



भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority



नवीकरणीय ऊर्जा परियोजना प्रबोधन प्रभाग
Renewable Energy Project Monitoring Division



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सं.: के.वि.प्रा./योजना/आर.पी.एम.-13/3/2020/1467

दिनांक: 18.03.2020

सेवा में,

(वितरण सूची के अनुसार)

विषय: नवीकरणीय ऊर्जा उत्पादन रिपोर्ट माह जनवरी 2020 के सम्बंध में।

महोदय,

माह जनवरी 2020 की नवीकरणीय ऊर्जा उत्पादन रिपोर्ट (व्यापक अवलोकन सहित) सूचनार्थ संलग्न है।

संलग्नक: यथोपरि।



(ओ. पी. मीना)

निदेशक (आर.पी.एम)

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SUMMARY OF REPORT FOR THE MONTH OF JANUARY 2020

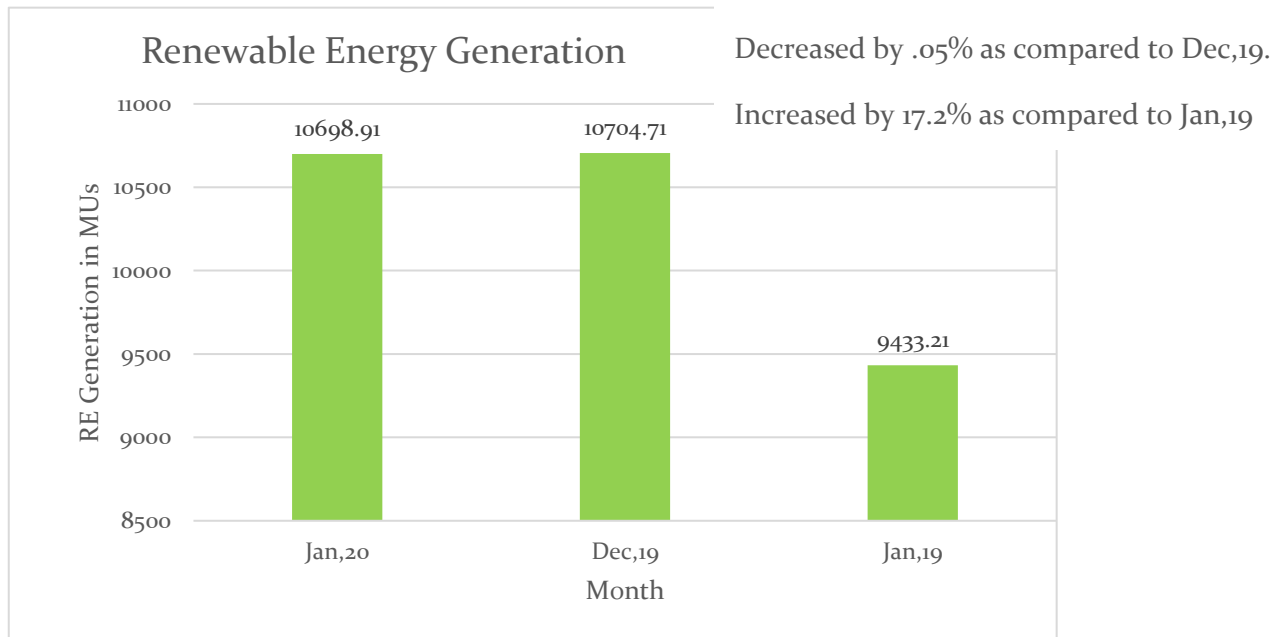


Figure 1 Renewable Energy Generation

Decreased by 72.64% as compared to Dec,19.

Decreased by 57.64 % as compared to Jan,19

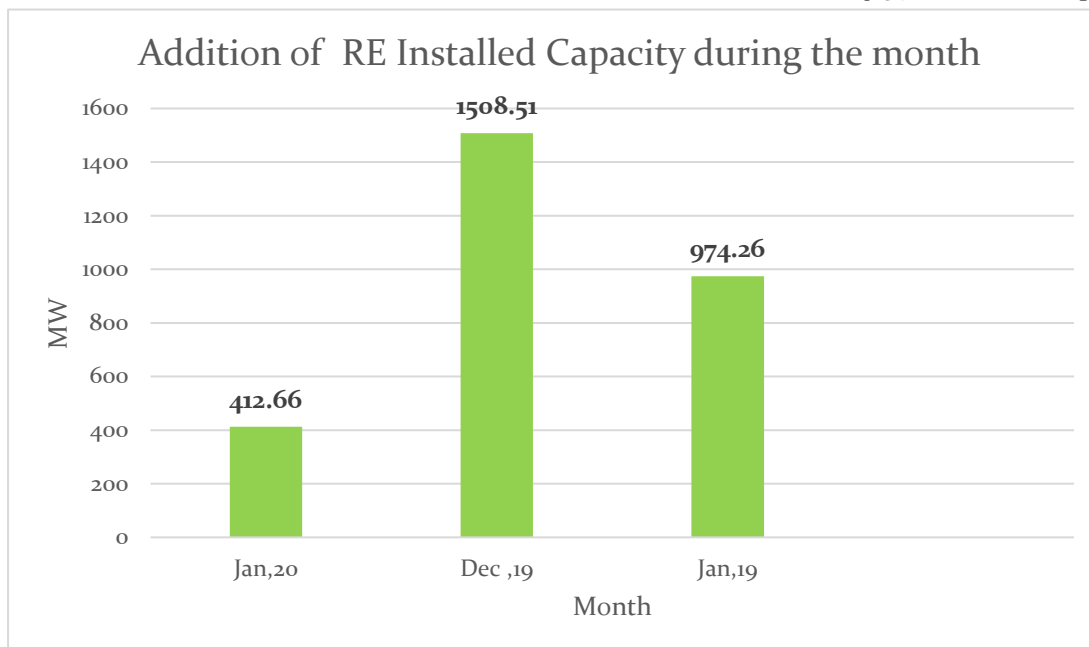


Figure 2 RE capacity added during the Month

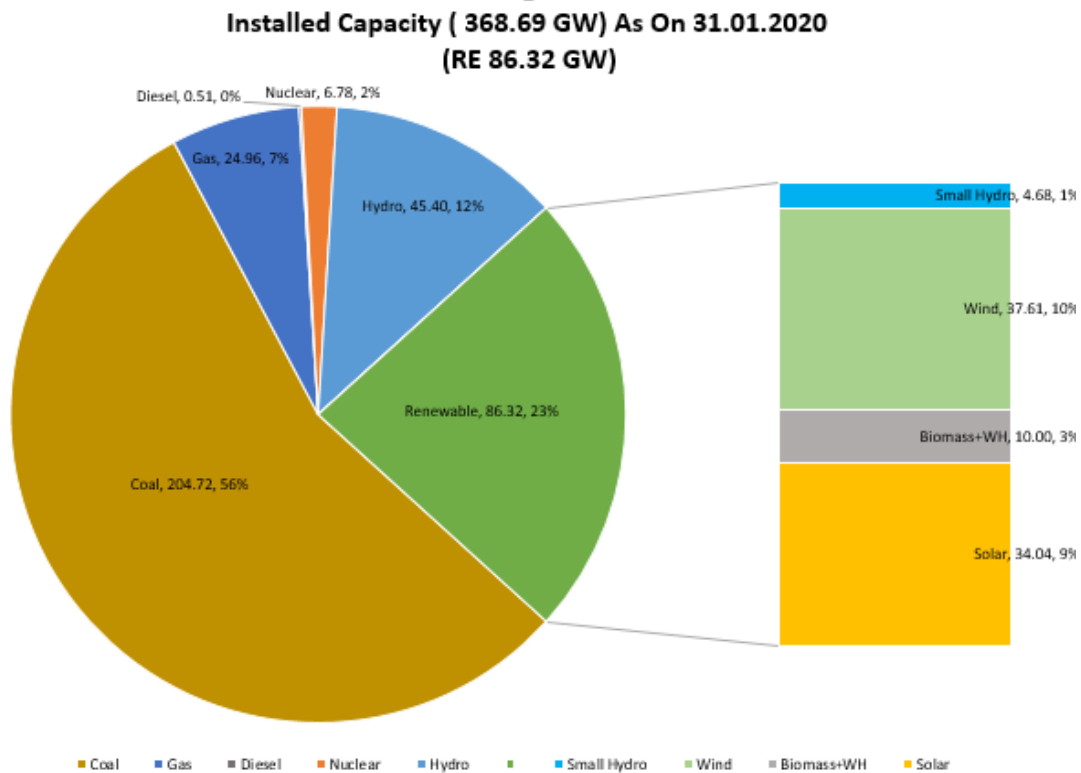


Figure 3 Installed Capacity in India as on 31.01.2020

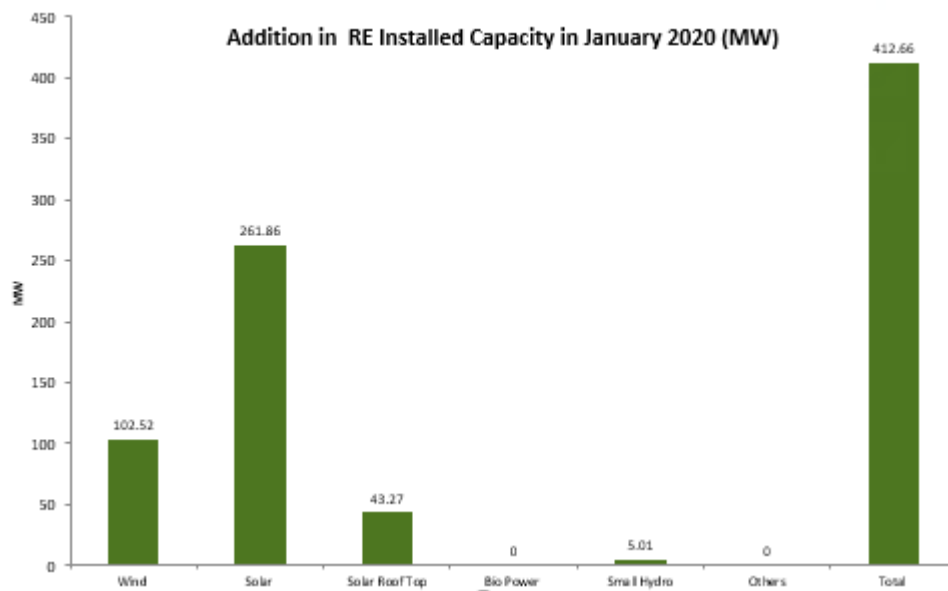


Figure 4: Addition in RE Installed Capacity

HIGHLIGHTS OF RE GENERATION DURING JANUARY, 2020

1. RE generation grow by 13.42 % in January, 2020 as compare to January, 2019.
2. Wind Power generation during the month of January, 2020 increased in Rajasthan, Gujarat, Maharashtra and Tamil Nadu and decreased in Andhra Pradesh and Karnataka as compared to January, 2019.
3. Daily wind generation Decreased by 14.24. % as compared to December, 2019 and increase by 12.36 % as compared to January, 2019.
4. Solar Power generation during the month of January, 2020 increased in Rajasthan, Gujarat, Karnataka and Tamil Nadu and decreased in Punjab and Uttarakhand as compared to January, 2019.
5. Daily solar generation increased by 18.71 % as compared to December, 2019 and increased by 18.57 % as compared to January 2019.
6. Generation from Bagasse is not at the past year levels and still lower than January 2019 in Uttar Pradesh, Maharashtra, Telangana, Karnataka and West Bengal.
7. Dally report of CEA is now capturing 96.50 % of wind and 94.15% of solar energy.
8. RE to Transport report giving details of energy schedule to Delhi Metro through Delhi Discom is included.

ALL INDIA SUMMARY OF RENEWABLE GENERATION

Category	Jan -20				April 2019-January 2020		
	Installed Capacity (MW)	Actual(MU)	Actual (MU) Same Month	% Of Last Year (2/3)	Actual (MU)	Actual(MU) Same Period	% Of Last Year (5/6)
			2018-19			2018-19	
	1	2	3	4	5	6	7
Wind	37607.7	3319.95	2851.89	116.41	57721.89	55975.98	103.12
Solar	34035.66	4612.72	3534.81	130.49	39407.14	31329.74	125.78
Biomass	9861.31	273.21	230.98	118.29	2347.05	2266.79	103.54
Bagasse		1906.91	2351.84	81.08	7741.14	9803.03	78.97
Small Hydro	4676.56	562.16	428.57	131.17	8255.16	7839.06	105.31
Others	139.8	23.95	35.11	68.22	300.26	353.69	84.89
Total	86321.03	10698.91	9433.21	113.42	115772.65	107568.28	107.63

Table 1 All India Summary of Renewable Energy Generation

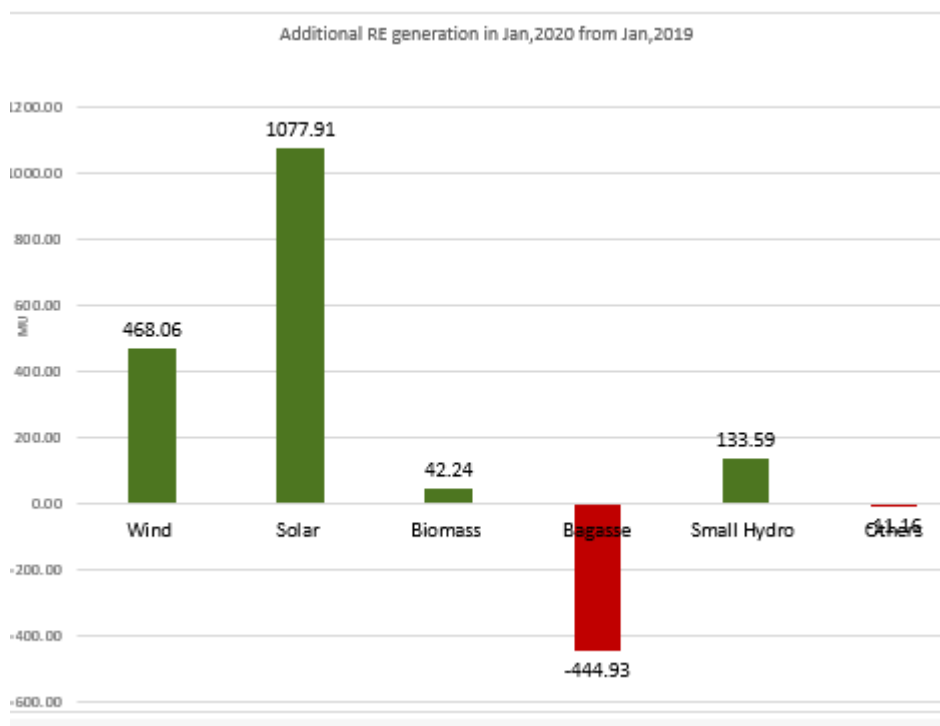


Figure 5 Additional RE generation in Jan'20 as compared to Jan'20

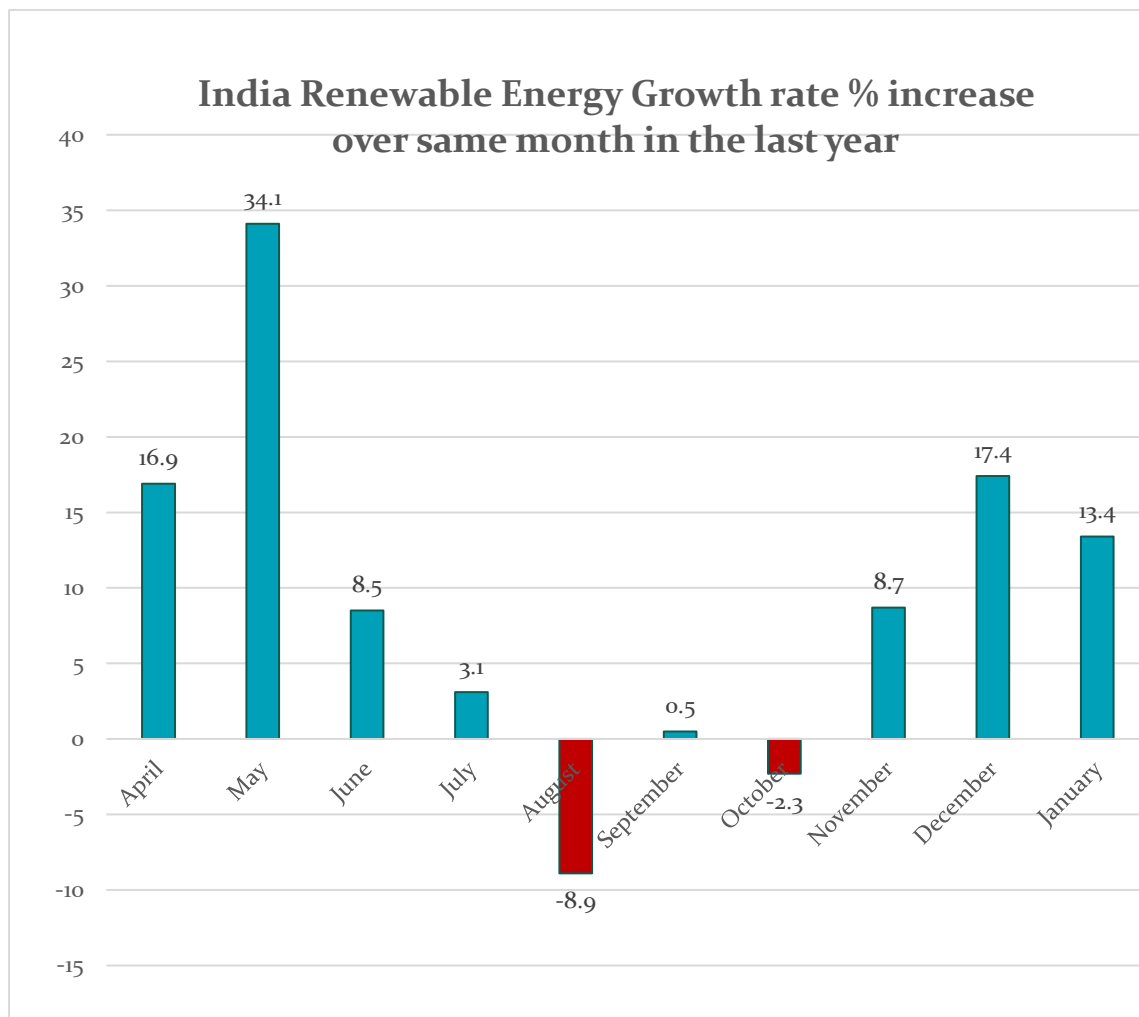


Figure 6 Month Wise Growth of RE Generation

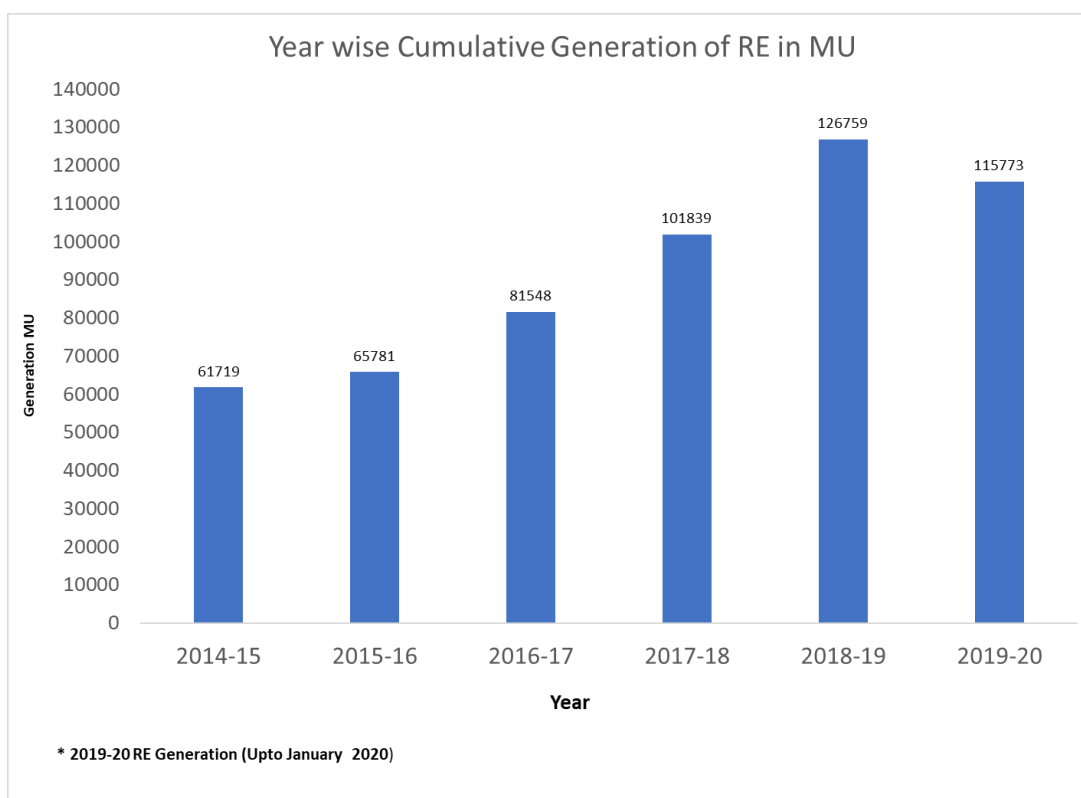


Figure 7 Year Wise RE Generation

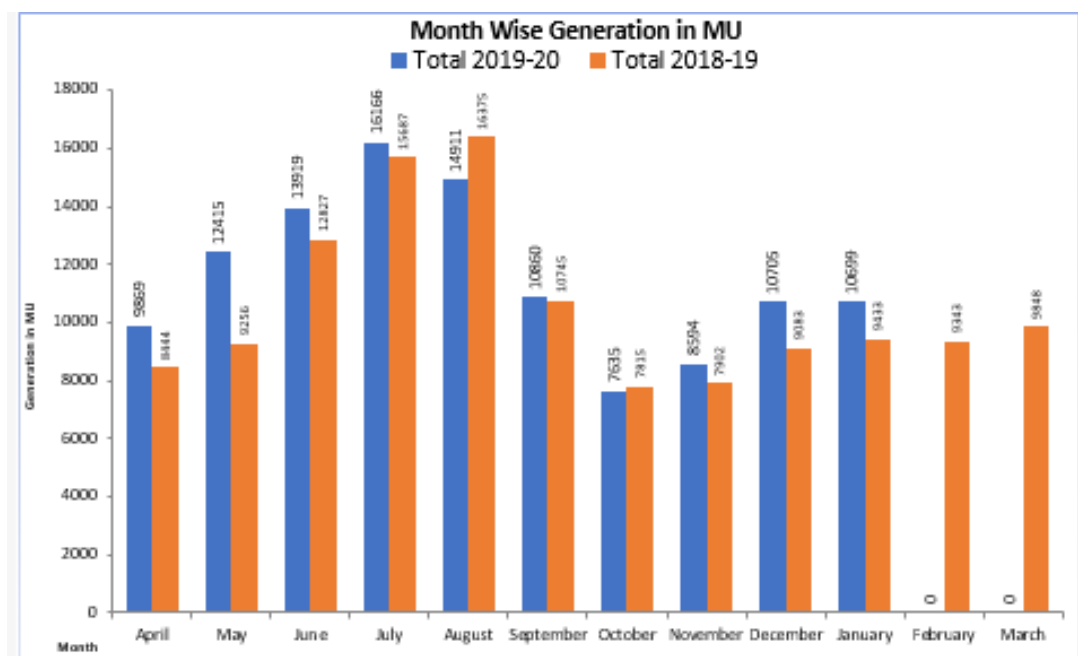


Figure 8 Month Wise RE Generation

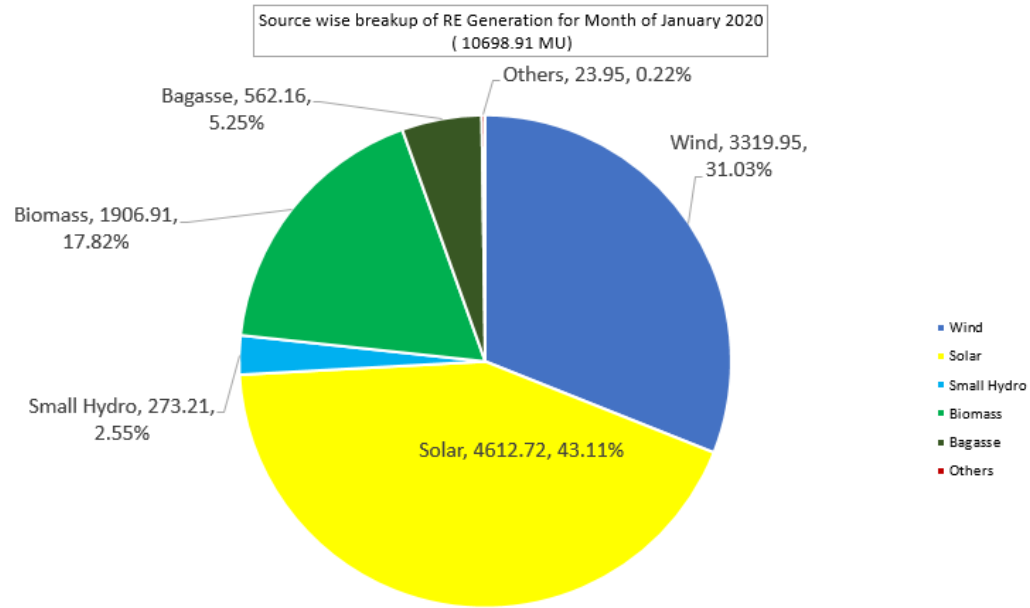


Figure 9 Source wise breakup of RE Generation

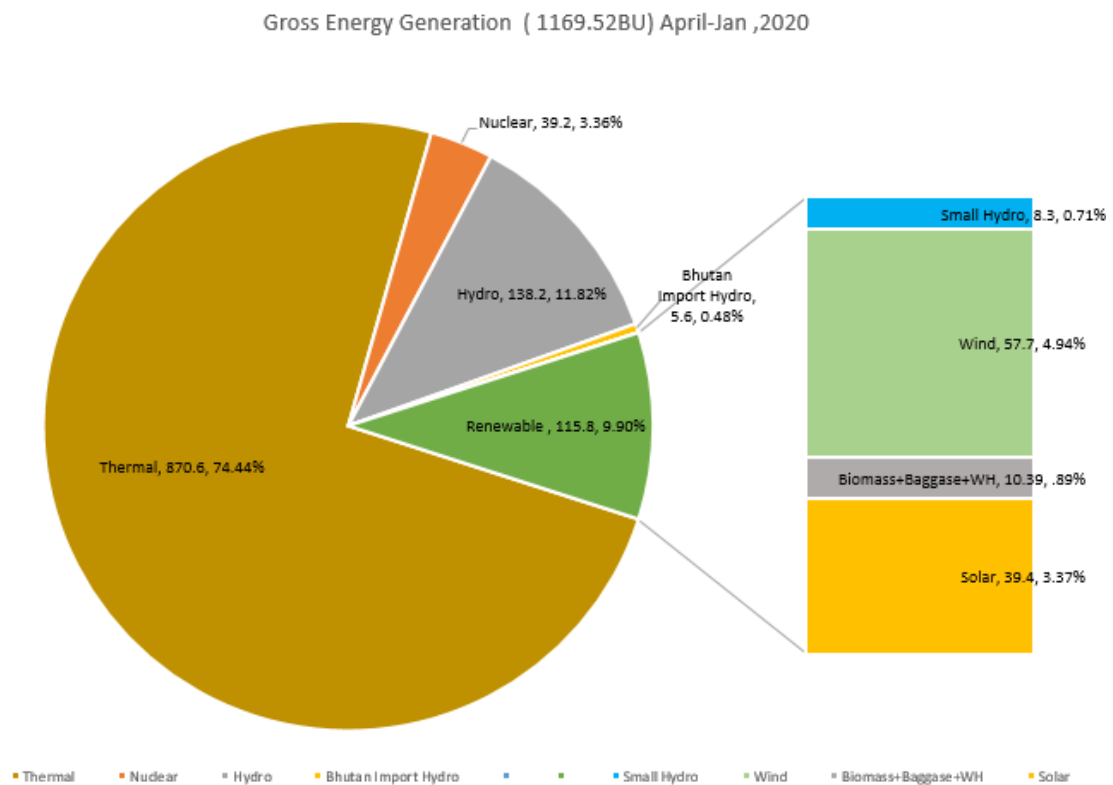


Figure 10 Gross Energy Generation In India and RE Share

Table 2 State Wise Renewable Energy Generation

Renewable Energy Generation (State Wise) for the month of January ,2020				
State/UT	Actual Generation (MU)		Cumulative Generation (MU)	
	Jan,2020	Jan,2019	April - Jan, 2020	April - Jan, 2019
Chandigarh	0.18	0.23	10.22	11.79
Delhi #	26.72	21.74	362.62	242.99
Haryana *	71.36	48.32	606.45	532.86
HP	79.77	63.51	1907.04	2137.76
J & K	13.17	15.95	389.79	276.84
Ladakh	0.00	0.00	0.00	0.00
Punjab	225.98	216.57	2232.84	1972.09
Rajasthan	1141.87	792.60	11684.91	9976.94
Uttar Pradesh	718.74	783.90	3703.20	4173.96
Uttarakhand	84.17	82.51	993.97	915.60
Northern Region	2361.96	2025.33	21891.03	20240.84
Chhattisgarh	79.68	59.59	880.14	803.97
Gujarat	1484.81	1025.57	14850.84	11852.52
Madhya Pradesh	625.34	565.69	6845.09	6925.90
Maharashtra	1125.42	1318.08	11743.66	12504.47
Dadra and Nagar Haveli	0.56	0.57	4.93	4.45
Daman & Diu	2.01	1.76	17.60	14.86
Goa	0.14	0.00	0.54	0.00
Western Region	3317.95	2971.25	34342.80	32106.16
Andhra Pradesh	779.00	839.74	11890.19	12524.12
Telangana	593.25	633.40	5468.77	5689.86
Karnataka	2302.64	1887.16	21382.97	18367.05
Kerala	49.84	45.72	701.02	664.57
Tamil Nadu	1071.45	763.38	17603.59	15468.68
Lakshadweep	0.06	0.08	0.53	1.02
Puducherry *	0.37	0.23	3.40	2.11
Southern Region	4796.61	4169.71	57050.47	52717.42
Andaman Nicobar	1.64	2.56	14.99	24.59

Renewable Energy Generation (State Wise) for the month of January ,2020				
State/UT	Actual Generation (MU)		Cumulative Generation (MU)	
	Jan,2020	Jan,2019	April - Jan, 2020	April - Jan, 2019
Bihar *	45.56	56.66	263.45	303.09
Jharkhand *	1.31	1.56	13.53	15.48
Orissa	54.85	53.95	663.05	539.63
Sikkim *	6.92	1.41	57.88	26.04
West Bengal	92.27	130.57	1222.61	1339.81
DVC	1.28	0.81	1.60	2.62
Eastern Region	203.83	247.53	2237.10	2251.26
Arunachal Pradesh	0.20	0.18	1.80	1.46
Assam	1.52	1.69	54.26	18.26
Manipur	0.60	0.16	3.57	1.05
Meghalaya	5.36	3.57	56.01	43.98
Mizoram	3.10	4.10	43.76	31.84
Nagaland	5.05	3.22	69.62	82.08
Tripura *	2.73	6.46	22.23	73.94
North Eastern Region	18.56	19.39	251.25	252.61
All India Total	10698.91	9433.21	115772.65	107568.28
1) Data as received from SLDC of the respective states or from the electricity department				
2) Figure given above indicate gross generation of all power stations (Central , State & Private Sector) located geographically in the respective State/UT.				
* Data has been taken provisionally as of RE generation report of December 2019.				
# Solar power generation as of RE generation report of December 2019 .				

Table 3 State Wise wind Power Generation

State Wise -Source Wise RE Generation_ Wind _January 2020		
	Wind Electricity	
State/UT	Jan'20	Jan'19
Chandigarh	0.00	0.00
Delhi #	0.00	0.00
Haryana *	0.00	0.00
HP	0.00	0.00
J & K	0.00	0.00
Ladakh	0.00	0.00
Punjab	0.00	0.00
Rajasthan	399.49	312.56
Uttar Pradesh	0.00	0.00
Uttarakhand	0.00	0.00
Northern Region	399.49	312.56
Chhattisgarh	0.00	0.00
Gujarat	1093.84	779.91
Madhya Pradesh	260.92	229.07
Maharashtra	269.85	224.15
Dadra and Nagar Haveli	0.00	0.00
Daman & Diu	0.00	0.00
Goa	0.00	0.00
Western Region	1624.61	1233.13
Andhra Pradesh	217.35	367.77
Telangana	19.20	18.31
Karnataka	478.48	529.87
Kerala	7.95	6.70
Tamil Nadu	572.88	373.64
Lakshadweep	0.00	0.00
Puducherry *	0.00	0.00
Southern Region	1295.85	1296.29
Andaman Nicobar	0.00	0.00
Bihar *	0.00	0.00
Jharkhand *	0.00	0.00
Orissa	0.00	9.91
Sikkim *	0.00	0.00
West Bengal	0.00	0.00
DVC	0.00	0.00
Eastern Region	0.00	9.91

Arunachal Pradesh	0.00	0.00
Assam	0.00	0.00
Manipur	0.00	0.00
Meghalaya	0.00	0.00
Mizoram	0.00	0.00
Nagaland	0.00	0.00
Tripura *	0.00	0.00
North Eastern Region	0.00	0.00
All India Total	3319.95	2851.89
1) Data as received from SLDC of the respective states or from the electricity department		
2) Figure given above indicate gross generation of all power stations (Central , State & Private Sector) located geographically in the respective State/UT.		
* Data has been taken provisionally as of RE generation report of December 2019.		

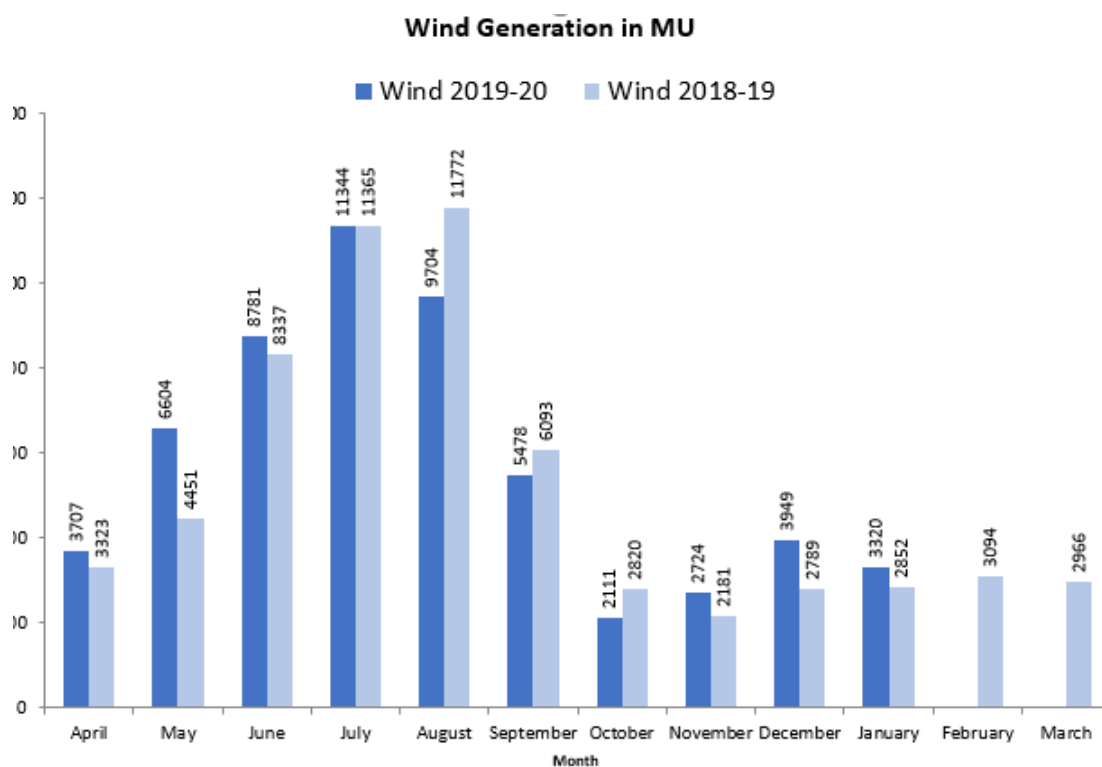


Figure 11 Month Wise Wind Power Generation

Table 4 State Wise Solar Power Generation

State wise_Source Wise RE Generation_Solar_January 2020		
	Solar Generation (MU)	
State/UT	Jan'20	Jan'19
Chandigarh	0.18	0.23
Delhi #	7.09	0.48
Haryana *	15.85	5.04
HP	1.92	0.00
J & K	0.00	0.00
Ladakh	0.00	0.00
Punjab	82.46	94.35
Rajasthan	701.08	448.47
Uttar Pradesh	118.16	96.61
Uttarakhand	18.94	23.08
Northern Region	945.68	668.27
Chhattisgarh	30.38	29.55
Gujarat	356.69	233.43
Madhya Pradesh	309.67	293.73
Maharashtra	205.42	207.47
Dadra and Nagar Haveli	0.56	0.57
Daman & Diu	2.01	1.76
Goa	0.14	0.00
Western Region	904.87	766.50
Andhra Pradesh	506.42	394.84
Telangana	530.77	560.67
Karnataka	1221.55	759.16
Kerala	13.99	11.98
Tamil Nadu	439.66	326.80
Lakshadweep	0.06	0.08
Puducherry *	0.37	0.23

Southern Region	2712.82	2053.77
Andaman Nicobar	0.90	1.44
Bihar *	10.79	15.41
Jharkhand *	1.31	1.56
Orissa	30.32	23.28
Sikkim *	0.00	0.00
West Bengal	5.04	2.96
DVC	0.005	0.01
Eastern Region	48.35	44.65
Arunachal Pradesh	0.16	0.12
Assam	0.48	0.66
Manipur	0.32	0.16
Meghalaya	0.00	0.00
Mizoram	0.03	0.00
Nagaland	0.00	0.00
Tripura *	0.01	0.69
North Eastern Region	1.00	1.63
All India Total	4612.72	3534.81

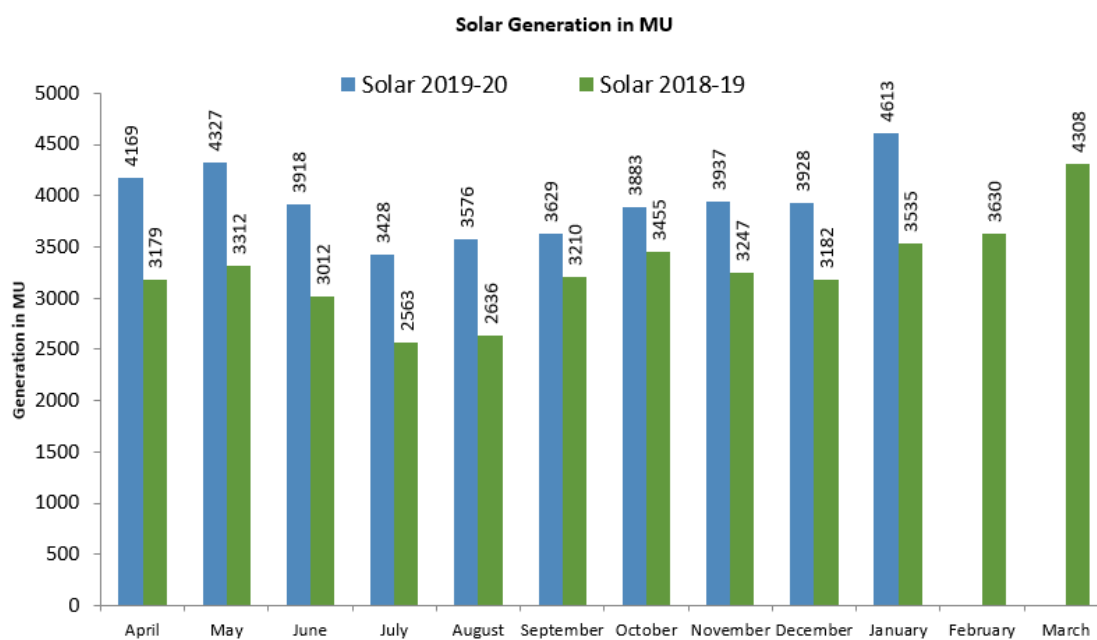


Figure 12 Month wise Solar Power Generation

Table 5 State Wise Biomass Power Generation

State Wise_Source Wise RE Generation_Biomass_January 2020		
	(MU)	
State/UT	Jan'20	Jan'19
Chandigarh	0.00	0.00
Delhi #	0.00	0.00
Haryana *	15.65	17.55
HP	0.00	0.00
J & K	0.00	0.00
Ladakh	0.00	0.00
Punjab	41.76	32.25
Rajasthan	39.86	31.43
Uttar Pradesh	18.97	8.19
Uttarakhand	0.00	0.00
Northern Region	116.23	89.41
Chhattisgarh	43.01	26.48
Gujarat	14.33	5.50
Madhya Pradesh	0.12	0.14
Maharashtra	43.40	37.60
Dadra and Nagar Haveli	0.00	0.00
Daman & Diu	0.00	0.00
Goa	0.00	0.00
Western Region	100.86	69.72
Andhra Pradesh	13.28	15.43
Telangana	11.37	13.21
Karnataka	13.79	15.77
Kerala	0.00	0.00
Tamil Nadu	7.69	15.59
Lakshadweep	0.00	0.00
Puducherry *	0.00	0.00
Southern Region	46.13	60.00
Andaman Nicobar	0.00	0.00
Bihar *	2.09	3.81
Jharkhand *	0.00	0.00
Orissa	7.90	8.03
Sikkim *	0.00	0.00
West Bengal	0.00	0.00
DVC	0.00	0.00

Eastern Region	9.99	11.84
Arunachal Pradesh	0.00	0.00
Assam	0.00	0.00
Manipur	0.00	0.00
Meghalaya	0.00	0.00
Mizoram	0.00	0.00
Nagaland	0.00	0.00
Tripura *	0.00	0.00
North Eastern Region	0.00	0.00
All India Total	273.21	230.98

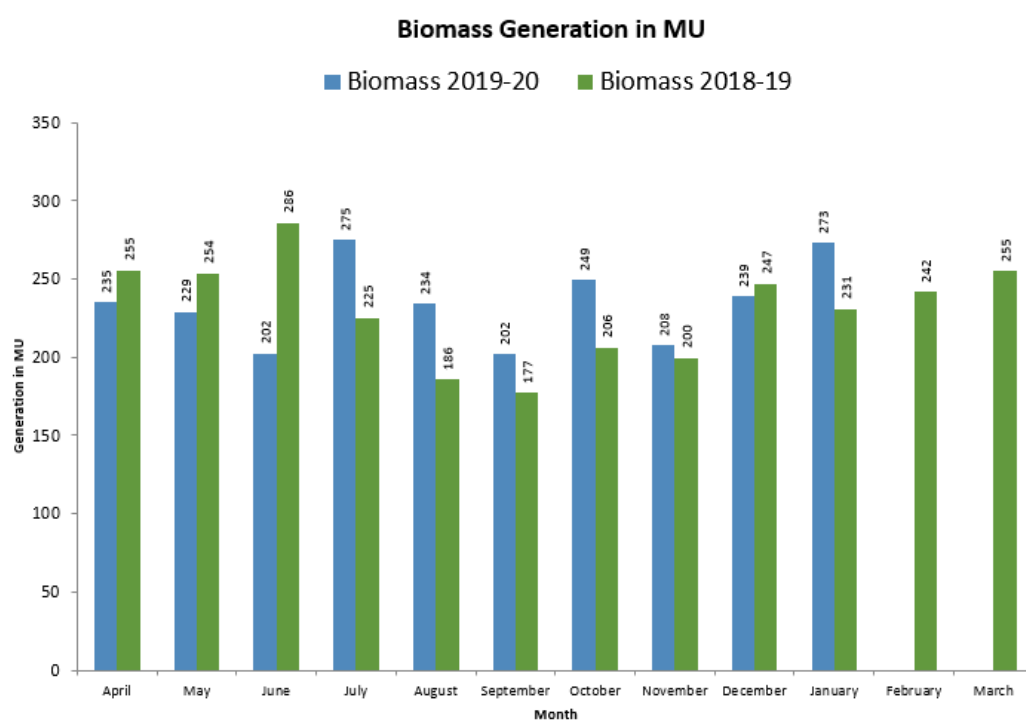


Figure 13 Month Wise Biomass Power Generation

Table 6 State Wise bagasse Power Generation

SOURCE WISE _BAGASSE _RE GENERATION _JANUARY 2020		
	(MUS)	
STATE/UT	JAN'20	JAN'19
CHANDIGARH	0.00	0.00
DELHI #	0.00	0.00
HARYANA *	14.83	8.51
HP	0.00	0.00
J & K	0.00	0.00
LADAKH	0.00	0.00
PUNJAB	46.23	45.95
RAJASTHAN	0.00	0.00
UTTAR PRADESH	576.90	676.66
UTTARAKHAND	23.65	24.32
NORTHERN REGION	661.61	755.45
CHHATTISGARH	0.00	0.00
GUJARAT	2.28	0.00
MADHYA PRADESH	24.17	24.32
MAHARASHTRA	546.90	781.95
DADRA AND NAGAR HAVELI	0.00	0.00
DAMAN & DIU	0.00	0.00
GOA	0.00	0.00
WESTERN REGION	573.34	806.28
ANDHRA PRADESH	6.57	37.87
TELANGANA	28.59	30.09
KARNATAKA	496.02	531.69
KERALA	0.00	0.00
TAMIL NADU	22.16	26.77
LAKSHADWEEP	0.00	0.00
PUDUCHERRY *	0.00	0.00
SOUTHERN REGION	553.34	626.42
ANDAMAN NICOBAR	0.00	0.00
BIHAR *	31.99	36.30
JHARKHAND *	0.00	0.00
		0.00
ORISSA	0.00	0.00
SIKKIM *	85.36	126.59

WEST BENGAL	1.28	0.81
DVC	118.62	163.70
EASTERN REGION	0.00	0.00
ARUNACHAL PRADESH	0.00	0.00
ASSAM	0.00	0.00
MANIPUR	0.00	0.00
MEGHALAYA	0.00	0.00
MIZORAM	0.00	0.00
NAGALAND	0.00	0.00
TRIPURA *	0.00	0.00
NORTH EASTERN REGION	0.00	0.00
ALL INDIA TOTAL	1906.91	2351.84

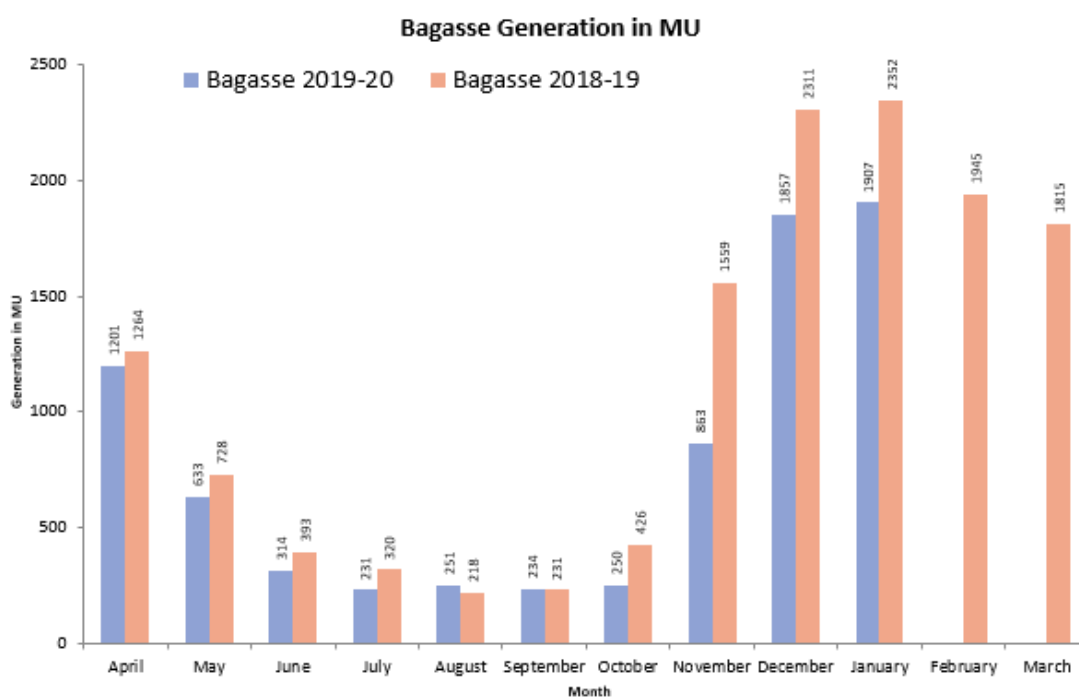


Figure 14 Month wise bagasse Power Generation

Table 7 State Wise Small Hydro Generation

STATE WISE_SOURCE WISE RE GENERATION_SMALL HYDRO_JANUARY, 2019		
	(MU)	
STATE/UT	JAN'20	JAN'19
CHANDIGARH	0.00	0.00
DELHI #	0.00	0.00
HARYANA *	25.04	17.22
HP	77.85	63.51
J & K	13.17	15.95
LADAKH	0.00	0.00
PUNJAB	55.50	44.02
RAJASTHAN	1.44	0.14
UTTAR PRADESH	4.71	2.43
UTTARAKHAND	41.58	35.11
NORTHERN REGION	219.28	178.38
CHHATTISGARH	6.28	3.57
GUJARAT	17.67	6.73
MADHYA PRADESH	27.25	14.95
MAHARASHTRA	59.80	66.79
DADRA AND NAGAR HAVELI	0.00	0.00
DAMAN & DIU	0.00	0.00
GOA	0.00	0.00
WESTERN REGION	111.00	92.04
ANDHRA PRADESH	34.65	23.15
TELANGANA	3.03	1.53
KARNATAKA	92.81	50.68
KERALA	27.90	27.03
TAMIL NADU	29.06	20.58
LAKSHADWEEP	0.00	0.00
PUDUCHERRY *	0.00	0.00
SOUTHERN REGION	187.45	122.97
ANDAMAN NICOBAR	0.74	1.12
BIHAR *	0.69	1.15
JHARKHAND *	0.00	0.00
ORISSA	16.64	12.73
SIKKIM *	6.92	1.41

WEST BENGAL	1.88	1.02
DVC	0.00	0.00
EASTERN REGION	26.86	17.42
ARUNACHAL PRADESH	0.04	0.06
ASSAM	1.03	1.04
MANIPUR	0.28	0.00
MEGHALAYA	5.36	3.57
MIZORAM	3.07	4.10
NAGALAND	5.05	3.22
TRIPURA *	2.72	5.77
NORTH EASTERN REGION	17.57	17.76
ALL INDIA TOTAL	562.16	428.57

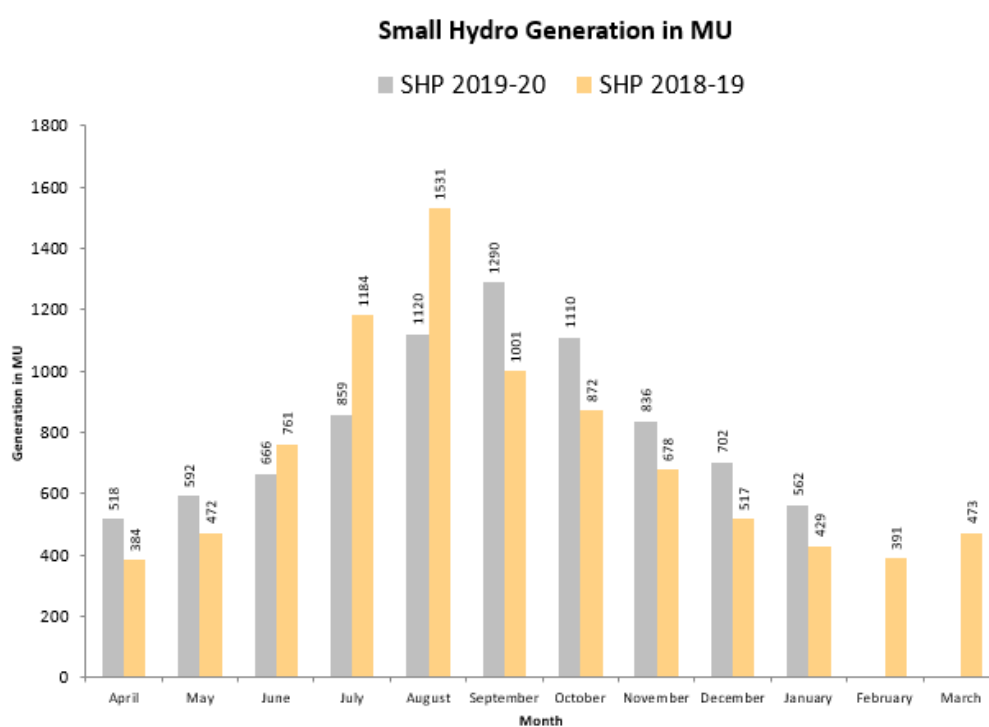


Figure 15 Month wise Small Hydro Power Generation

Table 8 State Wise Other (Waste Heat etc) Power Generation

STATE WISE_SOURCE WISE RE GENERATION_OTHER (WASTE HEAT ETC.) JANUARY 2020		
	(MUS)	
STATE/UT	JAN'20	JAN'19
CHANDIGARH	0.00	0.00
DELHI #	19.63	21.26
HARYANA *	0.00	0.00
HP	0.00	0.00
J & K	0.00	0.00
LADAKH	0.00	0.00
PUNJAB	0.03	0.00
RAJASTHAN	0.00	0.00
UTTAR PRADESH	0.00	0.00
UTTARAKHAND	0.00	0.00
NORTHERN REGION	19.66	21.26
CHHATTISGARH	0.00	0.00
GUJARAT	0.00	0.00
MADHYA PRADESH	3.22	3.47
MAHARASHTRA	0.05	0.11
DADRA AND NAGAR HAVELI	0.00	0.00
DAMAN & DIU	0.00	0.00
GOA	0.00	0.00
WESTERN REGION	3.27	3.58
ANDHRA PRADESH	0.74	0.68
TELANGANA	0.29	9.59
KARNATAKA	0.00	0.00
KERALA	0.00	0.00
TAMIL NADU	0.00	0.00
LAKSHADWEEP	0.00	0.00
PUDUCHERRY *	0.00	0.00
SOUTHERN REGION	1.02	10.26
ANDAMAN NICOBAR	0.00	0.00
BIHAR *	0.00	0.00
JHARKHAND *	0.00	0.00
ORISSA	0.00	0.00
SIKKIM *	0.00	0.00
WEST BENGAL	0.00	0.00
DVC	0.00	0.00

EASTERN REGION	0.00	0.00
ARUNACHAL PRADESH	0.00	0.00
ASSAM	0.00	0.00
MANIPUR	0.00	0.00
MEGHALAYA	0.00	0.00
MIZORAM	0.00	0.00
NAGALAND	0.00	0.00
TRIPURA *	0.00	0.00
NORTH EASTERN REGION	0.00	0.00
ALL INDIA TOTAL	23.95	35.11

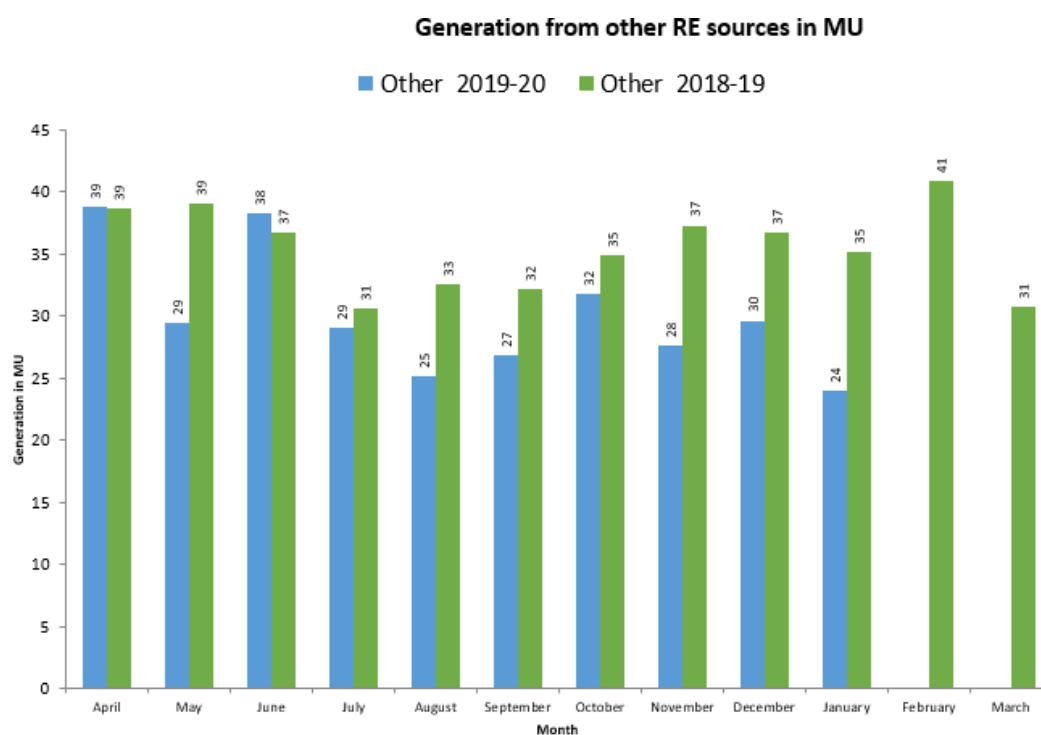


Figure 16 Month Other RE (Waste Heat etc) Power Generation

Table 9: Renewable Energy Generation by ISGS Stations

Monthly RE generation from Inter state Generating Station (ISGS) for January , 2020							
Station	State/ Region	Sector (Central /State /Private)	Owner	Type	Capacity (MW)	Generation (MU)	Monthly CUF
DADRI SOLAR	Uttar Pradesh	Central	NTPC	Solar	5	0.41	11%
SINGRAULI SOLAR	Uttar Pradesh	Central	NTPC	Solar	15	1.58	14%
UNCHAHAAR SOLAR	Uttar Pradesh	Central	NTPC	Solar	10	0.73	10%
MAHOBA SOLAR (UP) PRIVATE LTD	Rajasthan	Private	IPP	Solar	200	37.06	25%
ACME CHITTORGARH ENERGY PVT LTD	Rajasthan	Private	IPP	Solar	250	34.41	19%
AZURE POWER INDIA PVT LTD	Rajasthan	Private	IPP	Solar	200	33.48	23%
AZURE POWER THIRTY FOUR PVT LTD	Rajasthan	Private	IPP	Solar	130	24.32	25%
CLEAN SOLAR POWER (BHADLA) PVT LDT	Rajasthan	Private	IPP	Solar	300	29.79	13%
RENEW SOLAR POWER PVT LTD	Rajasthan	Private	IPP	Solar	50	8.98	24%
RENEW SOLAR POWER PVT LTD. BIKANER	Rajasthan	Private	IPP	Solar	250	38.87	21%
SB ENERGY FOUR PVT LTD	Rajasthan	Private	IPP	Solar	200	37.02	25%
TATA POWER RENEWABLE ENERGY LTD	Rajasthan	Private	IPP	Solar	150	27.92	25%
Northern Region*					1760	274.57	
ACME SOLAR (RAMNAGAR)	Madhya Pradesh	Private	IPP	Solar	250	38.95	21%
ARINSUN SOLAR (BARSAITADESH)	Madhya Pradesh	Private	IPP	Solar	250	35.44	19%
MAHINDRA SOLAR (BADWAR)	Madhya Pradesh	Private	IPP	Solar	250	37.29	20%
RENEW SOLAR (BHUVAD)	Gujarat	Private	IPP	Solar	250	47.04	25%
GIWEL-II WIND (VADVA)	Gujarat	Private	IPP	Wind	250	53.12	29%

GIWEL-III WIND (NARANPAR)	Gujarat	Private	IPP	Wind	300	52.85	24%
IWISL WIND (DAYAPAR)	Gujarat	Private	IPP	Wind	500	15.94	4%
OSTRO WIND (KUTCH)	Gujarat	Private	IPP	Wind	250	65.99	35%
Western Region					2300	346.62	
GREEN INFRA	Tamil Nadu	Private	IPP	Wind	250	46.78	25%
ORANGE	Tamil Nadu	Private	IPP	Wind	200	33.73	23%
MYTRA	Tamil Nadu	Private	IPP	Wind	187	25.77	19%
BEETAM (TITUCORIN)	Tamil Nadu	Private	IPP	Wind	50.2	7.04	19%
Southern Region					687.2	113.32	
Total					4697	717.93	

Table 10 Renewable Energy Generation by CPSU Owned stations

Renewable Energy Generation Data (CPSU Wise)					
CPSU	State	Installed Capacity (MW)	Source	Actual Generation (MU)	Cumulative Generation (MU)
				January ,2020	April to January 2020
NTPC					
NTPC Faridabad_Solar	Haryana	5	Solar	0.45	5.30
NTPC Bhadla	Rajasthan	260	Solar	34.18	358.83
NTPC Dadri_Solar	Uttar Pradesh	5	Solar	0.43	5.10
NTPC Unchahar_Solar	Uttar Pradesh	10	Solar	0.91	11.42
NTPC Singrauli_Solar	Uttar Pradesh	15	Solar	1.60	16.54
NTPC Singrauli_SH	Uttar Pradesh	8	Small Hydro	1.00	8.60
NTPC Rojmal	Gujarat	50	Wind	5.00	91.57
NTPC Rajgarh_Solar	Madhya Pradesh	50	Solar	6.16	60.37
NTPC Mandsaur	Madhya Pradesh	250	Solar	31.87	302.74
NTPC Anantapuram	Andhra Pradesh	250	Solar	36.48	321.40
NTPC Ramagundam	Telangana	10	Solar	1.21	11.49
NTPC Andaman Nicobar	Andaman Nicobar	5	Solar	0.46	3.85
NTPC Talchar_Solar	Orissa	10	Solar	1.09	11.18
Total NTPC		928		120.84	1208.40
THDC					
THDC Patan Wind Power Project	Gujarat	50	Wind	0.00	84.57
THDC Devbhumi Dwarka Wind Power Project	Gujarat	63	Wind	21.25	138.20
Total THDC		113		21.25	222.77
NHPC					
NHPC Wind Power Project	Rajasthan	50	Wind	4.07	29.93
NHPC Solar Power Project	Tamil Nadu	50	Solar	8.60	45.10
Total NHPC		100		12.67	75.025
ONGC					
ONGC Wind, Bhuj	Gujarat	51	Wind	7.36	22.21

ONGC Wind, Jaisalmer	Rajasthan	102	Wind	6.72	25.64
ONGC Solar, Goa	Goa	1	Solar	0.14	0.55
ONGC Solar, Hazira	Gujarat	10	Solar	1.21	4.85
ONGC Solar, Ankleshwar	Gujarat	5	Solar	0.54	2.20
ONGC Solar, Rajahmundry	Andhra Pradesh	1	Solar	0.10	0.42
ONGC Solar, Rooftop (RTS) Gujarat	Gujarat	4.232	Solar	0.35	1.50
ONGC Solar, Assam (RTS)	Assam	1.645	Solar	0.13	0.58
ONGC Solar, Uttarakhand (RTS)	Uttarakhand	1.236	Solar	0.11	0.43
ONGC Solar, Agartala asset	Tripura	0.247	Solar	0.01	0.05
ONGC Solar, Mumbai (Uran & NBP green height)	Maharashtra	0.285	Solar	0.01	0.03
ONGC Solar, Cauvery Assest Karaikal	Maharashtra	0.015	Solar	0.00	0.00
ONGC Solar, DDU Bhawan, (Under Maintenance)	Goa	0.25	Solar	0.00	0.00
Total ONGC		177.91		16.69	58.47
SJVN Limited					
Khirvire Wind Power	Maharashtra	47.6	Wind	1.28	50.81
Sadla Wind Power	Gujarat	50	Solar	2.37	67.21
Charanka Solar Power	Gujarat	5.6	Solar	0.71	5.05
Total SJVN		103.2		4.35	123.06
Oil India Ltd					
Oil India Ltd	Rajasthan	14	Solar	1.88	18.29
Oil India Ltd	Rajasthan	67.6	Wind	3.53	56.75
Oil India Ltd	Gujarat	43.3	Wind	8.28	89.13
Oil India Ltd	Madhya Pradesh	63.2	Wind	7.48	105.91
Total Oil India Ltd		188.1		21.17	270.09
NEEPCO					
NEEPCO	Tripura	5	Solar	0.52	9.40
All India		1615.21		197.49	1967.21
Generation of CPSU owned RE generating stations is shown in respective state according to physical location so their generation should not be considered additional generation.					

Table 11 Deviation Data for ISGS

Deviation Settlement Mechanism(DSM) of Renewable Energy (ISGS) project for the Month of January, 2020			
Station	Schedule (MU)	Actual(MU)	Deviation (Actual-Schedule) in MU.
Northern Region			
ACME CHITTORGARH ENERGY PVT LTD	32.09	34.48	2.39
AZURE SOLAR	31.66	33.70	2.04
AZURE SOLAR THIRTY FOUR	23.64	24.29	0.65
Clean Solar Power(Bhadla) Pvt Ltd.	28.25	29.18	0.93
DADRI SOLAR	0.46	0.43	-0.03
MAHOBA SOLAR	37.37	36.91	-0.46
RENEW Solar	8.93	8.56	-0.37
RENEW SOLAR POWER LTD PVT BIKANER	38.84	39.37	0.53
SB ENERGY	36.33	36.64	0.31
SINGRAULI SOLAR	1.49	1.57	0.08
TATA POWER RENEWABLE	25.85	27.31	1.45
UNCHAHAR SOLAR	1.01	0.89	-0.12
Western Region			0.00
ACME Jaipur(RUMS)	38.20	38.77	0.57
ARINSUN (RUMS)	38.40	39.01	0.61
Mahindra Renewable (RUMS)	35.20	37.89	2.69
Ostro -Kutch	72.27	65.99	-6.28
Renew Power	50.73	47.04	-3.69
Green Infra Wind Energy Limited SECI 2	55.80	53.13	-2.67
Green Infra Wind Energy Limited SECI 3	55.64	51.85	-3.78
Inox Wind	16.47	15.51	-0.96
Southern Region			0.00
GIREL	53.61	50.31	-3.30
MYTRAH	32.28	27.71	-4.57
ORANGE	41.75	36.43	-5.33
BEETAM	9.20	7.57	-1.63

+ve Deviation Means Actual generation is greater than Schedule Generation.

Table 12 Fossil and Non Fossil Generation

Fossil and Non Fossil (State Wise) Electricity Generation for the Month of January,2020							
State/UT	Fossil		Non Fossil			Grand Total	Non Fossil as % of Total Generation
	Thermal	Gas	Nuclear	Hydro (Large)	Renewable Energy		
Chandigarh	0	0.00	0.00	0.00	0.18	0.18	100.0
Delhi	0.00	448.26	0.00	0.00	26.72	474.98	5.6
Haryana	1464.77	40.18	0.00	0.00	71.36	1576.31	4.5
HP	0.00	0.00	0.00	1433.18	79.77	1512.95	100.0
J & K	0.00	0.00	0.00	859.95	13.17	873.12	100.0
Ladakh	0.00	0.00	0.00	17.00	0.00	17.00	100.0
Punjab	1352.46	0.00	0.00	347.76	225.98	1926.20	29.8
Rajasthan	4246.49	72.34	703.65	72.82	1141.87	6237.17	30.8
Uttar Pradesh	9589.40	155.15	332.38	144.72	718.74	10940.39	10.9
Uttarakhand	0.00	187.04	0.00	798.39	84.17	1069.60	82.5
Northern Region	16653.12	902.97	1036.03	3673.82	2361.96	24627.90	28.7
Chhattisgarh	10836.55	0.00	0.00	15.13	79.68	10931.36	0.9
Gujarat	7790.82	617.84	317.62	395.70	1484.81	10606.79	20.7
Madhya Pradesh	10563.15	0.00	0.00	441.30	625.34	11629.79	9.2
Maharashtra	9077.86	610.05	666.25	462.28	1125.42	11941.86	18.9
Dadra and Nagar Haveli	0.00	0.00	0.00	0.00	0.56	0.56	100.0
Daman & Diu	0.00	0.00	0.00	0.00	2.01	2.01	100.0
Goa	0.00	0.00	0.00	0.00	0.14	0.14	100.0
Western Region	38268.38	1227.89	983.87	1314.41	3317.96	45112.51	12.4
Andhra Pradesh	5014.46	303.66	0.00	162.84	779.00	6259.96	15.0
Telangana	4009.60	0.00	0.00	175.17	593.25	4778.02	16.1
Karnataka	2438.20	0.00	579.54	1270.05	2302.64	6590.43	63.0
Kerala	0.00	0.00	0.00	432.36	49.84	482.20	100.0
Tamil Nadu	5468.83	260.57	759.38	510.20	1071.45	8070.43	29.0
Lakshadweep	0.00	0.00	0.00	0.00	0.06	0.06	100.0
Puducherry	0.00	20.55	0.00	0.00	0.37	20.92	1.8
Southern Region	16931.09	584.78	1338.92	2550.62	4796.61	26202.02	33.2
Andaman Nicobar	11.16	0.00	0.00	0.00	1.64	12.80	12.8
Bihar	2877.64	0.00	0.00	0.00	45.56	2923.20	1.6

Jharkhand	2375.58	0.00	0.00	4.95	1.31	2381.84	0.3
Orissa	3956.33	0.00	0.00	451.06	54.85	4462.24	11.3
Sikkim	0.00	0.00	0.00	299.63	6.92	306.55	100.0
West Bengal	5901.78	0.00	0.00	137.81	92.27	6131.86	3.8
DVC	0.00	0.00	0.00	0.00	1.28	1.28	100.0
Eastern Region	15122.49	0.00	0.00	893.45	203.83	16219.77	6.8
Arunachal Pradesh	0.00	0.00	0.00	56.06	0.20	56.26	100.0
Assam	378.46	229.23	0.00	45.53	1.52	654.74	7.2
Manipur	0.00	0.00	0.00	17.01	0.60	17.61	100.0
Meghalaya	0.00	0.00	0.00	51.13	5.36	56.49	100.0
Mizoram	0.00	0.00	0.00	11.39	3.10	14.49	100.0
Nagaland	0.00	0.00	0.00	7.68	5.05	12.73	100.0
Tripura	0.00	459.78	0.00	0.00	2.73	462.51	0.6
North Eastern Region	378.46	689.01	0.00	188.80	18.56	1274.83	16.3
All India Total	87353.54	3404.65	3358.82	8621.10	10698.92	113437.03	20.0

Table 13 Renewable Energy as % of Total Electricity Generated

Re Generation as proportion of Total Electricity generation -Physical location wise. (State Wise) for the Month of January,2020							
State/UT	Thermal	Gas	Nuclear	Hydro	Renewable Energy	Grand Total	RE as % of Total
Chandigarh	0.00	0.00	0.00	0.00	1.78	1.78	100.00
Delhi	0.00	417.28	0.00	0.00	30.92	448.20	6.90
Haryana	1081.41	162.22	0.00	0.00	52.74	1296.37	4.07
HP	1526.79	0.00	0.00	0.00	86.53	1613.32	5.36
J & K	0.00	0.00	0.00	984.46	18.23	1002.69	1.82
Ladakh	0.00	0.00	0.00	18.99	0.00	18.99	0.00
Punjab	1464.59	0.00	0.00	341.62	181.39	1987.60	9.13
Rajasthan	4181.65	67.28	726.98	68.76	1104.36	6149.03	17.96
Uttar Pradesh	8610.61	39.59	335.68	130.39	706.54	9822.81	7.19
Uttarakhand	0.00	187.50	0.00	746.08	82.16	1015.74	8.09
Northern Region	16865.05	873.87	1062.66	2290.30	2264.65	23356.53	9.70
Chhattisgarh	10412.65	0.00	0.00	3.90	85.49	10502.04	0.81
Gujarat	7244.32	823.16	303.42	467.63	1746.10	10584.63	16.50
Madhya Pradesh	10430.00	0.00	0.00	404.08	621.76	11455.84	5.43
Maharashtra	9092.84	637.37	621.95	550.90	1062.26	11965.32	8.88
Dadra and Nagar Haveli	0.00	0.00	0.00	0.00	0.47	0.47	100.00
Daman & Diu	0.00	0.00	0.00	0.00	2.23	2.23	100.00
Goa	7244.32	823.16	303.00	467.63	0.14	8838.25	0.00
Western Region	44424.13	2283.69	1228.37	1894.14	3518.45	53348.78	6.60
Andhra Pradesh	4593.11	241.34	0.00	150.07	683.54	5668.06	12.06
Telangana	3859.17	0.00	0.00	111.80	534.73	4505.70	11.87
Karnataka	1901.21	0.00	677.92	1310.44	2348.83	6238.40	37.65
Kerala	0.00	0.00	0.00	369.33	67.14	436.47	15.38
Tamil Nadu	4660.18	267.15	1010.64	540.44	1021.59	7500.00	13.62
Lakshadweep	0.00	0.00	0.00	0.00	0.05	0.05	100.00
Puducherry	0.00	21.87	0.00	0.00	0.37	22.24	1.66
Southern Region	15013.67	530.36	1688.56	2482.08	4656.25	24370.92	19.11
Andaman Nicobar	7.62	0.00	0.00	0.00	1.80	9.42	19.08
Bihar	2869.33	0.00	0.00	0.00	15.85	2885.18	0.55
Jharkhand	2339.54	0.00	0.00	8.39	1.22	2349.15	0.05
Orissa	3974.03	0.00	0.00	409.20	53.11	4436.34	1.20
Sikkim	0.00	0.00	0.00	359.65	6.92	366.57	1.89
West Bengal	5671.56	0.00	0.00	184.79	86.47	5942.82	1.46
DVC	0.00	0.00	0.00	0.00	0.01	0.01	100.00

Re Generation as proportion of Total Electricity generation -Physical location wise. (State Wise) for the Month of January,2020

State/UT	Thermal	Gas	Nuclear	Hydro	Renewable Energy	Grand Total	RE as % of Total
Eastern Region	14862.08	0.00	0.00	962.03	165.37	15989.48	1.03
Arunachal Pradesh	0.00	0.00	0.00	69.24	0.22	69.46	0.32
Assam	383.57	229.24	0.00	29.22	18.49	660.52	2.80
Manipur	0.00	0.00	0.00	34.53	1.24	35.77	3.46
Meghalaya	0.00	0.00	0.00	72.05	9.66	81.71	11.82
Mizoram	0.00	0.00	0.00	22.10	4.11	26.21	15.69
Nagaland	0.00	0.00	0.00	12.04	6.14	18.18	33.79
Tripura	0.00	457.76	0.00	0.00	2.74	460.50	0.59
North Eastern Region	383.57	687.00	0.00	239.18	42.61	1352.36	3.15
All India Total	91548.50	4374.92	3979.59	7867.73	10647.33	118418.07	8.99

RENEWABLE ENERGY TO TRANSPORT SECTOR :

Table 14 REWA Solar To Delhi Metro

From Rewa Solar Park (MP) to DMRC				
	Delhi Discoms			
Month	BRPL	BYPL	TPDDL	Total (MUs)
April ,19	3.59	3.8		7.39
May,19	15.79	9.03		24.82
June,19				0
July,19	15.72	8.7		24.42
August,19	15.85	8.78		24.63
September,19	15.3	8.52		23.82
October,19	15.15	8.49		23.64
November,19	13.95	7.82		21.77
December,19	13.05	7.17	6.1	26.32
January,2020	12.93	6.50	6.26	25.69
* All figures at Delhi PP in MUs				
DMRC : Delhi Metro Rail Corporation				

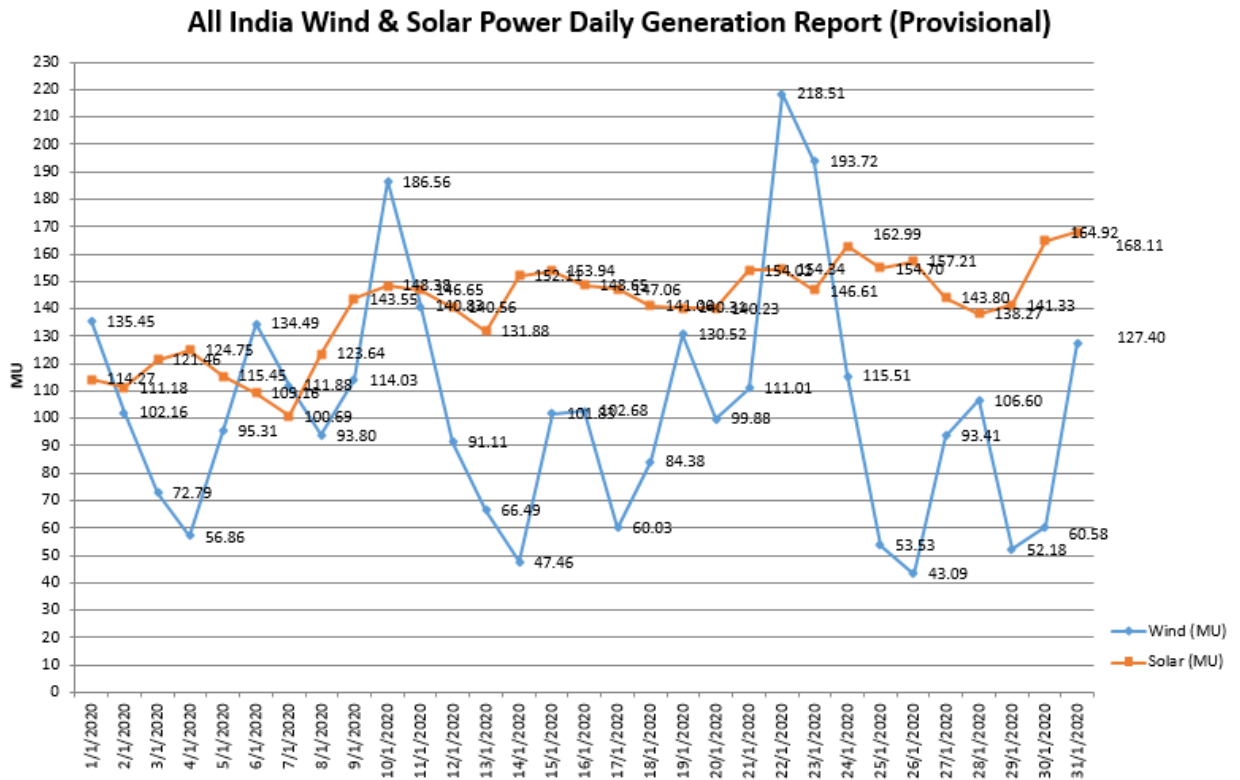


Figure 17 Daily Solar and wind Power Generation trend

A decorative graphic element consisting of overlapping blue and teal geometric shapes, resembling a stylized wave or a series of triangles, positioned to the left of the text.

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