

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 2850
ANSWERED ON 06.08.2025

SHARE OF RENEWABLE ENERGY IN ENERGY MIX

2850. MS. S JOTHIMANI

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

- (a) the percentage increase in renewable energy generation, excluding large hydro renewable projects during the first half of the year 2025 and the current share of non-hydro renewables in the national energy mix;
- (b) the details of Ministry's roadmap for scaling up Battery Energy Storage Systems (BESS) to support grid stability and enable integration of variable renewables
- (c) the projected contribution of energy storage infrastructure in achieving the national target of 500GW of non-fossil fuel-based capacity by the year 2030 especially in high potential States like Tamil Nadu; and
- (d) whether the Government is upgrading grid infrastructure and streamlining Power Purchase Agreements (PPAs) and if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER

(SHRI SHRIPAD YESSO NAIK)

(a) As per the Central Electricity Authority (CEA) electricity generation reports, during the first half of the year 2025 (i.e. January – June 2025), the total renewable energy generation has increased 23.9% with reference to the same period of last year. Further, the share of renewable energy (excluding hydro power) in the national energy mix during the month of June was 17.56%.

(b) & (c) Government has taken several measures for development and deployment of Battery Energy Storage Systems (BESS) in the country to support grid stability and facilitate integration of variable renewable energy as mentioned below:

- National Framework to promote Energy Storage Systems (ESS) in the country was issued by Ministry of Power in August, 2023.
- Ministry of Power vide order dated 10.06.2025 has granted 100% Inter State Transmission System (ISTS) charges waiver for co-located Battery Energy Storage Systems (BESS) projects, commissioned on or before 30th June 2028.
- Central Electricity Authority issued an advisory on 18.02.2025 recommending the co-location of ESS with solar power projects to enhance grid stability and cost efficiency.
- Ministry of Power brought out Viability Gap Funding (VGF) for development of approx. 43 GWh of Battery Energy Storage Systems. Tamil Nadu has been allocated 2.5 GWh of BESS capacity under the state component of the VGF scheme.
- Ministry of Heavy Industry brought out a Production Linked Incentive (PLI) scheme, 'National Programme on Advanced Chemistry Cell (ACC) Battery Storage' for implementation of gigascale ACC manufacturing facilities of 50 GWh in India.

The contribution of energy storage infrastructure in achieving the national target of 500 GW of non-fossil fuel-based capacity by 2030 requirements as estimated by CEA are as under:

Technology	Capacity
BESS	41.65 GW / 208.25 GWh
PSP	18.98 GW / 128.15 GWh
Total	60.63 GW / 336.4 GWh

Further, a total of nine Battery Energy Storage System (BESS) projects (≥ 1 MWh capacity) with a cumulative capacity of 204.5 MW / 505.6 MWh have been commissioned till date.

(d) The Ministry has been implementing Green Energy Corridor (GEC) Scheme to strengthen Intra State Transmission Systems to integrate renewable energy into the national grid in 10 renewable energy rich States, namely, Rajasthan, Andhra Pradesh, Gujarat, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Uttar Pradesh and Tamil Nadu for evacuation of renewable energy.

Further, Government has taken various steps to expedite the Power Sale Agreements (PSAs) / Power Purchase Agreements (PPAs), which include impressing upon States for compliance of Renewable Consumption Obligation (RCO) under Energy Conservation Act, impressing upon Renewable Energy Implementing Agencies (REIAs) to consider aggregating demand from DISCOMs/ other consumers and design products accordingly before inviting tenders, organizing regional workshops with major renewable energy-procuring States to address concerns and accelerate PSA/PPA signing, and amendment in Standard Bidding Guidelines for solar, wind, hybrid and FDRE (Firm & Dispatchable Renewable Energy) to provide for cancellation of Letter of Award (LoA) beyond 12 months from the LoA date.
