



DEPARTMENT OF ENERGY
2021 POWER STATISTICS

Monthly Gross Generation in MWh (Separate Grid / Off-Grid)
For 2021

Plant Type	LUZON GRID												Total Generation (MWh)	% Share
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Coal	2,615,823	3,201,266	3,226,825	3,569,141	3,932,544	4,069,685	3,762,459	3,568,009	3,568,144	4,141,721	4,134,517	3,343,102	43,133,237	57.3
Oil-based	18,457	23,682	63,793	74,591	196,541	215,407	115,339	42,285	34,430	72,137	41,031	78,584	996,287	1.3
Combined Cycle	1,454	5,632	39,730	27,533	81,637	89,871	55,553	20,456	17,227	16,973	12,423	48,114	416,603	0.6
Diesel	16,788	18,061	41,502	45,821	106,641	116,024	55,295	20,413	17,193	54,783	28,609	29,411	550,541	0.7
Gas Turbine	214	0	2,561	1,237	8,262	9,512	4,492	1,416	9	381	0	0	28,084	0.0
Oil Thermal	0	0	0	0	0	0	0	0	0	0	1,059	0	1,059	0.0
Natural Gas	1,645,797	1,511,287	1,560,645	1,787,671	1,878,683	1,868,956	1,638,706	1,650,399	1,617,296	931,848	1,470,412	1,497,982	19,059,682	25.3
Renewable Energy	1,486,733	960,697	842,854	874,781	739,323	845,923	835,699	1,229,660	1,183,045	1,238,539	1,114,489	1,042,252	12,053,335	16.0
Geothermal	312,291	308,082	280,577	335,445	331,572	340,672	327,359	339,655	312,337	306,516	331,107	312,127	3,837,742	5.1
Hydro	585,351	409,086	365,829	335,360	236,311	312,945	313,580	649,758	672,888	693,068	444,029	393,335	5,411,540	7.2
Biomass	93,141	89,816	75,963	76,712	74,668	80,357	88,808	79,948	77,342	80,836	81,556	89,019	988,186	1.3
LFG	1,198	1,187	1,399	1,711	1,620	1,465	983	1,349	1,070	1,008	1,063	1,288	15,341	0.0
Rice Husk, Bagasse	91,942	88,629	74,584	75,001	73,047	78,892	87,825	78,600	76,272	79,828	80,493	87,731	972,845	1.3
Solar	44,227	49,574	45,653	54,828	65,598	58,432	52,459	63,626	72,234	62,750	79,216	72,092	720,691	1.0
Wind	111,063	104,138	74,813	72,436	31,174	53,516	53,493	96,672	48,243	95,369	178,581	175,679	1,095,177	1.5
Total Generation	5,426,150	5,696,942	5,714,117	6,306,184	6,747,091	6,999,970	6,352,204	6,490,353	6,402,915	6,384,245	6,760,450	5,961,919	75,242,541	100.0

Plant Type	VISAYAS GRID												Total Generation (MWh)	% Share
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Coal	697,490	667,319	634,153	805,705	820,301	776,329	795,206	831,882	787,473	768,845	802,544	613,606	8,998,853	55.3
Oil-based	14,967	9,747	30,539	21,727	80,366	79,028	79,809	40,579	14,132	38,598	29,901	28,265	467,659	2.9
Combined Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Bunker/Diesel	14,967	9,747	30,539	21,727	80,366	79,028	79,809	40,579	14,132	38,598	29,901	28,265	467,659	2.9
Gas Turbine	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Oil Thermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Natural Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Renewable Energy	590,377	594,988	562,617	623,426	600,433	579,265	533,675	546,900	551,366	553,390	573,813	491,058	6,801,309	41.8
Geothermal	482,372	465,031	433,821	484,800	471,325	487,157	454,043	467,973	475,229	457,916	455,180	400,571	5,536,416	34.0
Hydro	9,345	9,902	5,635	4,535	4,386	8,187	7,088	6,247	9,027	6,436	10,717	5,792	89,296	0.5
Biomass	32,391	44,393	40,943	47,414	41,377	18,782	2,997	2,475	10,071	34,193	41,662	33,143	349,842	2.2
LFG	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Rice Husk, Bagasse	32,391	44,393	40,943	47,414	41,377	18,782	2,997	2,475	10,071	34,193	41,662	33,143	349,842	2.2
Solar	43,019	51,528	62,602	69,536	67,664	61,239	58,503	59,613	52,344	44,484	49,101	32,639	652,271	4.0
Wind	23,250	24,135	19,616	17,142	15,680	3,901	11,046	10,593	4,696	8,360	17,153	18,913	174,485	1.1
Total Generation	1,302,835	1,272,054	1,227,309	1,450,859	1,501,100	1,434,623	1,406,690	1,419,361	1,352,972	1,360,834	1,406,250	1,132,929	16,267,822	100.0

Plant Type	MINDANAO GRID												Total Generation (MWh)	% Share
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Coal	798,473	833,010	781,695	866,352	867,540	909,320	795,894	856,190	848,714	809,915	809,702	743,352	9,920,155	67.9
Oil-based	9,807	7,511	12,555	13,658	11,879	12,457	16,181	18,559	11,690	14,089	14,063	10,372	152,432	1.0
Combined Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Diesel	9,807	7,511	12,555	13,658	11,879	12,457	16,181	18,559	11,690	14,089	14,063	10,372	152,432	1.0
Gas Turbine	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Oil Thermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Natural Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Renewable Energy	323,569	331,770	315,986	348,217	343,894	353,953	395,393	410,116	380,960	424,247	462,027	441,632	4,531,763	31.0
Geothermal	61,642	53,949	46,197	58,627	61,642	55,080	51,449	53,831	49,225	45,351	54,037	52,290	643,320	4.4
Hydro	247,564	260,284	251,046	274,985	264,758	280,890	327,126	338,085	313,096	361,036	390,540	375,079	3,684,487	25.2
Biomass	7,567	8,805	9,716	6,257	9,760	9,981	9,388	9,888	9,917	9,334	8,686	8,069	107,367	0.7
LFG	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Rice Husk, Bagasse	7,567	8,805	9,716	6,257	9,760	9,981	9,388	9,888	9,917	9,334	8,686	8,069	107,367	0.7
Solar	6,795	8,732	9,027	8,347	7,734	8,002	7,431	8,313	8,722	8,527	8,764	6,195	96,589	0.7
Wind	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Total Generation	1,131,649	1,172,290	1,110,236	1,228,226	1,223,112	1,275,730	1,207,469	1,284,865	1,241,364	1,248,261	1,285,792	1,195,356	14,604,350	100.0

By Grid	PHILIPPINES												Total Generation (MWh)	% Share
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Luzon	5,426,150	5,696,942	5,714,117	6,306,184	6,747,091	6,999,970	6,352,204	6,490,353	6,402,915	6,384,245	6,760,450	5,961,919	75,242,541	70.9
Visayas	1,302,835	1,272,054	1,227,309	1,450,859	1,501,100	1,434,623	1,406,690	1,419,361	1,352,972	1,360,834	1,406,250	1,132,929	16,267,822	15.3
Mindanao	1,131,649	1,172,290	1,110,236	1,228,226	1,223,112	1,275,730	1,207,469	1,284,865	1,241,364	1,248,261	1,285,792	1,195,356	14,604,350	13.8
Total Generation	7,860,634	8,141,286	8,051,661	8,985,269	9,471,303	9,710,323	8,966,363	9,194,580	8,997,251	8,993,340	9,452,500	8,290,204	106,114,713	100.0

Plant Type	PHILIPPINES												Total Generation (MWh)	% Share
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Coal	4,111,786	4,701,594	4,642,673	5,241,198	5,620,384	5,755,335	5,351,559	5,256,081	5,204,332	5,720,481	5,746,763	4,700,059	62,056,246	58.5
Oil-based	43,031	40,950	126,886	109,976	288,586	306,892	211,330	101,424	60,252	124,834	84,996	117,221	1,616,378	1.5
Combined Cycle	1,454	5,632	39,730	27,533	81,637	89,871	55,553	20,456	17,227	16,973	12,423	48,114	416,603	0.4
Diesel	41,363	35,318	84,595	81,206	198,687	207,509	151,285	79,552	43,016	107,479	72,573	68,048	1,170,632	1.1
Gas Turbine	214	0	2,561	1,237	8,262	9,512	4,492	1,416	9	381	0	0	28,084	0.0
Oil Thermal	0	0	0	0	0	0	0	0	0	0	1,059	0	1,059	0.0
Natural Gas	1,645,797	1,511,287	1,560,645	1,787,671	1,878,683	1,868,956	1,638,706	1,650,399	1,617,296	931,848	1,470,412	1,497,982	19,059,682	18.0
Renewable Energy	2,060,019	1,887,455	1,721,457	1,846,424	1,683,649	1,779,141	1,764,767	2,186,676	2,115,371	2,216,177	2,150,329	1,974,942	23,386,408	22.0
Geothermal	856,305	827,062	760,595	878,873	864,539	882,909	832,851	861,460	836,791	809,783	840,324	764,987	10,016,478	9.4
Hydro	842,261	679,271	622,510	614,879	505,455	602,022	647,793	994,089	995,011	1,062,540	845,286	774,206	9,185,324	8.7
Biomass	133,099	143,015	126,642	130,383	125,									



DEPARTMENT OF ENERGY
2021 POWER STATISTICS

Monthly Gross Generation in MWh (Separate Grid / Off-Grid)

OFF-GRID														
Plant Type	LUZON OFF-GRID												Total Generation (MWh)	% Share
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Coal	9,861	8,701	9,159	9,717	9,938	9,918	7,633	4,213	5,466	5,530	8,407	8,298	96,841	7.4
Oil-based	79,543	78,870	81,294	94,921	101,022	103,937	96,780	107,746	97,530	91,268	85,399	71,102	1,089,414	83.6
Combined Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Diesel	79,543	78,870	81,294	94,921	101,022	103,937	96,780	107,746	97,530	91,268	85,399	71,102	1,089,414	83.6
Gas Turbine	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Oil Thermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Natural Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Renewable Energy	11,979	12,277	12,233	8,476	8,517	7,949	5,047	7,814	7,346	11,117	12,151	11,831	116,737	9.0
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Hydro	9,341	12,215	9,958	8,411	5,755	7,634	4,546	7,509	6,128	11,058	12,086	11,831	106,470	8.2
Biomass	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
LFG	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Rice Husk, Bagasse	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Solar	66	62	56	65	67	68	67	69	66	59	65	0	710	0.1
Wind	2,572	0	2,219	0	2,696	248	433	236	1,152	0	0	0	9,556	0.7
Total Generation	101,383	99,848	102,686	113,114	119,478	121,805	109,460	119,773	110,342	107,915	105,958	91,230	1,302,991	100.0

VISAYAS OFF-GRID														
Plant Type	VISAYAS OFF-GRID												Total Generation (MWh)	% Share
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Coal	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Oil-based	10,588	10,559	10,247	11,874	12,029	12,220	10,316	10,512	10,086	9,118	9,285	1,822	118,657	100.0
Combined Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Bunker/Diesel	10,588	10,559	10,247	11,874	12,029	12,220	10,316	10,512	10,086	9,118	9,285	1,822	118,657	100.0
Gas Turbine	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Oil Thermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Natural Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Renewable Energy	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Hydro	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Biomass	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
LFG	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Rice Husk, Bagasse	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Solar	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Wind	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Total Generation	10,588	10,559	10,247	11,874	12,029	12,220	10,316	10,512	10,086	9,118	9,285	1,822	118,657	100.0

MINDANAO OFF-GRID														
Plant Type	MINDANAO OFF-GRID												Total Generation (MWh)	% Share
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Coal	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Oil-based	18,458	18,746	17,741	20,447	20,035	20,442	19,236	21,489	20,067	19,658	20,041	15,204	231,565	99.5
Combined Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Diesel	18,458	18,746	17,741	20,447	20,035	20,442	19,236	21,489	20,067	19,658	20,041	15,204	231,565	99.5
Gas Turbine	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Oil Thermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Natural Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Renewable Energy	105	106	103	112	109	109	94	99	101	107	113	121	1,278	0.5
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Hydro	105	106	103	112	109	109	94	99	101	107	113	121	1,278	0.5
Biomass	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
LFG	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Rice Husk, Bagasse	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Solar	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Wind	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Total Generation	18,563	18,852	17,844	20,558	20,144	20,551	19,330	21,589	20,168	19,764	20,155	15,326	232,843	100.0

PHILIPPINES OFF-GRID														
By Grid	PHILIPPINES OFF-GRID												Total Generation (MWh)	% Share
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Luzon	101,383	99,848	102,686	113,114	119,478	121,805	109,460	119,773	110,342	107,915	105,958	91,230	1,302,991	78.8
Visayas	10,588	10,559	10,247	11,874	12,029	12,220	10,316	10,512	10,086	9,118	9,285	1,822	118,657	7.2
Mindanao	18,563	18,852	17,844	20,558	20,144	20,551	19,330	21,589	20,168	19,764	20,155	15,326	232,843	14.1
Total Generation	130,534	129,260	130,776	145,546	151,651	154,576	139,106	151,874	140,596	136,797	135,397	108,378	1,654,491	100.0

PHILIPPINES OFF-GRID														
Plant Type	PHILIPPINES OFF-GRID												Total Generation (MWh)	% Share
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Coal	9,861	8,701	9,159	9,717	9,938	9,918	7,633	4,213	5,466	5,530	8,407	8,298	96,841	5.9
Oil-based	108,589	108,176	109,282	127,242	133,086	136,599	126,333	139,748	127,684	120,044	114,725	88,128	1,439,635	87.0
Combined Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Diesel	108,589	108,176	109,282	127,242	133,086	136,599	126,333	139,748	127,684	120,044	114,725	88,128	1,439,635	87.0
Gas Turbine	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Oil Thermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Natural Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Renewable Energy	12,084	12,383	12,336	8,587	8,626	8,058	5,141	7,913	7,447	11,223	12,265	11,952	118,015	7.1
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Hydro	9,446	12,321	10,061	8,522	5,863	7,742	4,640	7,608	6,228	11,164	12,199	11,952	107,749	6.5
Biomass	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
LFG	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Rice Husk, Bagasse	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Solar	66	62	56	65	67	68	67	69	66	59	65	0	710	0.0
Wind	2,572	0	2,219	0	2,696	248	433	236	1,152	0	0	0	9,556	0.6
Total Generation	130,534	129,260	130,776	145,546	151,651	154,576	139,106	151,874	140,596	136,797	135,397	108,378	1,654,491	100.0

Note:
Generation data includes grid connected, embedded and off-grid generator.
BESS generation not included
Source: Generating Facilities' submitted Monthly Operation Report (MOR)
updated as of 8 July 2022