

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.1729
TO BE ANSWERED ON 28.11.2019**

SHIFT OF FOCUS FROM FOSSIL FUELS

1729. SHRI GURJEET SINGH AUJLA:

**Will the Minister of POWER
be pleased to state:**

- (a) whether the Government proposes to shift the focus from fossil fuels to non-fossil based and renewable energy sources;**
- (b) if so, the details thereof;**
- (c) whether the Government has set a target date to achieve this;**
- (d) if so, the details thereof; and**
- (e) the steps taken by the Government in this direction?**

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) & (b) : The focus of the Government is to increase the proportion of non-fossil based and renewable energy sources (RES) in the installed power generation capacity. As on 31.10.2019, the all India power generation installed capacity is 3,64,960 MW, which includes 2,29,401 MW (i.e. 63 %) from fossil fuel based sources and 1,35,559 MW (i.e. 37 %) from non-fossil fuel based sources (45,399 MW from hydro; 6,780 MW from nuclear; and 83,379.5 MW from RES).

As per the National Electricity Plan notified in 2018, all India power generation installed capacity by the end of 2021-22 is estimated to be 4,79,419 MW, which includes 2,43,037 MW (i.e. 51 %) from fossil fuel based sources and 2,36,381 MW (i.e. 49%) from non-fossil fuel based sources (51,301 MW from hydro; 10,080 MW from nuclear; and 1,75,000 MW from RES).

Further, all India power generation installed capacity by the end of 2026-27 is estimated to be 6,19,066 MW, which includes 2,63,885 MW (i.e. 43 %) from fossil fuel based sources and 3,55,181 MW (i.e. 57 %) from non-fossil fuel based sources (63,301 MW from hydro; 16,880 MW from nuclear; and 2,75,000 MW from RES).

(c) to (e) : The Government has set a target for installing 175 GW of Renewable Energy capacity in the country by the year 2022, which includes 100 GW from solar, 60 GW from wind, 10 GW from biomass and 5 GW from small hydro electric projects. A total of 83.38 GW of renewable energy capacity has been installed upto 31st October 2019 in the country.

Hydro electric power generation capacity aggregating to 12,034.5 MW is under various stages of construction. Further, in order to promote hydro electric power sector in the country, the Government of India, on 8th March, 2019, has approved a number of measures, which are as under:

- ✓ **Declaring large hydro electric projects (LHEPs) (> 25 MW projects) as renewable energy source.**
- ✓ **Hydro Purchase Obligation (HPO) as a separate entity within non-solar Renewable Purchase Obligation (RPO).**
- ✓ **Tariff rationalization measures for bringing down hydro power tariff.**
- ✓ **Budgetary support for flood moderation/storage hydro electric projects (HEPs).**
- ✓ **Budgetary Support for cost of enabling infrastructure, i.e. roads/bridges subject to following limits.**
 - **Rs. 1.5 crore per MW for projects upto 200 MW**
 - **Rs. 1.0 crore per MW for projects above 200 MW.**

Further, in order to facilitate power evacuation from Renewable Energy Projects, Government has initiated a programme for development of Green Energy Corridors (GEC). Under the programme, it is aimed for evacuation of Renewable Energy from generation points to the grid by creating intra-state and inter-state transmission infrastructure for facilitating large-scale renewable generation capacity addition. As part of the GEC, Renewable Energy Management Centres (REMCs) are also being established in Renewable rich states, corresponding to Regional Load Dispatch Centers (RLDCs) and also at National Load Dispatch Center (NLDC).

Nuclear power generation capacity of 5300 MW is also under various stages of construction.

The Government has inter-alia, taken the following steps to promote and expand the installed power generation capacity through RES in the country:-

- **Announcement of a target of installing 175 GW of renewable energy capacity by the year, 2022;**
- **Permitting Foreign Direct Investment (FDI) up to 100 percent under the automatic route.**
- **Waiver of Inter State Transmission System (ISTS) charges and losses for inter-state sale of solar and wind power for projects to be commissioned up to December, 2022.**
- **Notification of standard bidding guidelines to enable distribution licensee to procure solar and wind power at competitive rates in cost effective manner.**
- **Declaration of trajectory for Renewable Purchase Obligation (RPO) up to the year 2022.**
- **Implementation of Green Energy Corridor project to facilitate grid integration of large scale renewable energy capacity addition.**
- **Launching of New Schemes, such as, PM-KUSUM, solar rooftop phase II, 12000 MW CPSU scheme Phase II.**
- **Issued guidelines for procurement of solar and wind power through tariff based competitive bidding process.**