

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
STARRED QUESTION NO. 178
TO BE ANSWERED ON 28.07.2016
Renewable Energy Sources

*178. **SHRI C. MAHENDRAN**

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

- (a) whether the country is tapping the optimal potential of various renewable energy sources like wind, solar, tidal, small hydro projects etc. and if so, the details thereof, State-wise;
- (b) whether the Government proposes to develop infrastructure to tap the renewable energy potential to the maximum extent across the county and if so, the details thereof;
- (c) whether the State Governments are keenly interested to start new initiatives in this regard and if so, the details thereof, State-wise; and
- (d) whether any international Assistance / collaborations are presently in progress and if so, the details thereof?

ANSWER

MINISTER OF STATE FOR POWER, COAL , NEW & RENEWABLE ENERGY & MINES
(SHRI PIYUSH GOYAL)

(a) to (d) : A Statement is laid on the Table of the House.

**STATEMENT REFERRED TO IN REPLY TO LOK SABHA STARRED QUESTION
No. 178 for ANSWER ON 28/07/2016**

(a) Yes Madam. The endeavour of the Government is to tap the optimal potential of various renewable energy sources. A cumulative capacity addition of over 44 GW has been reported against an estimated potential of over 1096 GW from various renewable energy sources i.e. Solar, Wind, Small Hydro Power and Biomass. State-wise details of the source wise estimated potential viz-a-viz installed capacity is given in the annexure.

(b) The Ministry of New & Renewable Energy(MNRE) is implementing various schemes and programmes to develop sectoral infrastructure for promotion of Renewable Energy sources in the country. This Government has set an ambitious enhanced target of renewable energy capacity to 175 GW by 2022.

In order to achieve the target, certain steps have been taken such as amendments to the Electricity Act and Tariff Policy for strong enforcement of Renewable Purchase Obligation (RPO) and providing Renewable Generation Obligation (RGO).

The Government proposes to develop infrastructure to tap renewable energy potential to the maximum extent by setting up exclusive solar parks; development of power transmission network through Green Energy Corridor project; Rooftop projects in industries and large Government complexes/ buildings; making a provision of 10 percent renewable energy as mandatory under Mission Statement, Guidelines for development of smart cities; amendments in building bye-laws for mandatory provision of Roof Top Solar for new construction or higher Floor Area Ratio & infrastructure status for solar projects.

In order to infuse funds into this sector steps such as, raising of tax free solar bonds; providing long tenor loans; making roof top solar a part of housing loan by banks/ NHB have been taken. Further, states are encouraged for raising funds from bilateral and international Banks as also from the Green Climate Fund to achieve the target.

(c) Yes Madam. The states are taking keen interest for the promotion of power from various Renewable Energy sources. So far 34 Solar parks with a total capacity of 20000 MW in 21 states have been sanctioned. 100 MW capacity on Canal tops / Canal banks projects in 8 states have been sanctioned. Solar rooftop policies / regulations have been declared by 28 States. States are also identifying new Small Hydro Power and Wind power potential sites.

(d) Government has initiated various bilateral cooperation programmes with several countries through Memorandum of Understandings (MoUs) / Agreements. These MoUs / Agreements are based on the principles of reciprocity and mutual benefits. In addition, Deutsche Gesellschaft fur Internationale Zusammenarbeit (GIZ), United States Agency for International Development (USAID), Department of International Development (DFID) and European Union (EU) are some of the main foreign agencies / organizations supporting demonstration projects and capacity building in India.

Annexure

Statement referred to in reply to part (a) of lok sabha Starred Question No. 178 for answer on 28.07.2016 regarding "Renewable Energy Sources"

Sourcewise Estimated Potential and Achievements as on 30.06.2016											
S. No.	STATES / Uts	Small Hydro Power		Wind Power		Bio-Power				Solar Power	
		Estimated Potential	Ach.	Estimated Potential	Ach	Bio-Power/Cogeneration		Waste to Energy		Estimated Potential	Ach
		(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)
1	Andhra Pradesh	978	232.98	44229.00	1450.35	878	380.75	123	58.16	38440.00	878.97
2	Arunachal Pradesh	1341	104.61			8				8650.00	0.27
3	Assam	239	34.11			212		8		13760.00	0.00
4	Bihar	223	70.70			919	43.42	73		11200.00	45.10
5	Chhatisgarh	1107	76.00	77.00		236	279.90	24		18270.00	93.78
6	Goa	7	0.05	1.00		26				880.00	0.00
7	Gujarat	202	16.60	84431.00	4104.46	1571	56.30	112		35770	1123.363
8	Haryana	110	73.50			1683	45.30	24		4560.00	15.39
9	Himachal Pradesh	2398	793.81			142		2		33840.00	0.20
10	Jammu & Kashmir	1431	156.53			43				111050.00	1.00
11	Jharkhand	209	4.05			90		10		18180.00	16.19
12	Karnataka	4141	1217.73	55857.00	2871.15	1581	872.18		1.00	24700	153.32
13	Kerala	704	198.92	1700.00	43.50	1044		36		6110	13.045
14	Madhya Pradesh	820	86.16	10484.00	2288.60	1364	35.00	78	3.90	61660	790.37
15	Maharashtra	794	346.18	45394.00	4664.08	3137	1245.78	287	12.72	64320	385.756
16	Manipur	109	5.45			13		2		10630.00	0.00
17	Meghalaya	230	31.03			11		2		5860.00	0.00
18	Mizoram	169	36.47			1		2		9090.00	0.10
19	Nagaland	197	30.67			10				7290.00	0.00
20	Odisha	295	64.63	3093.00		246	20.00	22		25780	66.92
21	Punjab	441	170.90			3472	155.50	45	10.25	2810	520.7
22	Rajasthan	57	23.85	18770.00	3993.95	1039	112.80	62		142310	1294.6
23	Sikkim	267	52.11			2				4940.00	0.00
24	Tamil Nadu	660	123.05	33800.00	7632.31	1520	641.90	151	8.05	17670	1267.414
25	Telangana			4244.00	98.70					20410	796.59
26	Tripura	47	16.01			3		2		2080.00	5.00
27	Uttar Pradesh	461	25.10			2867	870.00	176	5.00	22830.00	143.50
28	Uttarakhand	1708	209.33			24	76.00	5		16800.00	41.15
29	West Bengal	396	98.50	2.00		396	26.00	148		6260.00	11.77
30	Andaman & Nicobar	8	5.25	8.00						0.00	5.10
31	Chandigarh							6		0.00	6.81
32	Dadra & Nagar Haveli									0.00	0.00
33	Daman & Diu									0	4
34	Delhi							131	16.00	2050.00	23.87
35	Lakshwadeep			8.00						0.00	0.75
36	Pondicherry			153.00				3		0	0.025
37	Others				4.30			1022		790.00	100.31
	Total (MW)	19749	4304.27	302251.00	27151.40	22538	4860.83	2556	115.08	748990.00	7805.36

MW = Megawatt