

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 887
ANSWERED ON 07/12/2023

CAPACITY OF RENEWABLE POWER GENERATION

887. SHRI GUMAN SINGH DAMOR

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

- (a) the total capacity of renewable power generation units established as on 31st March, 2023;
- (b) the quantum of renewable energy being generated through such units;
- (c) the quantum of electricity being generated in Madhya Pradesh along with the percentage of power generation through renewable energy thereon;
- (d) the sectors in which electricity is being generated through renewable energy along with the facilities being provided to those sectors to promote power generation through renewable energy;
- (e) whether global warming can be reduced through the use of renewable energy; and
- (f) if so, the estimated reduction in global warming brought during the last five years?

ANSWER

THE MINISTER OF NEW & RENEWABLE ENERGY AND POWER

(SHRI R.K. SINGH)

(a) & (b) So far, a total of 178.98 GW capacity from Renewable energy resources has been installed in the country as on 31.10.2023.

A total of 243.6 BU electricity has been generated in the Country as on 31.10.2023.

(c) As per details received from Central Electricity Authority (CEA), percentage share of electricity generated in the State of Madhya Pradesh is given at **Annexure**.

(d) Utility-scale renewable energy projects inject the generated electricity into the national grid and supplied to consumers in all sectors throughout the country. Further, rooftop solar projects enable renewable energy generation in residential, institutional, commercial and industrial sectors. Further, renewable energy is generated for water pumping and supply to the grid in the agriculture sector, under the PM KUSUM scheme.

Government of India has undertaken several measures following specific measures/steps to promote development of renewable energy in the country, these include:

- Permitting Foreign Direct Investment (FDI) up to 100 percent under the automatic route,
- Waiver of Inter State Transmission System (ISTS) charges for inter-state sale of solar and wind power for projects to be commissioned by 30th June 2025,
- Specifying the minimum share of consumption of non-fossil resources by designated consumers, including Distribution Companies, up to 2029-30,
- Setting up of Ultra Mega Renewable Energy Parks to provide land and transmission to RE developers for installation of RE projects at large scale,
- Schemes such as Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM), Solar Rooftop Phase II, 12000 MW CPSU Scheme Phase II,
- Laying of new transmission lines and creating new sub-station capacity under the Green Energy Corridor Scheme for evacuation of renewable power,
- Notification of standards for deployment of solar photovoltaic system/devices,
- Setting up of Project Development Cell for attracting and facilitating investments,

- Standard Bidding Guidelines for tariff based competitive bidding process for procurement of Power from Grid Connected Solar PV and Wind Projects.
- 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.
- Notification of Promoting Renewable Energy through Green Energy Open Access Rules 2022.
- Notification of “The Electricity (Late Payment Surcharge and related matters) Rules (LPS rules).
- Launch of Green Term Ahead Market (GTAM) to facilitate sale of Renewable Energy Power through exchanges.
- National Green Hydrogen Mission launched with an aim to make India a global hub for production, utilization and export of Green Hydrogen and its derivatives.
- Notification of prescribed trajectory for RE power bids to be issued by Renewable Energy Implementation Agencies from FY 2023-24 to FY 2027-28. Under the trajectory, 50 GW/annum of RE bids to be issued.

(e) As per the Inter-governmental Panel on Climate Change (IPCC), consumption of fossil fuels accounts for the majority of global anthropogenic greenhouse gas (GHG) emissions which lead to global warming. By replacing fossil fuels with renewable energy, GHG emissions can be avoided, and global warming can be curbed.

(f) As a result of the installation of 178.98 GW of RE capacity the quantum of CO₂ emissions avoided 319 million tonnes per year.

Annexure

Annexure referred to in reply to part (c) of Lok Sabha Unstarred Question No. 887 for 07/12/2023 regarding 'Capacity of Renewable Power Generation'

Percentage share of electricity generated in the State of Madhya Pradesh

(All Figure in MU)										
Electricity generation in Madhya Pradesh in MU										
Year	Wind	Solar	Biomass	Bagasse	Small Hydro	Others	Large Hydro	Total RE including Large Hydro	Total Generaion	%age of RE Generation
2020-21	3913.45	4202.03	0.48	82.57	281.76	37.57	6477.33	14995.19	138084.97	10.86
2021-22	4346.66	4006.70	25.35	82.20	221.43	34.40	4686.72	13403.45	143037.90	9.37
2022-23	4486.72	3839.30	38.76	113.05	357.97	36.93	7309.07	16181.79	152020.25	10.64
2023-24 (Oct-23)	3465.19	2094.33	50.52	9.94	273.43	14.58	4505.03	10413.02	94862.33	10.98