1	2	3	4	5
7.	Abacus Holding Pvt. Ltd.	1	13.03.2012	RPSSGP.
8.	Aftab Solar Pvt. Ltd.	5	07.02.2012	NVNN
9.	Mahavir Ferro Alloys	1	15.03.2012	RPSSGP
10.	OCL India Ltd.	2.5	28.03.2014	REC Mechanism
11.	Alex Green Energy Ltd.	5.0	14.08.2014	For fulfilment of RPO
12.	Mahanadi Coalfields Ltd.	2.0	13.10.2014	REC Mechanism
13.	Kalings Institute of Social Science (KISS)	0.5	29.11.2014	REC Mechanism
14.	ACME Odisha Solar Power	25.0	21.06.2015	For fulfilment of RPO
	TOTAL	48		

Production of renewable energy

1271. SHRI BASAWARAJ PATIL: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) how much renewable energy is produced in India;

(b) which are the key States in this area; and

(c) what is the target for the coming three years?

THE MINISTER OF STATE OF THE MINISTRY OF NEW AND RENEWABLE ENERGY (SHRI RAJ KUMAR SINGH): (a) and (b) A total of 85.65 billion units of power have been generated in the country during the year 2017-18 (up to January, 2018) from all renewable energy sources. The State-wise and source-wise power generation from renewable energy sources during the year 2017-18 is given in the Statement (*See* below).

(c) The Government has set a target for installing 175 GW of renewable energy capacity by the year 2022. The breakup of 175 GW is as follows:—

Solar	100 GW
Wind	60 GW
Biomass	10 GW
Small Hydro Power	05 GW

Statement

State-wise and source-wise power generation from various renewable energy sources during 2017-18 (upto January, 2018).

(Million Units)

Sl. No.	State	Wind	Solar	Small Hydel	Bio-Power	Total
1	2	3	4	5	6	7
Year 2017-18 (1st April, 2017- 31st Jan., 2018)						
1.	Chandigarh	0	6.35	0	0	6.35
2.	Delhi	0	11.03	0	189.89	200.92
3.	Haryana	0	51.84	193.75	199.06	444.66
4.	Himachal Pradesh	0	0	1802.59	0	1802.59
5.	Jammu and Kashmir	0	0	291	0	291
6.	Punjab	0	1194.18	174.57	815.37	2184.11
7.	Rajasthan	5060.64	2802.06	5.89	284.75	8153.33
8.	Uttar Pradesh	0	476.52	25.03	2649.76	3151.31
9.	Uttarakhand	0	201.32	529.36	52.85	783.53
10.	NTPC Dadri/FBD/	0	392.4	0	0	392.4
11.	Unchahar/Singrauli/ Bhadla/ Oil India Ltd.	193.66	21.22	0	0	214.88
12.	Chhattisgarh	0	96.48	19.62	778	894.1
13.	NTPC Rajgarh/ Rojmal/Mandsaur	27.28	270.15	0	0	297.43

1	2	3	4	5	6	7
14.	Gujarat	8522	1634.78	34.18	24.83	10215.79
15.	Madhya Pradesh	3619.82	1430.77	109.12	64.02	5223.73
16.	Maharashtra	6099.69	848.25	496.17	2467	9911.1
17.	Dadra and Nagar Haveli	0	4.5	0	0	4.5
18.	Daman and Diu	0	15.12	0	0	15.12
19.	Andhra Pradesh	5576.89	2892.76	139.77	290.16	8899.59
20.	Telangana	180.23	2977.68	47.99	282.4	3488.29
21.	Karnataka	6623.48	1527.92	1531.08	1510.38	11192.86
22.	Kerala	86.75	45.88	554.63	0	687.25
23.	NTPC Ramagundam/ Anantapuram	0	347.37	0	0	347.37
24.	Tamil Nadu	11491.81	2259.01	159.42	618.81	14529.05
25.	Lakshadweep	0	1.46	0	0	1.46
26.	Puducherry	0	1.06	0	0	1.06
27.	Andaman and Nicobar	0	5.39	11.37	0	16.77
28.	Bihar	0	106.11	6.58	86.63	199.32
29.	Jharkhand	0	15.92	0	0	15.92
30.	Odisha	0	167.13	243.95	34.09	445.17
31.	Sikkim	0	0	28.54	0	28.54
32.	West Bengal	0	15.75	155.97	1160.92	1332.64
33.	DVC	0	0.05	8.68	0	8.73
34.	NTPC Andaman/ Talcher	0	16.42	0	0	16.42
35.	Arunachal Pradesh	0	0.21	0.46	0	0.68
36.	Assam	0	7.34	14	0	21.34
37.	Manipur	0	0.04	0	0	0.04

1	2	3	4	5	6	7
38.	Meghalaya	0	0	61.4	0	61.4
39.	Mizoram	0	0	48.96	0	48.96
40.	Nagaland	0	0	84.21	0	84.21
41.	Tripura	0	0	36.57	0	36.57
42.	NEEPCO	0	5.51	0	0	5.51
	TOTAL	47482.24	19850	6814.86	11508.9	85655.99

Note: Data as received from State Load Dispatch Centre (SLDC) of the respective States of the electricity department.

Source: Central Electricity Authority (CEA)

Integration of renewable energy sources with the National Grid

1272. SHRIMATI SASIKALA PUSHPA: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) whether it is a fact that out of 279 GW of installed capacity of renewable energy, only 36 GW is included in the National Electricity Grid;

(b) if so, the details thereof;

(c) the factors which hamper integration of renewable energy sources with the National Grid;

(d) whether Government has formulated any road map to enhance renewable based capacity of the National Grid; and

(e) if so, the details thereof?

THE MINISTER OF STATE OF THE MINISTRY OF NEW AND RENEWABLE ENERGY (SHRI RAJ KUMAR SINGH): (a) and (b) No Sir. As on 31.01.2018, the total renewable energy capacity installed in the country is about 65.9 GW, out of which 64.3 GW renewable energy power plants are connected to the National Electricity Grid, and the remaining 1.6 GW are Off-Grid/Captive Power Plants.

(c) to (e) Renewable energy sources (Wind and Solar) are characterized by variability and uncertainty. To address these aspects, a comprehensive plan comprising transmission as well as control infrastructure was identified as a part of "Green Energy Corridors", which includes: