

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO-2129
TO BE ANSWERED ON-08.03.2018

SOLAR POWER PRODUCTION

2129. SHRI ABHISHEK SINGH

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

- (a) the quantum of solar power production at present and its per unit cost of generation and transmission in the country;
- (b) the steps taken by the Union Government to promote and facilitate research in solar energy generation to make it cost effective; and
- (c) whether the Union Government has taken initiative to coordinate with countries which are ahead of India in utilising solar power and if so, the details thereof?

ANSWER

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

(a) As on 31st January, 2018, 18454 MW of Solar Power has been installed in the Country. The quantum of solar power production was 19.85 BU till Jan'2018 (i.e. from April'2017 to January'2018). The cost of energy keeps changing from State to State depending on technology, location of power plants and radiation at site. Solar power is being procured through open tenders and e-bidding. Lowest tariff till date obtained is Rs. 2.44/kWh in Bhadla solar power project in Rajasthan.

(b) The following steps are taken to promote and facilitate research in solar energy generation to make cost effective:

- Under the National Solar Mission, a R&D programme has been focusing on improving efficiency in existing applications, reducing costs of Balance of Systems, testing hybrid co-generation and addressing constraints of variability, space-intensity and lack of convenient and cost-effective storage.
- The Ministry supports a scheme “Research, Design, Development, Demonstration (RDD&D) and Manufacture of Solar Energy” through various research institutions and industry. Ministry provides upto 100% financial support to Government/non-profit research organizations/NGOs and upto 50% to industry/civil society organizations
- Fiscal and financial incentives in the form of accelerated depreciation, concessional customs duties, preferential tariffs and generation based incentives are being provided to improve viability of solar power generation units.
- 38 Solar Parks in 22 States are sanctioned in various parts of the country to achieve cost reductions of solar power generation through economies of scale and combined power evacuation facility.
- Procurement of solar power by Government CPSUs like NTPC, NLC, SECI etc.
- Long term vision and stable policy framework so that investors can plan better for investment.
- Transparent E-reverse auction for procurement of solar power, which has already resulted in a price of Rs. 2.44 /Kwh, almost at grid parity with the conventional sources of electricity.
- Waiver of charges for Inter State Transmission of the solar power till March, 2022.

(c) The Ministry has already taken initiative to partner with other countries to develop solar energy projects. The details of sanctioned project with international collaboration are given below:-

- Indo-German for 1 MW solar thermal power plant at Mount Abu by WRST Mumbai,
- Indo- Spanish for monitoring system for the energy reception elements in Solar Thermal plants by TERI, New Delhi
- Indo-Japan for 30 kW cross liner-CSP system Test Unit by RGPV Bhopal,
- Indo-US for High Energy Density Thermal Energy Storage for Concentrated Solar Plant by RKDF University, Bhopal.
