

Department of Energy  
**2021 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           |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 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         |
| 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         |
| 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         |
| Others                                   | 1,069         | 1,359         | 1,177         | 1,275         | 1,641         | 1,395         | 1,523         | 1,996         | 1,446         | 1,668          | 1,971          | 2,186          | 2,462          | 2,634          | 2,670          | 2,753          | 2,997          | 2,658          | 3,695          |
| 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         | 67,809         | 74,103         | 77,793         | 82,617         | 87,118         | 83,243         | 87,417         |
| 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          |
| System Losses                            | 6,810         | 7,223         | 6,817         | 6,865         | 7,698         | 7,680         | 7,542         | 7,800         | 7,630         | 8,360          | 7,741          | 7,455          | 7,481          | 8,288          | 8,262          | 9,007          | 9,994          | 9,742          | 9,968          |
| <b>Total</b>                             | <b>82,941</b> | <b>85,957</b> | <b>86,568</b> | <b>86,784</b> | <b>89,612</b> | <b>90,821</b> | <b>91,934</b> | <b>97,743</b> | <b>99,176</b> | <b>102,922</b> | <b>103,266</b> | <b>107,261</b> | <b>112,413</b> | <b>119,788</b> | <b>124,376</b> | <b>130,765</b> | <b>133,041</b> | <b>127,736</b> | <b>133,115</b> |

| 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           |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|
| 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         |
| 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         | 16,288         |
| 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         |
| <b>Total</b>                           | <b>52,941</b> | <b>55,957</b> | <b>56,568</b> | <b>56,784</b> | <b>59,612</b> | <b>60,821</b> | <b>61,934</b> | <b>67,743</b> | <b>69,176</b> | <b>72,922</b> | <b>75,266</b> | <b>77,261</b> | <b>82,413</b> | <b>90,788</b> | <b>94,370</b> | <b>99,765</b> | <b>106,041</b> | <b>101,756</b> | <b>106,115</b> |

| Gross Power Generation by Plant Type in G | 2003          | 2004          | 2005          | 2006          | 2007          | 2008          | 2009          | 2010          | 2011          | 2012          | 2013          | 2014          | 2015          | 2016          | 2017          | 2018          | 2019           | 2020           | 2021           |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|
| 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         |
| 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         | 5,866         | 5,661         | 3,787         | 3,173         | 3,752          | 2,474          | 1,616          |
| Combined Cycle                            | 439           | 739           | 91            | 239           | 653           | 513           | 639           | 1,202         | 124           | 227           | 247           | 515           | 276           | 694           | 405           | 522           | 729            | 495            | 412            |
| Diesel                                    | 5,509         | 6,263         | 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          | 1,112          |
| Gas Turbine                               | 42            | 82            | 25            | 0             | 9             | 36            | 62            | 3             | 0             | 0             | 0             | 0             | 0             | 0             | 0             | 0             | 26             | 11             | 87             |
| Oil Thermal                               | 1,180         | 1,431         | 309           | 274           | 324           | 509           | 909           | 1,364         | 512           | 695           | 438           | 463           | 80            | 10            | 245           | 282           | 145            | 184            | 1              |
| 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        | 20,547        | 21,334        | 22,354        | 19,497         | 19,060         | 19,060         |
| Renewable Energy (RE)                     | 17,692        | 20,489        | 20,628        | 20,837        | 20,837        | 20,837        | 20,837        | 20,837        | 20,837        | 20,766        | 19,903        | 19,810        | 23,266        | 23,266        | 21,979        | 23,044        | 21,609         | 23,396         | 23,396         |
| Geothermal                                | 9,822         | 10,282        | 9,902         | 10,455        | 10,215        | 10,223        | 10,224        | 9,929         | 9,942         | 10,250        | 9,505         | 10,308        | 11,044        | 11,070        | 10,270        | 10,435        | 10,631         | 10,767         | 10,016         |
| Hydro                                     | 7,870         | 8,593         | 8,987         | 9,939         | 8,563         | 9,843         | 9,788         | 7,803         | 9,598         | 10,252        | 10,019        | 9,137         | 8,665         | 8,111         | 9,611         | 9,384         | 8,025          | 7,192          | 9,185          |
| Biomass                                   | 0             | 0             | 0             | 0             | 0             | 14            | 27            | 115           | 183           | 212           | 196           | 196           | 367           | 726           | 1,013         | 1,105         | 1,040          | 1,261          | 1,445          |
| 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          |
| Wind                                      | 0             | 0             | 17            | 53            | 58            | 67            | 64            | 62            | 88            | 75            | 66            | 152           | 745           | 975           | 1,094         | 1,163         | 1,042          | 1,026          | 1,270          |
| <b>Total</b>                              | <b>52,941</b> | <b>55,957</b> | <b>56,568</b> | <b>56,784</b> | <b>59,612</b> | <b>60,821</b> | <b>61,934</b> | <b>67,743</b> | <b>69,176</b> | <b>72,922</b> | <b>75,266</b> | <b>77,261</b> | <b>82,413</b> | <b>90,788</b> | <b>94,370</b> | <b>99,765</b> | <b>106,041</b> | <b>101,756</b> | <b>106,115</b> |

| 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          |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 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        | 11,684        |
| Oil Based                              | 3,604         | 3,669         | 3,663         | 3,616         | 3,193         | 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         | 4,417         |
| Natural Gas                            | 2,763         | 2,763         | 2,703         | 2,763         | 2,834         | 2,831         | 2,861         | 2,861         | 2,861         | 2,862         | 2,862         | 2,862         | 2,862         | 3,431         | 3,447         | 3,453         | 3,453         | 3,453         | 3,453         |
| Renewable Energy (RE)                  | 4,799         | 5,149         | 5,226         | 5,261         | 5,277         | 5,284         | 5,309         | 5,437         | 5,391         | 5,211         | 5,541         | 5,898         | 6,330         | 6,958         | 7,079         | 7,227         | 7,399         | 7,617         | 7,965         |
| Geothermal                             | 1,932         | 1,932         | 1,978         | 1,978         | 1,958         | 1,966         | 1,966         | 1,783         | 1,783         | 1,848         | 1,868         | 1,918         | 1,917         | 1,917         | 1,916         | 1,944         | 1,928         | 1,928         | 1,928         |
| Hydro                                  | 2,867         | 3,217         | 3,222         | 3,287         | 3,291         | 3,291         | 3,291         | 3,400         | 3,491         | 3,521         | 3,543         | 3,600         | 3,629         | 3,619         | 3,629         | 3,701         | 3,700         | 3,729         | 3,781         |
| Biomass                                | 0             | 0             | 0             | 0             | 0             | 0             | 30            | 38            | 83            | 119           | 119           | 131           | 221           | 233           | 224           | 258           | 353           | 447           | 489           |
| Solar                                  | 0             | 0             | 1             | 1             | 1             | 1             | 1             | 1             | 1             | 1             | 1             | 17            | 165           | 765           | 885           | 896           | 921           | 1,019         | 1,324         |
| Wind                                   | 0             | 0             | 25            | 33            | 33            | 33            | 33            | 33            | 33            | 33            | 33            | 33            | 23            | 427           | 427           | 427           | 427           | 443           | 443           |
| <b>Total</b>                           | <b>15,124</b> | <b>15,548</b> | <b>15,619</b> | <b>15,603</b> | <b>15,941</b> | <b>15,681</b> | <b>15,610</b> | <b>16,368</b> | <b>16,162</b> | <b>17,025</b> | <b>17,325</b> | <b>17,944</b> | <b>18,765</b> | <b>21,423</b> | <b>22,728</b> | <b>23,815</b> | <b>25,531</b> | <b>26,250</b> | <b>27,519</b> |

| 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          |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 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        | 10,927        |
| Oil Based                               | 3,175         | 3,214         | 3,043         | 2,979         | 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         | 3,082         |
| 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         | 2,759         | 3,291         | 3,291         | 3,286         | 3,286         | 3,286         | 3,286         |
| 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         | 7,055         |
| 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         |
| 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         | 3,527         |
| Biomass                                 | 0             | 0             | 0             | 0             | 0             | 0             | 10            | 20            | 46            | 76            | 76            | 81            | 146           | 157           | 160           | 182           | 227           | 285           | 291           |
| Solar                                   | 0             | 0             | 1             | 1             | 1             | 1             | 1             | 1             | 1             | 1             | 17            | 103           | 379           | 594           | 700           | 740           | 737           | 817           | 1,041         |
| Wind                                    | 0             | 0             | 9             | 9             | 9             | 9             | 9             | 9             | 9             | 9             | 9             | 9             | 103           | 379           | 383           | 383           | 427           | 443           | 443           |
| <b>Total</b>                            | <b>13,404</b> | <b>13,792</b> | <b>13,598</b> | <b>13,638</b> | <b>13,473</b> | <b>13,048</b> | <b>13,319</b> | <b>13,802</b> | <b>14,477</b> | <b>15,066</b> | <b>15,371</b> | <b>15,633</b> | <b>16,432</b> | <b>19,097</b> | <b>20,511</b> | <b>21,241</b> | <b>22,736</b> | <b>23,410</b> | <b>24,348</b> |

Notes: Independent Power Producers' (IPPs) generation included in the utility.  
 Gross Power Generation data includes grid connected, embedded and off-grid generator.  
 2020 capacity mix includes off-grid capacities.  
 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.  
 Dependable Capacity - maximum capacity when modified for ambient limitations for a specified period of time, such as a month or a season.  
 Gross Power Generation - the total amount of electric energy produced by generating units and measured at the generating terminal.  
 Updated as of 15 June 2022