

Department of Energy
2023 POWER STATISTICS

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 | 2023 |
|------------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|
| Residential | 16,357 | 15,920 | 16,031 | 15,830 | 16,376 | 16,644 | 17,504 | 18,833 | 18,694 | 19,695 | 20,514 | 20,969 | 22,747 | 25,631 | 26,782 | 28,261 | 30,552 | 34,292 | 34,981 | 35,324 | 36,968 |
| 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 | 26,727 | 27,119 | 24,294 | 26,236 |
| Industrial | 15,188 | 15,012 | 15,705 | 15,888 | 16,522 | 17,031 | 17,084 | 18,576 | 19,334 | 20,677 | 21,429 | 22,514 | 24,117 | 25,573 | 27,587 | 28,194 | 25,566 | 27,623 | 28,844 | 29,493 | 29,493 |
| 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 | 2,897 | 2,658 | 3,695 | 2,871 | 3,112 | 3,112 |
| Electricity Sales | 42,720 | 44,076 | 45,189 | 45,672 | 48,008 | 49,206 | 50,668 | 55,266 | 56,098 | 59,211 | 61,566 | 63,345 | 67,800 | 74,153 | 77,793 | 82,617 | 87,118 | 83,243 | 87,417 | 91,333 | 95,808 |
| 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 | 10,403 |
| 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 | 9,907 | 9,994 | 9,742 | 9,968 | 10,693 | 11,793 |
| 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 | 118,004 |

| 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 | 2023 |
|-------------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 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 | 9,928 | 9,726 | 10,054 | 10,876 | 11,344 | 11,103 | 11,640 | 12,113 | 12,550 |
| Visayas | 895 | 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 | 2,458 |
| 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 | 1,878 | 2,144 | 2,167 | 2,323 |
| 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 | 17,331 |

| 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 | 2023 |
|----------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|
| 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 | 83,290 |
| 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 | 18,163 |
| 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 | 16,551 |
| 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 | 118,004 |

| 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 | 2023 |
|---------------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|
| Coal | 14,939 | 16,194 | 15,257 | 15,294 | 16,837 | 15,749 | 16,476 | 23,301 | 25,342 | 28,265 | 32,081 | 33,504 | 36,686 | 43,303 | 46,847 | 51,932 | 67,890 | 58,176 | 62,052 | 66,430 | 73,754 |
| 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 | 1,304 |
| Combined Cycle | 439 | 738 | 91 | 239 | 653 | 513 | 639 | 1,202 | 124 | 227 | 247 | 515 | 276 | 694 | 405 | 522 | 728 | 495 | 417 | 646 | 99 |
| 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 | 1,987 | 1,171 | 1,782 | 1,122 |
| Gas Turbine | 42 | 82 | 25 | 0 | 9 | 36 | 62 | 3 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 26 | 11 | 28 | 9 | 0 |
| 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 | 83 |
| Natural Gas | 13,139 | 12,384 | 16,861 | 16,366 | 18,789 | 19,576 | 19,887 | 19,518 | 20,591 | 19,642 | 18,791 | 18,690 | 18,878 | 19,854 | 20,547 | 21,334 | 22,354 | 19,497 | 18,675 | 17,884 | 16,668 |
| 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 | 23,771 | 24,684 | 26,278 |
| 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 | 10,270 | 10,435 | 10,651 | 10,757 | 10,681 | 10,425 | 10,730 | 10,730 |
| 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 | 10,287 |
| Biomass | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 27 | 115 | 183 | 212 | 196 | 367 | 726 | 1,013 | 1,105 | 1,040 | 1,261 | 1,165 | 1,322 | 1,409 |
| 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 | 2,544 |
| 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 | 1,308 |
| 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 | 118,004 |

| 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 | 2023 |
|----------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Coal | 3,888 | 3,967 | 3,967 | 4,177 | 4,213 | 4,213 | 4,277 | 4,867 | 4,917 | 5,568 | 5,568 | 5,798 | 5,963 | 7,419 | 8,049 | 8,844 | 10,417 | 10,944 | 11,669 | 12,428 | 12,406 |
| 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 | 3,737 |
| 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 | 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 | 8,417 |
| 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 | 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 | 3,799 |
| Biomass | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 38 | 83 | 119 | 119 | 131 | 221 | 233 | 224 | 258 | 363 | 447 | 489 | 611 | 585 |
| Solar | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 23 | 165 | 765 | 885 | 896 | 921 | 1,019 | 1,317 | 1,530 | 1,653 |
| Wind | 0 | 0 | 25 | 25 | 25 | 33 | 33 | 33 | 33 | 33 | 33 | 283 | 427 | 427 | 427 | 427 | 427 | 443 | 427 | 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 | 28,291 |

| 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 | 2023 |
|-----------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|
| Coal | 3,691 | 3,696 | 3,432 | 3,638 | 3,467 | 3,412 | 3,813 | 4,245 | 4,551 | 5,206 | 5,206 | 5,378 | 5,613 | 6,979 | 7,674 | 8,388 | 9,743 | 10,245 | 10,913 | 11,504 | 11,335 |
| Oil Based | 3,175 | 3,216 | 3,043 | 2,879 | 2,670 | 2,702 | 2,528 | | | | | | | | | | | | | | |