh and Rajasthan.
(iv) Waiver of Inter State Transmission System Charges for Battery Energy Storage Systems
(v) Guidelines for Procurement and Utilization of Battery Energy Storage Systems.
(vi) Guidelines for the development of Pumped Storage Projects.
(vii) Budgetary support for enabling infrastructure for Pumped Storage Projects.
(viii) CERC (Ancillary) Regulations, 2022 for Ancillary services from ESS (Energy Storage System).

(b) Solar energy installed capacity is 135.81 GW and Wind energy installed capacity is 54.51 GW as on December, 2025.

(c) Following measures have been taken by the Government to ensure grid stability and storage:

(i) Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations lay down the minimum technical requirements for the RE generating plants to ensure safe, secure and reliable operation of the grid. The compliances to the said regulations by RE plants are verified jointly by Central Transmission Utility (CTUIL) and Grid-India/Regional Load Despatch Centres (RLDCs) before granting connectivity/interconnection to the national grid.
(ii) Indian Electricity Grid Code mandates that RE plants participate in the primary and secondary frequency control in case of contingencies.
(iii) The grid stability in case of voltage fluctuations is dependent on the adequate reactive power support from generators. Power equipments like Static Synchronous Compensator (STATCOM) and Synchronous Condensers provide dynamically varying reactance support to the grid.

(iv) Establishment of Renewable Energy Management Centres (REMCs) for real-time forecasting, scheduling, and monitoring of RE generation across 12 RE-rich regions.

(d) As per the updated Nationally Determined Contribution (NDC) submitted by India to the United Nations Framework Convention on Climate Change (UNFCCC), non-fossil installation target is as follows:
'*to achieve about 50 percent cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030'*.
MNRE is the nodal Ministry for all matters relating to New and Renewable energy.

Accordingly, the target of achieving 50 percent cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030, has been achieved well in advance in 2025 itself, 5 years ahead of the committed timeline.

As of 31.12.2025, against the total installed power generation capacity of 513.73 GW in the country, 258.01 GW comprises non-fossil fuel-based capacity, accounting for 51.93% of the total installed capacity.

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