

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO. 2934
TO BE ANSWERED ON 12.12.2016

INITIATIVES ON RENEWABLE ENERGY CAPACITY

2934. SHRI SACHIN RAMESH TENDULKAR:

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

- (a) what initiatives the Ministry is taking to achieve its targeted renewable energy capacities and meet committed reduction in emissions;
- (b) what is the quantum of projected electricity generation from renewable sources; and
- (c) the details of researches the Ministry is undertaking to bring down the cost of generating electricity from renewable sources?

ANSWER

MINISTER OF STATE FOR POWER, COAL , NEW & RENEWABLE ENERGY & MINES (SHRI PIYUSH GOYAL)

(a): The initiatives taken by the Government to achieve targeted renewable energy capacities and meet committed reduction in emission in the country include:

- Up-scaling of the target of renewable energy capacity to 175 GW by the year 2022, which includes 100 GW from solar, 60 GW from wind, 10 GW from bio-power and 5 GW from small hydro-power
- amendments in the Tariff Policy for strong enforcement of Renewable Purchase Obligation (RPO) and for providing Renewable Generation Obligation (RGO);
- setting up of exclusive solar parks;
- development of power transmission network through Green Energy Corridor project;
- identification of large government complexes/ buildings for rooftop projects;
- provision of roof top solar and 10 percent renewable energy as mandatory under Mission Statement and Guidelines for development of smart cities;
- amendments in building bye-laws for mandatory provision of roof top solar for new construction or higher Floor Area Ratio (FAR);
- infrastructure status for solar projects;
- raising tax free solar bonds;
- making roof top solar a part of housing loan by banks/NHB;
- incorporating measures in Integrated Power Development Scheme (IPDS) for encouraging distribution companies and making net-metering compulsory
- raising funds from bilateral and international donors as also from the Green Climate Fund to achieve the target. and

creation of Surya Mitras for installation and maintenance of the Solar Projects.

(b): As per information of the Central Electricity Authority(CEA), 47.62 BU have been generated from various renewable energy sources during 2016-17 (April to September'16), which is 7.54% of the total energy generation in the country.

(c): The focus areas for R&D are solar energy, wind hybrid systems, biogas, biofuels, hydrogen, fuel cells and related components. R&D projects undertaken have strengthened R&D/ academic institutes, industries for furthering RD&D for technology development for commercialization. In solar photovoltaics, the focus has been on indigenous development of solar cells with improved efficiency at par with international level, with cost reduction. Crystalline silicon solar cell of 18% efficiency has been developed at lab scale. R&D efforts are continuing for improvement of efficiency with cost reduction. R&D in solar thermal power provided feedback on operational aspects of the technology for further development. R&D in hybridization of solar and wind is being pursued for ensuring improved energy supply from renewable energy. In addition, R&D efforts are going on for design, development and demonstration of hydrogen and fuel cells for power generation and other uses.
