GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
STARRED QUESTION NO. 166
ANSWERED ON 14/12/2023

INSTALLED CAPACITY OF RENEWABLE ENERGY

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

(a) the accumulated capacity of Installed Renewable Energy (in megawatts) excluding Large Hydro Power till 31st March, 2023, year and State-wise;
(b) the reasons, if any, for the low installed capacity of renewable energy in the country before the year 2014;
(c) whether the Government has proactively been engaged in developing sustainable renewable energy and if so, the details thereof; and
(d) whether the Government has taken any initiative regarding Mission LiFE and to promote Reduce, Reuse and Recycle practices in the country‘s energy sector and if so, the details thereof?

ANSWER

**THE MINISTER OF NEW & RENEWABLE ENERGY AND POWER
(SHRI R.K. SINGH)**

(a) to (d) A Statement is laid on the Table of the House.

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STATEMENT

STATEMENT REFERRED TO IN REPLY TO LOK SABHA STARRED QUESTION No. 166 for ANSWER ON 14-12-2023

(a) The cumulative installed renewable energy capacity, excluding large hydro power, reached 1,25,160 MW on 31 March 2023. The State-wise and source-wise installed capacity is at **Annexure-I.**

(b) &(c) As on 31 March 2014, the installed renewable capacity, excluding large hydro power, was 35,850 MW, which has increased to 1,32,132 MW as on 31 October 2023, i.e., by nearly 3.7 times.

Since 2014, the Government of India has undertaken several major initiatives that have led to a faster expansion of renewable energy capacity, which inter alia include:

i. Enhancement of the target of National Solar Mission from the initial 20,000 MW to 100,000 MW.
ii. 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 and graded ISTS charges thereafter,
iii. Declaration of trajectory for Renewable Purchase Obligation (RPO) up to the year 2030,
iv. Launch of new schemes and programs, including Development of Solar Parks and Ultra Mega Solar Power Projects Scheme, Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan Yojana (PM-KUSUM), Grid Connected Solar Rooftop Programme, CPSU Scheme Phase-II (Government Producer Scheme), Production Linked Incentive Scheme under 'National Programme on High Efficiency Solar PV Modules, National Bioenergy Programme, Renewable Energy Research and Technology Development (RE-RTD) Programme, Schemes for incentives on electrolyser manufacturing and Green Hydrogen production under the National Green Hydrogen Mission.
v. Setting up of Ultra Mega Renewable Energy Parks to provide land and transmission to RE developers on a plug and play basis,
vi. Laying of new transmission lines and creating new sub-station capacity for evacuation of renewable power,
vii. Setting up of Project Development Cell for attracting and facilitating investments,
viii. Standard Bidding Guidelines for tariff based competitive bidding process for procurement of Power from Grid Connected Solar PV and Wind Projects,
ix. 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,
x. Notification of Promoting Renewable Energy through Green Energy Open Access Rules 2022,
xi. Notification of Late Payment Surcharge and related matters Rules 2022.
xii. Notification of Electricity Amendment Rules 2022 with provision of Uniform Renewable Energy Tariff for Central Pool.
xiii. Launch of the National Green Hydrogen Mission with the objective to make India a hub for Green Hydrogen production and exports.

(d) India has updated its Nationally Determined Contribution (NDC) in August 2022. One of the goals in the updated NDC is "Put forward and further propagate a healthy and sustainable way of living based on the traditions and values of conservation and moderation, including through a mass movement for LiFE - Lifestyle for Environment as a key to combating climate change". In line with the principles of Mission LiFE, Government of India has taken initiatives to reduce fossil fuel consumption and greenhouse gas emissions by enhancing renewable energy capacity. In addition, *E- Waste* (*Management*) *Rules*, 2022, provide a framework for reuse and recycle of various components of renewable energy projects.

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ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF LOK SABHA STARRED QUESTION No. 166 for ANSWER ON 14-12-2023

State-wise installed capacity of Renewable Power as on 31.03.2023.						
S. No.	**STATES / Uts**	**Small Hydro Power**	**Wind Power**	**Bio Power**	**Solar Power**	**Total Capacity**
		(MW)	**(MW)**	**(MW)**	**(MW)**	**(MW)**
1	Andhra Pradesh	163.31	4096.65	566.03	4534.19	9360.18
2	Arunachal Pradesh	133.11		0.00	11.64	144.75
3	Assam	34.11		2.00	147.93	184.04
4	Bihar	70.70		126.02	192.88	389.60
5	Chhatisgarh	76.00		275.00	948.82	1299.82
6	Goa	0.05		0.34	26.49	26.88
7	Gujarat	91.64	9978.92	110.73	9254.56	19435.85
8	Haryana	73.50		259.43	1029.16	1362.09
9	Himachal Pradesh	969.71		10.20	87.49	1067.40
10	Jammu & Kashmir	146.68		0.00	49.44	196.12
11	Jharkhand	4.05		4.30	105.84	114.19
12	Karnataka	1280.73	5294.95	1902.15	8241.40	16719.23
13	Kerala	266.52	62.50	2.50	761.43	1092.95
14	Ladakh	40.99		0.00	7.80	48.79
15	Madhya Pradesh	123.71	2844.29	134.94	2802.14	5905.08
16	Maharashtra	381.08	5012.83	2640.69	4722.90	12757.50
17	Manipur	5.45		0.00	12.28	17.73
18	Meghalaya	32.53		13.80	4.15	50.48
19	Mizoram	45.47		0.00	28.02	73.49
20	Nagaland	32.67		0.00	3.04	35.71
21	Odisha	115.63		59.22	453.17	628.02
22	Punjab	176.10		522.27	1167.26	1865.63
23	Rajasthan	23.85	5193.42	125.08	17055.70	22398.05
24	Sikkim	55.11		0.00	4.69	59.80
25	Tamil Nadu	123.05	10017.17	1043.70	6736.43	17920.35
26	Telangana	90.87	128.10	220.37	4666.03	5105.37
27	Tripura	16.01		0.00	17.60	33.61
28	Uttar Pradesh	49.10		2216.73	2515.22	4781.05
29	Uttarakhand	218.82		139.44	575.53	933.79
30	West Bengal	98.50		343.10	179.97	621.57
31	Andaman & Nicobar	5.25		0.00	29.91	35.16
32	Chandigarh			0.00	58.69	58.69
33	Dadar & Nagar Haveli			0.00	5.46	5.46
34	Daman & Diu			0.00	41.01	41.01
35	Delhi			84.00	218.26	302.26
36	Lakshadweep			0.00	3.27	3.27
37	Pondicherry			0.00	35.53	35.53
38	Others		4.30	0.00	45.01	49.31
	Total (MW)	**4944.30**	**42633.13**	**10802.04**	**66780.34**	**125159.81**
MW = Megawatt						