

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 3056
TO BE ANSWERED ON 03.08.2017

GENERATION OF POWER FROM RENEWABLE SOURCES

3056. SHRI ALOK SANJAR:

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

- (a) whether power is generated from biomass, solar and wind power plants in the country;
- (b) if so, the details thereof, State-wise;
- (c) whether power generated from biomass plants is cheaper as compared to wind and solar energy;
- (d) if so, the details thereof; and
- (e) the per unit cost of electricity generated by the biomass plant as compared to the electricity generated by solar and wind energy plants?

ANSWER

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

(a) & (b): Yes Madam. Power is being generated from biomass, solar and wind power plants in the country. The state-wise details of power generated from various renewable sources i.e Wind, Solar, Biomass, Small Hydro Power during 2016-17 is given in the **Annexure-I**.

(c) to (e): No Madam. The electricity generated from biomass power is not cheaper than solar and wind power. The details of the estimated per unit cost of electricity generated from various renewable energy sources i.e. solar, wind, biopower and small hydro power are given in **Annexure-II**.

Annexure-I referred to in reply to part (a &b) of Lok Sabha Unstarred Question No. 3056 to be answered on 03/08/2017 regarding 'Generation of Power from Renewable Sources '

GENERATION from Various Renewable Energy Sources for the Year 2016 – 17

								(All figures in MU)
Sl. No.	State/Utility	Wind	Solar	Biomass	Bagasse	Small Hydro	Others	Total
1	Chandigarh	0.00	13.16	0.00	0.00	0.00	0.00	13.16
2	Delhi	0.00	5.68	0.00	0.00	0.00	139.05	144.73
3	Haryana	0.00	19.70	184.66	6.38	238.80	0.00	449.54
4	HP	0.00	0.00	0.00	0.00	2015.58	0.00	2015.58
5	J & K	0.00	0.77	0.00	0.00	325.36	0.00	326.12
6	Punjab	0.00	909.20	528.17	214.14	497.99	0.00	2149.49
7	Rajasthan	5562.52	2131.61	272.97	0.00	6.76	0.00	7973.85
8	Uttar Pradesh	0.00	230.95	165.39	3214.09	27.83	77.40	3715.66
9	Uttarakhand .	0.00	37.77	0.00	110.92	850.50	0.00	999.19
10	NTPC Dadri/FBD/Unchahar/Singrauli	0.00	74.90	0.00	0.00	0.00	0.00	74.90
11	Oil India Ltd	201.61	25.59	0.00	0.00	0.00	0.00	227.20
12	Chhattisgarh	0.00	120.91	1281.10	0.00	44.21	0.00	1446.22
13	NTPC Rajgarh	0.00	82.21	0.00	0.00	0.00	0.00	82.21
14	Gujarat	7720.01	1738.28	12.16	0.00	27.54	0.00	9497.99
15	Madhya Pradesh	3563.17	1366.10	86.59	0.00	224.46	28.35	5268.67
16	Maharashtra	7490.75	577.83	573.58	2040.76	609.58	0.20	11292.70
17	Dadra and Nagar Haveli	0.00	1.31	0.00	0.00	0.00	0.00	1.31
18	Daman & Diu	0.00	14.43	0.00	0.00	0.00	0.00	14.43
19	Andhra Pradesh	3187.85	1599.78	350.24	169.74	168.75	6.90	5483.26
20	Telangana	211.93	1337.90	176.01	180.93	52.62	40.48	1999.89
21	Karnataka	6058.65	524.67	157.50	1550.61	1294.25	0.00	9585.68
22	Kerala	72.59	26.52	1.23	0.00	462.38	0.00	562.72
23	NTPC Ramagundam	0.00	350.53	0.00	0.00	0.00	0.00	350.53
24	Tamil Nadu	11935.26	1898.34	349.14	877.34	93.79	0.00	15153.87
25	Lakshadweep	0.00	1.59	0.00	0.00	0.00	0.00	1.59
26	Puducherry	0.00	0.34	0.00	0.00	0.00	0.00	0.34
27	Andaman & Nicobar	0.00	6.17	0.00	0.00	13.86	0.00	20.03
28	Bihar	0.00	109.18	1.72	159.66	21.96	0.00	292.53
29	Jharkhand	0.00	38.47	0.00	0.00	0.00	0.00	38.47
30	Orissa	0.00	210.81	57.85	0.00	239.05	0.00	507.71
31	Sikkim	0.00	0.00	0.00	0.00	35.78	0.00	35.78
32	West Bengal	0.00	14.96	0.00	1433.95	120.86	0.00	1569.77
33	DVC	0.00	0.01	0.00	0.00	136.10	0.00	136.11
34	NTPC Andaman/Talcher	0.00	20.00	0.00	0.00	0.00	0.00	20.00
35	Arunachal Pradesh	0.00	0.14	0.00	0.00	13.46	0.00	13.60
36	Assam	0.00	2.69	0.00	0.00	79.52	0.00	82.21
37	Manipur	0.00	0.01	0.00	0.00	0.00	0.00	0.01
38	Meghalaya	0.00	0.00	0.00	0.00	59.10	0.00	59.10
39	Mizoram	0.00	0.00	0.00	0.00	49.62	0.00	49.62
40	Nagaland	0.00	0.00	0.00	0.00	92.73	0.00	92.73
41	Tripura	0.00	0.00	0.00	0.00	46.47	0.00	46.47
42	NEEPCO	0.00	6.89	0.00	0.00	0.00	0.00	6.89
	Total	46004.34	13499.41	4198.30	9958.52	7848.91	292.38	81801.85

Source: Central Electricity Authority

Annexure-II referred to in reply to part (c to e) of Lok Sabha Unstarred Question No. 3056 to be answered on 03/08/2017 regarding 'Generation of Power from Renewable Sources '

ESTIMATED COSTS OF ELECTRICITY GENERATED from Various Renewable Energy Sources

Source	Estimated(per unit) cost of electricity generated from various RE sources (in Rupees)
Small Hydro Power	3.00 – 3.75
Wind Power	4.00-6.00
Solar Power	2.44-3.30
Biomass Power/ Cogeneration	5.00-7.00
Energy from Urban/ Industrial Waste	6.00-7.00