

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO. 1907
ANSWERED ON 04.08.2026

SHARE OF RENEWABLES IN THE COUNTRY'S ENERGY MIX

1907. SMT. RANJEET RANJAN

SHRI NEERAJ DANGI

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

- (a) the year-wise and source-wise share of renewable energy in the country's total energy supply mix from 2021-22 till date;
- (b) whether renewable energy's share in the country's total primary energy supply remains low despite growth in installed capacity, if so, the reasons thereof;
- (c) what measures Government is taking to bridge this gap; and
- (d) the year-wise and source-wise share of renewable energy in the country's electricity generation from 2021-22 till date, along with the quantum of electricity generated from each renewable source?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER

(SHRI SHRIPAD YESSO NAIK)

(a) As per the information received from Central Electricity Authority (CEA), the year-wise and source-wise share of renewable energy in the country's total electricity generation from 2021-22 to 2026-27 (upto June, 2026) is given at **Annexure-I**.

(b) & (c) The renewable energy share in India's installed electricity generation capacity is 52.6% as of June 2026 and its share in the country's total electricity generation is about 26%. The renewable energy sources, particularly solar and wind, have lower capacity utilization factors (CUFs) than conventional thermal power plants, because they are intermittent and weather-dependent. To enhance the renewable energy generation, Government has taken several steps and initiatives which, inter alia, include as given at **Annexure-II**.

(d) As per the information received from CEA, the year-wise and source-wise share of renewable energy in the country's electricity generation from 2021-22 to 2026-27 (upto June, 2026), along with the quantum of electricity generated from each renewable source is given at **Annexure-I**.

**Annexure-I referred to in reply of parts (a) & (d) of the Rajya Sabha Unstarred
Question No. 1907 to be answered on 04.08.2026**

**Year-wise and source-wise share of renewable energy in the country's total electricity
Generation from 2021-22 to 2026-27 (upto June, 2026)**

(In Billion Units)

Year	*Total Electricity Generation	Renewable Energy Generation							
		Wind	Solar	Biomass	Bagasse	Small Hydro	Others	Large Hydro	Total
2021-22	1484.36	68.64 (4.62%)	73.48 (4.95%)	3.48 (0.23%)	12.57 (0.85%)	10.46 (0.70%)	2.27 (0.15%)	151.63 (10.21%)	322.53 (21.73%)
2022-23	1617.58	71.81 (4.44%)	102.01 (6.31%)	3.16 (0.20%)	12.86 (0.80%)	11.17 (0.69%)	2.53 (0.16%)	162.10 (10.02%)	365.65 (22.60%)
2023-24	1734.12	83.39 (4.81%)	115.97 (6.69%)	3.42 (0.20%)	10.82 (0.62%)	9.48 (0.55%)	2.75 (0.16%)	134.05 (7.73%)	359.88 (20.75%)
2024-25	1824.12	83.35 (4.57%)	144.15 (7.90%)	3.74 (0.20%)	9.33 (0.51%)	11.57 (0.63%)	2.87 (0.16%)	148.63 (8.15%)	403.64 (22.13%)
2025-26	1840.11	106.70 (5.80%)	174.76 (9.50%)	4.14 (0.22%)	9.94 (0.54%)	12.01 (0.65%)	3.03 (0.16%)	167.20 (9.09%)	477.78 (25.96%)
2026-27 (upto June, 2026)	521.82	33.56 (6.43%)	62.79 (12.03%)	1.10 (0.21%)	0.83 (0.16%)	1.85 (0.35%)	0.80 (0.15%)	36.88 (7.07%)	137.81 (26.41%)

*Excluding Import from Bhutan

Source: Central Electricity Authority

Annexure-II referred to in reply of part (b)&(c) of the Rajya Sabha Unstarred Question No. 1907 to be answered on 04.08.2026

The Government of India has taken several steps and initiatives to enhance renewable energy generation in the country. These include, inter-alia, the following:

- Standard Bidding Guidelines for tariff based competitive bidding process for procurement of Power from Grid Connected Solar, Wind, Wind-Solar Hybrid and Firm & Dispatchable Renewable Energy (FDRE) projects have been issued.
- Pilot scheme for Contract for Difference (CfD) for renewable energy projects of 500 MW capacity issued. The CfD mechanism, a globally proven framework, will provide an alternative instrument (in addition to long term Power Purchase Agreements) for sale of renewable energy, through power exchanges.
- To boost RE consumption, Renewable Purchase Obligation (RPO) followed by Renewable Consumption Obligation (RCO) trajectory has been notified till 2029-30. The RCO which is applicable to all designated consumers under the Energy Conservation Act 2001 will attract penalties on non-compliance. RCO also includes specified quantum of consumption from Decentralized Renewable Energy sources.
- Foreign Direct Investment (FDI) has been permitted up to 100 percent under the automatic route.
- Schemes such as Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM), PM Surya Ghar Muft Bijli Yojana, National Programme on High Efficiency Solar PV Modules, New Solar Power Scheme (for Tribal and PVTG Habitations/Villages) under Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (PM JANMAN) and Dharti Aabha Janjatiya Gram Utkarsh Abhiyan (DA JGUA), National Green Hydrogen Mission, Viability Gap Funding (VGF) Scheme for Offshore Wind Energy Projects, Small hydro power development scheme have been launched.
- Scheme for setting up of Solar Parks and Ultra Mega Solar Power projects is being implemented to provide land and transmission to RE developers for installation of RE projects at large scale.
- Waiver on Inter State Transmission System (ISTS) charges for renewable energy projects including green hydrogen projects, with certain timelines and conditions.
- Laying of new transmission lines and creating new sub-station capacity has been funded under the Green Energy Corridor Scheme for evacuation of renewable power.
- Quality Control Orders for Solar Photovoltaic products (i.e., Solar PV Modules, Solar PV Inverters & Storage Battery) and Solar Water Heating systems notified.
- Issued National Framework for promoting & developing Energy Storage Systems.
- Issued Guidelines for Resource Adequacy Planning Framework for India.

- Electricity (Rights of Consumers) Rules, 2020 has been issued for net-metering up to five hundred Kilowatt or up to the electrical sanctioned load, whichever is lower.
- “National Repowering and Life Extension Policy for Wind Power Projects, 2023” has been issued.
- The Offshore Wind Energy Lease Rules, 2023 have been notified vide Ministry of External Affairs notification dated 19th December 2023, to regulate the grant of lease of offshore areas for development of offshore wind energy projects.
- The Revised Guidelines for installation of prototype wind turbine models issued on 12th June 2025.
- Procedure for inclusion/updating Wind Turbine Model in the Revised List of Models and Manufacturers of Wind Turbines (RLMM) issued on 31st July 2025. The amendment renames RLMM as Approved List of Models and Manufacturers [ALMM (Wind)] and mandates usage of listed components such as Blade, Tower, Generator, Gearbox and Special Bearings (Main, Pitch and Yaw Bearing) along with mandatory relocation of data centres within India and prohibition of real-time data transfer outside India.
- The Standard Operating Procedure (SOP) for ALMM-Wind and ALMM – Wind Turbine Components (ALMM-WTC) issued on 29th October 2025, detailing the end-to-end process for application, verification, factory inspection, component evaluation and model enlistment.
- Standard & Labelling (S&L) programs for Solar Photovoltaic modules and Grid-connected Solar Inverters have been launched.
- To augment transmission infrastructure needed for steep RE trajectory, transmission plan has been prepared till 2030.
- “The Electricity (Late Payment Surcharge and related matters) Rules (LPS rules) have been notified.
- Electricity (Promoting Renewable Energy Through Green Energy Open Access) Rules, 2022, notified on 06th June 2022 with objective of ensuring access to affordable, reliable, and sustainable green energy for all. Green Energy Open Access is allowed to any consumer with contract demand of 100 kW or above through single or multiple single connection aggregating Hundred kW or more located in same electricity division of a distribution licensee.
- Green Term Ahead Market (GTAM) has been launched to facilitate sale of Renewable Power through exchanges.
- Government has issued orders that power shall be dispatched against Letter of Credit (LC) or advance payment to ensure timely payment by distribution licensees to RE generators.
