

GOVERNMENT OF INDIA  
MINISTRY OF NEW AND RENEWABLE ENERGY  
**LOK SABHA**  
**STARRED QUESTION NO. 85**  
TO BE ANSWERED ON 21.12.2017

**SOLAR ENERGY**

\*85. SHRI DINESH TRIVEDI:  
DR. SWAMI SAKSHIJI MAHARAJ:

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

- (a): whether the target of generating 100 GW power through solar energy will be achieved by the Government by 2022 and if so, the steps taken and the achievements made so far in this regard;
- (b): the demand for fuels of the solar energy sector and the details of the investment attracted by the Government for the purpose so far;
- (c): the current status of the domestic industry of polysilicon, PV modules, Lithium ion batteries in terms of costs and the measures taken by the Government to incentivise indigenous solar energy capacity building using tax credits or subsidies;
- (d): whether the Government can achieve its targets for generation of solar energy along with 'Make in India' agenda keeping in view the low cost of inputs in Chinese markets *vis-a-vis* the cost of indigenous generation of solar energy; and
- (e): if so, the details thereof along with the manner in which the target is likely to be achieved by the Government?

**ANSWER**

THE MINISTER OF STATE FOR POWER AND NEW & RENEWABLE ENERGY (I/C)  
(SHRI R. K. SINGH)

**(a) to (e):** A statement is laid on the Table of the House.

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**STATEMENT REFERRED TO IN REPLY TO LOK SABHA STARRED QUESTION NO. 85 FOR 21.12.2017 REGARDING SOLAR ENERGY**

(a) and (e): As against the target of installing 100 GW of Solar Power capacity, as on 15.12.2017, a capacity of 16,676 MW has been installed with another 6500 MW capacity under installation. The trajectory for bidding of rest of solar power capacity has been finalized as under:-

<b>Year</b>	<b>Total tenders planned (In MW)</b>
<b>2017-18</b>	<b>20,000*</b>
<b>2018-19</b>	<b>30,000</b>
<b>2019-20</b>	<b>30,000</b>

\* Of this, 3600 MW capacity has already been bid out.

The Government have launched various schemes to achieve the target as detailed in the **Annexure**.

(b): No physical input fuel is required for solar power generation through solar photovoltaic systems. Energy is generated from the solar radiation energy which solar photovoltaic (PV) cells convert into electricity. An investment at the rate of Rs. 5 crore/MW (approx.) is required for solar PV plants. An investment of Rs. 83,000 crore (approx.) has been made for the currently installed grid connected solar capacity of 16,676 MW as on 15.12.2017.

(c): There is no manufacturing capacity in the country for Polysilicon. The manufacturers have reported that a capacity of 3164 MW and 8398 MW has been installed for solar cells and solar modules respectively in the country. The Lithium-Ion battery technology has been developed by Indian Space Research Organisation (ISRO) also. However, commercial manufacturing capacity for the same has not come up as yet.

The Government provides capital subsidy for setting up of manufacturing units for solar cells and modules and the entire value chain under Modified Special Incentive Package Scheme (M-SIPS). This apart, in order to encourage local manufacturing, Government have permitted Foreign Direct Investment up to 100% in renewable energy through automatic route. The Domestic Content Requirement (DCR) of solar modules is obligatory under the Rooftop scheme and solar cells & modules under CPSU and Defence Schemes for government sector. In addition, Government have floated an Expression of Interest (EOI) for 20 GW solar manufacturing capacity.

(d): The Government is confident of achieving the target of 100 GW of solar power capacity by the year 2022. Since the country does not have enough manufacturing capacity at present for solar cells and modules to meet full demand, both imported and indigenous solar cells and modules are being utilized for achieving the targets.

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**Annexure referred to in reply to Part (a) of Lok Sabha Starred Question No. 85 for 21.12.2017**

**Details of schemes launched for promotion of solar energy**

- i. 40,000 MW Solar Park Scheme for setting up of over 50 Solar Parks and Ultra Mega Solar Power Projects.
- ii. Scheme for setting up 1000 MW of Grid-Connected Solar PV Power Projects by Central Public Sector Undertakings (CPSUs) and Government of India organisations with Viability Gap Funding (VGF).
- iii. Scheme for setting up 300 MW of Grid-Connected Solar PV Power Projects by Defence Establishments and Para Military Forces with VGF.
- iv. Bundling Scheme - 15000 MW grid-connected solar PV power plants through National Thermal Power Corporation (NTPC) Ltd./ National Vidyut Vyapar Nigam (NVVN).
- v. VGF Schemes for setting up of Grid Connected Solar PV Power Projects through Solar Energy Corporation of India (SECI).
- vi. Installation of Grid Connected Solar Rooftop Power Plants.