GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY LOK SABHA UNSTARRED QUESTION NO. 3858 ANSWERED ON 18/12/2024

SCHEMES FOR PRODUCTION OF RENEWABLE ENERGY

3858. SHRI CHANDRA PRAKASH CHOUDHARY

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

(a) the details of schemes being implemented by the Government to increase the production of renewable energy in the country keeping in view the adverse impact of conventional energy on the environment particularly in the State of Jharkhand;

(b) the growth registered in the generation of renewable energy after the implementation of the schemes; and

(c) the quantum of energy targeted to be generated each year including the current year, State-wise including Jharkhand?

ANSWER THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER

(SHRI SHRIPAD YESSO NAIK)

(a) The details of major schemes/programmes being implemented by the Government to increase the production of renewable energy in the country including in the State of Jharkhand are given at **Annexure-I**.

(b) Renewable energy generation has increased from 190.96 Billion Units in 2014-15 to 359.88 Billion Units in 2023-24.

(c) State-wise details of renewable energy generation during the last three years and the current year in the country, including in the State of Jharkhand, are given at **Annexure-II.**

Annexure-I

Annexure-I referred to in reply of part (a) of the Lok Sabha Unstarred Question No. 3858 to be answered on 18.12.2024

Details of the major ongoing renewable energy (RE) schemes/programmes being implemented by the Government

1. Scheme for Development of Solar Parks and Ultra-mega Solar Power Projects with a target of setting up 40,000 MW capacity. Under the scheme, the infrastructure such as land, roads, power evacuation system water facilities are developed with all statutory clearances/approvals. Thus, the scheme helps expeditious development of utility-scale solar projects in the country. The scheme envisages a capacity of 40,000 MW with Central Financial Assistance (CFA) outlay of Rs.8,100 crore.

2. Central Public Sector Undertaking (CPSU) Scheme Phase-II (Government Producer Scheme) for setting up grid-connected Solar Photovoltaic (PV) Power Projects by Government Producers, using domestically manufactured solar PV cells and modules, with Viability Gap Funding (VGF) support, for self-use or use by Government/ Government entities, either directly or through Distribution Companies (DISCOMS). The scheme envisages a capacity of 12 GW solar power projects by Government entities with CFA outlay of Rs.8,580 crore.

3. Production Linked Incentive scheme "National Programme on High Efficiency Solar PV Modules" for achieving manufacturing capacity of Giga Watt (GW) scale in High Efficiency Solar PV modules (Tranche - I & II). The scheme envisages setting up of fully/partially integrated manufacturing capacity of high efficiency Solar PV modules with CFA outlay of Rs.24,000 crore.

4. PM-KUSUM Scheme to promote small Grid Connected Solar Energy Power Plants, standalone solar powered agricultural pumps and solarization of existing grid connected agricultural pumps. The scheme is not only beneficial to the farmers but also States and DISCOMs. Under the scheme a target of 10,000 MW of grid connected solar plants and installation/solarization of 49 lakh pumps has been envisaged with CFA outlay of Rs.34,422 crore.

5. PM-Surya Ghar: Muft Bijli Yojana for installing rooftop solar for 1 crore households (30 GW capacity) with CFA outlay of Rs.75,021 crore.

6. Green Energy Corridor (GEC) Phase I and II: to create intra-state transmission system for renewable energy projects. Under phase I of the scheme 9700 ckm (circuit kilometers) of transmission

infrastructure is to be developed in 8 States with CFA outlay of Rs.4056 crore. Under phase II of the scheme 10,750 ckm of transmission infrastructure is to be developed in 7 States with CFA outlay of Rs.3970 crore.

7. 'Viability Gap Funding (VGF) Scheme for Offshore Wind Energy Projects' at a total outlay of Rs.7453 crore, including CFA outlay of Rs.6853 crore for installation and commissioning of 1 GW of Offshore Wind Energy Projects (500 MW each off the coast of Gujarat and Tamil Nadu), and grant of Rs 600 crore for upgradation of two ports to meet logistics requirements for offshore wind energy projects.

8. Bio-Energy Programme:

• Waste to Energy Programme: Programme on Energy from Urban, industrial and Agricultural Wastes/Residues.

Approved Target: 200MWeq; CFA outlay: Rs.600 crore

- Biomass Programme: Scheme to Support Manufacturing of Briquettes & Pellets and Promotion of Biomass (non-bagasse) based cogeneration in Industries.
 Approved Target: 100 MW; CFA outlay Rs.158 crore
- Biogas Programme: for promotion of family type Biogas plants
 Approved Target: 50,000 Nos of family type Biogas plants with CFA outlay of Rs.100 crore

9. Renewable Energy Research and Technology Development (RE-RTD) Programme. Support to R & D projects, testing centers, Startup etc. in the renewable energy sector with CFA outlay of Rs.228 crore.

10. Human Resource Development Scheme with components such as short-term trainings & skill development programmes, fellowships, internships, support to lab upgradation for renewable energy and renewable energy chair. The scheme envisages creation of skilled manpower in the renewable energy sector with CFA outlay of Rs.200 crore.

11. National Green Hydrogen Mission was launched with the aim of making India a Global Hub for the production, utilization and export of Green Hydrogen and its derivatives. The scheme envisages at least 5 MMT (Million Metric Tonne) of annual green hydrogen production capacity by 2030 with CFA outlay of Rs.19,744 crore.

Annexure-II

Annexure-II referred to in reply of part (c) of the Lok Sabha Unstarred Question No. 3858 to be answered on 18.12.2024

State-wise details of renewable energy generation* during the last three years and the current year

No. 1 2 2 2 3 2 4 2 5 1 6 0 7 0 8 1 9 1 10 0 11 0	State/ UT Andaman & Nicobar Islands Andhra Pradesh Arunachal Pradesh Assam Bihar Chandigarh Chandigarh Dadra and Nagar Haveli and Daman & Diu Delhi Goa	2021-22 34.77 18776.44 4163.41 798.34 239.83 14.19 2342.34 96.83 458.73	2022-23 37.88 20159.49 4845.79 760.61 288.85 12.61 2240.42 30.62	2023-24 39.50 18837.67 4280.73 995.96 342.08 11.70 2799.20 28.86	2024-25 (Upto Oct, 2024) 23.32 12696.96 3219.95 1065.85 203.71 6.49 2084.28
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Andhra Pradesh Arunachal Pradesh Assam Bihar Chandigarh Chhattisgarh Dadra and Nagar Haveli and Daman & Diu Delhi Goa	18776.44 4163.41 798.34 239.83 14.19 2342.34 96.83 458.73	20159.49 4845.79 760.61 288.85 12.61 2240.42 30.62	18837.67 4280.73 995.96 342.08 11.70 2799.20	23.32 12696.96 3219.95 1065.85 203.71 6.49
2 4 3 4 5 1 6 (0 7 (0 8 1 9 1 10 (0 11 (0)	Andhra Pradesh Arunachal Pradesh Assam Bihar Chandigarh Chhattisgarh Dadra and Nagar Haveli and Daman & Diu Delhi Goa	18776.44 4163.41 798.34 239.83 14.19 2342.34 96.83 458.73	20159.49 4845.79 760.61 288.85 12.61 2240.42 30.62	18837.67 4280.73 995.96 342.08 11.70 2799.20	12696.96 3219.95 1065.85 203.71 6.49
3 4 4 4 5 1 6 0 7 0 8 1 9 1 10 0 11 0	Arunachal Pradesh Assam Bihar Chandigarh Chhattisgarh Dadra and Nagar Haveli and Daman & Diu Delhi Goa	4163.41 798.34 239.83 14.19 2342.34 96.83 458.73	4845.79 760.61 288.85 12.61 2240.42 30.62	4280.73 995.96 342.08 11.70 2799.20	3219.95 1065.85 203.71 6.49
4 1 5 1 6 0 7 0 8 1 9 1 10 0 11 0	Assam Bihar Chandigarh Chhattisgarh Dadra and Nagar Haveli and Daman & Diu Delhi Goa	798.34 239.83 14.19 2342.34 96.83 458.73	760.61 288.85 12.61 2240.42 30.62	995.96 342.08 11.70 2799.20	1065.85 203.71 6.49
5 1 6 0 7 0 8 1 9 1 10 0 11 0	Bihar Chandigarh Chhattisgarh Dadra and Nagar Haveli and Daman & Diu Delhi Goa	239.83 14.19 2342.34 96.83 458.73	288.85 12.61 2240.42 30.62	342.08 11.70 2799.20	203.71 6.49
7 0 8 1 9 1 10 0 11 0	Chhattisgarh Dadra and Nagar Haveli and Daman & Diu Delhi Goa	2342.34 96.83 458.73	12.61 2240.42 30.62	2799.20	
7 0 8 1 9 1 10 0 11 0	Chhattisgarh Dadra and Nagar Haveli and Daman & Diu Delhi Goa	2342.34 96.83 458.73	2240.42 30.62	2799.20	
9 1 10 0 11 0	Delhi Goa	458.73		20.00	2084.38
9 1 10 0 11 0	Delhi Goa			28.86	15.80
11 (530.20	728.81	448.73
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	Gujarat	27461.04	35895.77	43039.55	31122.85
12	Haryana	1135.42	1419.73	1651.50	1263.87
13	Himachal Pradesh	38503.40	41579.81	38952.37	35171.65
14	Jammu & Kashmir	17489.83	17170.62	16282.93	13004.84
15	Jharkhand	576.67	327.57	219.96	214.88
16	Karnataka	42570.74	42731.82	39499.72	27862.94
17	Kerala	10932.06	9935.26	7359.96	6273.10
18 1	Ladakh	405.98	402.78	388.48	337.18
19 1	Lakshadweep	0.30	0.10	0.09	0.05
20 1	Madhya Pradesh	13403.45	16181.79	16099.80	12301.75
21 1	Maharashtra	21853.02	23100.88	24029.90	14578.55
22 1	Manipur	462.20	486.77	307.14	431.28
23 1	Meghalaya	886.50	1052.41	875.13	844.38
24 1	Mizoram	165.53	266.40	217.74	244.10
25 1	Nagaland	164.02	289.32	246.61	255.20
26	Orissa	6311.73	6654.91	7423.92	5156.80
27 1	Puducherry	12.24	12.24	12.24	7.14
28 1	Punjab	6951.88	8569.23	8798.82	4765.56
29 1	Rajasthan	24581.15	41957.48	48162.93	33540.16
	Sikkim	11506.25	11709.14	8622.21	1648.08
	Tamil Nadu	29273.35	33592.22	33166.59	25877.36
	Telangana	12972.52	13439.96	8752.39	8454.66
	Tripura	7.62	6.58	7.01	3.35
	Uttar Pradesh	7731.62	8191.22	8052.23	4170.15
	Uttarakhand	15204.45	16368.16	14850.17	11724.34
36	West Bengal	5034.93	5382.85	4736.88	2940.52
	Total e hydro generation Excluding Import from B	322539.63	365651.45	359888.76	261997.99

Source: Central Electricity Authority (CEA)