GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY LOK SABHA STARRED QUESTION NO-437

ANSWERED ON-25.03.2021

RENEWABLE ENERGY TARGET

*437. SHRI VINCENT H. PALA:

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

- (a) whether the Government expects to meet the renewable energy target of 175 GW installation by 2022, considering that the country has achieved only 94 GW of installed capacity as of now;
- (b) if so, the manner in which the Government proposes to meet the shortfall;
- (c) if not, the reasons for falling behind on target even before COVID-19 pandemic;
- (d) whether there is any plan to coordinate with the Ministry of Power to ensure reliable integration of renewable energy into the grid and development of energy storage and if so, the details thereof:
- (e) whether only 3GW has been achieved out of the 40 GW target set for solar rooftop and if so, the details thereof; and
- (f) the steps being taken to create improved awareness among beneficiaries and streamline the process of installation of Rooftop Solar (RTS) plants for consumers?

ANSWER

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

(SHRI R.K. SINGH)

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

STATEMENT REFERRED TO IN REPLY TO LOK SABHA STARRED QUESTION No. 437 for ANSWER ON 25/3/2021

(a) to (c): The Government has set a target of achieving 175 GW installed Renewable Energy capacity (excluding large hydro) by December, 2022.

A total of 92.97 GW renewable energy capacity (excluding large hydro) has been cumulatively installed in the country as on 28-02-2021. Further, a capacity of 50.15 GW is under various stages of under implementation and a capacity of 27.02 GW is under various stages of bidding. Therefore, a total of 170.14 GW capacity has either been installed or under various stages of implementations/bidding.

The Government has taken several steps to promote renewable energy in the country. These include:

- permitting Foreign Direct Investment (FDI) up to 100 percent under the automatic route,
- waiver of Inter State Transmission System (ISTS) charges and losses for inter-state sale of solar and wind power for projects to be commissioned by 30 June, 2023,
- declaration of trajectory for Renewable Purchase Obligation (RPO) up to the year 2022,
- setting up of Ultra Mega Renewable Energy Parks to provide land and transmission to RE developers on a plug and play basis,
- schemes such as Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM), Solar Rooftop Phase II, 12000 MW CPSU Scheme Phase II, etc,
- laying of new transmission lines and creating new sub-station capacity under the Green Energy Corridor Scheme for evacuation of renewable power,
- notification of standards for deployment of solar photovoltaic system/devices,
- setting up of Project Development Cell for attracting and facilitating investments,
- Standard Bidding Guidelines for tariff based competitive bidding process for procurement of Power from Grid Connected Solar PV and Wind Projects.
- Government has issued orders that power shall be dispatched against Letter of Credit (LC) or advance payment to ensure timely payment by distribution licensees to RE generators.
- (d) In order to ensure reliable integration of RE into the grid, following actions have been taken in coordination with Ministry of Power:
 - Under the Green Energy Corridor, Inter-State Transmission System (ISTS) with 3200 circuit kilometres (ckm) of transmission lines and 17000 Mega Volt-Amperes (MVA) capacity substations has been implemented, and Intra-State Transmission System (InSTS) with approx. 9700 ckm transmission lines and approx. 22600 MVA capacity substations is under implementation.
 - Eleven Renewable Energy Management Centres (REMCs) with facilities of forecasting and scheduling of renewable generation to address the issues of intermittency of renewable energy have been commissioned. Another two are under implementation.
 - Inter-State transmission infrastructure for evacuation of 66.5 GW Renewable Energy in various States has been planned and is under implementation.

(e)&(f) A cumulative capacity of 3.917 GW of Rooftop Solar (RTS) plants has been installed in the country as on 28.02.2021. State-wise installed RTS capacity is given at **Annexure**.

Under Rooftop Solar Programme Ph-I, it was observed that the consumer had to approach multiple agencies for getting a RTS plant installed. To make the process simpler, it has been decided to make the DISCOMs and its local offices as the nodal points for implementation of the Phase-II of Rooftop Solar programme. Further, provision of higher subsidy for small residential capacities and incentives for DISCOMs have been made to foster the installation of RTS in the country. The Rooftop Solar Programme Phase-II has two components as under:

- Component A: RTS capacity aggregating 4000 MW is targeted in residential sector through provision of central financial assistance (CFA). CFA of 40% of the benchmark cost is provided for RTS projects upto 3 kW capacity and 20% for RTS system capacity beyond 3 kW and up to 10 kW for individual households. For Group Housing Societies/Residential Welfare Associations (GHS/RWA), CFA is limited to 20% for RTS plants of capacity upto 500 kw for supply of power to common facilities.
- Component B: Provision has been made to provide incentives to DISCOMs for achieving RTS capacity addition in a financial year above the baseline capacity as on 31st March of the previous year. There is no incentive for capacity addition up to 10% of baseline capacity, incentive of 5% of the benchmark cost for capacity addition beyond 10% and up to 15%; and incentive of 10% of the benchmark cost for capacity addition beyond 15%. Incentives are given only for initial 18000 MW capacity addition.

In addition, the following steps have been taken to promote installation of RTS plants:

- The consumer willing to install RTS plant under MNRE Scheme has to pay the cost of RTS plant after deducting the applicable CFA. The CFA amount will be paid to the vendor authorized for installation of RTS plant by the DISCOM.
- Standard operating procedure with timelines for installation of RTS plant have been shared with DISCOMs
- Creation of SPIN-an online platform for expediting project approval and report submission and strengthens monitoring of implementation of RTS projects.
- Facilitated availability of concessional loans from World Bank and Asian Development Bank (ADB) through SBI and PNB, respectively, for industrial and commercial sectors, where CFA/incentive is not provided by the Ministry.
- Technical Assistance has been made available to DISCOMs from multilateral/bilateral agencies like World Bank, ADB, GIZ, etc, including for capacity building, development / integration of online portal and aggregation of demand related to RTS projects.

Annexure

Annexure referred to in reply to part (e) & (f) of Lok Sabha starred Question No. 437 for 25/3/2021 regarding 'Renewable Energy Target'

Statewise installed Solar Rooftop capacity

	State wise instance Solar Robitop c	Capacity installed (MW) as
	States/UTs	on 28.02.2021
1	Andaman & Nicobar	4.18
2	Andhra Pradesh	138.82
3	Arunachal Pradesh*	0.22
4	Assam	20.68
5	Bihar	12.09
6	Chandigarh	38.82
7	Chhattisgarh	28.65
8	Goa	6.49
9	Gujarat	941.66
10	Haryana	304.55
11	Himachal Pradesh	14.17
12	Jammy and Kashmir*	12.98
13	Jharkhand	29.58
14	Karnataka	100.64
15	Kerala	107.40
16	Lakshadweep*	0.00
17	Ladakh*	0.00
18	Madhya Pradesh	90.56
19	Maharashtra	693.85
20	Manipur	4.50
21	Meghalaya*	0.12
22	Mizoram	1.37
23	Nagaland*	0.08
24	NCT of Delhi	141.19
25	Odisha	18.15
26	Puduchery	9.30
27	Punjab	124.54
28	Rajasthan	418.98
29	Sikkim*	0.07
	THE DADRA AND NAGAR HAVELI AND	
30	DAMAN AND DIU*	0.39
31	Tamil nadu	99.26
32	Telangana	168.65
33	Tripura*	3.08
34	Uttarakhand	257.25
35	Uttar pradesh	117.30
36	West bengal	7.90
	Total	3917.44

Capacity installed reported by DISCOMs (other than States marked * for which installation reported online by SNA/expert PSU/SECI etc. in SPIN portal of MNRE)