

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 4286
TO BE ANSWERED ON 19.03.2020

ACHIEVEMENTS OF SOLAR ENERGY GENERATION

4286. SHRI RAJESHBHAI CHUDASAMA

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

- (a) the target set and achievements made in the field of solar energy generation during the Twelfth Five Year Plan period;
- (b) the target fixed for the period after the said plan and the steps being taken by the Government for achieving the target;
- (c) the funds released to and spent by each State during the Twelfth Five Year Plan; and
- (d) the expenditure likely to be incurred to promote and popularise the solar energy in the country during the current financial year?

ANSWER

THE MINISTER OF STATE (I/C) FOR NEW & RENEWABLE ENERGY, POWER and MoS
for SKILL DEVELOPMENT AND ENTREPRENEURSHIP

(SHRI R.K. SINGH)

- (a) The National Solar Mission was launched in 2010 with a target of installing solar power capacity of 20GW by 2022. This target was revised in 2015 to 100 GW. A cumulative solar power capacity of 35 GW has been installed so far. This apart, projects of 23.15 GW solar capacity are at various stages of implementation and 31.27 GW at various stages of tendering.
- (b) The Government has set a target of installing 100 GW of solar power capacity by 2022. The Union Government has launched various schemes, as given at **Annexure-I**, for development & deployment of solar energy in the country and achieving the target set.
- (c) Rs. 8186.07 crore were released under solar energy programmes during the Twelfth Five Year Plan. The State/UT-wise details of funds released under few schemes are given in **Annexure II**.
- (d) A total fund of Rs. 2280.51 crore has been allocated for grid connected and off-grid solar energy programmes during the current year 2019-20.

**ANNEXURE I REFERRED TO IN REPLY TO PART (b) OF LOK SABHA
UNSTARRED QUESTION NO. 4286 FOR 19.03.2020**

- i. Solar Park Scheme for setting up of Solar Parks and Ultra Mega Solar Power Projects targeting over 40,000 MW of solar power projects.
- ii. Scheme for setting up of Grid-Connected Solar PV Power Projects by the Central Public Sector Undertakings (CPSUs) and the Government of India organizations with Viability Gap Funding (VGF).
- iii. VGF Scheme for setting up of 5000 MW of Grid Connected Solar PV Power Projects through SECI, which has a separate component of 1000 MW for N-E states.
- iv. Phase-I and Phase-II of Grid Connected Rooftop Programme.
- v. Off-Grid Solar PV Schemes viz. Solar Street Lights / Power packs, Solar Study lamps, Solar Study lamps under 70 lakh Solar Study lamps scheme, Solar Street light under AJAY scheme.
- vi. Pradhan Mantri – Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM).

ANNEXURE II

ANNEXURE II REFERRED TO IN REPLY TO PART (c) OF LOK SABHA UNSTARRED QUESTION NO. 4286 FOR 19.03.2020.

STATE-WISE DETAILS OF FUNDS RELEASED DURING THE TWELFTH FIVE YEAR PLAN

1. DETAILS OF STATE-WISE, YEAR-WISE, CFA RELEASED BY SECI TO PROJECT IMPLEMENTING AGENCIES UNDER PILOT-CUM-DEMONSTRATION PROJECT FOR DEVELOPMENT OF GRID CONNECTED SOLAR PV POWER PLANTS ON CANAL BANKS AND CANAL TOPS:-

State	Year*	
	2015-16	2016-17
Andhra Pradesh	Rs.20,820,000	Rs. 18,180,000
Gujarat	Rs.105,000,000	Rs 103,152,000
Karnataka	Rs.48,192,000	Rs. 33,899,800
Kerala	Rs.15,000,000	Rs.12,112,470
Punjab	Rs.120,000,000	Rs.30,000,000
Uttar Pradesh	Rs.28,272,000	
Uttarakhand	Rs.63,000,000	Rs. 63,000,000
West Bengal	Rs. 30,000,000	Rs. 48,000,000
Total	Rs. 430,284,000	Rs. 308,344,270

* Scheme was launched in December, 2014.

2. YEAR WISE CFA RELEASED BY SECI TO SPPD/STU/CTU UNDER SOLAR PARK

SCHEME:-

(Rs. in Lakh)

Sr. No.	State	Solar Park	Year*		
			2014-15	2015-16	2016-17
1	Andhra Pradesh	Ananthapuramu-I Solar Park	7410.34	6104.89	9.77
2		Kurnool Solar Park	4858.50	4141.50	25.00
3		Kadapa Solar Park	0.00	0.00	625.00
4		Ananthapuramu-II Solar Park	0.00	0.00	325.00
5		Hybrid Solar Wind Park	0.00	0.00	0.00
6		Ext Trans PGCIL-AP	0.00	0.00	0.00
7		Ext Trans APTRANCO-AP II	0.00	0.00	0.00
8		Ext Trans APTRANCO-Kurnool	0.00	0.00	0.00
		Total	12268.84	10246.39	984.77
9	Arunachal Pradesh	Lohit Solar Park	0.00	19.65	0.00
10	Assam	Solar Park in Assam	0.00	0.00	0.00
11	Chhattisgarh	Rajnandgaoun Solar Park	0.00	0.00	15.00
12	Gujarat	Radhnesada Solar Park	0.00	3311.35	0.00
13		Harsad Solar Park	0.00	0.00	0.00
14		Dholera Solar Park	0.00	0.00	0.00
15		Ext Trans PGCIL-Radhnesada	0.00	0.00	0.00
		Total	0.00	3331.00	15.00
16	Haryana	Solar Park in Haryana	0.00	0.00	0.00
17	Himachal Pradesh	Solar Park in Himachal Pradesh	0.00	0.00	0.00
18	Jammu & Kashmir	Solar Park in J&K	0.00	0.00	0.00
19	Karnataka	Pavagada Solar Park	0.00	10000.00	7980.00
20		Ext Trans PGCIL-Pavagada	0.00	0.00	0.00
		Total	0.00	10,000.00	7980.00
21	Kerala	Kasargod Solar Park	0.00	0.00	200.00
22	Madhya Pradesh	Rewa Solar Park	0.00	3750.00	0.00
23		Neemuch-Mandsaur Solar Park	0.00	0.00	25.00
24		Agar Solar Park	0.00	0.00	0.00
25		Shajapur Solar Park	0.00	0.00	0.00
26		Morena (Chambal) Solar Park	0.00	0.00	0.00
27		Ext Trans PGCIL-Rewa	0.00	0.00	0.00
		Total	0.00	3750.00	25.00
28	Maharashtra	Sai Guru Solar Park (Pragat)	0.00	0.00	435.00
29		Patoda Solar Park (Paramount)	0.00	0.00	25.00

Sr. No.	State	Solar Park	Year*		
			2014-15	2015-16	2016-17
30		Dondaicha Solar Park	0.00	0.00	25.00
31		Latur Solar Park	0.00	0.00	0.00
32		Washim solar park	0.00	0.00	0.00
33		Yavatmal Solar Park	0.00	0.00	0.00
34		Kacharala solar park	0.00	0.00	0.00
		Total	0.00	0.00	485.00
35	Manipur	Bukpi Solar Park	0.00	0.00	0.00
36	Meghalaya	Solar park in Meghalaya	0.00	3.07	0.00
37	Mizoram	Vankal Solar Park	0.00	0.00	0.00
38	Nagaland	Solar Park in Nagaland	0.00	0.00	0.00
39	Odisha	Solar Park in Odisha	0.00	0.00	0.00
40		Solar Park by NHPC	0.00	0.00	0.00
		Total	0.00	3.07	0.00
41	Rajasthan	Bhadla-II Solar Park	3319.00	2801.00	0.00
42		Bhadla-III Solar Park	0.00	4575.00	450.00
43		Bhadla-IV Solar Park	0.00	0.00	1525.00
44		Phalodi-Pokaran Solar Park	0.00	0.00	25.00
45		Fatehgarh Phase-1B Solar Park	0.00	0.00	25.00
46		Nokh Solar Park	0.00	0.00	0.00
47		RVPN- Bh-II, Bh-III, Bh-IV	0.00	0.00	0.00
48		PGCIL- Bh-II, Bh-III, Bh-IV, PP, F 1B	0.00	0.00	0.00
		Total	3319.00	7376.00	2025.00
49	Tamil Nadu	Solar Park in Tamil Nadu	0.00	0.00	0.00
50	Tamil Nadu	Kadaladi Solar Park	0.00	0.00	0.00
51	Telangana	Gattu Solar Park	0.00	25.00	0.00
52	Uttar Pradesh	Solar Park in UP	0.00	2081.80	0.00
53		UP Kanpur Dehat Solar Park	0.00	0.00	0.00
54		UP Jalaun Solar Park	0.00	0.00	0.00
55		UP Kanpur Nagar Solar Park	0.00	0.00	0.00
56		Ext Trans UPPTCL	0.00	0.00	0.00
		Total	0.00	2106.80	0.00
57	Uttarakhand	Solar park in Uttarakhand	0.00	0.00	8.25
58	West Bengal	Solar park in West Bengal	0.00	0.00	25.00
		Total	15587.84	36813.26	11748.02

* Scheme was launched in December, 2014.

3. DETAILS OF STATE-WISE, YEAR-WISE, VGF RELEASED BY SECI TO CPSUS/ GOI ORGANISATIONS UNDER CENTRAL PUBLIC SECTOR UNDERTAKINGS (CPSUS) SCHEME

State	Year*	
	2015-16	2016-17
Andhra Pradesh	Rs. 1,250,000,000	Rs. 1,275,000,000
Madhya		Rs. 825,000,000
Rajasthan		Rs. 1,800,000,000
Tamil		Rs. 25,000,000
Telangana		Rs. 7,500,000
Uttar		Rs.
Total	Rs. 1,250,000,000	Rs. 3,935,000,000

* Scheme was launched in January, 2015.

4. DETAILS OF FUNDS RELEASED BY MNRE TO NVVN PAYMENT SECURITY SCHEME FOR GRID-CONNECTED SOLAR POWER PROJECTS UNDER PHASE-I OF NSM

State-wise break-up is not possible as the funds under the Scheme are being released to NTPC Vidyut Vyapar Nigam Limited (NVVN) for implementing Payment Security Mechanism for solar power plants being implemented through NVVN under Phase-I of National Solar Mission.

Sl. No.	Financial Year	Amount released (Rs. in Cr.)	Towards
1.	2012-13	32.85	3 rd installment
2.	2013-14	23.47	4 th installment
3.	2014-15	0.00	-
4.	2015-16	58.32	5 th installment
5.	2016-17	126.39	6 th installment
	TOTAL	241.03	

5. CFA RELEASED BY MNRE TO SECI UNDER DEFENCE SCHEME:-

Sr. No.	Year*	Expenditure incurred (Rs. In Crores)
1.	2014-15	Nil
2.	2015-16	3.78
3.	2016-17	24.35

* Scheme was launched in December, 2014.

6. FUNDS RELEASED BY MNRE TO IMPLEMENTING AGENCIES UNDER OFF-GRID PROGRAMMES:-

(Rs. in Lakhs)

Sr. No.	States/UTs	2012-13	2013-14	2014-15	2015-16	2016-17
4.	Andhra Pradesh	134	29	3205	10368	3953
5.	Arunachal Pradesh	582	428	261	57	694
6.	Assam	223	304	57	439	1358
7.	Bihar	20	350	648	1541	0
8.	Chhattisgarh	5282	1115	3014	3327	6549
9.	Delhi	0	0	102	124	0
10.	Gujarat	0	7	1689	1797	2608
11.	Haryana	226	0	624	1922	0
12.	Himachal Pradesh	191	2098	1628	4100	2650
13.	Jammu & Kashmir	3361	3697	1915	4395	2466
14.	Jharkhand	270	0	651	1551	0
15.	Karnataka	114	840	834	66	3901
16.	Kerala	855	0	2370	965	2359
17.	Lakshadweep	0	645	0	375	0
18.	Madhya Pradesh	449	0	1570	41	66
19.	Maharashtra	28	0	3431	2442	0
20.	Manipur	1483	369	147	1160	442
21.	Meghalaya	0	502	573	312	1354
22.	Mizoram	179	394	702	753	1354
23.	Nagaland	1036	425	350	555	1501
24.	Odisha	0	0	1294	195	1700
25.	Puducherry	0	0	26	0	0
26.	Punjab	97	203	1024	824	0
27.	Rajasthan	3890	1248	11489	20063	6711
28.	Sikkim	262	820	141	28	282
29.	Tamil Nadu	128	2029	2939	8262	207
30.	Telangana	0	0	2232	1502	0
31.	Tripura	402	0	113	347	1372
32.	Uttarakhand	123	4057	115	2510	373
33.	Uttar Pradesh	2675	17	4481	3851	1896
34.	West Bengal	382	0	167	34	0
35.	Chandigarh	0	0	276	0	0
36.	Others (CEL, REIL, NABARD, Regional Rural Banks, NGOs, etc.) and other Channel Partners	17526	13059	13411	26515	11266
	Total	39918	32637	61478	100422	55065

7. CFA RELEASED BY MNRE TO IMPLEMENTING AGENCIES UNDER ROOF-TOP PROGRAMMES:-

(Rs. in Crores)

Sr. No.	State/UTs	2012-13	2013-14	2014-15	2015-16	2016-17
1	Andhra Pradesh	0	0.00	2.41	3.87	9.150
2	Assam	0	0.00	0.00	0.00	38.4615
3	Andaman & Nicobar	0	0.00	0.00	0.00	0.525
4	Chhattisgarh	0	0.00	0.00	3.60	5.495
5	Delhi	0	0.00	0.00	5.76	19.467
6	Gujarat	0	1.03	0.00	4.50	17.43
7	Goa	0	0.00	0.00	1.44	0.00
8	Haryana	0	0.00	0.00	3.60	16.2225
9	Jammu & Kashmir	0	0.00	0.00	0.00	3.675
10	Jharkhand	0	0.00	0.00	0.00	12.7125
11	Kerala	0	0.00	0.00	4.68	4.05
12	Karnataka	0	0.00	0.00	0.00	2.52
13	Lakshadweep	0	0.00	0.00	0.00	0.455
14	Madhya Pradesh	0	0.00	0.00	1.24	31.95588
15	Maharashtra	0	0.00	0.00	0.00	23.175
16	Odisha	0	0.00	0.00	2.88	0.86
17	Puducherry	0	0.00	0.00	0.00	1.1045000
18	Punjab	0	0.00	0.00	9.22	4.50
19	Rajasthan	0	0.00	0.00	4.26	14.79
20	Tamil Nadu	0	0.51	0.00	8.23	69.67
21	Telangana	0	0.00	0.00	3.78	20.12
22	Tripura	0	0.00	0.00	0.00	0.00
23	Uttarakhand	0	0.00	0.01	22.13	25.973
24	Uttar Pradesh	0	0.00	0.00	5.86	1.16
25	West Bengal	0	0.00	0.00	3.09	0.17
26	Chandigarh	0	0.00	1.26	9.09	6.72
27	Manipur	0	0.00	0.00	0.91	8.11
28	Himachal Pradesh	0	0.00	0.00	0.00	5.4315
	Sub- Total	0.00	1.54	3.68	98.14	343.89
29	PSU/Govt. Department	0.00	0.00	0.00	18.52	74.7439
30	SECI	42.68	0.00	0.00	128.00	250.00
31	NISE	0.00	0.00	0.00	2.62	0.00
32	TERI	0.00	0.00	0.00	0.09	0.00
33	others (NFDC)	0.00	0.00	0.00	0.017	9.380
	Total	42.68	1.54	3.68	247.39	678.01