

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 3197
TO BE ANSWERED ON 03.08.2017

CAPACITY ADDITION OF NEW AND RENEWABLE ENERGY

3197. SHRI DEVUSINH CHAUHAN:

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

- (a) the details of targeted plan for capacity addition of new and renewable energy in the country during the 12th Plan period and mode of implementation of the same along with the achievements made till date, State-wise;
- (b) the details of the work undertaken by State Nodal Agencies for generation of new and renewable energy, during the said period, State-wise; and
- (c) the quantum of incentives given to State Nodal Agencies during this period, State-wise?

ANSWER

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

(a): An achievement of 29,463 MW of grid connected renewable capacity addition has been reported against a target of 30,000 MW during 12th Plan period.

Grid interactive renewable power projects are mostly implemented by the private sector. A total cumulative capacity of 58,303 MW of Grid Interactive Renewable Power has been achieved by 30-06-2017 in the country from various renewable energy sources. State-wise & source-wise details of the renewable power cumulative capacity addition upto 30-06-2017 are given in the **Annexure-I**.

(b): The State Nodal Agencies are generally involved in finalization of Power Purchase Agreement (PPA), allocation of land, transmission infrastructure etc for creation of additional grid connected renewable power projects.

(c): The Government had provided various incentives for the development of grid connected renewable energy projects in the States/ UTs of the country during the 12th Plan period. These included incentives in the form of generation based incentives/subsidies, fiscal incentives such as accelerated depreciation, concessional customs duty, excise duty exemptions, income tax holiday for 10 years and viability gap funding from National Clean Energy Fund (NCEF). The subsidies and incentives offered by the Government in the form of Central Financial Assistance for the implementation of various renewable energy programmes including State Nodal Agencies during 12th Plan is given in the **Annexure-II**.

Annexure-I referred to in reply to part (a) of Lok Sabha Unstarred Question No. 3197 to be answered on 03/08/2017 regarding 'Capacity Addition of New and Renewable Energy'

State-wise installed capacity of Grid Interactive Renewable Power as on 30.06.2017.							
S. No.	STATES / Uts	Small Hydro Power	Wind Power	Bio-Power		Solar Power	Total Capacity
				BM Power/Cogen.	Waste to Energy		
		(MW)	(MW)	(MW)	(MW)	(MW)	(MW)
1	Andhra Pradesh	241.98	3721.25	378.20	58.16	2011.10	6410.69
2	Arunachal Pradesh	104.605				0.27	104.87
3	Assam	34.11				11.78	45.89
4	Bihar	70.70		113.00		111.52	295.22
5	Chhatisgarh	76.00		228.00		128.86	432.86
6	Goa	0.05				0.71	0.76
7	Gujarat	16.60	5434.37	65.30		1262.1	6778.37
8	Haryana	73.50		96.40		81.40	251.30
9	Himachal Pradesh	835.31				0.73	836.04
10	Jammu & Kashmir	158.03				1.36	159.39
11	Jharkhand	4.05				23.27	27.32
12	Karnataka	1225.73	3774.70	1452.00	1.00	1180.38	7633.81
13	Kerala	213.02	51.50			74.2	338.72
14	Madhya Pradesh	86.16	2497.790	93.00	3.90	857.04	3537.89
15	Maharashtra	347.37	4771.33	2065.00	12.72	452.37	7648.79
16	Manipur	5.45				0.03	5.48
17	Meghalaya	31.03				0.01	31.04
18	Mizoram	41.47				0.10	41.57
19	Nagaland	30.67				0.50	31.17
20	Odisha	64.625		50.40		79.42	194.45
21	Punjab	170.90		179.00	9.25	809.45	1168.60
22	Rajasthan	23.85	4281.72	119.30		1961.22	6386.09
23	Sikkim	52.11				0.00	52.11
24	Tamil Nadu	123.05	7870.41	878.00	8.05	1697.32	10576.83
25	Telangana		100.80	158.10		1609.27	1868.17
26	Tripura	16.01				5.09	21.10
27	Uttar Pradesh	25.10		1933.00	5.00	359.00	2322.10
28	Uttarakhand	209.320		73.00		233.49	515.81
29	West Bengal	98.50		300.00		26.14	424.64
30	Andaman & Nicobar	5.25				6.56	11.81
31	Chandigarh					17.32	17.32
32	Dadar & Nagar Haveli					2.97	2.97
33	Daman & Diu					10.46	10.46
34	Delhi				16.00	40.27	56.27
35	Lakshwadeep					0.75	0.75
36	Pondicherry					0.08	0.08
37	Others		4.30			58.31	62.61
	Total (MW)	4384.550	32508.170	8181.70	114.08	13114.85	58303.35

MW = Megawatt

Annexure-II referred to in reply to part (c) of Lok Sabha Unstarred Question No. 3197 to be answered on 03/08/2017.

Subsidies and Incentives being provided as Central Financial Assistance (CFA) for the installation of various renewable energy programmes during 12th Plan period.

A. GRID-INTERACTIVE RENEWABLE POWER PROGRAMMES:

1. Wind Power Projects.		
Generation Based Incentive(GBI)		Rs 0.50 per unit subject to max of Rs 1.00 crore/MW for producers
2. Solar Power Projects.		
a) Solar PV Power projects under Jawaharlal Nehru National Solar Mission (JNNSM) Phase-II, Batch-I of total 750 MW with Viability Gap Funding (VGF) support from National Clean Energy Fund (NCEF).	Minimum Project Capacity 10 MW Maximum Project Capacity 50 MW	VGF support up to 30% of Project Cost limited to Rs.2.50 Cr/MW based on reverse bidding process for power producers.
b) Grid Connected Rooftop Solar PV Power Projects in residential, institutional and social sector	Benchmark of Rs 60/- to Rs 70/- per watt depending upon the capacity.	Central Financial Assistance (CFA) up to 30% of benchmark cost for the General Category States/UTs and up to 70% of benchmark cost for Special Category States/UTs, i.e. North Eastern States including Sikkim, Uttarakhand, Himachal Pradesh, Jammu & Kashmir and Lakshadweep, Andaman & Nicobar Islands is provided to consumers for installation of grid connected solar rooftop projects. Incentives are also provided for promotion of roof top SPV power in Government sector. No subsidy is provided for commercial and industrial establishments in private sector.
c) Grid connected Solar PV Power Projects by Central Public Sector Undertakings (CPSUs).	Total size of the scheme 1000MW.	VGF support to the CPSUs/Govt. Organisations (producers) at a fixed rate of Rs.1 crore/MW for projects where domestically produced cells and modules are used and Rs. 0.50 crores/MW in cases where domestically produced modules are used.
d) Grid-connected Solar PV Power plants on Canal Banks and Canal Tops	1 MW to 10 MW	Rs 3 crore / MW or 30% of the project cost
e) Solar Park Scheme	--	i) 25 lakh per Solar park for preparation of Detailed Project Report(DPRs) ii) 20 Lkah per MW or 30% of the project cost including Grid-connectivity cost, whichever is lower.

f) Solar PV scheme for Defence Establishments	--	Rs 1.1 crore / MW for all capacities

3. Small Hydro Power (SHP) Projects

Support to new SHP projects (producers) in State sector:

Category	Above 100 KW and up to 1000 KW	Above 1 MW – 25 MW
Special category and NE States	75,000 per KW.	7.5 Crores / MW limited to 20 crore per project.
Other States	35,000 per KW.	3.5 Crores / MW limited to 20 crore per project.

Support to new SHP projects (producers) in private / co-operative / joint sector:

Areas	Upto 25 MW
N E Region, J & K, H.P. & Uttarakhand (Special Category States)	1.5 crore/ MW limited to 5.00 crore per project
Other States	1.0 crore/ MW limited to 5.00 crore per

4. Biomass Power and Bagasse Cogeneration Projects (producers):

Private / Joint / Cooperative / Public Sector Sugar Mills:

Type of Projects	Special Category and NE States	Other States
Biomass Power projects	Rs.25 lakh per MW*	Rs.20 lakh per MW*
Bagasse Co-generation	Rs.18 lakh per MW*	Rs.15 lakh per MW*
Co-generation projects by cooperative/public sector sugar mills:-	Per MW of surplus power (maximum support Rs. 6.0 cr / project)	Per MW of surplus power (maximum support of Rs. 6.0 cr per project)
40 bar & above	Rs.40 lakh	Rs.40 lakh
60 bar & above	Rs.50 lakh	Rs.50 lakh
80 bar & above	Rs.60 lakh	Rs.60 lakh

*Maximum support of Rs. 1.50 crore per project.

5. Waste to Energy Projects:

Type of Waste	Central Financial Assistance to Producers
Municipal Solid Waste	Rs.2.00cr./MW, Max. Support 10 Cr. /project.
Urban Waste	Rs.2.00cr./MW, Max. Support 5 Cr. /project.
Industrial waste	Rs. 0.20cr to Rs. 1.00cr/MW, Max. Support Rs.5.00cr/project.