

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 4723
TO BE ANSWERED ON 15.12.2016

PARTICIPATION OF STATES IN ACHIEVING TARGETS

4723. SHRI YOGI ADITYA NATH:
SHRI MANSHANKAR NINAMA:
DR. RAMESH POKHRIYAL "NISHANK":
SHRI RAJESHBHAI CHUDASAMA:

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

- (a) whether the Union Government has ensured the participation of various States in achieving the targets fixed for generation of renewable energy sources in the country;
- (b) if so, the details thereof;
- (c) whether any special programme has been launched by the Union Government for community involvement for the said purpose;
- (d) if so, the details thereof;
- (e) whether there are issues related to pricing and evacuation by State electricity boards especially in the case of solar energy and whether they are being solved; and
- (f) if so, the details thereof?

ANSWER

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

(a) & (b): The States are actively participating in the promotion of Grid Interactive Renewable power in the country. The source and state-wise details of the same, upto 31-10-2016, is given in Annexure-I.

(c) & (d): All the programmes / schemes of the Ministry of New & Renewable Energy (MNRE) are implemented for all, including communities. The details of programmes/ schemes being implemented by the MNRE are given in Annexure-II.

(e) & (f): The price of electricity generated from renewable energy sources is gradually reaching grid parity. Evacuation of power from Renewable Energy projects is a challenge. The Government has taken up the matter with the DISCOM and transmission companies. The MNRE has also taken up a project called Green Energy Corridor, for creation of transmission infrastructure in 8 renewable rich states.

Annexure-I

Annexure-I referred to in reply to parts (a) & (b) of Lok Sabha Unstarred Question No. 4723 for answer on 15/12/2016 regarding 'Participation of States in Achieving Targets'

State-wise installed capacity of Grid Interactive Renewable Power as on 31.10.2016.							
S. No.	STATES / Uts	Small Hydro Power	Wind Power	Bio-Power		Solar Power	Total Capacity
				BM Power & Cogenration	Waste to Energy		
		(MW)	(MW)	(MW)	(MW)	(MW)	(MW)
1	Andhra Pradesh	232.98	2001.75	380.75	58.16	968.05	3641.69
2	Arunachal Pradesh	104.61				0.27	104.87
3	Assam	34.11				10.00	44.11
4	Bihar	70.70		43.42		95.10	209.22
5	Chhattisgarh	76.00		279.90		128.56	484.46
6	Goa	0.05				0.00	0.05
7	Gujarat	16.60	4269.86	56.30		1138.19	5480.95
8	Haryana	73.50		45.30		17.39	136.19
9	Himachal Pradesh	798.81				0.20	799.01
10	Jammu & Kashmir	156.53				1.00	157.53
11	Jharkhand	4.05				16.84	20.89
12	Karnataka	1220.73	3099.45	887.18	1.00	340.08	5548.44
13	Kerala	205.02	43.50			13.05	261.57
14	Madhya Pradesh	86.16	2288.60	35.00	3.90	811.38	3225.04
15	Maharashtra	346.18	4664.40	1245.78	12.72	386.06	6655.14
16	Manipur	5.45				0.00	5.45
17	Meghalaya	31.03				0.00	31.03
18	Mizoram	41.47				0.10	41.57
19	Nagaland	30.67				0.00	30.67
20	Odisha	64.63		20.00		66.92	151.55
21	Punjab	170.90		155.50	9.25	571.2	906.85
22	Rajasthan	23.85	4123.35	113.30		1301.16	5561.66
23	Sikkim	52.11				0.00	52.11
24	Tamil Nadu	123.05	7685.81	641.90	8.05	1555.41	10014.22
25	Telangana		98.70			963.79	1062.49
26	Tripura	16.01				5.00	21.01
27	Uttar Pradesh	25.10		876.00	5.00	143.50	1049.60
28	Uttarakhand	209.33		76.00		41.15	326.48
29	West Bengal	98.50		26.00		11.77	136.27
30	Andaman & Nicobar	5.25				5.10	10.35
31	Chandigarh					6.81	6.81
32	Dadra & Nagar Haveli					0.00	0.00
33	Daman & Diu					4	4.00
34	Delhi				16.00	23.87	39.87
35	Lakshadweep					0.75	0.75
36	Puducherry					0.03	0.03
37	Others		4.30			100.92	105.22
	Total (MW)	4323.37	28279.72	4882.33	114.08	8727.64	46327.13

MW = Megawatt

Annexure-II referred to in reply to parts (c) & (d) of Lok Sabha Unstarred Question No. 4723 for answer on 15/12/2016 regarding 'Participation of States in Achieving Targets'

Details of the Renewable Energy Schemes / Programmes

1. Grid Interactive and Distributed Renewable Energy Power:

- **Wind Power:** MW-scale Wind Farms.
- **Bio-power:** Biomass power/ Cogeneration.
- **Small Hydro Power:** Small hydro power plants up to 25 MW capacity.
- **Solar Power:** Grid-interactive -Solar Thermal and SPV power generation plants, Solar Roof Top programme.
- **Energy Storage:** for proper scheduling and forecasting of Power generation and stabilization of the Grid.
- **Green Energy Corridors:** transmission Infrastructure for evacuation of Power from Renewable Energy Sources..
- **Support to Solar Energy Corporation of India.**
- **Demonstration of Renewable Energy Application.**

2. Off-Grid/ Distributed and Decentralized Renewable Power:

- **Solar Power** (To promote the solar devices such as Solar Lighting Systems, Solar Pumps, Solar Power Packs and Concentrated Solar Technology systems.
- **Small wind and Hybrid Systems:**
- **Water Mills and Water Hydrants**
- **Energy Storage** for Energy Security and energy access in remote areas.
- **Biomass(non-bagasse) cogeneration/ U&I Waste to Energy**
- **Remote Village Electrification Programme :** provision of lighting/ electricity in the un-electrified remote villages/ hamlets
- **Biomass Gasifier for Rural Energy / Industrial Energy.**
- **Biogas Programme:** setting up of Family Type biogas plants for cooking/ lighting/ manure/ small scale power generation
- **Solar Thermal Systems:** deployment of decentralized solar thermal systems/ devices (mainly solar cookers / driers for cooking, drying farm produce) under National Solar Mission.
- **Green Buildings** - incorporating active renewable energy systems and passive designs
- **Solar Cities** – Planning for reducing their conventional energy consumption through energy conservation and use of renewable energy devices/ systems

3. Research, Development and International Cooperation:

- Supporting research and development projects at premier institutions and industries on different aspects of new and renewable energy technologies.
- Human Resource Development and Training Programme
- International relations, international cooperation including Investment Promotion
- New and Innovative Projects

3. Support to Autonomous Bodies: Support to Institutions under the aegis of MNRE