

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO. 3592
TO BE ANSWERED ON 03.04.2017

WIDESPREAD USE OF RENEWABLE ENERGY

3592. DR. SATYANARAYAN JATIYA:

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

- (a) the measures taken for widespread use of renewable energy and the quantum of power being generated from all renewable energy sources as on date, State-wise;
- (b) the extent of effectiveness of concessional measures taken for agricultural and industrial consumption including domestic consumption; and
- (c) the year-wise details of quantum of power generated in Madhya Pradesh through renewable energy resources during the last three years including the year 2016-17?

ANSWER

THE MINISTER OF STATE FOR POWER, COAL, NEW & RENEWABLE ENERGY AND MINES
(INDEPENDENT CHARGE) (SHRI PIYUSH GOYAL)

(a): The measures undertaken by Government for widespread use of renewable energy sources include:

- Incentives in the forms of generation based incentives/subsidies, fiscal incentives such as accelerated depreciation, concessional customs duty, excise duty exemptions, income tax holiday for 10 years and viability gap funding from NCEF (National clean Energy Fund).
- Up-scaling of the target of renewable energy capacity to 175 GW by the year 2022, which includes 100 GW from solar, 60 GW from wind, 10 GW from bio-power and 5 GW from small hydro-power
- amendments in the Tariff Policy for strong enforcement of Renewable Purchase Obligation (RPO) and for providing Renewable Generation Obligation (RGO);
- setting up of exclusive solar parks;
- development of power transmission network through Green Energy Corridor project;
- identification of large Government complexes/ buildings for rooftop projects;
- infrastructure status for solar projects;
- raising tax free solar bonds;
- making roof top solar a part of housing loan by banks/NHB;
- incorporating measures in Integrated Power Development Scheme (IPDS) for encouraging distribution companies and making net-metering compulsory

- raising funds from bilateral and international donors as also from the Green Climate Fund to achieve the target. and
- creation of Surya Mitras for installation and maintenance of the Solar Projects.
- wide publicity is given through advertisements, publications, Radio/TV programmes, exhibitions, orientation camps, outdoor publicity etc.

The State-wise quantum of power generated through various renewable energy sources during 2016-17 (April'2016 to Jan'2017) is given at **Annexure-I.**

(b): The progress achieved through concessional measures undertaken by the Ministry of New and Renewable Energy including agriculture, industrial and domestic use of renewable energy is given at **Annexure-II.**

(c): The Year-wise details of quantum of power generated in Madhya Pradesh through various renewable energy sources during the last three years and the current year is as under:

Year	Generation in Million Units
2013-14	1051.48
2014-15	1427.51
2015-16	2910.42
2016-17(upto Jan'17)	4394.36

Annexure-I

**REFERRED TO IN REPLY TO PART (a) OF RAJYA SABHA UNSTARRED QUESTION NO. 3592
FOR ANSWER ON 03-04-2017**

**State-wise and Source-wise power generation from various renewable energy sources during the
2016-17 (April'2016 to Jan'2017).**

(Million Units)						
S. No	State	Wind	Solar	Small Hydel	Bio-Power	Total
1	CHANDIGARH	0.00	12.37	0.00	0.00	12.37
2	DELHI	0.00	4.00	0.00	106.85	110.84
3	HARYANA	0.00	38.74	267.49	87.96	394.20
4	HP	0.00	0.00	1885.33	0.00	1885.33
5	J & K	0.00	0.49	278.24	0.00	278.73
6	PUNJAB	0.00	676.06	372.73	632.44	1681.23
7	RAJASTHAN	4857.24	1740.36	3.83	224.46	6825.89
8	UTTAR PRADESH	0.00	165.56	22.07	2257.69	2445.31
9	UTTARAKHAND	0.00	25.09	726.65	45.57	797.30
10	NTPC DADRI+FBD+ UNCHAHAAR+SINGRA ULI	0.00	38.06	0.00	0.00	38.06
11	OIL INDIA LTD	173.57	19.09	0.00	0.00	192.67
12	CHHATTISGARH	0.00	97.66	39.65	1045.79	1183.10
13	NTPC RAJGARH	0.00	67.59	0.00	0.00	67.59
14	GUJARAT	6578.73	1409.65	20.26	8.16	8016.80
15	MADHYA PRADESH	3015.17	1090.63	189.76	98.80	4394.36
16	MAHARASHTRA	6950.36	464.55	444.34	2152.25	10011.49
17	DADRA AND NAGAR HAVELI	0.00	0.96	0.00	0.00	0.96
18	DAMAN & DIU	0.00	10.95	0.00	0.00	10.95
19	ANDHRA PRADESH	2769.94	1228.48	135.17	423.90	4557.49
20	TELANGANA	183.69	960.99	45.54	310.36	1500.59
21	KARNATAKA	5411.24	343.47	1491.55	1358.97	8605.23
22	KERALA	66.43	20.92	374.73	44.43	506.51
23	NTPC RAMAGUNDAM+ ANANTAPURAM	0.00	271.12	0.00	0.00	271.12
24	TAMIL NADU	11153.53	1477.88	89.80	1065.36	13786.57
25	LAKSHADWEEP	0.00	1.17	0.00	0.00	1.17
26	ANDAMAN & NICOBAR ISLANDS	0.00	5.26	12.17	0.00	17.43
27	BIHAR	0.00	83.01	20.05	0.00	190.52
28	JHARKHAND	0.00	31.63	0.00	87.46	31.63
29	ODISHA	0.00	166.37	218.15	0.00	442.36
30	SIKKIM	0.00	0.00	34.38	57.85	34.38
31	WEST BENGAL	0.00	11.71	92.84	0.00	1297.49
32	DVC	0.00	0.00	121.46	1192.94	121.46

(Million Units)						
S. No	State	Wind	Solar	Small Hydel	Bio-Power	Total
33	NTPC ANDAMAN+TALCHER	0.00	16.48	0.00	0.00	16.48
34	ARUNACHAL PRADESH	0.00	0.13	13.40	0.00	13.53
35	ASSAM	0.00	79.85	78.73	0.00	158.58
36	MANIPUR	0.00	0.01	0.00	0.00	0.01
37	MEGHALAYA	0.00	0.00	54.75	0.00	54.75
38	MIZORAM	0.00	0.00	42.57	0.00	42.57
39	NAGALAND	0.00	0.00	86.41	0.00	86.41
40	TRIPURA	0.00	0.00	40.03	0.00	40.03
41	NEEPCO	0.00	5.65	0.00	0.00	5.65
	Total	41159.91	10565.90	7202.06	11201.23	70129.11

Source: Central Electricity Authority (CEA)

Note: Data as received from State Load Dispatch Centre (SLDC) of the respective states of the electricity department.

Annexure-II

REFERRED TO IN REPLY TO PART (b) OF RAJYA SABHA UNSTARRED QUESTION NO. 3592 FOR ANSWER ON 03-04-2017

Progress achieved through concessional measures undertaken by the Ministry of New and Renewable Energy including agriculture, industrial and domestic use.

S. No	Renewable Energy Programmes/ Systems	Cumulative Achievements
I.	Power From Renewables	
A.	Grid-interactive renewable power (in MW)	
1.	Wind Power (in MW)	29151.29
2.	Small Hydro Power (in MW)	4346.85
3.	Biomass Power / Cogeneration (in MW)	8182.00
4.	Waste to Power (in MW)	114.08
5.	Solar Power (in MW)	9566.66
	Total	51360.88
B.	Off-grid/ Distributed Renewable Power and Decentralized Energy System	
6.	Family Type Biogas Plants (nos. in lakh)	49.52
7.	SPV Street Lighting System (nos. in lakh)	4.43
8.	SPV Home Lighting System (nos. in lakh.)	14.02
9.	SPV Lanterns (nos. in lakh.)	9.97
10.	SPV Pumps (nos. in lakh.)	1.09
11.	Power Plants Stand Alone (KWp)	172.93
12.	Biomass (Non-bagasse) Cogeneration(in MWeq.)	651.91
13.	Biomass Gasifiers (in MWeq.)	186.88
14.	Waste-to-Energy (in MWeq.)	164.45

MW=Megawatt; kW=kilowatt, kWp=kilowatt peak