

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 3106
ANSWERED ON 21/12/2023

ACHIEVEMENTS UNDER NATIONAL SOLAR MISSION

3106. SHRIMATI SUMALATHA AMBAREESH

Will the Minister of New and Renewable Energy be pleased to state:

- (a) whether the Government has launched the National Solar Mission to increase the production of solar energy and if so, the details thereof;
- (b) the details of the target set to achieve under said Mission;
- (c) whether adequate measures are being taken by the Government to meet the energy demand in the country and if so, the details thereof; and
- (d) whether the Government has achieved its targeted growth under the said Mission and if so, the details thereof and if not, the reasons therefor?

ANSWER

THE MINISTER OF NEW & RENEWABLE ENERGY AND POWER

(SHRI R.K. SINGH)

(a) & (b) Yes, Sir. The targets set under the National Solar Mission were:

- i. To create an enabling policy framework for the deployment of 20,000 MW of solar power by 2022. This target was enhanced in 2015, from 20,000 MW to 1,00,000 MW of grid-connected solar power projects by 2022.
- ii. To promote programmes for off-grid applications, reaching 2000 MW by 2022.
- iii. To deploy 20 million solar lights by 2022.
- iv. To achieve 20 million sq. meters solar thermal collector area by 2022.
- v. To create favourable conditions for developing solar manufacturing capability in the country.

(c) In order to meet the energy demand in the country, Government has taken various measures to increase share of renewable energy. The list of measures is given at **Annexure-I**. Also various schemes have been issued to promote Renewable Energy, which are listed at **Annexure-II**.

In addition, in order to run the coal based power plants at desired capacity, Ministry of Power, vide letter dated 20.02.2023, issued directions under Section 11 of the Electricity Act, 2003, to Imported Coal Based (ICB) generating companies, wherein, it was directed that all the ICB plants should operate and generate power at their full capacity.

(d) Solar capacity of around 72.31 GW has been installed in the country as on 30-11-2023. This includes 58.53 GW from ground-mounted solar projects, 11.08 GW from Rooftop solar capacity, and 2.70 GW from off-grid solar capacity in the country, which includes 11.12 million solar lights. Solar thermal collector area of around 11 million square meters was installed till 2016-17 and since then it has been implemented in market mode without any financial support from Government. The domestic solar PV module manufacturing capacity in the country, as currently enlisted in MNRE's Approved List of Models and Manufacturers (ALMM), is around 22 GW per annum. The Government has launched Production Linked Incentive (PLI) Scheme for High Efficiency Solar PV Modules, for achieving manufacturing capacity of Giga Watt (GW) scale in High Efficiency Solar PV Modules. Under this PLI Scheme, Letters of Award have been issued for setting up around 48.3 GW of fully/ partially integrated solar PV module manufacturing capacity in the country.

**ANNEXURE-I REFERRED TO IN REPLY TO PART (c) OF LOK SABHA
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Details of measures taken to promote Renewable Power in the Country

- Permitting Foreign Direct Investment (FDI) up to 100 percent under the automatic route,
- Waiver of Inter State Transmission System (ISTS) charges for inter-state sale of solar and wind power for projects to be commissioned by 30th June 2025,
- Declaration of trajectory for Renewable Purchase Obligation (RPO) up to the year 2029-30,
- 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.
- Notification of Promoting Renewable Energy through Green Energy Open Access Rules 2022.
- Notification of "The Electricity (Late Payment Surcharge and related matters) Rules (LPS rules).
- Launch of Green Term Ahead Market (GTAM) to facilitate sale of Renewable Energy Power through exchanges.
- National Green Hydrogen Mission approved with an aim to make India a global hub for production, utilization and export of Green Hydrogen and its derivatives.
- Notification of prescribed trajectory for RE power bids to be issued by Renewable Energy Implementation Agencies from FY 2023-24 to FY 2027-28. Under the trajectory, 50 GW/annum of RE bids to be issued.

ANNEXURE II REFERRED TO IN REPLY TO PART (c) OF LOK SABHA

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Details of the ongoing major Renewable Energy Schemes / Programmes

1. Scheme for Development of Solar Parks and Ultra-mega Solar Power Projects with a target of setting up 40,000 MW capacity. Under the scheme, the infrastructure such as land, roads, power evacuation system water facilities are developed with all statutory clearances/approvals. Thus, the scheme helps expeditious development of utility-scale solar projects in the country.
2. Central Public Sector Undertaking (CPSU) Scheme Phase-II (Government Producer Scheme) for setting up 12,000 MW grid-connected Solar Photovoltaic (PV) Power Projects by Government Producers, using domestically manufactured solar PV cells and modules, with Viability Gap Funding (VGF) support, for self-use or use by Government/ Government entities, either directly or through Distribution Companies (DISCOMS).
3. Production Linked Incentive scheme 'National Programme on High Efficiency Solar PV Modules' for achieving manufacturing capacity of Giga Watt (GW) scale in High Efficiency Solar PV modules (Tranche- I & II).
4. PM-KUSUM Scheme to promote small Grid Connected Solar Energy Power Plants, stand-alone solar powered agricultural pumps and solarisation of existing grid connected agricultural pumps. The scheme is not only beneficial to the farmers but also States and DISCOMs. States will save on subsidy being provided for electricity to agriculture consumers and DISCOMs get cheaper solar power at tail end saving transmission and distribution losses.
5. Rooftop Solar Programme Phase II for grid connected solar rooftop power plants. Under this Programme, subsidy is provided for residential sector and performance linked incentives to DISCOMs for achieving capacity addition in rooftop solar above baseline.
6. Green Energy Corridors (GEC): to create intra-state transmission system for renewable energy projects. Central Financial Assistance (CFA) is provided to set up transmission infrastructure for evacuation of Power from Renewable Energy projects in total ten States (considering both the phases of GEC).
 - (i) Intra-State Transmission System Green Energy Corridor Phase-I
 - (ii) Intra-State Transmission System Green Energy Corridor Phase-II
7. Bio-Energy Programme:
 - Waste to Energy Programme : Programme on Energy from Urban, industrial and Agricultural Wastes/Residues

- Biomass Programme: Scheme to Support Manufacturing of Briquettes & Pellets and Promotion of Biomass (non-bagasse) based cogeneration in Industries.
 - Biogas Programme : for promotion of family type Biogas plants
8. Renewable Energy Research and Technology Development (RE-RTD) Programme (Support Programme).
 9. Human Resource Development Scheme with components such as short term trainings & skill development programmes, fellowships, internships, support to lab upgradation for RE and renewable energy chair.
 10. National Green Hydrogen Mission launched with an outlay of Rs. 19,744 crore with aim to make India a Global Hub for production, utilization and export of Green Hydrogen and its derivatives.