GOVERNMENT OF INDIA
MINISTRY OF POWER

RAJYA SABHA
UNSTARRED QUESTION NO.309
ANSWERED ON 02.02.2026

500 GW INSTALLED CAPACITY MILESTONE AND NON-FOSSIL ENERGY SHARE

309 DR. BHAGWAT KARAD:
SHRI DEEPAK PRAKASH:
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Will the Minister of **POWER** be pleased to state:

(a) details of India achieving the milestone of 500 GW installed power capacity in September, 2025;

(b) the present share of non fossil fuel sources in total installed capacity and whether the fifty percent non fossil target announced at COP26 has been achieved ahead of schedule;

(c) the renewable energy capacity additions during 2025 including solar and wind milestones crossed;

(d) the roadmap for achieving 500 GW non fossil capacity by 2030 and the strategy for attaining Net Zero emissions by 2070; and

(e) the status potential and Government initiatives for promoting projects in the Marathwada region of Maharashtra?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) & (b) : The details of installed generation capacity in September 2025, at the time of achievement of 500 GW, and the installed generation capacity as on 31.12.2025, indicating the percentage share of fossil and non fossil fuel sources, are given at **Annexure-I**. As on 31.12.2025 the total installed generation capacity is 5,13,730 MW, comprising of 2,46,942 MW (48.07 %) of fossil-fuel sources and 2,66,788 MW (51.93 %) of non-fossil fuel sources.

India has achieved a landmark in its energy transition journey by reaching 50% of its installed electricity capacity from non-fossil fuel sources in June, 2025 – more than five years ahead of the target set under its Nationally Determined Contributions (NDCs) to the Paris Agreement. This significant milestone underscores the country's steadfast commitment to climate action and sustainable development.

(c) : During 2025, a total of 48,436 MW Renewable energy capacity has been added. This includes 37,945 MW of Solar power and 6,347 MW of Wind power. The details of the renewable energy capacity additions during 2025 are given at **Annexure-II**.

(d) : The details of initiatives undertaken by the Government of India to achieve 500 GW non fossil capacity by 2030 and the strategy for attaining Net Zero emissions by 2070 are as follows:

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

(i) 100% Inter State Transmission System (ISTS) charges have been waived for inter-state sale of solar and wind power for projects to be commissioned by 30th June 2025 (with waiver tapering off 25% annually till June 2028), for co-located BESS projects commissioned by June 2028, for Hydro PSP projects where construction work awarded by June 2028, for Green Hydrogen Projects commissioned till December 2030 and for offshore wind projects commissioned till December 2032.

(ii) Standard Bidding Guidelines for tariff based competitive bidding process for procurement of Power from Grid Connected Solar, Wind, Wind-Solar Hybrid and Firm & Dispatchable RE (FDRE) projects have been issued.

(iii) Ministry of New & Renewable Energy (MNRE) has issued Bidding Trajectory for issuance of RE power procurement bids of 50 GW/annum by Renewable Energy Implementing Agencies (REIAs) from FY 2023-24 to FY 2027-28.

(iv) Foreign Direct Investment (FDI) has been permitted up to 100 percent under the automatic route.

(v) Laying of new transmission lines and creating new sub-station capacity has been supported under the Green Energy Corridor Scheme for evacuation of renewable power

(vi) To augment transmission infrastructure needed for steep RE trajectory, transmission plan has been prepared till 2032.

(vii) 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

(viii) 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 have been launched

(ix) Government of India, in September 2023, approved a Viability Gap Funding (VGF) scheme for development of Battery Energy Storage Systems (BESS). BESS capacity of 13.22 GWh is under implementation with a budgetary allocation of Rs 3,760 Cr. under this scheme. Considering the increasing demand of BESS, Ministry of Power, in June 2025, has approved another VGF scheme for development of 30 GWh BESS capacity with a financial support of Rs 5,400 Cr from Power System Development Fund (PSDF).

(x) 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.

(xi) "Strategy for Establishments of Offshore Wind Energy Projects" has been issued.

(xii) To achieve the objective of increased domestic production of Solar PV Modules, the Govt. of India is implementing the Production Linked Incentive (PLI) scheme for High Efficiency Solar PV Modules.

(xiii) 12,973.5 MW of Hydro Electric Projects are under construction. Further, 4,274 MW of Hydro Electric Projects are under various stage of planning and targeted to be completed by 2031-32

(xiv) Ministry of Power has initiated the steps to promote Pumped Storage Projects (PSPs) to support renewable energy integration and grid stability. At present, 10 Pumped Storage Projects totalling 11,870 MW are under construction in the country.

2. Further, Nuclear power has huge potential to ensure long term energy security and is vital for India's clean energy transition towards Net Zero by 2070. It is a clean and environment friendly source of base load power. The lifecycle emissions of nuclear power are comparable to those of renewables like hydro and wind. The Government of India has set an ambitious target of 100 GW nuclear power capacity by 2047. Following steps have been taken to diversify India's energy portfolio through Nuclear Energy:

i. A dedicated Nuclear Energy Mission with an allocation of ₹20,000 crore has been launched to develop at least five indigenously designed Small Modular Reactors (SMRs) by 2033 and promote advanced nuclear technologies.

ii. Sustainable Harnessing and Advancement of Nuclear energy for Transforming India (SHANTI) Act, 2025 has been enacted to pave a way to harness the potential of India's nuclear energy based on indigenous resources to the maximum extent through active involvement of both the public and private sectors.

iii. Bharat Small Reactors (BSRs) of 220 MW capacity based on India's proven Pressurized Heavy Water Reactor (PHWR) technology are being upgraded for deployment in industrial hubs to support decarbonisation. BARC is also developing Small Modular Reactors.

iv. India's fuel security is being enhanced through new uranium discoveries, including a significant discovery that would extend the life of the Jaduguda mine by over 50 years. Progress in the closed fuel cycle, such as milestones achieved in the Prototype Fast Breeder Reactor, will further support sustainable fuel supply.

v. To accelerate capacity addition, NPCIL and NTPC have formed the joint venture ASHVINI for developing nuclear power plants within the existing legal framework.

3. The National Green Hydrogen Mission would also contribute significantly to India's efforts for decarbonization and also create opportunities for employment and economic development. The Mission targets setting up at least 5 MMT per annum of green hydrogen capacity by 2030.

The impact of this achievement on India's long term energy transition roadmap is crucial towards the goal of combating climate change, keeping in view energy security, affordability and accessibility as critical inalienable priorities to ensure growth and development alongside Energy transition of the economy towards net-zero by 2070.

(e) : As informed by the State Government of Maharashtra, National Institute of Wind Energy (NIWE) has assessed that there is a potential of 1,895 MW wind power in various district of the Marathwada region at 120 meters AGL (Above Ground Level). Against this potential, 1,141 MW of Wind capacity has already been installed.

Similarly, as per the assessment, there is a potential of 8,462 MW of Solar power projects out of which 2,134 MW solar power capacity has already been installed in the Marathwada region.

Maharashtra Energy Development Agency (MEDA) has taken initiatives for development of new wind projects, repowering old sites and integrating storage and hybrid systems to promote Renewable Energy development in the State.

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ANNEXURE-I

ANNEXURE REFERRED IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 309 ANSWERED IN THE RAJYA SABHA ON 02.02.2026

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The details of country's of installed generation capacity, indicating the share of renewable and non-fossil fuel sources, percentage-wise, in September 2025 and December 2025

Installed Capacity (in MW) of the Country					
		as on 30.09.2025		as on 31.12.2025	
Category		Installed Capacity (MW)	% Share in Total	Installed Capacity (MW)	% Share in Total
Fossil Fuel	Coal	2,17,458	43.41%	2,19,610	42.75%
	Lignite	6,620	1.32%	6,620	1.29%
	Gas	20,132	4.02%	20,122	3.92%
	Diesel	589	0.12%	589	0.11%
	Total Fossil Fuel	**2,44,800**	**48.87%**	**2,46,942**	**48.07%**
Non-Fossil Fuel	RES (including Hydro)	2,47,310	49.37%	2,58,008	50.22%
	Hydro (including PSPs)	50,108	10.00%	50,915	9.91%
	Wind, Solar & Other RE	1,97,201	39.37%	2,07,093	40.31%
	Wind	53,124	10.61%	54,511	10.61%
	Solar	1,27,332	25.42%	1,35,810	26.44%
	BM Power/Cogen.	10,757	2.15%	10,757	2.09%
	Waste to Energy	854	0.17%	857	0.17%
	Small Hydro	5,134	1.02%	5,159	1.00%
	Nuclear	8,780	1.75%	8,780	1.71%
	Total Non-Fossil Fuel	**2,56,090**	**51.13%**	**2,66,788**	**51.93%**
	Total Installed Capacity	**5,00,889**	**100.0%**	**5,13,730**	**100.0%**

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ANNEXURE-II

ANNEXURE REFERRED IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 309 ANSWERED IN THE RAJYA SABHA ON 02.02.2026

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The details of the renewable energy capacity additions during 2025

All figures in MW

As on	Small Hydro Power	Wind Power	Bio-Power		Solar Power	Large Hydro	Total RES
			Bio Mass Power/Cogeneration	Waste to Energy			
2025 (Jan-Dec)	58.06	6,347.77	29.10	236.68	37,945.22	3,820.00	48,436.83

RES: Renewable Energy Sources

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