GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 1463
ANSWERED ON 04/12/2024

RESTRICTIONS ON SOLAR PANEL

1463. SHRI DAROGA PRASAD SAROJ
SHRI SANJAY HARIBHAU JADHAV

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

(a) Whether the Government has imposed any environmental restrictions on industries working on solar panel and if so, the details thereof;

(b) The number and details of solar panel set up across the country, State-wise including those in the different districts of Uttar Pradesh and Maharashtra especially in their Lalganj and Parbhani Parliamentary Constituencies along with their generation capacity;

(c) Whether the Government has constituted any panel for any scientific study to find out ways of reutilization and recycling solar panels;

(d) Whether the Government has found any environment friendly system evolved for the disposal of other types of wasted caused during generation of solar energy, if so, the details thereof; and

(e) Whether the Government has any record regarding unused and out of use solar panels during the last three years and the current year and if so, the details thereof, State-wise?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER

(SHRI SHRIPAD YESSO NAIK)

(a)&(d)

1. Ministry of Environment, Forest and Climate Change, Government of India has notified the E-Waste (Management) Rules, 2022 on 2nd November, 2022. These rules replace E-Waste (Management) Rules, 2016 with effect from 1st April, 2023. These rules provide for environmentally sound management of e-waste generated from electrical and electronic equipment, including solar photo-voltaic (PV) modules or panels or cells.
2. As per these rules, every manufacturer and producer of solar photo-voltaic modules or panels or cells have been mandated to obtain registration, maintain inventory of solar PV modules, store the waste generated from Solar PV modules/cells up to the year 2034-35 as per the guidelines laid down under the rules, file annual returns, comply with Standard Operating Procedures, and process the waste other than solar PV modules as per the applicable waste management rules. Further, Recycler of solar photo-voltaic modules or panels or cells shall be mandated for recovery of material as laid down by the Central Pollution Control Board (CPCB).

(b)

1. The details of Solar Power plants installed in the different states of the country are provided at **Annexure-1.**
2. The details of Solar Power plants installed in the different districts of Uttar Pradesh including Lalganj which comes under Azamgarh district is provided in **Annexure-2.**
3. The details of Solar Power plants installed in the different districts of Maharashtra including Parbhani is provided in **Annexure-3.**

(c) Department of Science and Technology has launched a call for project proposal on challenges for the development of efficient, environmentally sustainable methods for the recovery and recycling of end-of-life solar PV panels/modules by developing equipment and effective process for recycling the existing solar PV panels. The proposals received from various Institutes and universities are under evaluation.

(d) Same as (a) &(d) above.

(e) An online Extended Producer Responsibility (EPR) Portal has been developed for the management of e-Waste. All the Producers, Manufacturers, Recyclers & Refurbishers of e-waste are required to register on the online EPR Portal. As per information available on E-Waste EPR Portal, 552 numbers of producers of Solar Panels/Cells are registered, as on 29.11.2024, with CPCB.

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ANNEXURE-1

STATE WISE INSTALLED CAPACITY OF SOLAR ENERGY (as on 31.10.2024)		
S.No.	**STATES/UTs**	**Installed capacity (Megawatts)**
1.	Andhra Pradesh	4650.89
2.	Arunachal Pradesh	14.72
3.	Assam	180.77
4.	Bihar	257.34
5.	Chhattisgarh	1265.78
6.	Goa	47.86
7.	Gujarat	15305.26
8.	Haryana	1905.19
9.	Himachal Pradesh	137.29
10.	Jammu & Kashmir	73.89
11.	Jharkhand	181.04
12.	Karnataka	8930.10
13.	Kerala	1261.76
14.	Ladakh	7.80
15.	Madhya Pradesh	4248.69
16.	Maharashtra	8133.57
17.	Manipur	13.79
18.	Meghalaya	4.28
19.	Mizoram	30.35
20.	Nagaland	3.17
21.	Odisha	608.38
22.	Punjab	1375.79
23.	Rajasthan	24553.13
24.	Sikkim	7.56
25.	Tamil Nadu	9324.05
26.	Telangana	4842.10
27.	Tripura	20.93
28.	Uttar Pradesh	3286.98
29.	Uttarakhand	592.07
30.	West Bengal	310.47
31.	Andaman & Nicobar Island	29.91
32.	Chandigarh	75.51
33.	Dadra & Nagar Haveli and Daman & Diu	48.12
34.	Delhi	288.39
35.	Lakshadweep	4.97
36.	Puducherry	52.27
37.	Others including NABARD projects	45.01
Total		**92119.18**

ANNEXURE-2

DISTRICT WISE INSTALLED CAPACITY OF SOLAR ENERGY IN THE DIFFERENT DISTRICTS OF UTTAR PRADESH (as on 31.10.2024)		
S.No.	**District**	**Installed capacity (Megawatts)**
1	Agra	69.264
2	Aligarh	6.062
3	Ambedkar Nagar	7.595
4	Amethi	12.285
5	Amroha	2.335
6	Auraiya	40.391
7	Ayodhya	47.211
8	Azamgarh	3.097
9	Bagpat	2.157
10	Bahraich	41.081
11	Ballia	0.334
12	Balrampur	0.394
13	Banda	136.094
14	Barabanki	4.668
15	Bareilly	27.65
16	Basti	1.268
17	Bhadohi	2.074
18	Bijnor	32.847
19	Budaun	190.285
20	Bulandshahr	0.886
21	Chandauli	1.521
22	Chitrakoot	126.842
23	Deoria	40.477
24	Etah	1.479
25	Etawah	1.837
26	Farrukhabad	2.467
27	Fatehpur	0.619
28	Firozabad	1.508
29	Gautam Buddha Nagar	12.948
30	Ghaziabad	9.462
31	Ghazipur	5.264
32	Gonda	0.737
33	Gorakhpur	3.983
34	Hamirpur	24.573
35	Hapur	0.617
36	Hardoi	61.076

37	Hathras	1.886
38	Jalaun	402.536
39	Jaunpur	1.98
40	Jhansi	227.907
41	Kannauj	7.785
42	Kanpur Dehat	52.42
43	Kanpur Nagar	243.063
44	Kasganj	0.326
45	Kaushambi	0.04
46	Lakhimpur Kheri	1.523
47	Kushinagar	0.3
48	Lalitpur	81.479
49	Lucknow	106.532
50	Maharajganj	26.247
51	Mahoba	225.609
52	Mainpuri	5.976
53	Mathura	6.576
54	Mau	20.09
55	Meerut	15.009
56	Mirzapur	131.087
57	Moradabad	2.236
58	Muzaffarnagar	4.85
59	Pilibhit	20.909
60	Pratapgarh	0.645
61	Prayagraj	235.133
62	Raebareli	16.759
63	Rampur	0.541
64	Saharanpur	63.807
65	Sambhal	0.246
66	Sant Kabir Nagar	0.222
67	Shahjahanpur	91.789
68	Shamli	0.557
69	Shravasti	0.081
70	Siddharth Nagar	0.482
71	Sitapur	46.966
72	Sonbhadra	0.578
73	Sultanpur	1.44
74	Unnao	16.742
75	Varanasi	44.888
	Total	**3030.63 MW**

Annexure-3

DISTRICT WISE INSTALLED CAPACITY OF SOLAR ENERGY IN THE DIFFERENT DISTRICTS OF MAHARASHTRA (as on 31.10.2024)		
S.No.	**Name of the District**	**Installed Capacity (Megawatts)**
1	Ahmednagar	164.56
2	Akola	77.965
3	Amravati	217.81
4	Aurangabad	119.89
5	Beed	228.9
6	Bhandara	0
7	Buldhana	230.2
8	Chandrapur	10
9	Dhule	477.965
10	Gondia	0
11	Hingoli	64.2
12	Jalgaon	253.5
13	Jalna	489.85
14	Kolhapur	6.8
15	Latur	168.06
16	Nagpur	133.318
17	Nanded	187.575
18	Nandurbar	2
19	Nashik	170.235
20	Dharashiv	313.565
21	Parbhani	203.22
22	Pune	79.18
23	Raigad	0
24	Ratnagiri	1
25	Sangli	14.56
26	Satara	246.95
27	Sindhudurg	0
28	Solapur	826.218
29	Wardha	78.18
30	Washim	0
31	Yavatmal	222.57
	Total (A)	**4988.271**
	Mukhyamantri Saur Krushi Vahini Yojana (MSKVY) 2.0 – Implemented by Government of Maharashtra Total (B)	**31**
	Rooftop Solar Power Projects (Total-C)	**2585.36**
	Total (A+B+C)	**7604.631**