

GOVERNMENT OF INDIA  
MINISTRY OF NEW AND RENEWABLE ENERGY  
**RAJYA SABHA**  
**UNSTARRED QUESTION NO. 1573**  
ANSWERED ON 14.03.2023

**RENEWABLE ENERGY TARGETS**

1573. DR. ASHOK KUMAR MITTAL

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

- (a) whether the MNRE and IREDA has come up with some future plans to increase the usage of renewable energy;
- (b) whether the Ministry has decided to focus on some particular sector of renewable energy for the upcoming year;
- (c) whether there are any further research projects being carried on and funded by the Ministry and IREDA and if so, the details thereof; and
- (d) what is the strategy of Government to reach 500 GW of non-fossil fuel by 2030?

**ANSWER**

**THE MINISTER OF NEW & RENEWABLE ENERGY AND POWER**

**(SHRI R.K. SINGH)**

(a) The Government of India have taken several measures to increase the usage of Renewable Energy (RE) in future, including, inter-alia, the following:-

- 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 on “Standards for deployment of solar photovoltaic system/devices” ,
- Notification on “Promoting Renewable Energy through Green Energy Open Access Rules 2022”,
- Launch of Green Term Ahead Market (GTAM) to facilitate sale of RE power through exchanges,
- Launch of National Green Hydrogen Mission.

IREDA is the leading agency for financing of renewable energy projects in the country. IREDA has launched new and innovative schemes for increasing the usage of renewable energy in the country including the following :

- Comprehensive financing new technologies for promoting & increasing usage / penetration of Renewable Energy & Funding of green mobility segment,
- Special product for funding renewable energy projects through bonds/banks loans/other financial instruments,
- Project Specific Funding (PSF) Loans,
- Guarantee Assistance Scheme to RE Suppliers/ Manufacturers/ EPC Contractors/Developers.

(b) The Ministry will focus on all sectors of the renewable energy space in the upcoming year.

(c) The Ministry supports Renewable Energy Research and Technology Development Programme. This programme is implemented through various research institutions and industry to enable indigenous technology development and manufacture for wide spread applications of new and renewable energy in efficient and cost effective manner across the country with the ultimate aim of increasing the share of renewables in the energy mix in the country.

The Ministry encourages research and technology development proposals in collaboration with the industry and provides upto 100% financial support to Government/non-profit research organizations and upto 70% to Industry, Start-ups, Private Institutes, Entrepreneurs and Manufacturing units. Presently, 12 number of ongoing Research projects are funded by MNRE. The list of research and technology development projects is placed at **Annexure**.

(d) In line with Hon'ble Prime Minister's announcement at COP26, Ministry of New and Renewable Energy is working towards achieving 500 GW of installed electricity from non fossil fuel sources. The following steps in addition to measures mentioned in part (a), have been taken to promote renewable energy in the country:

- Permitting Foreign Direct Investment (FDI) up to 100 percent under the automatic route,
- Setting up of Ultra Mega Renewable Energy Parks to provide land and transmission to RE developers for installation of RE projects at large scale,
- 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.
- Transmission plan for integration of over 500 GW Renewable Energy Capacity by 2030.
- 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 "The Electricity (Late Payment Surcharge and related matters) Rules (LPS rules).

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**List of R&D Projects in New and Renewable Energy**

<b>Sl. No.</b>	<b>Title of the Project</b>	<b>Name of the PI and Institution</b>
<b>Solar PV</b>		
1	National Centre for Photovoltaic Research and Education (NCPRE) Phase-II	Prof. B G Fernandes and Prof C S Solanki, Indian Institute of Technology Mumbai
2	“National Primary Standard facility for cell calibration”	Dr. Prathap Pathi National Physical Laboratory (NPL), Delhi
3.	“Development of high efficiency (21%/ 19%) PERC type of c-Si/mc-Si solar cells”	Dr. A. K. Saxena, Additional General Manger & Head, BHEL-ASSCP, Gurugram and Dr. Arun K. Tripathi, National Institute of Solar Energy, Gurugram
4.	Flexible Perovskite Solar Cells and Intermediate Module	Prof. Shaibal K. Sarkar, Indian Institute of Technology Bombay, Powai, Mumbai
5	Design and Development of ‘High Efficiency Solar Water Pumping Systems	Director General, National Institute of Solar Energy (NISE)
6	Design and Development of high performance supercapatteries for solar applications (Solar Lantern, Solar Home Light)	Dr. S. P. Gairola, Professor & Head, Research & Development Cell, Uttaranchal University Dehradun and Co-PI: Dr. Yogesh Kumar Sharma, Indian Institute of Technology, (IIT-Roorkee)
<b>Solar Thermal</b>		
7	Development of high efficiency receiver for supercritical CO <sub>2</sub> integrated with static focus parabolic dish	Prof. Pradip Dutta, IISc Bangalore and Dr. B K Jaysimha, World Renewal Spiritual Trust (WRST), Bombay
<b>Wind Energy</b>		
8	Integrated Wind and Solar resource Assessment	National Institute of Wind Energy Chennai
9	Met-Ocean Measurements (Wind, Wave, Tide, Current, Water Level, etc.,) at Gulf of Khambhat and Gulf of Mannar	National Institute of Wind Energy Chennai
<b>Waste to Energy</b>		
10	Sanction and release to R&D proposal regarding Biomass Gasification through Plasma Pyrolysis Technology for Chemicals Production	IIT Roorkee, Roorkee, Uttrakhand
11	Densification and co-firing of agro-waste for power generation through gasification	SSS-NIBE, Kapoorthal, Punjab
<b>Hydrogen Energy</b>		
12	Green Hydrogen Mobility Projects at Leh	NTPC Ltd, Noida, U.P