GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY RAJYA SABHA UNSTARRED QUESTION NO. 2548

ANSWERED ON 17/12/2024

PRODUCTION OF NEW AND RENEWABLE ENERGY IN PUNJAB

2548. SHRI SATNAM SINGH SANDHU

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

- (a) the details of steps taken by the Ministry to promote the production of new and renewable energy in the past five years in the State of Punjab;
- (b) the details of the quantum of green/renewable energy produced in the State during the past five years, category-wise; and
- (c) the details of steps taken by the Ministry to utilise farm residue and other agricultural residues/products to generate Green energy in the country, specially in the State of Punjab?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER

(SHRI SHRIPAD YESSO NAIK)

- (a) Ministry of New and Renewable Energy (MNRE) has taken several steps and initiatives to promote and accelerate renewable energy capacity in the country, including in the State of Punjab. Details are given at **Annexure-I**.
- (b) Details of category-wise Renewable Energy generation in the State of Punjab during the last five years are given at **Annexure-II.**
- (c) MNRE has notified the National Bioenergy Programme in November, 2022. This Programme supports setting up of biomass related projects namely, Compressed Bio Gas (CBG) plants, non-bagasse cogeneration plants and briquette/pellet manufacturing plants by providing Central Financial Assistance (CFA) in the country including in the State of Punjab. These biomass plants use agricultural residue, including paddy straw, as one of their feedstocks. So far, 16 projects have been commissioned under this programme in the State of Punjab.

Further, MNRE in July 2024, has enhanced the CFA for manufacturing of non-torrefied and torrefied pellets to Rs. 21 lakh/MTPH or 30% of the capital cost per MTPH and Rs. 42 lakh/MTPH or 30% of the capital cost per MTPH respectively, in the country, including in the State of Punjab.

Annexure-I referred to in reply of part (a) of the Rajya Sabha Unstarred Question No. 2548 to be answered on 17.12.2024

The Government of India has taken several steps and initiatives to promote and accelerate renewable energy capacity in the country to realize the commitment of 500 GW non-fossil energy capacity by 2030. These include, inter-alia, the following:

- Ministry of New & Renewable Energy (MNRE) has issued Bidding Trajectory for issuance of RE power procurement bids of 50 GW/annum by Renewable Energy Implementing Agencies(REIAs) [REIAs: Solar Energy Corporation of India Limited (SECI), NTPC Limited, NHPC Limited, SJVN Limited] from FY 2023-24 to FY 2027-28.
- Foreign Direct Investment (FDI) has been permitted up to 100 percent under the automatic route.
- Inter State Transmission System (ISTS) charges have been waived for inter-state sale of solar and wind power for projects to be commissioned by 30th June 2025, for Green Hydrogen Projects till December 2030 and for offshore wind projects till December 2032.
- To boost RE consumption, Renewable Purchase Obligation (RPO) followed by Renewable Consumption Obligation (RCO) trajectory has been notified till 2029-30. The RCO which is applicable to all designated consumers under the Energy Conservation Act 2001 will attract penalties on non-compliance. RCO also includes specified quantum of consumption from Decentralized Renewable Energy sources.
- Project Development Cell for attracting and facilitating investments has been set up.
- Standard Bidding Guidelines for tariff based competitive bidding process for procurement of Power from Grid Connected Solar, Wind, Wind-Solar Hybrid and Firm & Dispatchable RE (FDRE) projects have been issued.
- Schemes such as Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM), PM Surya Ghar Muft Bijli Yojana, National Programme on High Efficiency Solar PV Modules, National Green Hydrogen Mission, Viability Gap Funding (VGF) Scheme for Offshore Wind Energy Projects have been launched.
- Scheme for setting up of Ultra Mega Renewable Energy Parks is being implemented to provide land and transmission to RE developers for installation of RE projects at large scale.
- Laying of new transmission lines and creating new sub-station capacity has been funded under the Green Energy Corridor Scheme for evacuation of renewable power.
- Electricity (Rights of Consumers) Rules, 2020 has been issued for net-metering up to five hundred Kilowatt or up to the electrical sanctioned load, whichever is lower.
- "National Repowering and Life Extension Policy for Wind Power Projects, 2023" has been issued.
- "Strategy for Establishments of Offshore Wind Energy Projects" has been issued indicating a bidding trajectory of 37 GW by 2030 and various business models for project development.
- The Offshore Wind Energy Lease Rules, 2023 have been notified vide Ministry of External Affairs notification dated 19th December 2023, to regulate the grant of lease of offshore areas for development of offshore wind energy projects.
- Standard & Labelling (S&L) programs for Solar Photovoltaic modules and Grid-connected Solar Inverters have been launched.
- To augment transmission infrastructure needed for steep RE trajectory, transmission plan has been prepared till 2030.
- "The Electricity (Late Payment Surcharge and related matters) Rules (LPS rules) have been notified.
- Electricity (Promoting Renewable Energy Through Green Energy Open Access) Rules, 2022, has been notified on 06th June 2022 with objective of ensuring access to affordable, reliable, and sustainable green energy for all. Green Energy Open Access is allowed to any consumer

- with contract demand of 100 kW or above through single or multiple single connection aggregating Hundred kW or more located in same electricity division of a distribution licensee.
- Green Term Ahead Market (GTAM) has been launched to facilitate sale of Renewable Energy Power through exchanges.
- 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.
- For Electrolyser Manufacturing, contracts have been awarded / are under process for a capacity of 3,000 MW per annum.
- For Green Hydrogen production, capacity has been awarded for 4,12,000 tons per annum.

Annexure-II

Annexure-II referred to in reply of part (b) of the Rajya Sabha Unstarred Question No. 2548 to be answered on 17.12.2024

Details of category-wise Renewable Energy Generation in the State of Punjab during the last five years

(in Million Units)

| Year | Solar | Biomass | Bagasse | Small | Large | Others | Total |
|---------|---------|---------|---------|--------|---------|--------|---------|
| | | | | Hydro | Hydro | | |
| | | | | Power | | | |
| 2019-20 | 1358.22 | 398.37 | 252.85 | 712.77 | 5123.48 | 0.32 | 7846.01 |
| 2020-21 | 1356.48 | 585.99 | 231.50 | 690.33 | 4747.03 | 0.17 | 7611.50 |
| 2021-22 | 1473.41 | 576.83 | 208.30 | 983.37 | 3709.73 | 0.24 | 6951.88 |
| 2022-23 | 2778.66 | 497.68 | 210.76 | 682.48 | 4399.65 | 0.00 | 8569.23 |
| 2023-24 | 2673.99 | 613.44 | 197.99 | 636.97 | 4676.42 | 0.00 | 8798.81 |

Source : Central Electricity Authority (CEA)