

GOVERNMENT OF INDIA  
MINISTRY OF NEW AND RENEWABLE ENERGY  
**LOK SABHA**  
**UNSTARRED QUESTION NO. 349**  
TO BE ANSWERED ON 17.11.2016

**‘PROMOTION OF NEW AND RENEWABLE ENERGY SOURCES’**

349. SHRI RAJESHBHAI CHUDASAMA: DR. A. SAMPATH

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

- (a) whether the Government has initiated any special schemes to promote new and renewable energy during the last three years, if so, the details thereof;
- (b) whether the Government has decided to generate 40 percent of the total energy requirement of the country from the renewable sources, if so, the details thereof;
- (c) whether the Government has formulated any modalities to achieve this, if so, the details thereof; and
- (d) whether the investment cost for solar energy is being reduced as compared to previous years and if so, the details thereof?

ANSWER

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

**(a):** The Government has initiated various schemes and programmes for the promotion of new & renewable energy in the country. Brief details of the major schemes/programmes implemented by the Ministry of New and Renewable Energy for the promotion of renewable energy during last three years are given in the Annexure.

**(b):** The Government of India, in its submission to the United Nations Frame Work Convention on Climate Change on Intended Nationally Determined Contribution (INDC) has stated that India will achieve 40% cumulative installed Electric power capacity from non-fossil fuel based energy resources by 2030 for which it is essential that the developments transfer technology and provide low cost long tenor financing.

**(c):** The Government has up-scaled 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. Besides the ongoing policies and programmes of the Government in RE sector, several policy measures initiated recently by the Government to achieve this up-scaled target, inter-alia, include suitable amendments to the Electricity Act and 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 FAR; infrastructure status for solar projects; raising tax free bonds; providing long tenor loans; 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 and raising funds from bilateral and international donors as also the Green Climate Fund to achieve the target.

**(d):** The Solar tariff has significantly been reduced as compared to previous years, which also reflects the reduction in investment cost for the Solar Energy.

Annexure referred to in reply to part (a) of Lok Sabha Unstarred Question No. 349 for 17/11/2016 regarding 'Promotion of New and Renewable Energy sources'

### Details of the Renewable Energy Schemes / Programmes

#### **1. Grid Interactive and Distributed Renewable Energy Power:**

- **Wind Power:** MW-scale Wind Farms.
- **Bio-power:** Biomass power/ Cogeneration.
- **Small Hydro Power:** Small hydro power plants up to 25 MW capacity.
- **Solar Power:** Grid-interactive -Solar Thermal and SPV power generation plants, Solar Roof Top programme..
- **Energy Storage:** for proper scheduling and forecasting of Power generation and stabilization of the Grid.
- **Green Energy Corridors:** transmission Infrastructure for evacuation of Power from Renewable Energy Sources..
- **Support to Solar Energy Corporation of India.**
- **Demonstration of Renewable Energy Application.**

#### **2. Off-Grid/ Distributed and Decentralized Renewable Power:**

- **Solar Power** (To promote the solar devices such as Solar Lighting Systems, Solar Pumps, Solar Power Packs and Concentrated Solar Technology systems.
- **Small wind and Hybrid Systems:**
- **Water Mills and Water Hydrants**
- **Energy Storage** for Energy Security and energy access in remote areas.
- **Biomass(non-bagasse) cogeneration/ U&I Waste to Energy**
- **Remote Village Electrification Programme :** provision of lighting/ electricity in the un-electrified remote villages/ hamlets
- **Biomass Gasifier for Rural Energy / Industrial Energy.**
- **Biogas Programme:** setting up of Family Type biogas plants for cooking/ lighting/ manure/ small scale power generation
- **Solar Thermal Systems:** deployment of decentralized solar thermal systems/ devices (mainly solar cookers / driers for cooking, drying farm produce) under National Solar Mission.
- **Green Buildings** - incorporating active renewable energy systems and passive designs
- **Solar Cities** – Planning for reducing their conventional energy consumption through energy conservation and use of renewable energy devices/ systems

#### **3. Research, Development and International Cooperation:**

- Supporting research and development projects at premier institutions and industries on different aspects of new and renewable energy technologies.
- Human Resource Development and Training Programme
- International relations international cooperation including Investment Promotion
- New and Innovative Projects

#### **4. Support to Autonomous Bodies:** Support to Institutions under the aegis of MNRE