

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO-3170
ANSWERED ON-23.03.2021

PROMOTION OF SOLAR ENERGY

3170#. SHRI VINAY DINU TENDULKAR

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

- (a) whether Government has launched any scheme for the masses to promote solar energy in the country, if so, the details thereof, State-wise and Union Territory-wise;
- (b) the percentage of the population of the country getting benefitted from this endeavour during the last two years;
- (c) the amount allocated for this purpose during the last three years and the amount spent so far therefor and whether any expenditure has been made by way of subsidy or whether any income has been made; and
- (d) if so, the details thereof?

ANSWER

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

(SHRI R.K. SINGH)

(a) Details of schemes presently being implemented by the Ministry of New and Renewable Energy (MNRE) for promotion of solar energy and their availability in various States/ UTs are placed at **Annexure-I**.

(b) MNRE's schemes to promote solar energy fetch a variety of benefits to the country and its people. These include improved access to energy and reduction in environmental pollution. Further, solar generation projects also create employment opportunities, particularly in the areas where they are set up. State-wise details of solar power projects/ applications installed in last two years and the current year are placed at **Annexure-II**.

(c) & (d) Details of the amount allocated and spent by the Government for promotion of solar energy in last three years and the current year are placed at **Annexure-III**. This amount includes expenditure by way of subsidy, viability gap funding and incentives provided, including to implementing agencies, under various schemes.

The financial support provided by the Government helps in financial viability of solar power projects, savings in electricity charges for individual consumers and institutions, and creating additional sources of income for farmers. Details of the benefits available under various schemes for promotion of solar energy are placed at **Annexure-I**.

Annexure-I referred in reply to Part (a) of the Rajya Sabha Unstarred Question No. 3170 to be answered on 23.03.2021 on 'Promotion of Solar Energy'

Details of the schemes presently being implemented by the Ministry of New and renewable Energy for promotion of solar energy and States/ UTs covered

Scheme	Application/ Size	CFA available & Intended beneficiary	States/UTs covered
a) Solar Park Scheme	Scheme aims to develop Solar Parks and Ultra Mega Solar Power Projects for setting up of 50 solar parks of 40,000 MW capacity in the Country	Rs. 20 Lakh per MW or 30% of the project cost including Grid-connectivity cost, whichever is lower. Also, up to Rs. 25 lakh per Solar park for preparation of Detailed Project Report (DPRs). Intended beneficiary: Solar Power Park Developer (SPPD), Central Transmission Utility and State Transmission Utility (STU) Application process: Proposal for solar park is submitted to SECI. On approval, CFA is disbursement by MNRE through SECI.	All States/ UTs
b) CPSU Scheme Phase-II (Government Producer Scheme)	Total size of the scheme 12000 MW.	Viability Gap Funding (VGF) of up to Rs. 0.7 Cr./MW is provided. Use of domestically manufactured solar PV cells and modules is mandatory. VGF is released in two tranches as follows: i. 50% on Award of contract to the EPC contractor (including in-house EPC Division); and ii. balance 50% on successful commissioning of the full capacity of the project Intended beneficiary: Government Producers Application process: Tender is brought out by SECI/ IREDA for reverse bidding on VGF. VGF is sanctioned to successful Government Producers.	All States/ UTs
c) Scheme for Distributed Grid-connected Solar PV Power Projects in Andaman & Nicobar Islands and Lakshadweep Islands with Capital Subsidy	Capacity proposed to be installed is 52 MW	i. Ministry provides 40% of the project cost discovered through competitive bidding process as grant to developer; ii. No additional grant for the preparation of DPR, conducting field survey, fund handling / service charge will be provided iii. The Capital Subsidy will be released	Island UTs of Andaman & Nicobar Islands and Lakshadweep

Scheme	Application/ Size	CFA available & Intended beneficiary	States/UTs covered
from MNRE		<p>in three tranches as mentioned below:</p> <ul style="list-style-type: none"> ➤ 15% on completion of site development and civil works at site; ➤ 60% on successful commissioning of the plant; and ➤ Balance 25% after one year of operation of the plant. <p>Intended beneficiary: PSU Developers such as NLC, NTPC, REIL and SECI or UT Administrations of A&N Islands or Lakshadweep islands.</p> <p>Application process: Proposal is submitted by PSU/ UT Administration to MNRE. On approval, Central subsidy is sanctioned to concerned PSU/ UT Administration.</p>	
d) Phase-II of Grid Connected Rooftop Programme	4000 MW in residential sector	<p>Central Financial Assistance will be as under:</p> <p>(i) Residential sector (maximum up to 3 kW capacity) - 40 % of benchmark cost or tender cost, whichever is lower.</p> <p>(ii) Residential sector (above 3 kW capacity and up to 10 kW capacity) - 40 % of benchmark cost or tender cost, whichever is lower, up to 3 KW and 20% for system capacity above 3 kW and up to 10 kW.</p> <p>(iii) Group Housing Societies/ Residential Welfare Associations (GHS/RWA) etc. for common facilities up to 500 kWp (@ 10 kWp per house), with the upper limit being inclusive of individual rooftop plants already installed by individual residents in that GHS/RWA at the time of installation of RTS for common activity.</p> <p>Further, incentive is being provided to Discoms based on percentage of year-wise installed capacity achieved against previous year's cumulative installation.</p>	All States/ UTs

Scheme	Application/ Size	CFA available & Intended beneficiary	States/UTs covered
		<p>Intended beneficiary: Residential customer, Group Housing Societies (GHS) and Residential Welfare Associations (RWA)</p> <p>Application process: Discoms are implementation agencies under the Scheme. Capacity is sanctioned to implementation agencies by MNRE.</p>	
e) Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM)	<p>(a) Component-A: 10 GW Installation of Renewable power plants (incl. solar) up to 2 MW capacity on barren/agriculture land.</p> <p>(b) Component-B: Installation of 20 lakh standalone solar pumps up to 7.5 HP capacity each for irrigation purpose</p> <p>(c) Component-C: Solarization of 15 lakh existing agricultural pumps up to 7.5 HP capacity each.</p>	<p>For Component-A, DISCOM would be eligible to get PBI @ Rs. 0.40 per unit purchased or Rs. 6.6 lakh per MW of capacity installed, whichever is less, for a period of five years from the commercial operation date.</p> <p>For Components-B and C, CFA of 30% of the benchmark cost or the tender cost of standalone pump or solarization of existing pump, whichever is lower, will be provided to the beneficiary. However, in North Eastern states including Sikkim; states of Himachal Pradesh and Uttarakhand; UTs of Jammu & Kashmir and Ladakh; and island UTs of Lakshadweep and A&N, CFA of 50% of the benchmark cost or the tender cost, whichever is lower will be provided. The State Government will also provide subsidy of 30% of the cost of standalone pump/ solarization, or higher.</p> <p>State may also opt for feeder level solarization under Component-C.</p> <p>Intended beneficiary: Farmers by way of subsidy and additional income through sell of electricity.</p> <p>Application process: State Nodal Agencies of MNRE/ Discoms/ State Agricultural Department/ State Horticulture Department are implementation agencies under Scheme. Capacity is sanctioned to implementation agencies by MNRE.</p> <p>Applications are invited by the implementation agencies and CFA is sanctioned to eligible beneficiaries.</p>	All States/ UTs
f) Off-grid and Decentralized	a) Solar Street Lights / Solar	CFA up to 30% of the benchmark cost or tender cost of the system, whichever	Solar street lights and solar power packs

Scheme	Application/ Size	CFA available & Intended beneficiary	States/UTs covered
Solar PV Applications Scheme: Phase-III	<p>Power Packs</p> <p>b) Solar Study lamps</p>	<p>is lower, in General Category States and 90% of the benchmark cost or tender cost of the system, whichever is lower, in North Eastern states including Sikkim; states of Himachal Pradesh and Uttarakhand; UTs of Jammu & Kashmir and Ladakh; and island UTs of Lakshadweep and Andaman & Nicobar.</p> <p>For solar study lamps, CFA up to 85% of the solar study lamp cost is provided all states.</p> <p>Intended beneficiary: Students, Communities and Public Service Institutions.</p> <p>Application process: State Nodal Agencies of MNRE are implementation agencies under the Scheme. Demand is aggregated by these agencies and submitted to MNRE for approval. CFA provided to beneficiaries through implementation agencies.</p>	<p>were initially available in all States including West Bengal.</p> <p>After continuation of the Scheme in 2020-21, these applications are available only in NE States.</p> <p>Solar study lamps are available in NE States and LWE affected districts.</p>

Annexure-II

Annexure-II referred in reply to Part (b) of the Rajya Sabha Unstarred Question No. 3170 to be answered on 23.03.2021 on 'Promotion of Solar Energy'

State-wise details on Solar Energy Capacity Installation during 01.04.218 to 28.02.2021

Sr. No.	State/UT	Solar Grid Capacity Installed (MW)	Solar Off-grid Capacity Installed				
			Solar Lamps/ Lanterns (Nos.)	Solar Home Lights (Nos.)	Solar Street Lights (Nos.)	Solar Pumps (Nos.)	Solar Power Packs (KWp)
1	Andaman & Nicobar	22.66	0	0	745	0	0
2	Andhra Pradesh	1801.04	26443	0	6803	9501	0
3	Arunachal Pradesh	0.22	111148	16120	12070	0	313.1
4	Assam	30.54	595484	0	9463	0	0
5	Bihar	17.06	1236848	0	29897	931	2631.4
6	Chandigarh	19.96	0	0	3	0	0
7	Chhattisgarh	21.13	0	34478	1688	22548	1142
8	Delhi	123.4	0	0	0	0	0
9	Goa	6.53	0	0	0	0	0
10	Gujarat	2480.3	0	0	3000	55	0
11	Haryana	190.98	0	0	12607	7168	0
12	Himachal Pradesh	42	0	0	14500	18	0
13	Jammu & Kashmir	19.37	0	0	10748	0	410
14	Jharkhand	22.96	415195	0	5793	1130	130
15	Karnataka	2411.04	0	0	2375	2640	100
16	Kerala	149.06	0	0	0	0	253
17	Lakshadweep	0	0	0	2000	0	0
18	Madhya Pradesh	1157.87	0	3904	4880	19100	0
19	Maharashtra	1050.79	0	0	0	8000	0
20	Manipur	6.3	0	0	11162	0	0
21	Meghalaya	0.1	15875	7030	900	0	919.5
22	Mizoram	1.33	97628	0	5061	0	1626.6
23	Nagaland	0	0	0	8890	0	0
24	Odisha	322.15	0	0	5471	864	1624
25	Pondicherry	9.17	0	0	0	0	0
26	Punjab	53.88	0	0	690	3113	0
27	Rajasthan	3139.81	0	0	262	14005	19599
28	Sikkim	0.07	0	0	0	0	0
29	Tamil Nadu	2494.91	0	14126	1089	1631	300
30	Telangana	645.11	12000	0	1203	0	335
31	Tripura	4.32	224659	0	5688	63	0
32	Uttar Pradesh	973.09	2069568	0	49158	18764	0
33	Uttarakhand	93.33	69459	0	12099	0	1124
34	West Bengal	112.52	0	0	6879	0	0
35	Others	29.93	0	0	0	609	0
Total		17452.93	4874307	75658	225124	110140	30507.6

Annexure-III

Annexure-III referred in reply to Part (c) and (d) of the Rajya Sabha Unstarred Question No. 3170 to be answered on 23.03.2021 on 'Promotion of Solar Energy'

Funds Allocated and Spent on Promotion of Solar Energy in Last Three Years and the Current Year

Year	Funds Allocated (Rs. Crore)	Expenditure (Rs. Crore)
2017-18	2102.10	1889.93
2018-19	2970.25	2524.65
2019-20	2280.51	1985.12
2020-21*	1776.24	1083.35*

* Expenditure figure till 28.02.2021