GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY RAJYA SABHA UNSTARRED QUESTION NO. 947

ANSWERED ON 03/12/2024

PROMOTION OF RENEWABLE ENERGY AND COMPETITIVE GREEN HYDROGEN MARKET

947. DR. SUDHANSHU TRIVEDI

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

- (a) what are the strategies of Government to bring together and encourage industry, State Governments and other stakeholders to promote renewable energy sector; and (b) the measures being taken to emphasis innovation, competitive procurement and Government.
- (b) the measures being taken to emphasis innovation, competitive procurement and Government support to green hydrogen initiative for creating a competitive green hydrogen market in the country?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER

(SHRI SHRIPAD YESSO NAIK)

- (a) Government of India has taken several steps and initiatives to encourage industry, State Governments and other stakeholders to promote and accelerate renewable energy capacity in the country, as given in the **Annexure**.
- (b) The Ministry of New and Renewable Energy (MNRE) is implementing National Green Hydrogen Mission. As part of this programme, proposals have been invited from Research Institutes and academia, Industries including MSMEs and start-ups to undertake research and innovation work in four major categories of Hydrogen eco-system viz. production, storage and transportation, safety, and applications.

Under the mission, the Government support in the form of financial incentive s upto ₹13,050 crore has been earmarked for the production of Green Hydrogen and its derivatives in order to create a competitive green hydrogen market in the country. Additionally, an outlay of ₹4,440 crore has been allocated for giving incentives for domestic electrolyser manufacturing. Further, Inter State Transmission System (ISTS) charges have been waived off by the Ministry of Power for those production plants of Green Hydrogen and its derivatives, if commissioned by December, 2030.

Annexure referred to in reply of part (a) of the Rajya Sabha Unstarred Question No. 947 to be answered on 3.12.2024

Government of India has taken several steps and initiatives to encourage industry, State Governments and other stakeholders to promote and accelerate renewable energy capacity in the country. 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, 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.
- Cabinet has approved the Viability Gap Funding (VGF) scheme for offshore wind energy projects for installation and commissioning of 1 GW of offshore wind energy projects (500 MW each off the coast of Gujarat and Tamil Nadu)
- "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.