

GOVERNMENT OF INDIA  
MINISTRY OF NEW AND RENEWABLE ENERGY  
**LOK SABHA**  
**UNSTARRED QUESTION NO. 1850**  
TO BE ANSWERED ON 05.05.2016

**COMMISSIONING OF NEW AND RENEWABLE ENERGY**

1850. SHRI JANARDAN MISHRA:  
SHRI GODSE HEMANT TUKARAM:

Will the Minister of New and Renewable Energy be pleased to state:

- (a) the new and renewable energy in Megawatts commissioned during 2013-14 and 2014-15 in the country along with the sources from which it has been generated;
- (b) the targets set for commissioning of renewable energy and achieved in the country during the current year;
- (c) the comparative advantages and disadvantages of wind and solar energy;
- (d) the efforts made by the Government to increase the cooperation in renewable energy sector; and
- (e) the future schemes of the Government for development of renewable energy sector?

ANSWER

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

(a): The renewable energy source-wise capacities installed during the financial years 2013-14 and 2014-15 is given below:

Renewable Energy Source	(Capacity in MW)	
	2013-14	2014-15
Wind	2083	2312
Solar	963	1112
Small Hydro Power (less than or equal to 25 MW)	171	252
Biomass	423	413
<b>Total</b>	<b>3640</b>	<b>4089</b>

(b): Against the target of 4460 MW, a capacity addition of 7060 MW has been reported commissioned during 2015-16. A target of 16660 MW has been set for the year 2016-17.

- (c): The comparative advantages and disadvantages of Wind and Solar Energy are as follows:
- Solar power is generated during day time only whereas in case of wind, the power is generated as & when the wind is available.
  - Solar projects requires larger footprint as compared to wind projects. Further, after installation of the wind projects, only a small footprint of land is used and the remaining land could be used for other purposes. This is not the case in solar projects.
  - After installation, solar PV projects require water regularly for cleaning purposes, whereas the wind projects do not require water at all.
  - The average capacity utilization factor in case of wind is higher as compared to solar projects.

- Wind resources are very site specific whereas solar resources are spread over wider area.

**(d):** The efforts made by the Government to increase the cooperation in the renewable energy Sector includes the launching of International Solar Alliance (ISA) jointly with France on 30<sup>th</sup> November 2015 on sidelines of COP 21 in Paris, which provides a common platform for cooperation among 121 solar resource rich countries lying fully or partially between the Tropics of Cancer and Capricorn including India. The Paris declaration on ISA announced on the occasion, inter-alia, provides for collective ambition to undertake innovative and concerted efforts with a view to reducing the cost of finance and cost of technology for immediate deployment of competitive solar generation assets in ISA member countries. Besides this major initiative, Ministry of New and Renewable Energy (MNRE) has also signed Memorandum of Understanding (MOUs) with 15 countries for extending mutual technical cooperation, collaborations and sharing of experiences for the development of renewable energy sector.

**(e):** Besides implementing the ongoing schemes/ programmes for the development of renewable energy sector, the new initiatives announced by the Government during the financial year 2016-17 include setting up of two Light Detector and Ranging (LIDAR) at identified locations to study the offshore wind speed profile which would help in establishing techno-economic feasibility of the sites for installation of off-shore wind power projects, schemes on energy storage, deployment of mini grid for meeting energy access and strengthening biodiesel activities in the states.

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