



Summary - Philippines

Electricity Consumption by Sector in GWh	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Residential	15,357	15,920	16,031	15,830	16,376	16,644	17,504	18,833	18,694	19,695	20,614	20,969	22,747	25,631	26,782	28,261	30,552	34,292	34,981	35,324
Commercial	11,106	11,785	12,245	12,679	13,470	14,136	14,756	16,261	16,624	17,777	18,304	18,761	20,085	21,770	22,768	24,016	25,476	20,727	21,119	24,294
Industrial	15,188	15,012	15,705	15,888	16,522	17,031	17,084	18,576	19,334	20,071	20,677	21,429	22,514	24,117	25,573	27,587	28,194	25,566	27,623	28,844
Others	1,069	1,359	1,177	1,275	1,641	1,395	1,523	1,596	1,446	1,668	1,971	2,186	2,462	2,634	2,670	2,753	2,897	2,658	3,695	2,871
Electricity Sales	42,720	44,076	45,159	45,672	48,009	49,206	50,868	55,266	56,098	59,211	61,566	63,345	67,808	74,153	77,793	82,617	87,118	83,243	87,417	91,333
Utilities Own Use	3,410	4,654	4,591	4,227	3,994	3,935	3,524	4,677	5,398	5,351	5,959	6,461	7,124	8,357	8,316	8,141	8,929	8,771	8,729	9,490
System Losses	6,810	7,228	6,817	6,885	7,608	7,680	7,542	7,800	7,680	8,360	7,741	7,455	7,481	8,288	8,262	9,007	9,994	9,742	9,968	10,693
Total Electricity Consumption	52,941	55,957	56,568	56,784	59,612	60,821	61,934	67,743	69,176	72,922	75,266	77,261	82,413	90,798	94,370	99,765	106,041	101,756	106,115	111,516

System Peak Demand in MW	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Luzon	6,149	6,323	6,443	6,466	6,643	6,674	6,928	7,656	7,552	7,889	8,305	8,717	8,928	9,726	10,054	10,876	11,344	11,103	11,640	12,113
Visayas	995	1,025	1,037	1,066	1,102	1,176	1,241	1,431	1,481	1,551	1,572	1,636	1,768	1,893	1,975	2,053	2,224	2,201	2,252	2,316
Mindanao	1,131	1,177	1,149	1,228	1,241	1,204	1,303	1,288	1,346	1,321	1,428	1,469	1,517	1,653	1,760	1,853	2,013	1,978	2,144	2,167
Total Non-Coincidental Peak Demand	8,275	8,525	8,629	8,760	8,987	9,054	9,472	10,375	10,379	10,761	11,305	11,822	12,213	13,272	13,789	14,782	15,581	15,282	16,036	16,596

Gross Power Generation per Grid in GWh	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Luzon	37,535	39,854	40,627	41,241	43,620	44,200	44,975	50,265	50,017	52,312	54,820	56,766	60,113	66,498	68,512	72,728	76,177	72,419	75,243	79,821
Visayas	8,842	9,016	8,698	8,129	8,102	8,650	8,724	9,075	10,456	11,483	11,100	11,014	12,170	12,955	14,054	14,266	16,060	15,485	16,268	16,222
Mindanao	6,564	7,087	7,243	7,414	7,890	7,972	8,235	8,403	8,703	9,127	9,347	9,481	10,130	11,345	11,804	12,770	13,805	13,852	14,604	15,473
Total Gross Generation	52,941	55,957	56,568	56,784	59,612	60,821	61,934	67,743	69,176	72,922	75,266	77,261	82,413	90,798	94,370	99,765	106,041	101,756	106,115	111,516

Gross Power Generation by Plant Type in GWh	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Coal	14,939	16,194	15,257	15,294	16,837	15,749	16,476	23,301	25,342	28,265	32,081	33,054	36,686	43,303	46,847	51,932	57,890	58,176	62,052	66,430
Oil-Based	7,170	8,504	6,141	4,665	5,148	4,868	5,381	7,101	3,398	4,254	4,491	5,708	5,886	5,661	3,787	3,173	3,752	2,474	1,616	2,519
Combined Cycle	439	738	91	239	653	513	639	1,202	124	227	247	515	276	694	405	522	728	495	417	646
Diesel	5,509	6,253	5,717	4,152	4,162	3,660	3,771	4,532	2,762	3,332	3,805	4,730	5,521	4,722	3,100	2,505	2,815	1,967	1,171	1,782
Gas Turbine	42	82	25	0	9	36	62	3	0	0	0	0	10	0	0	26	11	28	3	
Oil Thermal	1,180	1,431	309	274	324	658	909	1,364	512	695	438	463	80	245	282	145	184	1	1	88
Natural Gas	13,139	12,384	16,861	16,366	18,789	19,576	19,887	19,518	20,591	19,842	18,791	18,690	18,878	19,854	20,547	21,334	22,354	19,497	19,060	17,884
Renewable Energy (RE)	17,692	18,874	18,308	20,459	18,837	20,628	20,191	17,823	19,845	20,762	19,903	19,810	20,963	21,979	23,189	23,326	22,044	21,609	23,386	24,684
Geothermal	9,822	10,282	9,902	10,465	10,215	10,723	10,324	9,929	9,942	10,250	9,605	10,308	11,044	11,070	10,270	10,435	10,691	10,757	10,016	10,425
Hydro	7,870	8,593	8,387	9,939	8,563	9,843	9,788	7,803	9,698	10,252	10,019	9,137	8,665	8,111	9,611	9,384	8,025	7,192	9,185	10,085
Biomass	0	0	0	0	0	0	14	27	115	183	212	196	367	726	1,013	1,105	1,040	1,261	1,445	1,322
Solar	0	0	2	1	1	1	1	1	1	1	1	17	139	1,097	1,201	1,249	1,246	1,373	1,470	1,822
Wind	0	0	17	53	58	61	64	62	88	75	66	152	748	975	1,094	1,153	1,042	1,026	1,270	1,030
Total Gross Generation	52,941	55,957	56,568	56,784	59,612	60,821	61,934	67,743	69,176	72,922	75,266	77,261	82,413	90,798	94,370	99,765	106,041	101,756	106,115	111,516

Installed Capacity by Plant Type in MW	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Coal	3,958	3,967	3,967	4,177	4,213	4,213	4,277	4,867	4,917	5,568	5,568	5,708	5,963	7,419	8,049	8,844	10,417	10,944	11,669	12,428
Oil Based	3,604	3,669	3,663	3,602	3,616	3,353	3,193	3,193	2,994	3,074	3,353	3,476	3,610	3,616	4,153	4,292	4,262	4,237	3,847	3,834
Natural Gas	2,763	2,763	2,763	2,763	2,834	2,831	2,831	2,861	2,861	2,862	2,862	2,862	2,862	3,431	3,447	3,453	3,453	3,453	3,453	3,732
Renewable Energy (RE)	4,799	5,149	5,226	5,261	5,277	5,284	5,309	5,437	5,391	5,521	5,541	5,898	6,330	6,958	7,079	7,227	7,399	7,617	7,914	8,264
Geothermal	1,932	1,932	1,978	1,978	1,958	1,958	1,953	1,966	1,783	1,848	1,868	1,918	1,917	1,916	1,916	1,944	1,928	1,928	1,928	1,952
Hydro	2,867	3,217	3,222	3,257	3,293	3,291	3,291	3,400	3,491	3,521	3,521	3,543	3,600	3,618	3,627	3,701	3,760	3,779	3,752	3,745
Biomass	0	0	0	0	0	0	30	38	83	119	119	131	221	233	224	258	363	447	489	611
Solar	0	0	1	1	1	1	1	1	1	1	1	23	165	765	885	896	921	1,019	1,317	1,530
Wind	0	0	25	25	25	33	33	33	33	33	33	283	427	427	427	427	427	443	427	427
Total Installed Capacity	15,124	15,548	15,619	15,803	15,941	15,681	15,610	16,358	16,162	17,025	17,325	17,944	18,765	21,423	22,728	23,815	25,531	26,250	26,882	28,258

Dependable Capacity by Plant Type in MW	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Coal	3,691	3,696	3,432	3,638	3,467	3,412	3,813	4,245	4,651	5,206	5,206	5,378	5,613	6,979	7,674	8,368	9,743	10,245	10,913	11,504
Oil Based	3,175	3,216	3,043	2,879	2,670	2,702	2,528	2,488	2,579	2,561	2,846	2,705	2,734	2,821	3,286	2,995	3,015	3,054	2,650	2,860
Natural Gas	2,703	2,703	2,703	2,703	2,703	2,562	2,700	2,756	2,770	2,760	2,760	2,760	2,769	3,291	3,291	3,286	3,286	3,286	3,286	2,081
Renewable Energy (RE)	3,835	4,178	4,417	4,419	4,639	4,372	4,278	4,413	4,477	4,539	4,559	4,789	5,325	6,005	6,264	6,592	6,691	6,825	7,005	7,151
Geothermal	1,568	1,568	1,683	1,683	1,667	1,388	1,321	1,351	1,434	1,462	1,482	1,607	1,601	1,689	1,752	1,770	1,792	1,753	1,753	1,763
Hydro	2,267	2,610	2,723	2,726	2,962	2,950	2,914	3,021	2,963	2,983	2,983	2,982	3,073	3,181	3,269	3,473	3,508	3,527	3,500	3,444
Biomass	0	0	0	0	0	0	10	20	46	76	76	81	146	157	160	162	227	285	291	382
Solar	0	0	1	1	1	1	1	1	1	0	0	17	125	594	700	740	737	817	1,034	1,150
Wind	0	0	9	9	9	33	33	20	33	17	17	103	379	383	383	427	427	443	427	412
Total Dependable Capacity	13,404	13,792	13,595	13,639	13,479	13,049	13,319	13,902	14,477	15,066	15,371	15,633	16,432	19,097	20,515	21,241	22,736	23,410	23,855	23,598

- Notes:
1. Gross Power Generation data includes grid connected, embedded and off-grid generator.
 2. 2020 capacity mix includes off-grid capacities
 3. Summary starting 2021 will only include Grid Capacity and Generation only and will separate Offgrid from the computation
 4. Installed Capacity - nameplate capacity; full-load continuous gross capacity of a unit under specified conditions, as calculated from the electric generator nameplate based on the rated power factor.
 5. Dependable Capacity - maximum capacity when modified for ambient limitations for a specified period of time, such as a month or a season.
 6. Gross Power Generation - the total amount of electric energy produced by generating units and measured at the generating terminal

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