### GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY

### LOK SABHA

### **UNSTARRED QUESTION NO-6396**

TO BE ANSWERED ON-05.04.2018

### TAPPING OF NEW & RENEWABLE ENERGY SOURCES

### 6396. DR. RAMESH POKHRIYAL "NISHANK" SHRI MANSHANKAR NINAMA

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

- (a) whether the Government has taken a decision to use latest technology with a view to tap new and renewable energy sources in the country;
- (b) if so, the details and the present status thereof;
- (c) whether the Government has conducted any study on various new and renewable energy projects launched with the foreign assistance during the last three years and the current year;
- (d) if so, the details thereof and the details of new and renewable energy projects implemented in various States/ UTs of the country during the said periods; and
- (e) the funds allocated by the Government for these projects during the said period, State-wise?

#### **ANSWER**

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

- (a) & (b) Most of renewable energy projects in the country are being implemented by the private sector developers selected through a transparent bidding process. In order to be competitive, Developers are encouraged to deploy most advanced technologies to tap maximum energy. National Institute of Wind Energy (NIWE), an autonomous institution under the Ministry has installed a remote sensing instrument, LiDAR for assessment of offshore wind resource at Gulf of Khambat, off the Guiarat Coast.
- (c) & (d) Indian Renewable Energy Development Agency (IREDA), a non-banking financial institution under the Ministry of New and Renewable Energy has conducted following studies with the foreign assistance during the last three years and current year:
- Study/Survey & Preparation of Road Map on Tidal Energy Projects in India.
- Study on the business models for decentralized systems such as Solar PV/Hybrid mini grids, PV irrigation pumps and household lighting systems under access to Clean Energy Programme.
- Study for analysis of battery and Solar PV modules recycling processes in India along with development of market outreach strategy for Rooftop Solar PV.
- Study on the Investment Potential of Biofuels in India.

A total of 30.57 GW of renewable energy capacity has been installed through implementation of various renewable energy programmes/schemes during the period from April, 2014 to February, 2018 in the country. The state-wise and source-wise details of capacity addition are given in Annexure-I.

(e) The details of funds allocated by the Government in the form of Central Financial Assistance for the implementation of various renewable energy programmes/schemes during the last three years i.e. 2015-16, 2016-17 & 2017-18 in the country are given in Annexure-II.

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### Annexure-I

# Annexure-I referred to in reply to part (d) of Lok Sabha Unstarred Question No. 6396 for 05/04/2018 regarding 'Tapping of New & Renewable Energy Sources'.

Source-wise and State-wise achievements made during the last three years and current year (1st April 2014 to 28th Feb 2018)

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S.No.	State/UT	Solar Power	Wind Power	Small hydro Power	Bio-Power	Waste to Energy
1	Andhra Pradesh	2159.24	3093.25	20	0	10.91
2	Arunachal Pradesh	4.36	0	0.705	0	0
	Assam	12.45	0	0	0	0
	Bihar	142.45	0	0	20	0
5	Chhattisgarh	177.93	0	24	10	0
	Goa	0.91	0	0	0	0
7	Gujarat	670.6	2204.48	13	9.9	1.11
8	Haryana	205.55	0	3.4	34.5	0
9	Himachal Pradesh	2.23	0	216.71	0	0
	Jammu & Kashmir	6.86	0	22.5	0	0
	Jharkhand	9.67	0	0	0	0
	Karnataka	3626.53	1542.2	199	291.45	0
13	Kerala	107.91	16.4	60.6	0	0
14	Madhya Pradesh	893.83	2080.7	0	25	0
15	Maharashtra	493.82	675.85	45.75	442.8	0
16	Manipur	1.33	0	0	0	0
17	Meghalaya	0.06	0	0	0	0
18	Mizoram	0.2	0	5	0	0
19	Nagaland	0.5	0	1	0	0
20	Orissa	50.07	0	0	0	0
21	Punjab	896.7	0	14.7	15	1.2
22	Rajasthan	1603.86	1496.7	0	4.95	0
23	Sikkim	0.01	0	0	0	0
24	Tamil Nadu	1734.12	704.91	0	34	0
25	Telangana	3176.87	100.8	11.95	0	0
26	Tripura	5.09	0	0	0	0
27	Uttar Pradesh	522.05	0	0	98.85	8.19
28	Uttrakhand	289.09	0	34.5	0.12	0
29	West Bengal	46.32	0	0.1	8	0
30	Andaman & Nicobar	7.97	0	0	0	0
31	Chandigarh	23.2	0	0	0	0
32	Dadar& Nagar Haveli	5.46	0	0	0	0
33	Daman & Diu	10.61	0	0	0	0
34	Delhi	64.37	0	0	0	12

35	Lakshwadeep	0	0	0	0	0
36	Pondicherry	0.15	0	0	0	0
	Total	16952.37	11915.29	672.915	994.57	33.41

## **Annexure-II**

# Annexure-II referred to in reply to part (e) of LokSabhaUnstarred Question No. 6396 for 5/04/2018 regarding 'Tapping of New & Renewable Energy Sources'.

State-wise and year-wise details of funds released as Central Financial Assistance during last three years i.e. 2015-16, 2016-17 and 2017-18 (upto 31/3/2018)

(Rs in crore)

S. No.	State / UT Name	2015-16	2016-17	2017-18 (up to 31/3/2018)
1	ANDHRA PRADESH	5.08	1.92	4.96
2	ARUNACHAL PRADESH	5.47	20.08	45.16
3	ASSAM	15.32	60.28	24.86
4	BIHAR	16.19	0	0
5	CHANDIGARH	10.03	9.69	2.23
6	CHHATTISGARH	42.64	72.92	161.96
7	DADRA & NAGAR HAVELI	0	0	0.34
8	DAMAN & DIU	0	0	0
9	DELHI	43.16	166.04	311.45
10	GOA	1.57	0.17	0.002
11	GUJARAT	58.65	74.09	158.89
12	HARYANA	36.26	16.24	2.16
13	HIMACHAL PRADESH	53.09	36.39	42.30
14	JAMMU AND KASHMIR	90.92	49.67	16.12
15	JHARKHAND	16.13	12.87	5.58
16	KARNATAKA	61.15	52.42	39.54
17	KERALA	32.76	36.17	44.02
18	LAKSHADWEEP	3.78	0.46	3.97
19	MADHYA PRADESH	6.95	40.16	442.13
20	MAHARASHTRA	248.61	155.21	43.12
21	MANIPUR	14.65	12.53	6.65
22	MEGHALAYA	8.62	20.52	23.28
23	MIZORAM	10.63	22.38	21.47
24	NAGALAND	7.89	17.97	11.49
25	ODISHA	11.03	21.17	13.55
26	PUDUCHERRY	0.01	1.11	0.31
27	PUNJAB	29.19	9.19	4.42
28	RAJASTHAN	249.64	86.85	103.14
29	SIKKIM	0.84	2.87	0.18
30	TAMIL NADU	195.11	169.28	53.50
31	TELANGANA	155.04	99.19	174.62
32	TRIPURA	5.46	14.57	2.73
33	UTTAR PRADESH	55.66	28.11	36.41
34	UTTARAKHAND	51.23	41.92	43.89
35	WEST BENGAL	9.44	1.37	6.58
36	ANDAMAN AND NICOBAR	0.03	0.48	3.03

S. No.	State / UT Name	2015-16	2016-17	2017-18 (up to 31/3/2018)
37	CENTRAL AGENCY	1762.88	1187.01	1855.49