

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 3091
TO BE ANSWERED ON 03.08.2017

SOLAR ENERGY POLICY

3091. SHRIMATI JAYSHREEBEN PATEL:

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

- (a) the details of the Government's Solar Energy Policy;
- (b) the details of the progress made in the implementation of the above policy, State-wise;
- (c) the details of incentives provided to popularise the policy;
- (d) the manner in which the people are being encouraged towards the installation of solar rooftop panels along with the power generated in megawatts thereunder;
- (e) the details of the benefits accruing therefrom to the public and the Government; and
- (f) the planning of the Government for a better future with regard to this aspect?

ANSWER

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

(a): The Government has declared no specific 'Solar Energy Policy'. However, the Government has launched, inter alia, following schemes to promote solar energy:

- i. Solar Park Scheme for setting up of over 50 Solar Parks and Ultra Mega Solar Power Projects targeting over 40,000 MW of solar power projects.
- ii. Scheme for setting up 1000 MW of Grid-Connected Solar PV Power Projects by the Central Public Sector Undertakings (CPSUs) and the Government of India organisations with Viability Gap Funding (VGF).
- iii. Scheme for setting up 300 MW of Grid-Connected Solar PV Power Projects by Defence Establishments and Para Military Forces with VGF.
- iv. Pilot-cum-demonstration projects for development of grid connected solar PV power plants on canal banks and canal tops.
- v. Bundling Scheme - 15000 MW grid-connected solar PV power plants through NTPC Ltd./ NVVN.
- vi. VGF Scheme for setting up of 2000 MW of Grid Connected Solar PV Power Projects through SECI.
- vii. VGF Scheme for setting up of 5000 MW of Grid Connected Solar PV Power Projects through SECI.
- viii. Installation of Grid Connected Solar Rooftop Power Plants.

(b): State-wise details of grid connected solar power capacity installed in the country, as on 30.06.2017 are given at Annexure-I.

(c): The Government is promoting solar energy through various fiscal and promotional incentives such as capital subsidy, generation based incentive, accelerated depreciation, viability gap funding (VGF), financing solar rooftop systems as part of home loan, preferential tariff for power generation from renewables, foreign direct investment up to 100 per cent under the automatic route etc. Recently, Goods and Services Tax has been kept at the lower level of 5% to promote the solar sector.

(d): The Government has taken various steps to encourage people to install solar rooftop systems. Details are given at Annexure-II. An aggregate capacity of 704.02 MWp grid connected rooftop solar power plants have been installed in the country as on 31.07.2017.

(e): Installation of solar power helps in providing power to people especially in far-flung areas. It also provides environmental benefits resulting into combatting climate change. This apart, installation of solar panels is done quickly in comparison to other modes of power and there is low operation and maintenance cost involved. Overall solar power contributes to energy security of the country.

(f): The Government has revised the target from 20,000 MW to 100,000 MW by 2022 for grid connected solar power projects through installation of 60,000 MW of ground mounted and 40,000 MW of rooftop projects. The Year-wise targets for grid connected solar power capacity installation are given below:

Year/Category	Rooftop Solar (in MW)	Large Scale Solar Power Projects (in MW)	Total (in MW)
2015-16	200	1,800	2,000
2016-17	4,800	7,200	12,000
2017-18	5,000	10,000	15,000
2018-19	6,000	10,000	16,000
2019-20	7,000	10,000	17,000
2020-21	8,000	9,500	17,500
2021-22	9,000	8,500	17,500
Total	40,000	57,000	97,000*

*3,743 MW commissioned upto 2014-15.

ANNEXURE-I REFERRED TO IN REPLY TO PART (B) OF LOK SABHA UNSTARRED QUESTION NO. 3091 FOR 03.08.2017

STATE/UT-WISE DETAILS OF SOLAR ENERGY CAPACITY INSTALLED

(As on 30.06.17)

Sr. No.	State/UT	Total cumulative capacity till 30.06.2017
		(in MW)
1	Andhra Pradesh	2010.87
2	Arunachal Pradesh	0.27
3	Bihar	111.52
4	Chhattisgarh	128.86
5	Gujarat	1262.1
6	Haryana	81.4
7	Jharkhand	23.27
8	Karnataka	1180.38
9	Kerala	74.2
10	Madhya Pradesh	857.04
11	Maharashtra	452.36
12	Odisha	79.42
13	Punjab	809.45
14	Rajasthan	1961.21
15	Tamil Nadu	1697.32
16	Telangana	1609.27
17	Tripura	5.09
18	Uttar Pradesh	359
19	Uttarakhand	233.48
20	West Bengal	26.14
21	Andaman & Nicobar	6.56
22	Delhi	40.27
23	Lakshadweep	0.75
24	Puducherry	0.08
25	Chandigarh	17.32
26	Dadra and Nagar Haveli	2.97
27	Goa	0.71
28	Manipur	0.03
29	Meghalaya	0.01
30	Nagaland	0.5
31	Daman & Diu	10.46
32	J&K	1.36
33	Himachal Pradesh	0.73
34	Mizoram	0.1
35	Assam	11.78
36	Others/ data from rooftop division cumulative	58.31
TOTAL		13114.59

ANNEXURE-II REFERRED TO IN REPLY TO PART (D) OF LOK SABHA UNSTARRED QUESTION NO. 3091 FOR 03.08.2017

STEPS TAKEN TO ENCOURAGE ROOFTOP SOLAR INSTALLATION

- (a) The Central Financial Assistance (CFA) upto 30% of benchmark cost for the general category states and upto 70 % of benchmark cost for special category states, i.e. North Eastern States including Sikkim, Uttarakhand, Himachal Pradesh, Jammu & Kashmir and Lakshadweep, Andaman & Nicobar Islands is provided for installation of grid connected rooftop projects in residential, institutional and social sector.
- (b) All the 36 States/ UTs have notified net metering regulations and/or tariff orders.
- (c) Over 1933 firms have been empanelled as channel partner.
- (d) Solar Energy Corporation of India (SECI) issued the largest Rooftop Solar (RTS) tender for 500 MW for social/institutional/residential sectors and 500 MWp for Govt. sectors.
- (e) 4 State/ UTs of Chhattisgarh, Haryana, Uttar Pradesh and Chandigarh have notified mandatory notification for RTS.
- (f) As financial CFA has been withdrawn for projects in Industrial & Commercial sectors, MNRE made efforts to provide concessional loans to developers in these segments. Thus multilateral concessional loans of USD 625Million have been approved from the World Bank to State Bank of India (SBI) and USD 500 million has been approved from Asian Development Bank Punjab National Bank (PNB) for RTS development in Industrial & Commercial sectors.
- (g) MNRE also prepared model EPC agreement / PPA which have been duly vetted by Ministry of Finance and Ministry of Law and Justice.
- (h) Publicity through print and electronic media.