### GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY

#### **LOK SABHA**

### **UNSTARRED QUESTION NO. 4771**

TO BE ANSWERED ON 15.12.2016

#### POTENTIAL OF SOLAR POWER PLANTS

4771. SHRI MALYADRI SRIRAM:

SHRI HARINARAYAN RAJBHAR:

SHRI ABHISHEK SINGH:

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

- (a) the potential and actual installed capacity of solar power plants in the country, State-wise;
- (b) the number of functional solar power plants in the country including Andhra Pradesh and Uttar Pradesh, State-wise;
- (c) whether the Union Government has reviewed the functioning of these plants;
- (d) if so, the findings thereof;
- (e) the target fixed by the Union Government to set up these plants in the country in future; and
- (f) the measures taken by the Union Government to promote use of Biogas and Solar Energy in the country?

#### **ANSWER**

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

- (a): State-wise potential of solar energy in the States and the grid-connected installed solar power capacity, as on 30.11.2016, is given at Annexure-I.
- (b)to(d): The Ministry of New and Renewable Energy (MNRE) does not undertake review of functioning of solar power plants as most of the plants are set-up by private sector. The generation data of these plants is regularly collected and collated by Central Electricity Authority (CEA). The electricity generated from the grid-connected solar power projects during the last 3 years is given at Annexure-II.
- (e): Government has revised solar power capacity addition targets from 20,000 MW to 1,00,000 MW by 2022.
- (f): The Union Government has launched several schemes to promote use of biogas and solar energy in the country for which Government is providing various fiscal and promotional incentives such as capital and/or interest subsidy, tax holiday on the earnings for 10 years, generation based incentive, accelerated depreciation, viability gap funding (VGF), financing solar rooftop systems as part of home loan, concessional excise and custom duties, preferential tariff for power generation from renewables. In addition, power is offered at lower tariff through schemes like bundling with thermal power and VGF. Government also provides capital subsidy, for setting up of manufacturing units for solar cells and modules and the entire value chain under Modified Special Incentive Package Scheme (M-SIPS) of Ministry of Electronics and Information Technology.

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# ANNEXURE-I REFERRED TO IN REPLY TO PART (a) OF THE LOK SABHA UNSTARRED QUESTION NO. 4771 FOR 15.12.2016

## State-wise estimated Solar Energy Potential in the Country.

Sr. No.	State/UT	Solar Potential (GWp) #	Installed Capacity (MW) as on 30.11.2016		
1	Andhra Pradesh	38	970.48		
2	Arunachal Pradesh	9	0.27		
3	Assam	14	10.00		
4	Bihar	11	95.10		
5	Chhattisgarh	18	128.56		
6	Goa	1	0.00		
7	Gujarat	36	1134.20		
8	Haryana	5	18.39		
9	Himachal Pradesh	34	0.20		
10	Jammu & Kashmir	111	1.00		
11	Jharkhand	18	16.84		
12	Karnataka	25	340.06		
13	Kerala	6	13.05		
14	Madhya Pradesh	62	836.38		
15	Maharashtra	64	387.57		
16	Manipur	11	0.00		
17	Meghalaya	6	0.00		
18	Mizoram	9	0.10		
19	Nagaland	7	0.00		
20	Odisha	26	66.92		
21	Punjab	3	592.00		
22	Rajasthan	142	1304.68		
23	Sikkim	5	0.00		
24	Tamil Nadu	18	1558.41		
25	Telangana	20	963.79		
26	Tripura	2	5.00		
27	Uttar Pradesh	23	235.32		
28	Uttarakhand	17	43.15		
29	West Bengal	6	11.77		
30	Delhi	2	23.87		
31	UTs	1	16.69		
TOTAL 750					

<sup>#</sup> Assessed by National Institute of Solar Energy

<sup>\*</sup> includes 100.92 MW from other rooftop systems.

# ANNEXURE-II REFERRED TO IN REPLY TO PART (b) OF THE LOK SABHA UNSTARRED QUESTION NO. 4771 FOR 15.12.2016

## Year-wise generation of Solar Energy

(All figures in MU)

(All rigures in N						
S.N o	Name of State/UT	Generation during 2013-14	Generation during 2014-15	Generation during 2015-16	Generation during 2016-17 (Till September 2016)	
1	Chandigarh	0.00	2.23	3.40	2.11	
2	Delhi	3.29	3.18	4.11	1.52	
3	Haryana	0.00	10.36	114.96	34.17	
4	HP	0.00	0.00	0.00	0.00	
5	J&K	0.00	0.00	0.00	0.39	
6	Punjab	51.69	129.89	380.57	411.34	
7	Rajasthan	1052.23	1259.19	1766.10	1084.86	
8	Uttar Pradesh	14.96	20.13	89.75	72.24	
9	Uttarakhand	5.55	11.63	5.87	14.92	
10	NTPC Dadri+FBD+Unchahar+Singrauli	6.10	22.90	42.41	23.91	
11	Oil India Ltd	0.00	9.14	9.90	13.31	
12	Chhattisgarh	11.42	13.54	52.70	44.93	
13	Goa/NTPC Rajgarh	0.00	62.94	81.00	39.33	
14	Gujarat	1369.39	1474.56	1497.60	814.57	
15	Madhya Pradesh	247.05	562.29	1105.28	606.10	
16	Maharashtra	257.42	349.32	638.76	258.68	
17	Dadra and Nagar Haveli	0.00	0.03	0.50	0.72	
18	Daman & Diu	0.00	0.15	4.25	4.86	
19	Andhra Pradesh	207.11	159.77	282.67	626.79	
20	Telangana	0.00	138.12	402.51	458.76	
21	Karnataka	38.25	100.39	187.69	142.52	
22	Kerala	0.00	0.00	7.38	12.08	
23	Puducherry/NTPS Ramagundam/Anantapuram	2.45	15.62	16.02	120.00	
24	Tamil Nadu	38.87	158.75	507.18	785.29	
25	Lakshadweep	0.00	5.13	1.02	0.41	
26	Andaman & Nicobar Islands	0.00	0.00	6.26	3.30	
27	Bihar	0.00	0.00	6.39	17.42	
28	Jharkhand	0.00	8.32	19.77	20.42	
29	Orissa	34.28	44.94	150.73	92.28	
30	Sikkim	0.00	0.00	0.00	0.00	
31	West Bengal	0.00	7.07	6.28	4.83	
32	DVC	0.00	0.00	0.00	0.00	
33	NTPC Andman+Talchar	6.51	18.79	18.91	9.74	
34	Arunachal Pradesh	0.00	0.00	0.22	0.08	
35	Assam	0.00	9.65	31.60	66.64	
36	Manipur	0.00	0.00	0.00	0.00	
37	Meghalaya	0.00	0.00	0.00	0.00	
38	Mizoram	0.00	0.00	0.00	0.00	
39	Nagaland	0.00	0.00	0.00	0.00	
40	Tripura	0.00	0.00	0.00	0.00	
41	Neepco	0.00	0.98	6.15	3.04	
	Total	3346.57	4599.02	7447.92	5791.56	

Source: CEA