

**GOVERNMENT OF INDIA  
MINISTRY OF NEW AND RENEWABLE ENERGY  
LOK SABHA  
UNSTARRED QUESTION NO-2721**

TO BE ANSWERED ON-27.12.2018

**WIND TURBINE CERTIFICATION SCHEME**

2721. SHRI BIDYUT BARAN MAHATO  
SHRI CHANDRA PRAKASH JOSHI  
SHRI NARANBHAI KACHHADIYA  
SHRI SUMEDHANAND SARSWATI

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

- (a) whether the Ministry is consulting with the National Institute of Wind Energy, Chennai and is working on wind turbine certification scheme and if so, the details regarding the manner in which it would function;
- (b) the reasons for no special achievement in the wind turbine area for several decades in India although wind energy has been the chief source of renewable energy;
- (c) the area in the country with potential for wind energy generation;
- (d) whether the Government has any scheme for installation of different types of wind turbines with safety measures and if so, the details thereof along with the action taken so far in this direction; and
- (e) the total electricity generated through wind energy during the last three years?

**ANSWER**

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

- (a) Yes Madam, the Ministry of New and Renewable Energy has prepared draft Indian Wind Turbine Certification Scheme (IWTCS) in consultation with the National Institute of Wind Energy (NIWE), Chennai. It provides guidelines to ensure performance relating to quality, safety and reliability of wind turbines. The draft IWTCS has been circulated for comments of stakeholders and is also available at the Ministry's website.
- (b) The special achievements of the country in the wind energy sector, inter alia, include the following:
  - i. Wind power capacity of the country was 35.01 GW as on 30 November 2018. Globally India is at fourth position in terms of wind power capacity.
  - ii. Over 30 different turbine models (ranging from 225 kW to 3 MW) by 15 different manufacturers are being made in India with about 70 to 80 % of indigenisation.
  - iii. Wind power potential map at 100 meter hub-height was issued in September 2015 indicating 302 GW of wind potential, which is mainly concentrated in seven windy States, viz. Gujarat, Tamil Nadu, Rajasthan, Maharashtra, Madhya Pradesh, Karnataka and Andhra Pradesh.

(c) The estimated wind potential of the country is 302 GW at 100m agl (above ground level). The state-wise details are:

S.No.	State	Wind Potential (MW)
1	Gujarat	84431.33
2	Rajasthan	18770.49
3	Maharashtra	45394.34
4	Tamil Nadu	33799.65
5	Madhya Pradesh	10483.88
6	Karnataka	55857.36
7	Andhra Pradesh	44228.60
8	Kerala	1699.56
9	Telangana	4244.29
10	Odisha	3093.47
11	Chhattisgarh	76.59
12	West Bengal	2.08
13	Puducherry	152.83
14	Lakshadweep	7.67
15	Goa	0.84
16	Andaman & Nicobar	8.43
<b>Total in MW</b>		<b>302251.49</b>
<b>Total in GW</b>		<b>302</b>

(d) Yes Madam. Wind turbines listed in the RLMM (Revised List of Models and Manufacturers) maintained by the Ministry, can only be installed in India. Criteria for inclusion in the list are: type certificate issued as per international standards, (IEC 61400-22 and GL 2010) or Indian standard (TAPS); ISO certificate, manufacturing/ assembly facility in India, etc.

The Government had issued 'Guidelines for Development of Onshore Wind Power Projects' in 2016 wherein it is stated that 'No wind turbine model shall be allowed for installation in the country until it has obtained type and quality certification'. The Ministry maintains and updates RLMM regularly.

(e) As per Central Electricity Authority, the total electricity generated through wind energy in the country during the last three years, is as under:

Year	Electricity Generated from Wind Energy (in Million Units)
2015-16	33029
2016-17	46004
2017-18	52666

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