

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY

LOKSABHA
UNSTARRED QUESTION NO 1753
TO BE ANSWERED ON 28/11/2019

WIND ENERGY POTENTIAL

1753. SHRI KULDEEP RAI SHARMA
SHRI A.K.P. CHINRAJ
SHRI SUNIL DATTATRAY TATKARE
DR. SUBHASH RAMRAO BHAMRE
SHRIMATI SUPRIYA SULE
DR. AMOL RAMSING KOLHE

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

- (a) the details of potential capacity of wind energy that can be produced in the country;
- (b) the extent to which this potential has been realized so far along with the problem faced in this regard;
- (c) whether the Government is unable to produce energy from wind in the country despite having huge potential and if so, the details thereof;
- (d) whether the Government has assessed the wind energy potential and its potential locations and if so, the details thereof;
- (e) whether the Government has a national policy for developing energy from wind and if so, the details thereof and if not, the reasons therefor; and
- (f) whether the Government proposes to formulate such a policy and if so, the details thereof along with the other steps taken by the Government to boost production of wind energy?

ANSWER

THE MINISTER OF STATE (I/C) FOR NEW & RENEWABLE ENERGY, POWER and MoS for SKILL DEVELOPMENT AND ENTREPRENEURSHIP

(SHRI R. K. SINGH)

(a) to (d) The National Institute of Wind Energy (NIWE), Chennai has estimated gross wind power potential of the country as 302 GW and 695 GW at 100 meter and 120 meter above ground level, respectively. The state wise wind power potential is given at **Annexure-I**. Till 31.10.2019, 37 GW of wind power projects have already been installed in the country against target of 60 GW by 2022. The state wise wind power installed capacity is given at **Annexure-II** (as on 31.10.2019). Some of the important issues faced during the realization of potential include land acquisition for installation of wind power projects, change in policies by the State Governments, delay in getting forest clearance, reluctance of financial institutions to fund low tariff RE projects, etc.

The wind power projects are installed in the country commercially, based on techno economic feasibility of the site. During last five years capacity of approx 14 GW has been added.

(e)&(f) The Government issued 'Guidelines for Development of Onshore Wind Power Projects' on 22 October 2016 with an objective to facilitate the development of wind power projects in an efficient, cost effective and environmentally benign manner taking into account the requirements of project developers, state and national imperatives. The Guidelines , inter

alia, cover requirement of site feasibility, type and quality certified wind turbines, micro-siting criteria, compliance of grid regulations, real time monitoring, online registry and performance reporting, health and safety provisions, decommissioning plan, etc.

Government have also issued 'Guidelines for Tariff Based Competitive Bidding Process for Procurement of Power from Grid Connected Wind Power Projects' on 8th December, 2017, with an objective to provide a framework for procurement of wind power through a transparent process of bidding including standardization of the process and defining of roles and responsibilities of various stakeholders.

The Government is also promoting capacity addition of wind power projects through private sector investment by providing various fiscal and financial incentives such as Accelerated Depreciation benefit; concessional custom duty exemption on certain components of wind electric generators. Besides, Generation Based Incentive (GBI) is available for the wind projects commissioned before 31 March 2017. In addition to fiscal and other incentives as stated above, technical support including wind resource assessment and identification of potential sites is being provided through the National Institute of Wind Energy, Chennai.

Annexure-I

Annexure-I referred to in reply to part (a) to (d) of the Lok Sabha Unstarred Question No. 1753 for 28.11.2019

Statewise wind power potential of the country at 100 meter and 120 meter, above ground level

S. No.	State	Wind Power Potential at 100 mtr agl (GW)	Wind Power Potential at 120 mtr agl (GW)
1	Andhra Pradesh	44.23	74.90
2	Gujarat	84.43	142.56
3	Karnataka	55.86	124.15
4	Madhya Pradesh	10.48	15.40
5	Maharashtra	45.39	98.21
6	Rajasthan	18.77	127.75
7	Tamil Nadu	33.80	68.75
	Other States	9.28	43.78
	Total	302.25	695.50

Annexure-II

Annexure-II referred to in reply to part (a) to (d) of the Lok Sabha Unstarred Question No. 1753 for 28.11.2019

The state wise wind power installed capacity as on 31.10.2019.

STATE	Cumulative wind power capacity as on 31.10.2019 (MW)
Andhra Pradesh	4092.45
Gujarat	7203.77
Karnataka	4753.40
Kerala	62.50
Madhya Pradesh	2519.89
Maharashtra	4794.13
Rajasthan	4299.72
Tamil Nadu	9231.77
Telangana	128.10
Other States	4.30
Total	37090.03