

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
STARRED QUESTION NO. 224
ANSWERED ON 16.03.2023

BENEFITS OF SOLAR ENERGY

+*224. SHRI SANTOSH KUMAR
SHRI KAUSHALENDRA KUMAR

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

- (a) the schemes being run by the Government to provide benefits of solar energy to the citizens/ farmers of the country;
- (b) the terms and conditions laid down to avail the benefits by the citizens/farmers of the country under the said schemes;
- (c) the quantum of funds spent by the Government under the said schemes during the last five years, State/UT-wise;
- (d) the quantum of electricity currently being generated in the country through solar energy, State/ UT-wise;
- (e) the amount of grant provisioned for subsidy to the farmers under the Solar Pump Scheme; and
- (f) the details of terms and conditions thereof?

ANSWER

THE MINISTER OF NEW & RENEWABLE ENERGY AND POWER

(SHRI R.K. SINGH)

(a) to (f) A Statement is laid on the Table of the House.

STATEMENT

Statement referred to in reply to parts (a) to (f) of Lok Sabha Starred Question No. 224 to be answered on 16.03.2023 regarding *Benefits of Solar Energy*

(a) to (f) The Ministry of New and Renewable Energy (MNRE) is implementing schemes to provide benefit of solar energy to the citizens and farmers of the country. Terms and conditions laid down to avail benefits under the currently available citizen centric schemes for promotion of solar energy are given at **Annexure-I**. Details of funds released under these schemes since inception are given at **Annexure-II**.

During FY 2022-23, as on 31.01.2023, total 82.2 billion units of electricity have been generated through solar power projects installed in the country. State/ UT-wise details of generation are given in **Annexure-III**.

Under Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM) Scheme, for installation of standalone solar pumps and solarization of existing grid-connected agricultural pumps, Central Financial Assistance (CFA) of 30% of the benchmark cost issued by MNRE or the prices of the systems discovered through tender, whichever is lower, is provided. However, in North Eastern States including Sikkim, Jammu & Kashmir, Ladakh, Himachal Pradesh, Uttarakhand, Lakshadweep and A&N Islands, CFA of 50% of the benchmark cost issued by MNRE or the prices of the systems discovered through tender, whichever is lower, is provided.

**Annexure-I referred to in reply to part (a) to (f) of Lok Sabha Starred Question
No. 224 for 16.03.2023**

**DETAILS OF MAJOR CITIZEN CENTRIC SCHEMES FOR PROMOTION OF
SOLAR ENERGY**

Scheme	Targets	Eligibility conditions	Financial Assistance available
a) Rooftop Solar Programme Phase-II	Addition of 4000 MW RTS capacity in Residential Sector through provision of Central Financial Assistance (CFA). In addition, incentives to Discoms for initial 18000 MW RTS capacity addition.	The Scheme is demand driven and open for all residential consumers of electricity in the country for implementation as per guidelines issued for the Scheme. The Scheme is implemented through the state government agencies.	<p>(i) For Residential Sector</p> <ul style="list-style-type: none"> Central Financial Assistance (CFA) of 40% for capacity up to 3 kWp CFA of 20% for capacity beyond 3 kWp and up to 10 kWp CFA of 20% for GHS/RWA capacity up to 500 kWp (limited to 10 kWp per house and total upto 500 kWp) <p>(ii) For Discoms incentives up to 10% of project cost of new installations in a year depending upon achievements in capacity addition above baseline.</p>
b) Pradhan Mantri- Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM- KUSUM)	<p>Component A: Setting up of 10,000 MW of Decentralized Ground/Stilt Mounted Solar Power Plants</p> <p>Component B: Installation of 20 Lakh Stand-alone Solar Pumps</p> <p>Component C: Solarisation of 15 Lakh Grid Connected Agriculture Pumps including through feeder level solarisation</p>	<p>The Scheme is demand driven and open for all farmers in the country for implementation as per guidelines issued for the Scheme. The Scheme is implemented through the state government agencies.</p> <p>Plants under Component-A can be installed by individual farmers, Solar Power Developers, Cooperatives, Panchayats and Farmers Producer Organisations.</p> <p>The beneficiaries under Component-B and Component-C</p>	<p>Under Component-A, Procurement Based Incentive (PBI) is provided to the DISCOMs @ 40 paise/kWh or Rs.6.60 lakhs/MW/year, whichever is lower, for buying solar power. The PBI is given to the DISCOMs for a period of five years from the Commercial Operation Date of the plant. Therefore, the total PBI payable to DISCOMs is Rs. 33 Lakh per MW.</p> <p>Under Component-B and individual pump solarisation under Component-C, CFA of 30% of the benchmark cost issued by MNRE or the prices of the systems discovered in the tender, whichever is lower is provided. However, in North Eastern States including Sikkim, Jammu & Kashmir, Ladakh, Himachal Pradesh and Uttarakhand, Lakshadweep and A&N Islands,</p>

		<p>could be individual farmers, Water User Associations, Primary Agriculture Credit Societies and Communities/Cluster Based Irrigation Systems.</p>	<p>CFA of 50% of the benchmark cost issued by MNRE or the prices of the systems discovered in the tender, whichever is lower, is provided. In addition, the respective state/UT has to provide at least 30% financial support. Balance cost is to be contributed by beneficiary.</p> <p>For agriculture feeder solarization, CFA of Rs 1.05 Crore per MW is provided. There is no mandatory requirement of financial support from participating State/UT. The feeder solarisation can be implemented in CAPEX or RESCO mode.</p>
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**Annexure-II referred to in reply to part (a) to (f) of Lok Sabha Starred Question
No. 224 for 16.03.2023**

**State-wise details of funds released under PM-KUSUM Scheme and Rooftop Solar
Phase-II Scheme since inception**

Sr. no.	State /UT	Funds released since inception (till 28.02.2023) in Rs. Crore
1	Andaman & Nicobar	0.35
2	Andhra Pradesh	7.79
3	Arunachal Pradesh	0.81
4	Assam	5.36
5	Bihar	0.89
6	Chandigarh	2.85
7	Chhattisgarh	5.34
8	Delhi	14.69
9	Goa	3.59
10	Gujarat	2249.43
11	Haryana	338.49
12	Himachal Pradesh	12.18
13	Jammu & Kashmir	16.94
14	Jharkhand	39.60
15	Karnataka	7.21
16	Kerala	133.94
17	Madhya Pradesh	114.58
18	Maharashtra	335.06
19	Manipur	0.62
20	Meghalaya	0.28
21	Mizoram	0.05
22	Odisha	1.35
23	Punjab	112.76
24	Rajasthan	585.23
25	Tamil Nadu	52.27
26	Telangana	70.11
27	Tripura	11.44
28	Uttar Pradesh	116.43
29	Uttarakhand	11.45
30	West Bengal	10.17
31	Others	25.08
	Total	4286.34

Note: Implementation of PM-KUSUM and RTS Phase-II Schemes started in FY 2019-20, therefore, expenditure data has been provided since inception.

Annexure-III referred in reply to part (a) to (f) of the Lok Sabha Starred Question No. 224 to be answered on 16.03.2023

State/UTs-wise Solar Generation during FY 2022-23 (in MUs, up to 31-01-2023)

Sr. No.	State/UT	Generation (Million Units)
1	Andaman & Nicobar	19.49
2	Andhra Pradesh	6601.74
3	Arunachal Pradesh	21.93
4	Assam	174.2
5	Bihar	139.53
6	Chandigarh	9.75
7	Chhattisgarh	482.98
8	Dadra & Nagar Haveli and Daman & Diu	24.46
9	Delhi	201.69
10	Goa	11.84
11	Gujarat	8215.84
12	Haryana	460.67
13	Himachal Pradesh	50.69
14	Jharkhand	16.76
15	Karnataka	11363.08
16	Kerala	697.67
17	Lakshadweep	0.09
18	Madhya Pradesh	3155.93
19	Maharashtra	3441.24
20	Manipur	6.93
21	Mizoram	2.68
22	Odisha	571.62
23	Puducherry	10.2
24	Punjab	2165.74
25	Rajasthan	28104.14
26	Tamil Nadu	7505.74
27	Telangana	5428.40
28	Tripura	5.49
29	Uttar Pradesh	2945.98
30	Uttarakhand	276.50
31	West Bengal	101.5
Total		82214.5