# ◆ Appendix 2 Sample Output of Energy Demand Forecast Model ◆

# Appendix 2 Sample Output of Energy Demand Forecast Model

| No | | Item | Unit | Code | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 95/85 | 2000/199 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2000/95 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | Social statistics | | | | | | | | | | | | | | | | | | | | | | |
| 3 | E | Population ( Middle of Years) | 1000 Perso | POP | 990 | 990 | 1,000 | 1,020 | 1,030 | 1,070 | 1,070 | 1,080 | 1,090 | 1,103 | 1,115 | 1.2 | 1.1 | 1,116 | 1,128 | 1,141 | 1,153 | 1,166 | 1,179 | 1.1 |
| 4 | I | Independent Households | 1000 famil | HOH | 165 | 165 | 167 | 170 | 172 | 178 | 178 | 180 | 182 | 184 | 185 | 1.2 | 1.1 | 186 | 188 | 190 | 192 | 194 | 196 | 1.1 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | Labour Forces | | | | | | | | | | | | | | | | | | | | | | |
| 7 | E | Agriculture, Hunting, Forestry, Mining, and Qu | Person | LAPRI | 93,200 | 90,600 | 89,500 | 86,900 | 86,700 | 72,900 | 73,000 | 72,700 | 72,000 | 72,000 | 71,200 | -2.7 | -3.0 | 71,200 | 69,084 | 66,992 | 64,982 | 63,033 | 61,142 | -3.0 |
| 8 | E | Manufacturing | Person | LABMAN | 66,200 | 90,300 | 110,200 | 124,900 | 126,200 | 139,000 | 144,000 | 142,500 | 141,100 | 142,000 | 143,500 | 8.0 | | 143,500 | 141,538 | 139,707 | 138,004 | 136,427 | 134,971 | -1.2 |
| 9 | P | Sugar | Person | LABSUG | | | | | | 7,500 | 7,400 | 7,300 | 7,000 | 6,800 | 6,200 | -4.3 | -4.0 | 6,200 | 5,952 | 5,714 | 5,485 | 5,268 | 5,055 | -4.8 |
| 10 | E | EPZ | Person | LABEPZ | | | | | | 88,900 | 89,900 | 90,000 | 86,000 | 83,100 | 81,100 | -2.5 | -3.5 | 81,100 | 78,262 | 75,522 | 72,879 | 70,328 | 67,867 | -3.5 |
| 11 | E | Domestic Manufacturing | Person | LABDOM | | | | | | 42,600 | 43,100 | 45,200 | 48,100 | 52,100 | 56,200 | 6.9 | 2.0 | 56,200 | 57,324 | 58,470 | 59,640 | 60,833 | 62,049 | 2.0 |
| 12 | E | Electricity, Gas, and Water | Person | LABELE | 3,900 | 3,600 | 3,700 | 3,600 | 3,500 | 3,400 | 3,400 | 3,400 | 3,600 | 3,400 | 3,500 | -1.1 | -1.0 | 3,500 | 3,465 | 3,430 | 3,396 | 3,362 | 3,328 | -1.0 |
| 13 | E | Construction | Person | LABCON | 12,800 | 13,400 | 19,300 | 25,100 | 25,800 | 31,000 | 31,400 | 33,800 | 35,300 | 36,200 | 38,000 | 10.9 | 3.0 | 38,000 | 37,080 | 38,192 | 39,338 | 40,518 | 41,734 | 3.0 |
| 14 | E | Wholesale, Retail, Restaurants, and Hotels | Person | LABCOM | 23,400 | 29,400 | 32,500 | 39,300 | 43,200 | 52,200 | 57,000 | 61,600 | 70,200 | 76,000 | 80,100 | 10.9 | 7.0 | 80,100 | 85,707 | 91,706 | 98,126 | 104,995 | 112,344 | 7.0 |
| 15 | E | Transportation, Storage, and Communication | Person | LABTRA | 18,900 | 19,400 | 21,900 | 23,200 | 28,300 | 28,700 | 31,100 | 33,800 | 34,600 | 35,600 | 36,600 | 6.8 | 6.0 | 36,600 | 38,795 | 41,124 | 43,591 | 46,207 | 48,979 | 6.0 |
| 16 | E | Banking, Insurance, Real Estate, Business serv | Person | LABBAN | 6,200 | 6,500 | 7,000 | 7,700 | 9,800 | 11,500 | 12,100 | 13,000 | 13,800 | 15,000 | 16,000 | 9.9 | 5.0 | 16,000 | 15,800 | 17,640 | 18,522 | 19,448 | 20,421 | 5.0 |
| 17 | E | Other service | Person | LABSER | 96,900 | 96,800 | 97,700 | 101,200 | 99,200 | 102,100 | 105,500 | 112,400 | 117,300 | 122,600 | 127,700 | 2.8 | 2.0 | 127,700 | 130,254 | 132,859 | 135,516 | 138,227 | 140,991 | 2.0 |
| 18 | I | Total Labour Force | Person | LABTOT | 328,500 | 349,800 | 381,800 | 411,900 | 421,800 | 440,800 | 457,500 | 473,200 | 487,900 | 502,800 | 514,800 | 4.7 | | 514,600 | 522,704 | 531,651 | 541,476 | 552,218 | 563,911 | 1.8 |
| 19 | I | Labour Force in Population | % | LABSHA | 33 | 35 | 38 | 40 | 41 | 41 | 43 | 44 | 45 | 46 | 46 | | | 46 | 46 | 47 | 47 | 47 | 48 | 0.7 |
| 20 | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | | GDP at current Price | | | | | | | | | | | | | | | | | | | | | | |
| 22 | I | Agriculture, Hunting, Forestry, Mining, and Qu | Rs Million | NVAPRI | 2,143 | 2,532 | 2,967 | 3,172 | 3,501 | 4,048 | 4,266 | 4,660 | 4,750 | 5,040 | 5,736 | 10.3 | | 5,736 | 6,784 | 7,355 | 7,977 | 8,655 | 9,393 | 10.4 |
| 23 | I | Manufacturing | Rs Million | NVAMAN | 2,864 | 3,830 | 4,976 | 5,847 | 6,848 | 7,784 | 8,766 | 9,952 | 11,188 | 12,461 | 13,983 | 17.2 | | 13,983 | 17,635 | 19,332 | 21,200 | 23,257 | 25,522 | 12.8 |
| 24 | I | Sugar | Rs Million | NVASUG | 438 | 805 | 676 | 597 | 852 | 720 | 727 | 821 | 773 | 810 | 950 | 8.1 | | 950 | 1,099 | 1,191 | 1,292 | 1,402 | 1,521 | 9.9 |
| 25 | I | EPZ | Rs Million | NVAEPZ | 1,333 | 1,300 | 2,585 | 3,125 | 3,400 | 3,975 | 4,406 | 5,011 | 5,705 | 6,226 | 6,930 | 17.9 | | 6,930 | 8,982 | 9,832 | 10,766 | 11,793 | 12,923 | 13.3 |
| 26 | I | Domestic Manufacturing | Rs Million | NVADOM | 1,093 | 1,325 | 1,715 | 2,125 | 2,598 | 3,089 | 3,633 | 4,120 | 4,710 | 5,425 | 6,103 | 18.8 | | 6,103 | 7,555 | 8,309 | 9,142 | 10,062 | 11,078 | 12.7 |
| 27 | I | Electricity, Gas, and Water | Rs Million | NVAELE | 397 | 462 | 490 | 517 | 577 | 507 | 775 | 950 | 1,205 | 1,300 | 1,418 | 13.6 | | 1,418 | 1,286 | 1,448 | 1,631 | 1,838 | 2,071 | 7.9 |
| 28 | I | Construction | Rs Million | NVACON | 775 | 880 | 1,090 | 1,410 | 1,790 | 2,285 | 2,680 | 3,085 | 3,540 | 4,019 | 4,100 | 18.1 | | 4,100 | 5,430 | 5,944 | 6,509 | 7,130 | 7,812 | 13.8 |
| 29 | I | Wholesale, Retail, Restaurants, and Hotels | Rs Million | NVACOM | 1,834 | 2,300 | 3,004 | 3,837 | 4,602 | 5,529 | 6,225 | 7,042 | 8,222 | 9,155 | 10,029 | 18.5 | | 10,029 | 13,281 | 14,746 | 16,378 | 18,197 | 20,224 | 15.1 |
| 30 | I | Transportation, Storage, and Communication | Rs Million | NVATRA | 1,510 | 1,775 | 2,097 | 2,290 | 2,981 | 3,526 | 4,246 | 4,863 | 5,386 | 6,340 | 7,155 | 16.8 | | 7,155 | 8,923 | 9,907 | 11,003 | 12,225 | 13,587 | 13.7 |
| 31 | I | Banking, Insurance, Real Estate, Business serv | Rs Million | NVABAN | 2,190 | 2,335 | 3,092 | 3,551 | 4,233 | 5,087 | 5,812 | 6,833 | 7,677 | 8,568 | 9,645 | 16.0 | | 9,645 | 12,170 | 13,513 | 15,016 | 16,683 | 18,542 | 14.9 |
| 32 | I | Other service | Rs Million | NVASER | 2,187 | 2,338 | 3,070 | 3,915 | 4,490 | 5,113 | 5,853 | 6,542 | 7,778 | 9,250 | 10,144 | 16.7 | | 10,144 | 12,626 | 13,821 | 15,134 | 16,578 | 18,166 | 12.4 |
| 33 | I | Imputed Bank Service Charge | Rs Million | NVABSC | 0 | 0 | -405 | -552 | -893 | -861 | -1,053 | -1,455 | -1,540 | -1,873 | -2,210 | | | -2,210 | -2,908 | -3,365 | -3,895 | -4,511 | -5,225 | 18.8 |
| 34 | I | GDP at Factor cost | Rs Million | NVAFAC | 13,880 | 16,450 | 20,381 | 24,087 | 28,129 | 33,018 | 37,570 | 42,452 | 48,206 | 54,230 | 60,000 | 16.8 | | 60,000 | 75,235 | 82,709 | 90,954 | 100,052 | 110,093 | 12.9 |
| 35 | I | Net Indirect Taxes | Rs Million | NVATAX | 2,738 | 3,250 | 3,851 | 4,622 | 5,191 | 6,245 | 6,763 | 7,240 | 8,425 | 8,580 | 8,760 | 12.3 | | 8,760 | 10,903 | 11,935 | 13,070 | 14,316 | 15,687 | 12.4 |
| 36 | I | GDP at Current Price | Rs Million | NGDP | 16,618 | 19,700 | 24,232 | 28,709 | 33,320 | 39,263 | 44,333 | 49,692 | 56,631 | 62,840 | 68,760 | 15.3 | | 68,760 | 86,138 | 94,644 | 104,024 | 114,368 | 125,780 | 12.8 |
| 37 | | | | | | | | | | | | | | | | | | | | | | | | |
| 38 | I | GDP Deflator | 1990=100 | DFLGDP | 83.2 | 89.3 | 74.2 | 81.9 | 90.9 | 100.0 | 108.2 | 113.9 | 123.8 | 132.9 | 140.9 | 5.1 | | 141 | 167.0 | 174.1 | 181.6 | 189.4 | 197.7 | 7.0 |
| 39 | | | | | | | | | | | | | | | | | | | | | | | | |
| 40 | | GDP at Constant Price (1990) | | | | | | | | | | | | | | | | | | | | | | |
| 41 | E | Agriculture, Hunting, Forestry, Mining, and Qu | Rs Million | RVAPRI | 3,927 | 4,347 | 4,186 | 3,985 | 3,688 | 4,048 | 3,971 | 4,229 | 3,941 | 3,850 | 3,905 | -0.1 | 4 | 3,905 | 4,061 | 4,224 | 4,393 | 4,569 | 4,751 | 4.0 |
| 42 | I | Manufacturing | Rs Million | RVAMAN | 4,630 | 5,564 | 6,362 | 6,872 | 7,228 | 7,784 | 8,147 | 8,681 | 9,081 | 9,493 | 10,041 | 8.1 | 5.2 | 10,041 | 10,558 | 11,102 | 11,675 | 12,276 | 12,909 | 5.2 |
| 43 | E | Sugar | Rs Million | RVASUG | 754 | 849 | 816 | 733 | 642 | 720 | 708 | 766 | 653 | 575 | 632 | -1.7 | 4.8 | 632 | 658 | 684 | 711 | 740 | 769 | 4.0 |
| 44 | E | EPZ | Rs Million | RVAEPZ | 1,902 | 2,565 | 3,129 | 3,505 | 3,715 | 3,975 | 4,174 | 4,425 | 4,690 | 4,878 | 5,122 | 10.4 | 5.0 | 5,122 | 5,378 | 5,646 | 5,929 | 6,225 | 6,537 | 5.0 |
| 45 | E | Domestic Manufacturing | Rs Million | RVADOM | 1,974 | 2,150 | 2,416 | 2,634 | 2,871 | 3,089 | 3,265 | 3,490 | 3,738 | 4,041 | 4,287 | 8.1 | 5.5 | 4,287 | 4,523 | 4,772 | 5,034 | 5,311 | 5,603 | 5.5 |
| 46 | E | Electricity, Gas, and Water | Rs Million | RVAELE | 374 | 407 | 428 | 444 | 497 | 507 | 555 | 583 | 644 | 681 | 713 | 6.7 | 8.0 | 713 | 770 | 832 | 898 | 970 | 1,048 | 8.0 |
| 47 | S | Construction | Rs Million | RVACON | 1,313 | 1,444 | 1,574 | 1,826 | 2,031 | 2,285 | 2,479 | 2,702 | 2,864 | 3,036 | 3,098 | 9.0 | 5.0 | 3,096 | 3,251 | 3,414 | 3,585 | 3,764 | 3,952 | 5.0 |
| 48 | E | Wholesale, Retail, Restaurants, and Hotels | Rs Million | RVACOM | 3,307 | 3,631 | 4,365 | 4,871 | 5,231 | 5,529 | 5,762 | 6,177 | 6,671 | 7,111 | 7,487 | 8.5 | 6.5 | 7,467 | 7,952 | 8,469 | 9,019 | 9,605 | 10,230 | 6.5 |
| 49 | E | Transportation, Storage, and Communication | Rs Million | RVATRA | 2,498 | 2,567 | 2,837 | 3,092 | 3,329 | 3,526 | 3,706 | 3,968 | 4,224 | 4,688 | 5,018 | 7.8 | 6.5 | 5,018 | 5,342 | 5,690 | 6,059 | 6,453 | 6,873 | 6.5 |
| 50 | E | Banking, Insurance, Real Estate, Business serv | Rs Million | RVABAN | 3,465 | 3,419 | 4,187 | 4,336 | 4,657 | 5,087 | 5,372 | 5,999 | 6,201 | 6,447 | 6,845 | 7.0 | 6.5 | 6,845 | 7,290 | 7,704 | 8,269 | 8,808 | 9,379 | 6.5 |
| 51 | E | Other service | Rs Million | RVASER | 3,429 | 3,420 | 4,137 | 4,780 | 4,939 | 5,113 | 5,409 | 5,744 | 6,283 | 6,960 | 7,199 | 7.7 | 5.0 | 7,199 | 7,559 | 7,937 | 8,334 | 8,751 | 9,189 | 5.0 |
| 52 | E | Imputed Bank Service Charge | Rs Million | RVABSC | 0 | 0 | -546 | -674 | -752 | -861 | -973 | -1,277 | -1,244 | -1,409 | -1,568 | 14.1 | 11.0 | -1,538 | -1,741 | -1,933 | -2,145 | -2,381 | -2,643 | 11.0 |
| 53 | I | GDP at Factor cost | Rs Million | RVAFAC | 22,850 | 24,800 | 27,510 | 29,533 | 30,846 | 33,019 | 34,428 | 36,802 | 38,665 | 40,657 | 42,715 | 6.5 | | 42,715 | 45,044 | 47,499 | 50,087 | 52,814 | 55,687 | 5.4 |
| 54 | I | Net Indirect Taxes | Rs Million | RVATAX | 4,332 | 4,758 | 5,230 | 5,643 | 5,711 | 6,245 | 6,250 | 6,356 | 6,805 | 6,456 | 6,217 | 2.7 | 5.0 | 6,217 | 6,528 | 6,854 | 7,197 | 7,557 | 7,935 | 5.0 |
| 55 | I | GDP at constant (1990) | Rs Million | RGDP | 27,183 | 29,556 | 32,740 | 35,176 | 36,557 | 39,264 | 40,678 | 43,158 | 45,471 | 47,113 | 48,932 | 6.1 | | 48,932 | 51,572 | 54,354 | 57,284 | 60,371 | 63,622 | 5.4 |
| 56 | | | | | | | | | | | | | | | | | | 0 | | | | | | |
| 57 | I | GDP per Capita at Constant Price | Rs/person | PERGDP | 27,457 | 29,857 | 32,740 | 34,487 | 35,492 | 36,695 | 38,017 | 39,961 | 41,718 | 42,713 | 43,846 | 4.8 | | 43846 | 45,709 | 47,650 | 49,672 | 51,779 | 53,974 | 4.2 |
| 58 | | | | | | | | | | | | | | | | | | | | | | | | |
| 59 | | Labour Productivity (1990) | | | | | | | | | | | | | | | | | | | | | | |
| 60 | I | Agriculture, Hunting, Forestry, Mining, and Qu | 1000 Rs / | LPYPRI | 42 | 48 | 47 | 46 | 43 | 56 | 54 | 58 | 55 | 51 | 55 | 2.7 | | 55 | 59 | 63 | 68 | 72 | 78 | 7.2 |
| 61 | I | Manufacturing | 1000 Rs / | LPYMAN | 70 | 62 | 58 | 55 | 57 | 56 | 57 | 61 | 64 | 67 | 70 | 4.3 | | 70 | 75 | 79 | 85 | 90 | 96 | 6.4 |
| 62 | I | Sugar | 1000 Rs / | LPYSUG | | | | | | | 96 | 105 | 93 | 85 | 102 | 1.2 | | 102 | 10 | 120 | 130 | 140 | 152 | 8.3 |
| 63 | I | EPZ | 1000 Rs / | LPYEPZ | | | | | | | 46 | 49 | 55 | 59 | 63 | 6.3 | | 63 | 69 | 75 | 81 | 89 | 96 | 8.8 |
| 64 | I | Domestic Manufacturing | 1000 Rs / | LPYDOM | | | | | | | 76 | 77 | 78 | 78 | 76 | 0.1 | | 78 | 79 | 82 | 84 | 87 | 90 | 3.4 |
| 65 | I | Electricity, Gas, and Water | 1000 Rs / | LPYELE | 96 | 113 | 118 | 123 | 142 | 149 | 163 | 171 | 179 | 200 | 204 | 7.8 | | 204 | 222 | 242 | 265 | 289 | 315 | 3.1 |
| 66 | I | Construction | 1000 Rs / | LPYCON | 103 | 108 | 82 | 73 | 76 | 74 | 79 | 80 | 81 | 84 | 86 | -1.7 | | 88 | 88 | 89 | 91 | 93 | 95 | 1.9 |
| 67 | I | Wholesale, Retail, Restaurants, Hotels | 1000 Rs / | LPYCOM | 116 | 124 | 134 | 124 | 121 | 106 | 101 | 100 | 95 | 94 | 93 | -2.2 | | 93 | 93 | 92 | 92 | 91 | 91 | -0.5 |
| 68 | I | Transportation, Storage, and Communication | 1000 Rs / | LPYTRA | 127 | 132 | 130 | 133 | 126 | 123 | 119 | 117 | 122 | 132 | 137 | 6.7 | | 137 | 138 | 138 | 139 | 140 | 140 | 0.5 |
| 69 | I | Banking, Insurance, Real Estate, Business serv | 1000 Rs / | LPYBAN | 559 | 526 | 595 | 563 | 485 | 442 | 444 | 461 | 449 | 430 | 428 | -2.6 | | 428 | 434 | 440 | 446 | 453 | 459 | 1.4 |
| 70 | I | Other service | 1000 Rs / | LPYSER | 35 | 35 | 42 | 47 | 50 | 50 | 51 | 51 | 54 | 57 | 56 | 4.8 | | 58 | 59 | 60 | 61 | 63 | 65 | 2.9 |
| 71 | I | Total Labour Productivity at Constant Price ( | 1000 Rs / | LPYTOT | 83 | 85 | 86 | 85 | 87 | 89 | 89 | 91 | 93 | 94 | 95 | 1.3 | | 95 | 99 | 102 | 108 | 109 | 113 | 3.5 |
| 72 | | | | | | | | | | | | | | | | | | | | | | | | |
| 73 | | Wage at Current Price | | | | | | | | | | | | | | | | | | | | | | |
| 74 | I | All Sectors (Skilled ) | Rs / Month | WAGSKL | 1,476 | 1,581 | 2,078 | 2,815 | 3,335 | 3,524 | 4,080 | 4,530 | 4,787 | 5,167 | 5,567 | 14.2 | 5.0 | 5,567 | 5,845 | 6,138 | 6,445 | 6,767 | 7,105 | 5.0 |
| 75 | I | Wage Index of all Sectors | 1990=100 | WAGIND | 41.9 | 44.9 | 59.0 | 79.9 | 94.6 | 100.0 | 115.8 | 128.5 | 135.8 | 146.6 | 156.0 | 14.2 | | 158 | 165.9 | 174.2 | 182.9 | 192.0 | 201.6 | 5.0 |
| 76 | | | | | | | | | | | | | | | | | | | | | | | | |
| 77 | | Government Finance at Current Price | | | | | | | | | | | | | | | | | | | | | | |
| 78 | I | Revenue | RS Million | GFREV | 3,593 | 4,128 | 5,203 | 6,467 | 7,631 | 8,885 | 10,115 | 11,378 | 12,363 | 14,078 | 14,295 | 14.8 | | 14,295 | 17,793 | 19,477 | 21,328 | 23,362 | 25,599 | 12.4 |
| 79 | I | Grants Received | RS Million | GFGRT | 166 | 233 | 188 | 214 | 68 | 116 | 61 | 25 | 78 | 130 | 240 | | | 240 | 300 | 300 | 300 | 300 | 300 | 4.6 |
| 80 | I | Expenditure | RS Million | GFEXP | 4,229 | 4,445 | 5,125 | 5,377 | 7,483 | 8,880 | 9,944 | 11,518 | 12,148 | 14,271 | 15,868 | 14.1 | | 15,868 | 19,732 | 21,579 | 23,607 | 25,834 | 28,281 | 12.3 |
| 81 | I | Lending - Repayment | RS Million | GFNLD | 110 | 263 | 211 | 217 | 683 | 279 | 231 | 244 | 275 | -383 | -380 | | | -380 | -500 | -500 | -500 | -500 | -500 | 5.6 |

| 2010/2000 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2010/2000 | 2025/2010 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.1 | 1,179 | 1,192 | 1,205 | 1,218 | 1,231 | 1,245 | 1,259 | 1,273 | 1,287 | 1,301 | 1,315 | 1.1 | 1.0 | 1,315 | 1,328 | 1,341 | 1,355 | 1,368 | 1,382 | 1,396 | 1,410 | 1,424 | 1,438 | 1,453 | 1,45 |
| 1.1 | 198 | 199 | 201 | 203 | 205 | 208 | 210 | 212 | 214 | 217 | 219 | 1.1 | 1.0 | 219 | 221 | 224 | 226 | 228 | 230 | 233 | 235 | 237 | 240 | 242 | 24 |
| -3.0 | 61,142 | 59,308 | 57,528 | 55,803 | 54,128 | 52,505 | 50,929 | 49,402 | 47,920 | 46,482 | 45,087 | -3.0 | -2.0 | 45,087 | 44,186 | 43,302 | 42,438 | 41,587 | 40,750 | 39,940 | 39,142 | 38,359 | 37,592 | 36,840 | 36,10 |
| | 134,971 | 132,171 | 129,430 | 126,749 | 124,124 | 121,556 | 119,042 | 116,582 | 114,175 | 111,818 | 109,512 | -2.1 | | 109,512 | 110,848 | 112,203 | 113,576 | 114,969 | 116,381 | 117,812 | 119,262 | 120,733 | 122,224 | 123,735 | 125,25 |
| -4.0 | 5,055 | 4,853 | 4,659 | 4,473 | 4,294 | 4,122 | 3,957 | 3,799 | 3,647 | 3,501 | 3,361 | -4.0 | -1.3 | 3,361 | 3,317 | 3,274 | 3,232 | 3,190 | 3,148 | 3,107 | 3,067 | 3,027 | 2,988 | 2,949 | 2,91 |
| -2.0 | 67,837 | 66,509 | 65,179 | 63,876 | 62,598 | 61,346 | 60,119 | 58,917 | 57,739 | 56,584 | 55,452 | -2.0 | 1.3 | 55,452 | 56,173 | 56,903 | 57,643 | 58,392 | 59,151 | 59,920 | 60,699 | 61,488 | 62,288 | 63,098 | 63,91 |
| -2.0 | 62,049 | 60,808 | 59,592 | 58,400 | 57,232 | 56,088 | 54,966 | 53,867 | 52,789 | 51,733 | 50,699 | -2.0 | 1.3 | 50,699 | 51,358 | 52,026 | 52,702 | 53,387 | 54,081 | 54,784 | 55,496 | 56,218 | 56,949 | 57,689 | 58,43 |
| -1.0 | 3,328 | 3,295 | 3,262 | 3,230 | 3,197 | 3,165 | 3,134 | 3,102 | 3,071 | 3,041 | 3,010 | -1.0 | -1.0 | 3,010 | 2,980 | 2,950 | 2,921 | 2,892 | 2,863 | 2,834 | 2,806 | 2,778 | 2,750 | 2,722 | 2,69 |
| 3.0 | 41,734 | 42,986 | 44,275 | 45,604 | 46,972 | 48,331 | 49,832 | 51,327 | 52,867 | 54,453 | 56,087 | 3.0 | 3.0 | 56,087 | 57,769 | 59,503 | 61,288 | 63,126 | 65,020 | 66,971 | 68,980 | 71,049 | 73,181 | 75,376 | 77,63 |
| 5.0 | 112,344 | 117,962 | 123,860 | 130,053 | 136,555 | 143,383 | 150,552 | 158,080 | 165,984 | 174,283 | 182,997 | 5.0 | 1.3 | 182,997 | 185,376 | 187,786 | 190,227 | 192,700 | 195,205 | 197,743 | 200,314 | 202,918 | 205,556 | 208,228 | 210,93 |
| 4.5 | 48,979 | 51,183 | 53,486 | 55,893 | 58,408 | 61,037 | 63,783 | 66,654 | 69,653 | 72,788 | 76,063 | 4.5 | 1.1 | 76,063 | 76,900 | 77,746 | 78,601 | 79,465 | 80,339 | 81,223 | 82,117 | 83,020 | 83,933 | 84,856 | 85,79 |
| 4.0 | 20,421 | 21,237 | 22,087 | 22,970 | 23,889 | 24,845 | 25,838 | 26,872 | 27,947 | 29,065 | 30,227 | 4.0 | 3.0 | 30,227 | 31,134 | 32,068 | 33,030 | 34,021 | 35,042 | 36,093 | 37,176 | 38,291 | 39,440 | 40,623 | 41,84 |
| 1.0 | 140,991 | 142,401 | 143,825 | 145,263 | 146,716 | 148,183 | 149,665 | 151,162 | 152,673 | 154,200 | 155,742 | 1.0 | 1.0 | 155,742 | 157,299 | 158,872 | 160,461 | 162,066 | 163,686 | 165,323 | 166,976 | 168,646 | 170,333 | 172,036 | 173,75 |
| | 563,911 | 570,543 | 577,754 | 585,564 | 593,991 | 603,054 | 612,777 | 623,181 | 634,290 | 646,129 | 658,726 | 1.6 | | 658,726 | 666,493 | 674,430 | 682,540 | 690,826 | 699,292 | 707,939 | 716,772 | 725,794 | 735,007 | 744,417 | 754,02 |
| | 48 | 48 | 48 | 48 | 48 | 48 | 49 | 49 | 49 | 50 | 50 | 0.5 | | 50 | 50 | 50 | 50 | 50 | 51 | 51 | 51 | 51 | 51 | 51 | 5 |
| | 9,393 | 10,173 | 11,020 | 11,941 | 12,941 | 14,029 | 15,212 | 16,498 | 17,898 | 19,421 | 21,079 | 8.4 | | 21,079 | 22,829 | 24,728 | 26,783 | 29,012 | 31,429 | 34,050 | 36,893 | 39,976 | 43,322 | 46,952 | 50,89 |
| | 25,522 | 28,010 | 30,753 | 33,778 | 37,115 | 40,798 | 44,864 | 49,353 | 54,312 | 59,790 | 65,846 | 9.9 | | 65,846 | 73,864 | 82,878 | 93,015 | 104,416 | 117,239 | 131,667 | 147,901 | 166,171 | 186,737 | 209,891 | 235,96 |
| | 1,521 | 1,584 | 1,650 | 1,719 | 1,791 | 1,867 | 1,947 | 2,030 | 2,118 | 2,210 | 2,306 | 4.2 | | 2,306 | 2,401 | 2,501 | 2,605 | 2,713 | 2,826 | 2,944 | 3,067 | 3,195 | 3,330 | 3,470 | 3,61 |
| | 12,923 | 14,137 | 15,601 | 17,149 | 18,853 | 20,733 | 22,805 | 25,090 | 27,611 | 30,393 | 33,464 | 10.0 | | 33,464 | 37,637 | 42,332 | 47,616 | 53,563 | 60,257 | 67,793 | 76,278 | 85,833 | 96,593 | 108,714 | 122,36 |
| | 11,078 | 12,228 | 13,501 | 14,910 | 16,471 | 18,198 | 20,112 | 22,232 | 24,582 | 27,187 | 30,076 | 10.5 | | 30,076 | 33,826 | 38,046 | 42,795 | 48,140 | 54,156 | 60,929 | 68,555 | 77,142 | 86,813 | 97,707 | 109,97 |
| | 2,071 | 2,330 | 2,621 | 2,949 | 3,319 | 3,736 | 4,207 | 4,738 | 5,338 | 6,015 | 6,780 | 12.6 | | 6,780 | 7,625 | 8,576 | 9,647 | 10,851 | 12,208 | 13,734 | 15,453 | 17,389 | 19,569 | 22,025 | 24,79 |
| | 7,813 | 8,543 | 9,343 | 10,221 | 11,184 | 12,241 | 13,400 | 14,673 | 16,071 | 17,607 | 19,294 | 9.5 | | 19,294 | 21,097 | 23,069 | 25,228 | 27,591 | 30,177 | 33,008 | 36,107 | 39,502 | 43,219 | 47,291 | 51,75 |
| | 20,224 | 22,324 | 24,649 | 27,221 | 30,069 | 33,223 | 36,717 | 40,588 | 44,876 | 49,634 | 54,908 | 10.5 | | 54,908 | 60,038 | 65,652 | 71,796 | 78,520 | 85,879 | 93,936 | 102,757 | 112,417 | 122,996 | 134,584 | 147,28 |
| | 13,587 | 15,069 | 16,716 | 18,548 | 20,585 | 22,852 | 25,374 | 28,182 | 31,307 | 34,789 | 38,666 | 11.0 | | 38,666 | 42,682 | 47,118 | 52,017 | 57,431 | 63,412 | 70,022 | 77,328 | 85,401 | 94,326 | 104,198 | 115,11 |
| | 18,542 | 20,564 | 22,811 | 25,311 | 28,091 | 31,184 | 34,626 | 38,457 | 42,723 | 47,473 | 52,765 | 11.0 | | 52,765 | 58,245 | 64,298 | 70,984 | 78,371 | 86,533 | 95,553 | 105,521 | 116,540 | 128,721 | 142,190 | 157,08 |
| | 18,168 | 19,863 | 21,724 | 23,765 | 26,004 | 28,460 | 31,156 | 34,115 | 37,366 | 40,936 | 44,859 | 9.5 | | 44,859 | 49,050 | 53,637 | 58,658 | 64,149 | 70,162 | 76,744 | 83,951 | 91,843 | 100,486 | 109,953 | 120,32 |
| | -5,225 | -6,094 | -7,110 | -8,298 | -9,683 | -11,304 | -13,200 | -15,417 | -18,012 | -21,048 | -24,603 | 16.8 | | -24,603 | -28,695 | -33,470 | -39,043 | -45,546 | -53,136 | -61,995 | -72,338 | -84,414 | -98,515 | -114,983 | -134,21 |
| | 110,093 | 120,781 | 132,528 | 145,428 | 159,628 | 175,219 | 192,356 | 211,188 | 231,881 | 254,617 | 279,593 | 9.8 | | 279,593 | 306,735 | 336,484 | 369,083 | 404,795 | 443,904 | 486,719 | 533,572 | 584,824 | 640,962 | 702,100 | 768,96 |
| | 15,687 | 17,153 | 18,760 | 20,522 | 22,456 | 24,577 | 26,906 | 29,462 | 32,268 | 35,351 | 38,738 | 9.5 | | 38,738 | 42,358 | 46,319 | 50,553 | 55,397 | 60,590 | 66,274 | 72,497 | 79,312 | 86,776 | 94,952 | 103,90 |
| | 125780 | 137,934 | 151,288 | 165,960 | 182,082 | 199,797 | 219,282 | 240,650 | 264,150 | 289,968 | 318,332 | 9.7 | | 318,332 | 349,093 | 382,803 | 419,737 | 460,192 | 504,494 | 552,992 | 606,070 | 664,135 | 727,638 | 797,052 | 872,89 |
| 193.3 | 197.7 | 205.9 | 214.4 | 223.4 | 232.8 | 242.7 | 253.0 | 263.9 | 275.2 | 287.2 | 299.7 | 4.2 | 266.0 | 300 | 312.1 | 325.0 | 338.5 | 352.6 | 367.3 | 382.6 | 398.6 | 415.3 | 432.8 | 451.0 | 470. |
| 1 | 4,751 | 4,941 | 5,139 | 5,345 | 5,558 | 5,781 | 6,012 | 6,252 | 6,502 | 6,763 | 7,033 | 4.0 | 1 | 7,033 | 7,314 | 7,607 | 7,911 | 8,228 | 8,557 | 8,899 | 9,255 | 9,625 | 10,010 | 10,411 | 10,82 |
| 5.5 | 12,909 | 13,605 | 14,341 | 15,119 | 15,941 | 16,811 | 17,731 | 18,703 | 19,732 | 20,819 | 21,970 | 5.5 | 5.9 | 21,970 | 23,666 | 25,497 | 27,476 | 29,612 | 31,919 | 34,411 | 37,103 | 40,009 | 43,149 | 46,539 | 50,20 |
| 0 | 769 | 769 | 769 | 769 | 769 | 769 | 769 | 769 | 769 | 769 | 769 | 0.0 | 0 | 769 | 769 | 769 | 769 | 769 | 769 | 769 | 769 | 769 | 769 | 769 | 76 |
| 5.5 | 6,537 | 6,898 | 7,275 | 7,675 | 8,098 | 8,543 | 9,013 | 9,509 | 10,031 | 10,583 | 11,165 | 5.6 | 8.0 | 11,165 | 12,059 | 13,023 | 14,065 | 15,150 | 16,405 | 17,718 | 19,135 | 20,666 | 22,319 | 24,105 | 26,03 |
| 6.0 | 5,603 | 5,940 | 6,296 | 6,674 | 7,074 | 7,499 | 7,949 | 8,425 | 8,931 | 9,467 | 10,035 | 6.0 | 8.0 | 10,035 | 10,838 | 11,705 | 12,641 | 13,652 | 14,744 | 15,924 | 17,198 | 18,574 | 20,060 | 21,664 | 23,39 |
| 8.0 | 1,048 | 1,132 | 1,222 | 1,320 | 1,425 | 1,539 | 1,663 | 1,796 | 1,939 | 2,094 | 2,262 | 8.0 | 8.0 | 2,262 | 2,443 | 2,638 | 2,849 | 3,077 | 3,324 | 3,590 | 3,877 | 4,187 | 4,522 | 4,884 | 5,27 |
| 5.0 | 3,952 | 4,150 | 4,357 | 4,575 | 4,804 | 5,044 | 5,296 | 5,561 | 5,839 | 6,131 | 6,437 | 5.0 | 5.0 | 6,437 | 6,759 | 7,097 | 7,452 | 7,825 | 8,216 | 8,627 | 9,058 | 9,511 | 9,986 | 10,486 | 11,01 |
| 6.0 | 10,230 | 10,844 | 11,494 | 12,184 | 12,915 | 13,690 | 14,511 | 15,382 | 16,305 | 17,283 | 18,320 | 6.0 | 3.0 | 18,320 | 19,238 | 20,198 | 21,208 | 22,268 | 23,381 | 24,550 | 25,778 | 27,067 | 28,420 | 29,841 | 31,33 |
| 6.5 | 6,873 | 7,319 | 7,795 | 8,302 | 8,841 | 9,416 | 10,028 | 10,680 | 11,374 | 12,114 | 12,901 | 6.5 | 4.0 | 12,901 | 13,675 | 14,496 | 15,365 | 16,287 | 17,264 | 18,300 | 19,398 | 20,562 | 21,796 | 23,104 | 24,49 |
| 6.5 | 9,379 | 9,988 | 10,637 | 11,329 | 12,065 | 12,850 | 13,685 | 14,574 | 15,522 | 16,530 | 17,605 | 6.5 | 4.0 | 17,605 | 18,661 | 19,781 | 20,968 | 22,226 | 23,559 | 24,973 | 26,471 | 28,060 | 29,743 | 31,528 | 33,41 |
| 5.0 | 9,189 | 9,648 | 10,130 | 10,637 | 11,169 | 11,727 | 12,313 | 12,929 | 13,576 | 14,254 | 14,967 | 5.0 | 5.0 | 14,967 | 15,715 | 16,501 | 17,326 | 18,193 | 19,102 | 20,057 | 21,060 | 22,113 | 23,219 | 24,380 | 25,59 |
| 12.0 | -2,843 | -2,360 | -3,315 | -3,713 | -4,159 | -4,658 | -5,217 | -5,843 | -6,544 | -7,329 | -8,209 | 12.0 | 12.0 | -8,209 | -9,194 | -10,297 | -11,533 | -12,917 | -14,467 | -16,203 | -18,147 | -20,325 | -22,763 | -25,495 | -28,55 |
| | 55,687 | 58,667 | 61,801 | 65,096 | 68,560 | 72,200 | 76,022 | 80,035 | 84,245 | 88,660 | 93,289 | 5.5 | | 93,289 | 98,276 | 103,518 | 109,023 | 114,799 | 120,857 | 127,205 | 133,853 | 140,810 | 148,082 | 155,676 | 163,59 |
| 5.0 | 7,925 | 8,332 | 8,748 | 9,186 | 9,645 | 10,127 | 10,633 | 11,165 | 11,723 | 12,310 | 12,925 | 5.0 | 5.0 | 12,925 | 13,571 | 14,250 | 14,962 | 15,710 | 16,498 | 17,321 | 18,187 | 19,096 | 20,051 | 21,054 | 22,10 |
| | 63,622 | 66,998 | 70,549 | 74,282 | 78,205 | 82,327 | 86,656 | 91,200 | 95,988 | 100,969 | 106,211 | 5.8 | | 106,211 | 111,847 | 117,708 | 123,985 | 130,509 | 137,353 | 144,526 | 152,040 | 159,906 | 168,133 | 176,730 | 185,70 |
| | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 53,974 | 56,220 | 58,555 | 60,983 | 63,505 | 66,125 | 68,845 | 71,668 | 74,593 | 77,628 | 80,768 | 4.1 | | 80,768 | 84,212 | 87,792 | 91,511 | 95,373 | 99,380 | 103,535 | 107,839 | 112,296 | 116,904 | 121,665 | 126,57 |
| | 79 | 83 | 89 | 96 | 103 | 110 | 118 | 127 | 136 | 145 | 156 | 7.3 | | 156 | 168 | 176 | 186 | 198 | 210 | 223 | 236 | 251 | 266 | 283 | [illegible] |
| | 96 | 103 | 111 | 119 | 128 | 138 | 149 | 160 | 173 | 186 | 201 | 7.7 | | 201 | 213 | 227 | 242 | 258 | 274 | 292 | 311 | 331 | 353 | 376 | [illegible] |
| | 152 | 159 | 165 | 172 | 179 | 187 | 194 | 203 | 211 | 220 | 229 | 4.2 | | 229 | 232 | 235 | 238 | 241 | 244 | 248 | 251 | 254 | 258 | 251 | [illegible] |
| | 96 | 104 | 112 | 120 | 129 | 139 | 150 | 161 | 174 | 187 | 201 | 7.7 | | 201 | 215 | 229 | 244 | 260 | 277 | 296 | 315 | 336 | 358 | 382 | [illegible] |
| | 90 | 98 | 106 | 114 | 124 | 134 | 145 | 156 | 169 | 183 | 198 | 8.2 | | 198 | 211 | 225 | 240 | 256 | 273 | 291 | 310 | 330 | 352 | 376 | [illegible] |
| | 315 | 343 | 375 | 409 | 446 | 486 | 531 | 579 | 631 | 689 | 751 | 9.1 | | 751 | 820 | 894 | 976 | 1,064 | 1,161 | 1,267 | 1,382 | 1,507 | 1,644 | 1,794 | 1,9 |
| | 95 | 97 | 98 | 100 | 102 | 104 | 106 | 108 | 110 | 113 | 115 | 1.9 | | 115 | 117 | 119 | 122 | 124 | 126 | 129 | 131 | 134 | 136 | 139 | [illegible] |
| | 91 | 92 | 93 | 94 | 95 | 95 | 96 | 97 | 98 | 99 | 100 | 1.0 | | 100 | 104 | 108 | 111 | 116 | 120 | 124 | 129 | 133 | 138 | 143 | [illegible] |
| | 140 | 143 | 146 | 149 | 151 | 154 | 157 | 160 | 163 | 166 | 170 | 1.8 | | 170 | 178 | 186 | 195 | 205 | 215 | 225 | 236 | 248 | 260 | 272 | [illegible] |
| | 459 | 470 | 482 | 493 | 505 | 517 | 530 | 542 | 555 | 569 | 582 | 2.4 | | 582 | 599 | 617 | 635 | 653 | 672 | 692 | 712 | 733 | 754 | 776 | [illegible] |
| | 65 | 68 | 70 | 73 | 76 | 79 | 82 | 86 | 89 | 92 | 96 | 4.0 | | 96 | 100 | 104 | 108 | 112 | 117 | 121 | 126 | 131 | 136 | 142 | [illegible] |
| | 113 | 117 | 122 | 127 | 132 | 137 | 141 | 146 | 151 | 158 | 161 | 8.6 | | 161 | 168 | 175 | 182 | 189 | 196 | 204 | 212 | 220 | 229 | 237 | [illegible] |
| 5.0 | 7,105 | 7,461 | 7,834 | 8,225 | 8,637 | 9,068 | 9,522 | 9,998 | 10,498 | 11,023 | 11,574 | 5.0 | 5.0 | 11574 | 12,153 | 12,760 | 13,398 | 14,068 | 14,772 | 15,510 | 16,286 | 17,100 | 17,955 | 18,853 | 19,7 |
| | 201.8 | 211.7 | 222.3 | 233.4 | 245.1 | 257.3 | 270.2 | 283.7 | 297.9 | 312.8 | 328.4 | 5.0 | | 328 | 344.9 | 362.1 | 380.2 | 399.2 | 419.2 | 440.1 | 462.1 | 485.2 | 509.5 | 535.0 | 561. |
| | 25,599 | 27,618 | 29,802 | 32,168 | 34,729 | 37,503 | 40,508 | 43,765 | 47,296 | 51,120 | 55,275 | 8.0 | | 55,275 | 59,634 | 64,341 | 69,423 | 74,912 | 80,842 | 87,247 | 94,167 | 101,645 | 109,728 | 118,465 | 127,9 |
| | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | | | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 3 |
| | 28,281 | 30,423 | 32,734 | 35,230 | 37,925 | 40,835 | 43,980 | 47,379 | 51,052 | 55,024 | 59,320 | 7.7 | | 59,320 | 64,029 | 69,116 | 74,612 | 80,550 | 86,967 | 93,903 | 101,401 | 109,506 | 118,271 | 127,750 | 138,0 |
| | -500 | -800 | -800 | -800 | -800 | -800 | -800 | -800 | -800 | -800 | -800 | | | -800 | -1,500 | -1,500 | -1,500 | -1,500 | -1,500 | -1,500 | -1,500 | -1,500 | -1,500 | -1,500 | -1,5 |

| 2022 | 2023 | 2024 | 2025 | 2025/2010 | 1995/1985 | 2000/1995 | 2010/2000 | 2025/2010 | 2025/1995 |
|---|---|---|---|---|---|---|---|---|---|
| 1,482 | 1,497 | 1,512 | 1,527 | 1.0 | 1.2 | 1.1 | 1.1 | 1.0 | 1.0 |
| 247 | 249 | 252 | 254 | 1.0 | 1.2 | 1.1 | 1.1 | 1.0 | 1.0 |
| | | | | | | | | | |
| 35,391 | 34,673 | 33,980 | 33,300 | -2.0 | -2.7 | -3.0 | -3.0 | -2.0 | -2.5 |
| 126,520 | 128,394 | 129,989 | 131,606 | 1.2 | 8.0 | -1.2 | -2.1 | 1.2 | -0.3 |
| 2,873 | 2,835 | 2,798 | 2,762 | -1.3 | | -4.0 | -4.0 | -1.3 | -2.7 |
| 64,749 | 65,591 | 66,443 | 67,307 | 1.3 | | -3.5 | -2.0 | 1.3 | -0.6 |
| 59,199 | 59,968 | 60,748 | 61,537 | 1.3 | | 2.0 | -2.0 | 1.3 | 0.3 |
| 2,668 | 2,642 | 2,615 | 2,589 | -1.0 | -1.1 | -1.0 | -1.0 | -1.0 | -1.0 |
| 79,956 | 82,365 | 84,836 | 87,381 | 3.0 | 10.9 | 3.0 | 3.0 | 3.0 | 3.0 |
| 213,677 | 216,455 | 219,269 | 222,119 | 1.3 | 10.9 | 7.0 | 5.0 | 1.3 | 3.5 |
| 88,734 | 87,668 | 88,652 | 89,627 | 1.1 | 6.8 | 6.0 | 4.5 | 1.1 | 3.0 |
| 43,097 | 44,390 | 45,722 | 47,093 | 3.0 | 9.9 | 5.0 | 4.0 | 3.0 | 3.7 |
| 175,494 | 177,249 | 179,021 | 180,812 | 1.0 | 2.8 | 2.0 | 1.0 | 1.0 | 1.2 |
| 763,337 | 773,855 | 784,084 | 794,528 | 1.3 | 4.7 | 1.8 | 1.6 | 1.3 | 1.5 |
| 52 | 52 | 52 | 52 | 0.3 | 3.4 | 0.7 | 0.5 | 0.3 | 0.4 |
| | | | | | | | | | |
| 55,169 | 59,813 | 64,856 | 70,335 | 8.4 | 10.3 | 10.4 | 8.4 | 8.4 | 8.7 |
| 265,331 | 298,415 | 335,695 | 377,715 | 12.4 | 17.2 | 12.8 | 9.9 | 12.4 | 11.6 |
| 3,770 | 3,930 | 4,097 | 4,273 | 4.2 | 8.1 | 9.9 | 4.2 | 4.2 | 5.1 |
| 137,754 | 155,094 | 174,640 | 196,678 | 12.5 | 17.9 | 19.3 | 10.0 | 12.5 | 11.8 |
| 123,807 | 139,391 | 156,958 | 176,764 | 12.5 | 18.8 | 12.7 | 10.5 | 12.5 | 11.9 |
| 27,908 | 31,421 | 35,381 | 39,845 | 12.6 | 13.6 | 7.9 | 12.8 | 12.5 | 11.8 |
| 56,841 | 61,999 | 67,875 | 74,315 | 9.4 | 18.1 | 13.8 | 9.5 | 9.4 | 10.1 |
| 161,192 | 176,441 | 193,159 | 211,491 | 9.4 | 18.5 | 15.1 | 10.5 | 9.4 | 10.7 |
| 127,187 | 140,545 | 155,327 | 171,688 | 10.4 | 16.8 | 19.7 | 11.0 | 10.4 | 11.2 |
| 173,562 | 191,790 | 211,962 | 234,289 | 10.4 | 18.0 | 14.0 | 11.0 | 10.4 | 11.2 |
| 131,692 | 144,150 | 157,808 | 172,785 | 9.4 | 16.7 | 12.4 | 9.5 | 9.4 | 9.9 |
| -158,690 | -182,947 | -213,633 | -249,502 | 16.7 | | 18.8 | 16.8 | 16.7 | 17.1 |
| 841,992 | 921,626 | 1,008,427 | 1,102,959 | 9.6 | 15.8 | 12.9 | 9.8 | 9.6 | 10.2 |
| 113,724 | 124,483 | 136,277 | 149,211 | 9.4 | 12.3 | 12.4 | 9.5 | 9.4 | 9.9 |
| 955,716 | 1,046,109 | 1,144,704 | 1,252,170 | 9.8 | 15.3 | 12.8 | 9.7 | 9.8 | 10.2 |
| | | | | | | | | | |
| 489.9 | 510.8 | 532.5 | 555.3 | 4.2 | 6.3 | 7.0 | 4.2 | 4.2 | 4.7 |
| | | | | | | | | | |
| 11,260 | 11,711 | 12,179 | 12,666 | 4.0 | -0.1 | 4.0 | 4.0 | 4.0 | 4.0 |
| 54,155 | 58,426 | 63,038 | 68,020 | 7.8 | 8.1 | 5.2 | 5.5 | 7.8 | 6.8 |
| 769 | 769 | 769 | 769 | 0.0 | -1.7 | 4.0 | 0.0 | 0.0 | 0.7 |
| 29,118 | 30,365 | 32,795 | 35,418 | 8.0 | 10.4 | 5.0 | 5.5 | 8.0 | 6.7 |
| 25,289 | 27,291 | 29,474 | 31,832 | 8.0 | 8.1 | 5.5 | 6.0 | 8.0 | 6.9 |
| 5,696 | 6,152 | 6,644 | 7,175 | 8.0 | 6.7 | 8.0 | 8.0 | 8.0 | 8.0 |
| 11,561 | 12,139 | 12,746 | 13,383 | 5.0 | 9.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 32,900 | 34,545 | 36,272 | 38,086 | 5.0 | 6.5 | 6.5 | 6.0 | 5.0 | 5.6 |
| 25,959 | 27,517 | 29,168 | 30,918 | 6.0 | 7.6 | 6.5 | 6.5 | 6.0 | 6.2 |
| 35,425 | 37,550 | 39,803 | 42,191 | 6.0 | 7.0 | 6.5 | 6.5 | 6.0 | 6.2 |
| 26,879 | 28,223 | 29,634 | 31,116 | 5.0 | 7.7 | 5.0 | 5.0 | 5.0 | 5.0 |
| -31,981 | -35,819 | -40,117 | -44,931 | 12.0 | | 11.0 | 12.0 | 12.0 | 11.8 |
| 171,854 | 180,449 | 189,367 | 198,624 | 5.2 | 6.5 | 5.4 | 5.3 | 5.2 | 5.3 |
| 23,212 | 24,372 | 25,591 | 26,870 | 5.0 | 3.7 | 5.0 | 5.0 | 5.0 | 5.0 |
| 195,065 | 204,815 | 214,958 | 225,494 | 5.1 | 6.1 | 5.4 | 5.3 | 5.1 | 5.2 |
| | | | | | | | | | |
| 131,641 | 136,852 | 142,207 | 147,701 | 4.1 | 4.8 | 4.2 | 4.1 | 4.1 | 4.1 |
| | | | | | | | | | |
| 318 | 338 | 358 | 380 | 6.1 | 2.7 | 7.2 | 7.2 | 6.1 | 6.7 |
| 427 | 455 | 485 | 517 | 6.5 | 0.0 | 6.4 | 7.7 | 6.5 | 6.9 |
| 268 | 271 | 275 | 279 | 1.3 | | 8.3 | 4.2 | 1.3 | 9.4 |
| 434 | 463 | 494 | 526 | 6.8 | | 6.8 | 7.7 | 6.8 | 7.3 |
| 427 | 455 | 485 | 517 | 6.5 | | 9.4 | 9.2 | 6.6 | 8.6 |
| 2,135 | 2,329 | 2,541 | 2,772 | 9.1 | 7.8 | 9.1 | 9.1 | 9.1 | 9.1 |
| 145 | 147 | 150 | 153 | 1.9 | -1.7 | 1.5 | 1.9 | 1.9 | 1.9 |
| 154 | 160 | 165 | 171 | 3.7 | -2.2 | -0.5 | 1.0 | 3.7 | 2.1 |
| 299 | 314 | 329 | 345 | 4.8 | 0.7 | 0.5 | 1.9 | 4.8 | 3.1 |
| 822 | 846 | 871 | 896 | 2.9 | -2.6 | 1.4 | 2.4 | 2.9 | 2.5 |
| 153 | 159 | 166 | 172 | 4.0 | 4.8 | 2.9 | 4.0 | 4.0 | 3.8 |
| 255 | 265 | 274 | 284 | 3.8 | 1.3 | 3.5 | 3.6 | 3.8 | 3.7 |
| | | | | | | | | | |
| 20,785 | 21,824 | 22,915 | 24,061 | 5.0 | 14.2 | 5.0 | 5.0 | 5.0 | 5.0 |
| 589.8 | 619.3 | 650.3 | 682.8 | 5.0 | 14.2 | 5.0 | 5.0 | 5.0 | 5.0 |
| | | | | | | | | | |
| 138,129 | 149,180 | 161,137 | 174,077 | 7.9 | 14.8 | 12.4 | 8.0 | 7.9 | 8.7 |
| 300 | 300 | 300 | 300 | | | | | | |
| 149,098 | 161,105 | 174,191 | 188,174 | 8.0 | 14.1 | 12.3 | 7.7 | 8.0 | 8.6 |
| -1,500 | -1,500 | -1,500 | -1,500 | | | | | | |

| No. | | Item | Unit | Code | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 95/85 | 2000/199 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2000/95 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 82 | I | Deficit and Surplus | RS Million | GFDAS | -560 | -347 | 55 | 87 | -467 | -158 | 1 | -359 | 18 | 318 | -953 | | | -953 | -1,139 | -1,302 | -1,479 | -1,572 | -1,882 | 14.9 |
| 83 | | | | | | | | | | | | | | | | | | | | | | | | |
| 84 | | Government Finance at Constant Price (1990) | | | | | | | | | | | | | | | | | | | | | | |
| 85 | E | Revenue | RS Million | RGFREV | 5,685 | 6,044 | 7,012 | 7,856 | 8,395 | 8,885 | 9,348 | 9,989 | 9,986 | 10,591 | 10,145 | 6.0 | 6.0 | 10,145 | 10,653 | 11,185 | 11,745 | 12,332 | 12,949 | 5.0 |
| 86 | E | Grants Received | RS Million | RGFGRT | 263 | 341 | 253 | 261 | 75 | 116 | 56 | 22 | 63 | 98 | 170 | | | 170 | 0 | 0 | 0 | 0 | 0 | -100.0 |
| 87 | E | Expenditure | RS Million | RGFEXP | 6,891 | 6,508 | 6,907 | 7,786 | 8,232 | 8,880 | 9,190 | 10,112 | 9,813 | 10,738 | 11,262 | 5.3 | 5.0 | 11,262 | 11,814 | 12,393 | 13,000 | 13,637 | 14,305 | 4.9 |
| 88 | E | Lending - Repayment | RS Million | RGFNLD | 174 | 385 | 284 | 265 | 751 | 279 | 213 | 214 | 222 | -288 | -270 | | | -270 | | | | | | -100.0 |
| 89 | I | Deficit and Surplus | RS Million | RGFDAS | -918 | -508 | 74 | 106 | -514 | -158 | 1 | -315 | 15 | 239 | -678 | | | -676 | -1,161 | -1,207 | -1,255 | -1,305 | -1,357 | 14.9 |
| 90 | | | | | | | | | | | | | | | | | | | | | | | | |
| 91 | | Price Index and Exchange Rate | | | | | | | | | | | | | | | | | | | | | | |
| 92 | E | Consumer Price Index of South Africa | 1990=100 | CPISA | 49.0 | 58.2 | 67.5 | 76.2 | 87.4 | 100.0 | 115.3 | 131.3 | 144.0 | 157.0 | 170.0 | 13.3 | 10.0 | 171 | 187.7 | 206.4 | 227.1 | 249.8 | 274.8 | 10.0 |
| 93 | E | SA exchange Rates: Rand vs US Dollar | Rand / U.S. | EXGSA | 2.4 | 2.3 | 2.0 | 2.3 | 2.6 | 2.6 | 2.8 | 2.8 | 3.3 | 3.5 | 3.6 | 4.4 | 2.0 | 3.6 | 3.7 | 3.8 | 3.9 | 3.9 | 4.0 | 2.0 |
| 94 | E | Exchange Rates: Rs vs US Dollar | RS / U.S. | EXCHG | 15.44 | 13.47 | 12.89 | 13.44 | 15.25 | 14.86 | 15.65 | 15.56 | 17.05 | 17.96 | 17.91 | 1.5 | 2.0 | 17.91 | 20.5 | 20.9 | 21.3 | 21.7 | 22.1 | 2.0 |
| 95 | I | Import unit value Index | 1990=100 | IMVLIX | 85.0 | 89.7 | 72.1 | 78.7 | 93.7 | 100.0 | 104.7 | 106.9 | 118.0 | 126.5 | 135.8 | 4.7 | | 138 | 159.2 | 175.1 | 187.4 | 197.3 | 207.6 | 8.9 |
| 96 | I | Export unit value Index | 1990=100 | EXVLIX | 53.6 | 67.3 | 75.3 | 80.0 | 95.4 | 100.0 | 106.4 | 113.8 | 123.5 | 129.2 | 138.6 | 8.1 | | 139 | 163.3 | 170.0 | 177.1 | 184.5 | 192.3 | 6.8 |
| 97 | I | Consumer Price Index | 1990=100 | CPIMRT | 70.1 | 71.3 | 71.6 | 78.2 | 88.1 | 100.0 | 107.0 | 112.0 | 123.7 | 132.8 | 141.0 | 7.2 | | 141 | 165.0 | 172.8 | 179.9 | 187.4 | 195.2 | 6.7 |
| 98 | | | | | | | | | | | | | | | | | | | | | | | | |
| 99 | | GDE at Current Price | | | | | | | | | | | | | | | | | | | | | | |
| 100 | I | Private Consumption Expenditure | RS Million | EPCON | 11,118 | 12,000 | 14,690 | 17,215 | 20,850 | 24,840 | 27,542 | 30,599 | 35,738 | 40,360 | 44,730 | 14.9 | | 44,730 | 66,060 | 69,217 | 72,813 | 76,621 | 80,653 | 12.5 |
| 101 | I | Gov. Consumption Expenditure | RS Million | EGCON | 1,915 | 2,076 | 2,722 | 3,509 | 3,936 | 4,456 | 5,005 | 5,695 | 6,822 | 7,814 | 8,005 | 16.2 | | 8,505 | 10,711 | 11,725 | 12,839 | 14,064 | 15,411 | 12.4 |
| 102 | I | Gross Domestic Fixed Capital Formation | RS Million | EDFIX | 3,100 | 3,890 | 5,090 | 7,990 | 8,565 | 11,865 | 12,385 | 13,810 | 16,055 | 19,550 | 18,325 | 19.4 | | 18,325 | 23,087 | 21,581 | 24,183 | 31,866 | 35,810 | 14.3 |
| 103 | I | Private Fixed Capital Formation | RS Million | EPFIX | 2,100 | 2,515 | 3,415 | 4,655 | 6,330 | 7,560 | 8,870 | 8,980 | 11,025 | 13,855 | 12,460 | 19.5 | | 12,460 | 15,006 | 13,809 | 15,695 | 22,568 | 25,622 | 15.5 |
| 104 | I | Govern. Fixed Capital Formation | RS Million | EGFIX | 1,000 | 1,375 | 1,760 | 3,405 | 2,350 | 4,365 | 3,515 | 4,830 | 5,040 | 5,695 | 5,665 | 19.4 | | 5,865 | 7,082 | 7,752 | 8,498 | 9,298 | 10,188 | 11.7 |
| 105 | I | Export of Goods and Non-factor Services | RS Million | EEXP | 8,895 | 11,919 | 15,639 | 18,505 | 21,363 | 25,819 | 27,861 | 29,759 | 33,515 | 38,027 | 40,115 | 16.3 | | 40,115 | 50,855 | 56,710 | 63,264 | 70,504 | 78,927 | 14.5 |
| 106 | I | Import of Goods and Non-factor Service | RS Million | EIMP | 9,210 | 10,507 | 15,141 | 19,988 | 23,801 | 28,456 | 29,535 | 31,380 | 37,020 | 41,560 | 43,100 | 16.7 | | 43,100 | 59,054 | 62,491 | 68,310 | 76,895 | 84,365 | 14.4 |
| 107 | | | | | | | | | | | | | | | | | | | | | | | | |
| 108 | | GDE at Constant Price (1990) | | | | | | | | | | | | | | | | | | | | | | |
| 109 | I | Private Consumption Expenditure | RS Million | RPCON | 17,592 | 17,570 | 19,798 | 21,020 | 22,937 | 24,840 | 25,455 | 27,216 | 28,868 | 30,389 | 31,748 | 6.1 | | 31,748 | 39,551 | 39,751 | 40,097 | 40,445 | 40,798 | 5.1 |
| 110 | I | Gov. Consumption Expenditure | RS Million | RGCON | 3,030 | 3,040 | 3,668 | 4,284 | 4,330 | 4,456 | 4,626 | 5,000 | 5,511 | 5,880 | 6,107 | 7.3 | | 6,107 | 6,413 | 6,734 | 7,070 | 7,424 | 7,795 | 5.0 |
| 111 | I | Gross Domestic Fixed Capital Formation | RS Million | RDFIX | 4,905 | 5,695 | 6,860 | 9,756 | 9,422 | 11,805 | 11,446 | 12,125 | 12,977 | 14,710 | 13,006 | 10.2 | | 13,006 | 13,823 | 12,382 | 13,317 | 16,821 | 18,113 | 6.8 |
| 112 | I | Private Fixed Capital Formation | RS Million | RPFIX | 3,323 | 3,682 | 4,602 | 5,584 | 6,964 | 7,560 | 8,198 | 7,884 | 8,905 | 10,425 | 8,843 | 10.3 | | 8,843 | 9,583 | 7,930 | 8,643 | 11,913 | 12,960 | 7.9 |
| 113 | I | Govern. Fixed Capital Formation | RS Million | RGFIX | 1,582 | 2,013 | 2,372 | 4,194 | 2,585 | 4,365 | 3,249 | 4,241 | 4,071 | 4,285 | 4,163 | 10.2 | | 4,163 | 4,240 | 4,452 | 4,674 | 4,908 | 5,154 | 4.4 |
| 114 | I | Export of Goods and Non-factor Services | RS Million | REXP | 14,074 | 17,451 | 21,077 | 22,588 | 23,502 | 25,819 | 25,750 | 26,127 | 27,072 | 27,108 | 28,471 | 7.3 | | 28,467 | 30,448 | 32,568 | 34,838 | 37,269 | 39,872 | 7.0 |
| 115 | I | Import of Goods and Non-factor Service | RS Million | RIMP | 14,573 | 15,530 | 20,406 | 24,405 | 26,184 | 28,458 | 27,297 | 27,556 | 29,903 | 31,272 | 30,589 | 7.7 | | 30,589 | 35,358 | 35,888 | 37,617 | 40,590 | 42,873 | 6.9 |
| 116 | I | Stock & Statiscal Error | RS Million | RSSE | 2,154 | 1,333 | 1,743 | 1,854 | 2,549 | 942 | 893 | 248 | 947 | 317 | 192 | -21.5 | | 192 | -3,308 | -1,193 | -421 | -998 | -281 | -207.9 |
| 117 | I | GDE at Constant Price (1990) | | RGDE | 27,183 | 29,558 | 32,740 | 35,176 | 36,557 | 39,264 | 40,678 | 43,158 | 45,471 | 47,113 | 48,932 | 6.1 | | 48,932 | 51,572 | 54,354 | 57,284 | 60,371 | 63,622 | 5.4 |
| 118 | | | | | | | | | | | | | | | | | | | | | | | | |
| 119 | | Macro Index | | | | | | | | | | | | | | | | | | | | | | |
| 120 | I | Marginal Capital Coefficient of Public & Priva | None | MCCTOT | | 2.4 | 2.2 | 4.0 | 6.8 | 4.4 | 8.1 | 4.9 | 5.6 | 9.0 | 7.1 | | | 7.1 | 5.2 | 4.5 | 4.5 | 5.4 | 5.6 | -4.9 |
| 121 | I | Marginal Capital Coefficient of Private sector | None | MCCPRT | | 1.6 | 1.4 | 2.3 | 5.0 | 2.8 | 5.8 | 3.2 | 3.9 | 6.3 | 4.9 | | | 4.9 | 3.6 | 2.9 | 2.9 | 3.9 | 4.0 | -2.9 |
| 122 | I | RSSE/RGDE*100 | % | | | 4.5 | 5.3 | 5.3 | 7.0 | 2.4 | 1.7 | 0.6 | 2.1 | 0.7 | 0.4 | | | 0.4 | -6.41 | -2.19 | -0.74 | -2 | -0.44 | -202.4 |
| 123 | | | | | | | | | | | | | | | | | | | | | | | | |
| 124 | | | | | | | | | | | | | | | | | | | | | | | | |
| 125 | >> | >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>> | >>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> |
| 126 | | | | | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 95/85 | 2000/199 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2000/95 |
| 127 | | Conversion Factors | Conversion Factors | | | | | | | | | | | | | | | | | | | | | |
| 128 | E | Gasoline (0.7440 Kg / L, 1.344 Kl / Ton, 10500 | TOE / T | YGAS | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | |
| 129 | E | Diesel (0.8463 Kg / L, 1.1816 Kl / Ton, 10200 | TOE / T | YDIE | 1.010 | 1.010 | 1.010 | 1.010 | 1.010 | 1.010 | 1.010 | 1.010 | 1.010 | 1.010 | 1.010 | | 1.010 | 1.010 | 1.010 | 1.010 | 1.010 | 1.010 | 1.010 | |
| 130 | E | Kerosene (0.7973 Kg / L, 1.2542 Kl / Ton, 1034 | TOE / T | YKER | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | |
| 131 | E | Fuel oil (0.9516 Kg / L, 1.0508 Kl / Ton, 9627 | TOE / T | YFUE | 0.960 | 0.960 | 0.960 | 0.960 | 0.960 | 0.960 | 0.960 | 0.960 | 0.960 | 0.960 | 0.960 | | 0.960 | 0.960 | 0.960 | 0.960 | 0.960 | 0.960 | 0.960 | |
| 132 | E | LPG (10812 Kcal / Kg) | TOE / T | YLPG | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | |
| 133 | E | Jet Fuel | TOE / T | YJFL | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | |
| 134 | E | Coal (6151 Kcal / Kg) | TOE / T | YCOL | 0.620 | 0.620 | 0.620 | 0.620 | 0.620 | 0.620 | 0.620 | 0.620 | 0.620 | 0.620 | 0.620 | | 0.620 | 0.620 | 0.620 | 0.620 | 0.520 | 0.620 | 0.620 | |
| 135 | E | Bagasse (1851 Kcal / Kg) | TOE / T | YBAG | 0.160 | 0.160 | 0.160 | 0.160 | 0.160 | 0.160 | 0.160 | 0.160 | 0.160 | 0.160 | 0.160 | | 0.160 | 0.160 | 0.160 | 0.160 | 0.100 | 0.160 | 0.160 | |
| 136 | E | Fuel Wood | TOE / T | YFWD | 0.380 | 0.380 | 0.380 | 0.380 | 0.380 | 0.380 | 0.380 | 0.380 | 0.380 | 0.380 | 0.380 | | 0.380 | 0.380 | 0.380 | 0.380 | 0.380 | 0.380 | 0.380 | |
| 137 | E | Charcoal | TOE / T | YCHL | 0.740 | 0.740 | 0.740 | 0.740 | 0.740 | 0.740 | 0.740 | 0.740 | 0.740 | 0.740 | 0.740 | | 0.740 | 0.740 | 0.740 | 0.740 | 0.740 | 0.740 | 0.740 | |
| 138 | E | Electricity (860 Kcal / Kwh) | TOE / MWh | YELE | 0.086 | 0.086 | 0.086 | 0.086 | 0.086 | 0.086 | 0.086 | 0.086 | 0.086 | 0.086 | 0.086 | | 0.084 | 0.086 | 0.086 | 0.086 | 0.086 | 0.086 | 0.086 | |
| 139 | E | Hydo Electricity | TOE / MWh | YHEL | 0.220 | 0.220 | 0.220 | 0.220 | 0.220 | 0.220 | 0.220 | 0.220 | 0.220 | 0.220 | 0.220 | | 0.220 | 0.220 | 0.220 | 0.220 | 0.220 | 0.220 | 0.220 | |
| 140 | | | | | | | | | | | | | | | | | | | | | | | | |
| 141 | | World Energy Price Trends | | | | | | | | | | | | | | | | | | | | | | |
| 142 | E | Petroleum Spot Price (Dubai Fatech, FOB) | US$ / bbl | WPETDU | 26.5 | 13.1 | 16.9 | 13.2 | 15.7 | 20.5 | 16.5 | 17.2 | 15.0 | 14.8 | 16.3 | -4.7 | 3.0 | 16.3 | 19.8 | 17.3 | 17.8 | 18.3 | 18.9 | 3.0 |
| 143 | E | Coal Price (South Africa, CIF) | Rp / T | WCOLSA | 443 | 443 | 443 | 568 | 780 | 721 | 760 | 795 | 848 | 900 | 908 | 7.4 | 1.8 | 908 | 924 | 941 | 958 | 975 | 993 | 1.8 |
| 144 | | | | | | | | | | | | | | | | | | | | | | | | |
| 145 | | Energy Wholesale Prices (PHY) | | | | | | | | | | | | | | | | | | | | | | |
| 146 | I | Gasoline | RS / Liter | GPGAS | 7.3 | 7.4 | 7.4 | 7.4 | 7.4 | 7.4 | 9.1 | 9.1 | 9.1 | 9.1 | 9.1 | 1.5 | 4.7 | 9.1 | 10.5 | 11.0 | 11.5 | 12.1 | 12.6 | 6.7 |
| 147 | I | Diesel (Gas oil) | RS / Liter | GPDIE | 4.6 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | 1.1 | 4.7 | 5.2 | 5.4 | 5.7 | 5.9 | 6.2 | 6.5 | 4.7 |
| 148 | I | Kerosene | RS / Liter | GPKER | 3.8 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | -0.9 | 4.7 | 3.4 | 3.6 | 3.8 | 3.9 | 4.1 | 4.3 | 4.7 |
| 149 | I | Fuel Oil | RS / Liter | GPFUE | 3.1 | 1.5 | 1.6 | 1.5 | 2.0 | 2.4 | 2.1 | 2.2 | 2.2 | 2.2 | 2.4 | -2.4 | 4.7 | 2.4 | 2.5 | 2.6 | 2.8 | 2.9 | 3.0 | 4.7 |
| 150 | I | LPG | RS / Kg | GPLPG | 13.8 | 14.5 | 7.8 | 7.8 | 8.6 | 10.2 | 10.2 | 10.2 | 10.2 | 10.2 | 11.8 | -1.6 | 4.7 | 11.8 | 12.3 | 12.9 | 13.5 | 14.1 | 14.8 | 4.7 |
| 151 | I | Coal | RS / T | GPCOL | 443.0 | 443.0 | 443.0 | 568.0 | 760.0 | 721.0 | 760.0 | 785.0 | 848.0 | 900.0 | 908.0 | 7.4 | 3.8 | 908 | 943 | 978 | 1,015 | 1,054 | 1,094 | 3.8 |
| 152 | | | | | | | | | | | | | | | | | | | | | | | | |
| 153 | | Energy Wholesale Prices (TOE) | | | | | | | | | | | | | | | | | | | | | | |
| 154 | I | Gasoline | RS / TOE | TPGAS | 7,292 | 6,884 | 6,884 | 6,884 | 6,884 | 6,884 | 8,444 | 8,444 | 8,444 | 8,444 | 8,444 | 1.5 | | 8,444 | 9,725 | 10,183 | 10,661 | 11,162 | 11,697 | 6.7 |
| 155 | I | Diesel (Gas oil) | RS / TOE | TPDIE | 4,595 | 4,269 | 4,269 | 4,269 | 4,269 | 4,269 | 5,129 | 5,129 | 5,129 | 5,129 | 5,129 | 1.1 | | 5,129 | 5,370 | 5,622 | 5,886 | 6,163 | 6,453 | 4.7 |
| 156 | I | Kerosene | RS / TOE | TPKER | 3,627 | 3,204 | 3,204 | 3,204 | 3,204 | 3,204 | 3,298 | 3,298 | 3,298 | 3,298 | 3,298 | -0.9 | | 3,298 | 3,453 | 3,615 | 3,785 | 3,963 | 4,149 | 4.7 |
| 157 | I | Fuel oil | RS / TOE | TPFUE | 3,182 | 1,596 | 1,853 | 1,604 | 2,068 | 2,479 | 2,208 | 2,282 | 2,308 | 2,325 | 2,499 | -2.4 | | 2,499 | 2,617 | 2,740 | 2,868 | 3,003 | 3,144 | 4.7 |
| 158 | I | LPG | RS / TOE | TPLPG | 12,756 | 13,497 | 7,244 | 7,244 | 7,928 | 9,407 | 9,407 | 9,407 | 9,407 | 9,407 | 10,889 | -1.6 | | 10,889 | 11,401 | 11,936 | 12,499 | 13,085 | 13,700 | 4.7 |
| 159 | I | Coal | RS / TOE | TPCOL | 715 | 715 | 715 | 916 | 1,226 | 1,163 | 1,226 | 1,266 | 1,368 | 1,452 | 1,465 | 7.4 | | 1,465 | 1,520 | 1,578 | 1,538 | 1,700 | 1,765 | 3.8 |
| 160 | | | | | | | | | | | | | | | | | | | | | | | | |
| 161 | | Energy Retail Prices (PHY) | | | | | | | | | | | | | | | | | | | | | | |
| 162 | I | Gasoline | RS / Liter | GRGAS | 8.11 | 7.7 | 7.7 | 7.7 | 7.7 | 7.7 | 9.4 | 9.4 | 9.4 | 9.4 | 9.4 | 1.5 | 4.0 | 9.4 | 11.6 | 12.1 | 12.7 | 13.3 | 13.9 | 8.2 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -1.882 | -1.705 | -1.832 | -1.962 | -2.096 | -2.232 | -2.372 | -2.513 | -2.657 | -2.801 | -2.945 | |
| 5.6 | 12.949 | 13.415 | 13.838 | 14.398 | 14.916 | 15.453 | 16.010 | 16.586 | 17.183 | 17.802 | 18.442 | 3.6 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4.7 | 14.305 | 14.777 | 15.285 | 15.768 | 16.289 | 16.826 | 17.382 | 17.955 | 18.546 | 19.160 | 19.792 | 3.3 |
| | 0 | | | | | | | | | | | |
| | -1.357 | -1.362 | -1.387 | -1.371 | -1.373 | -1.373 | -1.372 | -1.369 | -1.365 | -1.358 | -1.350 | |
| 10.0 | 274.8 | 302.2 | 332.5 | 365.7 | 402.3 | 442.5 | 486.7 | 535.4 | 589.0 | 647.9 | 712.8 | 10.0 |
| 2.0 | 4 | 4.1 | 4.2 | 4.3 | 4.3 | -4.4 | 4.5 | 4.6 | 4.7 | 4.8 | 4.9 | 2.0 |
| 2.0 | 22 | 22.8 | 23.0 | 23.5 | 24.0 | 24.5 | 24.9 | 25.4 | 25.9 | 26.5 | 27.0 | 2.0 |
| 218.9 | 208 | 218.5 | 230.0 | 242.1 | 254.8 | 268.2 | 282.3 | 297.1 | 312.7 | 329.2 | 346.5 | 5.3 |
| 192.3 | 192 | 200.0 | 208.1 | 216.5 | 225.4 | 234.6 | 244.3 | 254.5 | 265.1 | 278.3 | 287.9 | 4.1 |
| 195.9 | 195 | 203.0 | 211.1 | 219.6 | 229.5 | 237.8 | 247.5 | 257.7 | 268.4 | 279.6 | 291.3 | 4.1 |
| | 80.659 | 114.411 | 121.455 | 128.959 | 136.953 | 145.471 | 154.547 | 164.221 | 174.532 | 185.523 | 197.241 | 9.4 |
| | 15.411 | 16.626 | 17.941 | 19.365 | 20.907 | 22.577 | 24.386 | 26.347 | 28.472 | 30.776 | 33.275 | 8.0 |
| | 35.810 | 39.398 | 37.781 | 41.589 | 51.617 | 56.857 | 82.679 | 89.115 | 78.247 | 84.151 | 92.916 | 10.0 |
| | 25.822 | 28.408 | 25.920 | 28.787 | 37.795 | 41.941 | 45.556 | 51.697 | 57.423 | 63.804 | 70.917 | 10.7 |
| | 10.188 | 10.992 | 11.861 | 12.803 | 13.822 | 14.926 | 16.122 | 17.419 | 18.824 | 20.347 | 21.999 | 8.0 |
| | 78.827 | 87.113 | 96.303 | 106.498 | 117.811 | 130.368 | 144.311 | 159.797 | 177.003 | 195.124 | 217.382 | 10.7 |
| | 84.365 | 105.293 | 112.087 | 122.110 | 135.848 | 148.248 | 161.894 | 176.921 | 193.480 | 211.738 | 231.883 | 10.6 |
| 41,356 | 40795.85 | 55.572 | 56.637 | 57.721 | 58.822 | 59.942 | 61.080 | 62.235 | 63.409 | 64.601 | 65.810 | 4.9 |
| 7,725 | 7.795 | 8.076 | 8.365 | 8.668 | 8.980 | 9.303 | 9.638 | 9.985 | 10.344 | 10.717 | 11.102 | 3.8 |
| 18,113 | 18.113 | 19.137 | 17.818 | 18.615 | 22.170 | 23.432 | 24.772 | 26.193 | 27.701 | 29.302 | 31.002 | 5.5 |
| 12,066 | 12.987 | 13.798 | 12.087 | 12.884 | 15.233 | 17.282 | 18.400 | 19.592 | 20.862 | 22.217 | 23.881 | 8.2 |
| 5,154 | 5.154 | 5.339 | 5.531 | 5.730 | 5.937 | 6.150 | 6.372 | 6.601 | 6.839 | 7.085 | 7.340 | 3.6 |
| 57,880 | 39.872 | 42.313 | 44.908 | 47.667 | 50.600 | 53.719 | 57.034 | 60.559 | 64.307 | 68.292 | 72.529 | 6.2 |
| 56,839 | 42.673 | 51.143 | 52.268 | 54.655 | 58.347 | 61.086 | 63.983 | 67.048 | 70.293 | 73.729 | 77.368 | 6.1 |
| | -281 | -6.958 | -4.713 | -3.733 | -4.019 | -2.982 | -1.884 | -724 | 500 | 1.787 | 3.136 | -201.0 |
| | 63.822 | 66.998 | 70.549 | 74.282 | 78.205 | 82.327 | 86.656 | 91.200 | 95.968 | 100.969 | 106.211 | 5.3 |
| | 5.6 | 5.7 | 5.0 | 5.0 | 5.7 | 5.7 | 5.7 | 5.8 | 5.8 | 5.9 | 5.9 | 0.6 |
| | 4.0 | 4.1 | 3.4 | 3.5 | 4.1 | 4.2 | 4.3 | 4.3 | 4.4 | 4.4 | 4.5 | 1.9 |
| | -0.44 | -10.38 | -6.68 | -5.09 | -5.14 | -3.62 | -2.17 | -0.79 | 0.5 | 1.8 | 3.0 | #NUM! |
| >>>>>>>>> | >>>>>>>>>> | >>>>>>>>> | >>>>>>>>>> | >>>>>>>>>> | >>>>>>>> | >>>>>>>>> | >>>>>>>>>> | >>>>>>>> | >>>>>>>>>> | >>>>>>>>>> | >>>>>>>>>> | |
| 2010/2000 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2010/200 |
| 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | |
| 1.010 | 1.010 | 1.010 | 1.010 | 1.010 | 1.010 | 1.010 | 1.010 | 1.010 | 1.010 | 1.010 | 1.010 | |
| 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | |
| 0.960 | 0.960 | 0.960 | 0.960 | 0.960 | 0.960 | 0.960 | 0.960 | 0.960 | 0.960 | 0.960 | 0.960 | |
| 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | |
| 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | |
| 0.620 | 0.620 | 0.620 | 0.620 | 0.620 | 0.620 | 0.620 | 0.620 | 0.620 | 0.620 | 0.620 | 0.620 | |
| 0.160 | 0.160 | 0.160 | 0.160 | 0.160 | 0.160 | 0.160 | 0.160 | 0.160 | 0.160 | 0.160 | 0.160 | |
| 0.380 | 0.380 | 0.380 | 0.380 | 0.380 | 0.380 | 0.380 | 0.380 | 0.380 | 0.380 | 0.380 | 0.380 | |
| 0.740 | 0.740 | 0.740 | 0.740 | 0.740 | 0.740 | 0.740 | 0.740 | 0.740 | 0.740 | 0.740 | 0.740 | |
| 0.086 | 0.086 | 0.086 | 0.086 | 0.086 | 0.086 | 0.086 | 0.086 | 0.086 | 0.086 | 0.086 | 0.086 | |
| 0.220 | 0.220 | 0.220 | 0.220 | 0.220 | 0.220 | 0.220 | 0.220 | 0.220 | 0.220 | 0.220 | 0.220 | |
| 3.0 | 19 | 19.5 | 20.0 | 20.6 | 21.3 | 21.9 | 22.6 | 23.2 | 23.9 | 24.7 | 25.4 | 3.0 |
| 1.8 | 953 | 1,011 | 1,029 | 1,047 | 1,066 | 1,085 | 1,105 | 1,125 | 1,145 | 1,168 | 1,187 | 1.8 |
| 4.7 | 12.6 | 13.2 | 13.8 | 14.5 | 15.2 | 15.9 | 16.6 | 17.4 | 18.2 | 19.1 | 20.0 | 4.7 |
| 4.7 | 6.5 | 6.8 | 7.1 | 7.5 | 7.8 | 8.2 | 8.6 | 9.0 | 9.4 | 9.9 | 10.3 | 4.7 |
| 4.7 | 4.3 | 4.5 | 4.7 | 5.0 | 5.2 | 5.4 | 5.7 | 6.0 | 6.2 | 6.5 | 6.8 | 4.7 |
| 4.7 | 3.0 | 3.2 | 3.3 | 3.5 | 3.6 | 3.8 | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 4.7 |
| 4.7 | 14.8 | 15.5 | 16.2 | 17.0 | 17.8 | 18.6 | 19.5 | 20.4 | 21.4 | 22.4 | 23.4 | 4.7 |
| 3.8 | 1094 | 1135.7 | 1176.9 | 1223.7 | 1270.2 | 1318.4 | 1368.5 | 1420.5 | 1474.5 | 1530.6 | 1588.7 | 3.8 |
| | 11.687 | 12.236 | 12.811 | 13.413 | 14.044 | 14.704 | 15.395 | 16.118 | 16.878 | 17.669 | 18.500 | 4.7 |
| | 6.453 | 6.756 | 7.074 | 7.406 | 7.754 | 8.118 | 8.500 | 8.900 | 9.318 | 9.756 | 10.214 | 4.7 |
| | 4.149 | 4.345 | 4.549 | 4.762 | 4.986 | 5.221 | 5.466 | 5.723 | 5.992 | 6.274 | 6.568 | 4.7 |
| | 3.144 | 3.292 | 3.447 | 3.609 | 3.779 | 3.956 | 4.142 | 4.337 | 4.541 | 4.754 | 4.977 | 4.7 |
| | 13.700 | 14.344 | 15.018 | 15.724 | 16.463 | 17.237 | 18.047 | 18.895 | 19.783 | 20.713 | 21.686 | 4.7 |
| | 1.765 | 1.832 | 1.901 | 1.974 | 2.049 | 2.127 | 2.207 | 2.291 | 2.378 | 2.469 | 2.562 | 3.8 |
| 4.0 | 13.9 | 14.6 | 15.3 | 16.0 | 16.7 | 17.5 | 18.3 | 19.2 | 20.1 | 21.0 | 22.0 | 4.7 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -2945 | -2.595 | -2.975 | -3.389 | -3.838 | -4.326 | -4.857 | -5.434 | -6.061 | -6.743 | -7.485 | -8.29 |
| 5.6 | 18442 | 19.106 | 19.794 | 20.507 | 21.245 | 22.010 | 22.802 | 23.623 | 24.473 | 25.354 | 26.267 | 27.21 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4.0 | 19792 | 20.515 | 21.263 | 22.039 | 22.844 | 23.676 | 24.542 | 25.436 | 26.366 | 27.328 | 28.328 | 29.35 |
| | 0 | | | | | | | | | | | |
| | -1350 | -1.408 | -1.469 | -1.533 | -1.599 | -1.668 | -1.740 | -1.815 | -1.893 | -1.974 | -2.059 | -2.14 |
| 10.0 | 713 | 783.9 | 862.3 | 948.5 | 1043.4 | 1147.7 | 1262.5 | 1388.7 | 1527.6 | 1680.4 | 1848.4 | 2033.2 |
| 2.0 | 5 | 5.0 | 5.1 | 5.2 | 5.3 | 5.4 | 5.5 | 5.6 | 5.7 | 5.8 | 6.0 | 6.1 |
| 2.0 | 27.00 | 27.5 | 28.1 | 28.6 | 29.2 | 29.8 | 30.4 | 31.0 | 31.6 | 32.3 | 32.9 | 33.5 |
| 397.7 | 346 | 364.7 | 383.8 | 404.0 | 425.2 | 447.5 | 471.1 | 495.8 | 521.9 | 549.3 | 578.1 | 608.5 |
| 287.9 | 288 | 299.5 | 311.5 | 324.1 | 337.1 | 350.7 | 364.3 | 379.7 | 395.1 | 411.2 | 428.0 | 445.5 |
| 283.8 | 291 | 302.9 | 314.9 | 327.5 | 340.6 | 354.2 | 368.4 | 383.2 | 398.6 | 414.7 | 431.5 | 449.0 |
| | 197.241 | 208.018 | 286.529 | 306.315 | 327.453 | 350.065 | 374.217 | 400.023 | 427.593 | 457.042 | 488.494 | 522.07 |
| | 33.275 | 35.900 | 38.733 | 41.793 | 45.097 | 48.667 | 52.522 | 56.689 | 61.191 | 66.056 | 71.316 | 77.00 |
| | 92.918 | 101.761 | 99.395 | 108.990 | 131.948 | 144.673 | 158.666 | 174.059 | 190.997 | 209.643 | 230.175 | 252.79 |
| | 70.917 | 78.027 | 73.788 | 81.360 | 102.133 | 112.498 | 123.942 | 136.580 | 150.543 | 165.971 | 183.026 | 201.88 |
| | 21.999 | 23.734 | 25.608 | 27.630 | 29.815 | 32.175 | 34.724 | 37.478 | 40.455 | 43.672 | 47.149 | 50.90 |
| | 217.382 | 229.021 | 252.267 | 277.930 | 306.268 | 337.569 | 372.150 | 410.367 | 452.614 | 499.328 | 550.997 | 608.16 |
| | 231.883 | 276.400 | 295.702 | 322.828 | 358.762 | 391.969 | 428.402 | 468.390 | 512.299 | 560.532 | 613.539 | 671.81 |
| 67,517 | 65.810 | 85.871 | 88.150 | 90.482 | 92.868 | 95.308 | 97.803 | 100.351 | 102.953 | 105.607 | 108.314 | 111.07 |
| 11,102 | 11.102 | 11.502 | 11.916 | 12.345 | 12.789 | 13.250 | 13.727 | 14.221 | 14.733 | 15.263 | 15.813 | 16.38 |
| 31,002 | 31.002 | 32.604 | 30.579 | 32.194 | 37.420 | 39.388 | 41.468 | 43.665 | 45.987 | 48.442 | 51.037 | 52.78 |
| 22,714 | 23.660 | 24.999 | 22.701 | 24.033 | 28.965 | 30.629 | 32.393 | 34.263 | 36.247 | 38.350 | 40.582 | 42.95 |
| 7,340 | 7.340 | 7.604 | 7.878 | 8.162 | 8.456 | 8.760 | 9.075 | 9.402 | 9.740 | 10.091 | 10.454 | 10.83 |
| 96,535 | 69.366 | 73.377 | 77.609 | 82.097 | 86.857 | 91.906 | 97.262 | 102.948 | 108.977 | 115.378 | 122.172 | 129.38 |
| 111,346 | 77.368 | 88.557 | 90.972 | 95.359 | 101.744 | 106.717 | 111.964 | 117.502 | 123.348 | 129.520 | 136.040 | 142.92 |
| | 3.136 | -2.950 | 486 | 2.226 | 2.319 | 4.217 | 6.230 | 8.359 | 10.604 | 12.962 | 15.434 | 18.01 |
| | 106.211 | 111.847 | 117.766 | 123.985 | 130.509 | 137.353 | 144.526 | 152.040 | 159.906 | 168.133 | 176.730 | 185.70 |
| | 5.9 | 5.8 | 5.2 | 5.2 | 5.7 | 5.8 | 5.8 | 5.8 | 5.8 | 5.9 | 5.9 | 6.0 |
| | 4.5 | 4.4 | 3.8 | 3.9 | 4.4 | 4.5 | 4.5 | 4.6 | 4.8 | 4.7 | 4.7 | 4.8 |
| | 3.0 | -2.6 | 0.4 | 1.9 | 1.8 | 3.1 | 4.3 | 5.5 | 6.6 | 7.7 | 8.7 | 9.7 |
| >>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>>> | >>>>>>>>> |
| 2025/2010 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 202 |
| 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 |
| 1.010 | 1.010 | 1.010 | 1.010 | 1.010 | 1.010 | 1.010 | 1.010 | 1.010 | 1.010 | 1.010 | 1.010 | 1.010 |
| 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 |
| 0.960 | 0.960 | 0.960 | 0.960 | 0.960 | 0.960 | 0.960 | 0.960 | 0.960 | 0.960 | 0.960 | 0.960 | 0.960 |
| 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 | 1.080 |
| 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 | 1.040 |
| 0.620 | 0.620 | 0.620 | 0.620 | 0.620 | 0.620 | 0.620 | 0.620 | 0.620 | 0.620 | 0.620 | 0.620 | 0.620 |
| 0.160 | 0.160 | 0.160 | 0.160 | 0.160 | 0.160 | 0.160 | 0.160 | 0.160 | 0.160 | 0.160 | 0.160 | 0.160 |
| 0.380 | 0.380 | 0.380 | 0.380 | 0.380 | 0.380 | 0.380 | 0.380 | 0.380 | 0.380 | 0.380 | 0.380 | 0.380 |
| 0.740 | 0.740 | 0.740 | 0.740 | 0.740 | 0.740 | 0.740 | 0.740 | 0.740 | 0.740 | 0.740 | 0.740 | 0.740 |
| 0.086 | 0.086 | 0.086 | 0.086 | 0.086 | 0.085 | 0.085 | 0.086 | 0.085 | 0.086 | 0.088 | 0.086 | 0.086 |
| 0.220 | 0.220 | 0.220 | 0.220 | 0.220 | 0.220 | 0.220 | 0.220 | 0.220 | 0.220 | 0.220 | 0.220 | 0.220 |
| 4.0 | 25 | 26.4 | 27.5 | 28.0 | 29.7 | 30.9 | 32.1 | 33.4 | 34.8 | 36.1 | 37.5 | 39.1 |
| 2.4 | 1187 | 1.215 | 1.244 | 1.274 | 1.305 | 1.336 | 1.368 | 1.401 | 1.435 | 1.469 | 1.504 | 1.54 |
| 5.6 | 20.0 | 21.1 | 22.3 | 23.5 | 24.8 | 26.2 | 27.6 | 29.2 | 30.8 | 32.5 | 34.3 | 36.2 |
| 5.6 | 10.3 | 10.9 | 11.5 | 12.1 | 12.8 | 13.5 | 14.3 | 15.1 | 15.9 | 16.8 | 17.7 | 18.7 |
| 5.6 | 6.8 | 7.2 | 7.6 | 8.0 | 8.5 | 8.9 | 9.4 | 10.0 | 10.5 | 11.1 | 11.7 | 12.4 |
| 5.6 | 4.8 | 5.0 | 5.3 | 5.6 | 5.9 | 6.3 | 6.6 | 7.0 | 7.4 | 7.8 | 8.2 | 8.7 |
| 5.6 | 23.4 | 24.7 | 26.1 | 27.5 | 29.1 | 30.7 | 32.4 | 34.2 | 36.1 | 38.1 | 40.2 | 42.4 |
| 4.4 | 1.589 | 1658.6 | 1731.6 | 1807.8 | 1887.3 | 1970.4 | 2057.1 | 2147.6 | 2242.1 | 2340.7 | 2443.7 | 2551.2 |
| | 18.500 | 19.526 | 20.610 | 21.754 | 22.961 | 24.236 | 25.581 | 27.000 | 28.499 | 30.081 | 31.750 | 33.51 |
| | 10.214 | 10.781 | 11.380 | 12.011 | 12.678 | 13.381 | 14.124 | 14.908 | 15.735 | 16.609 | 17.530 | 18.50 |
| | 6.568 | 6.933 | 7.318 | 7.724 | 8.153 | 8.605 | 9.083 | 9.587 | 10.119 | 10.680 | 11.273 | 11.89 |
| | 4.977 | 5.254 | 5.545 | 5.853 | 6.178 | 6.521 | 6.883 | 7.265 | 7.668 | 8.093 | 8.543 | 9.01 |
| | 21.686 | 22.890 | 24.160 | 25.501 | 26.916 | 28.410 | 29.987 | 31.651 | 33.408 | 35.262 | 37.219 | 39.28 |
| | 2.562 | 2.675 | 2.793 | 2.916 | 3.044 | 3.178 | 3.318 | 3.464 | 3.618 | 3.775 | 3.541 | 4.11 |
| 4.0 | 22.0 | 23.2 | 24.5 | 25.9 | 27.3 | 28.9 | 30.5 | 32.1 | 33.9 | 35.8 | 37.8 | 39.9 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| -9,170 | -10,125 | -11,165 | -12,297 | 10.0 | | | | | |
| 28,193 | 29,207 | 30,259 | 31,348 | 3.6 | 6.0 | 5.0 | 3.6 | 3.6 | 3.8 |
| 0 | 0 | 0 | 0 | | | | | | |
| 30,432 | 31,542 | 32,694 | 33,887 | 3.7 | 5.3 | 4.9 | 3.3 | 3.7 | 3.7 |
| -2,239 | -2,335 | -2,435 | -2,539 | 4.8 | | | | | |
| 2,239.6 | 2,460.2 | 2,706.2 | 2,976.9 | 10.0 | 13.3 | 10.0 | 10.0 | 10.0 | 10.0 |
| 6.2 | 6.3 | 6.4 | 6.5 | 2.0 | 4.4 | 2.0 | 2.0 | 2.0 | 2.0 |
| 34.2 | 34.9 | 35.6 | 36.3 | 2.0 | 1.5 | 2.0 | 2.0 | 2.0 | 2.4 |
| 640.5 | 674.1 | 709.5 | 746.8 | 5.3 | 4.7 | 8.9 | 5.3 | 5.3 | 5.6 |
| 463.8 | 482.9 | 502.9 | 523.7 | 4.1 | 8.1 | 5.8 | 4.1 | 4.1 | 4.5 |
| 467.3 | 486.3 | 506.2 | 527.0 | 4.0 | 7.2 | 5.7 | 4.1 | 4.0 | 4.5 |
| 557,933 | 596,203 | 637,040 | 680,607 | 8.6 | 14.9 | 12.5 | 9.4 | 8.6 | 9.5 |
| 83,153 | 89,806 | 97,004 | 104,794 | 7.9 | 16.2 | 12.4 | 8.0 | 7.9 | 8.7 |
| 277,716 | 305,199 | 335,496 | 368,931 | 9.6 | 19.4 | 14.3 | 10.0 | 9.6 | 10.5 |
| 222,741 | 245,819 | 271,364 | 299,648 | 10.1 | 19.5 | 15.5 | 10.7 | 10.1 | 11.2 |
| 54,975 | 59,373 | 64,132 | 69,283 | 7.9 | 19.4 | 11.7 | 8.0 | 7.9 | 8.6 |
| 671,442 | 741,500 | 819,095 | 905,071 | 10.0 | 19.3 | 14.5 | 10.7 | 10.0 | 10.9 |
| 735,922 | 806,467 | 884,138 | 969,697 | 10.0 | 16.7 | 14.4 | 10.6 | 10.0 | 10.9 |
| 113,876 | 116,729 | 119,626 | 122,566 | 4.2 | 6.1 | 5.1 | 4.9 | 4.2 | 4.6 |
| 16,972 | 17,583 | 18,216 | 18,872 | 3.6 | 7.3 | 5.0 | 3.6 | 3.6 | 3.8 |
| 56,683 | 59,759 | 63,001 | 66,438 | 5.2 | 10.2 | 6.8 | 5.5 | 5.2 | 5.8 |
| 45,462 | 48,128 | 50,958 | 53,961 | 5.7 | 10.3 | 7.9 | 6.2 | 5.6 | 6.2 |
| 11,221 | 11,625 | 12,049 | 12,477 | 3.6 | 10.2 | 4.4 | 3.6 | 3.6 | 3.7 |
| 137,044 | 145,176 | 153,819 | 162,988 | 5.9 | 7.3 | 7.0 | 6.2 | 5.5 | 6.0 |
| 150,204 | 157,896 | 166,027 | 174,526 | 5.6 | 7.7 | 6.9 | 6.1 | 5.6 | 6.0 |
| 20,695 | 23,470 | 26,329 | 29,257 | 16.1 | -21.5 | -207.9 | -136.9 | 16.1 | |
| 195,065 | 204,815 | 214,958 | 225,494 | 5.1 | 6.1 | 5.4 | 5.3 | 5.1 | 5.2 |
| 6.1 | 6.1 | 6.2 | 6.3 | 0.4 | | -4.9 | 0.6 | 0.4 | -0.4 |
| 4.9 | 4.9 | 5.0 | 5.1 | 0.8 | | -3.9 | 1.3 | 0.8 | 0.2 |
| 10.6 | 11.5 | 12.2 | 13.0 | 10.4 | | -202.4 | #NUM! | 10.4 | |
| >>>>>>>>>> | >>>>>>>>>> | >>>>>>>>>> | >>>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> | >>>>>>>>> |
| 2022 | 2023 | 2024 | 2025 | 2025/2010 | 1995/1985 | 2000/1995 | 2010/2000 | | |
| 1.080 | 1.080 | 1.080 | 1.080 | | | | | | |
| 1.010 | 1.010 | 1.010 | 1.010 | | | | | | |
| 1.040 | 1.040 | 1.040 | 1.040 | | | | | | |
| 0.960 | 0.960 | 0.960 | 0.960 | | | | | | |
| 1.080 | 1.080 | 1.080 | 1.080 | | | | | | |
| 1.040 | 1.040 | 1.040 | 1.040 | | | | | | |
| 0.620 | 0.620 | 0.620 | 0.620 | | | | | | |
| 0.160 | 0.160 | 0.160 | 0.160 | | | | | | |
| 0.380 | 0.380 | 0.380 | 0.380 | | | | | | |
| 0.740 | 0.740 | 0.740 | 0.740 | | | | | | |
| 0.086 | 0.086 | 0.086 | 0.086 | | | | | | |
| 0.220 | 0.220 | 0.220 | 0.220 | | | | | | |
| 40.7 | 42.3 | 44.0 | 45.7 | 4.0 | -4.7 | 3.0 | 3.0 | 4.0 | 3.5 |
| 1,577 | 1,615 | 1,654 | 1,694 | 2.4 | 7.4 | 1.8 | 1.8 | 2.4 | 2.1 |
| 39.2 | 40.3 | 42.6 | 44.9 | 5.6 | 1.5 | 6.7 | 4.7 | 5.6 | 5.5 |
| 19.7 | 20.8 | 22.0 | 23.2 | 5.6 | 1.1 | 4.7 | 4.7 | 5.6 | 5.1 |
| 13.1 | 13.8 | 14.6 | 15.4 | 5.6 | -0.9 | 4.7 | 4.7 | 5.6 | 5.1 |
| 9.1 | 9.6 | 10.2 | 10.7 | 5.6 | -2.4 | 4.7 | 4.7 | 5.6 | 5.1 |
| 44.8 | 47.3 | 49.9 | 52.7 | 5.6 | -1.6 | 4.7 | 4.7 | 5.6 | 5.1 |
| 2663.5 | 2780.7 | 2903.0 | 3030.8 | 4.4 | 7.4 | 3.8 | 3.8 | 4.4 | 4.1 |
| 35,372 | 37,335 | 39,409 | 41,595 | 5.6 | 1.5 | 6.7 | 4.7 | 5.6 | 5.5 |
| 19,550 | 20,614 | 21,758 | 22,966 | 5.6 | 1.1 | 4.7 | 4.7 | 5.6 | 5.1 |
| 12,559 | 13,256 | 13,992 | 14,758 | 5.6 | -0.9 | 4.7 | 4.7 | 5.6 | 5.1 |
| 9,517 | 10,045 | 10,603 | 11,191 | 5.6 | -2.4 | 4.7 | 4.7 | 5.6 | 5.1 |
| 41,465 | 43,766 | 46,195 | 48,759 | 5.6 | -1.6 | 4.7 | 4.7 | 5.6 | 5.1 |
| 4,296 | 4,485 | 4,682 | 4,888 | 4.4 | 7.4 | 3.8 | 3.8 | 4.4 | 4.1 |
| 42.1 | 44.5 | 46.9 | 49.5 | 5.6 | 1.5 | 8.2 | 4.7 | 5.6 | 5.7 |

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 163 I Diesel (Gas oil) | RS / Liter GRDIE | 4.85 | 4.51 | 4.51 | 4.51 | 4.51 | 4.51 | 5.41 | 5.41 | 5.41 | 5.41 | 5.41 | 1.1 | 4.0 | 5.4 | 6.3 | 6.6 | 6.9 | 7.3 | 7.6 | 7.0 |
| 164 I Kerosene | RS / Liter GRKER | 3.8 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | -0.9 | 3.0 | 3.5 | 4.7 | 5.0 | 5.2 | 5.4 | 5.7 | 10.2 |
| 165 I Fuel Oil | RS / Liter GRFUE | 3.1 | 1.5 | 1.8 | 1.6 | 2.0 | 2.4 | 2.1 | 2.2 | 2.2 | 2.3 | 2.4 | -2.4 | 2.0 | 2.4 | 2.5 | 2.7 | 2.8 | 2.9 | 3.1 | 4.9 |
| 166 I LPG | RS / Kg GRLPG | 14.1 | 14.8 | 8.0 | 8.0 | 8.7 | 10.4 | 10.4 | 10.4 | 10.4 | 10.4 | 12.0 | -1.6 | 3.8 | 12.0 | 12.7 | 13.3 | 13.9 | 14.6 | 15.2 | 4.9 |
| 167 I Coal | RS / T GRCOL | 766 | 766 | 768 | 906 | 1.121 | 1.090 | 1.136 | 1.142 | 1.218 | 1.284 | 1.290 | 5.4 | 1.0 | 1.290 | 1.333 | 1.383 | 1.436 | 1.490 | 1.547 | 3.7 |
| 168 | | | | | | | | | | | | | | | | | | | | | |
| 169 Energy Retail Prices (TOE) | | | | | | | | | | | | | | | | | | | | | |
| 170 I Gasoline | RS / TOE TRGAS | 7.510 | 7.091 | 7.091 | 7.091 | 7.091 | 7.091 | 8.698 | 8.698 | 8.698 | 8.698 | 8.698 | 1.5 | | 8.698 | 10.721 | 11.225 | 11.753 | 12.305 | 12.884 | 8.2 |
| 171 I Diesel (Gas oil) | RS / TOE TRDIE | 4.802 | 4.461 | 4.461 | 4.461 | 4.461 | 4.461 | 5.360 | 5.360 | 5.360 | 5.360 | 5.360 | 1.1 | | 5.360 | 6.255 | 6.549 | 6.856 | 7.179 | 7.516 | 7.0 |
| 172 I Kerosene | RS / TOE TRKER | 3.700 | 3.268 | 3.268 | 3.268 | 3.268 | 3.268 | 3.364 | 3.364 | 3.364 | 3.364 | 3.364 | -0.9 | | 3.364 | 4.553 | 4.767 | 4.991 | 5.225 | 5.471 | 10.2 |
| 173 I Fuel Oil | RS / TOE TRFUE | 3.214 | 1.611 | 1.871 | 1.620 | 2.089 | 2.503 | 2.231 | 2.285 | 2.331 | 2.348 | 2.524 | -2.4 | | 2.524 | 2.609 | 2.794 | 2.926 | 3.063 | 3.207 | 4.9 |
| 174 I LPG | RS / TOE TRLPG | 13.011 | 13.736 | 7.389 | 7.389 | 8.084 | 9.598 | 9.596 | 9.596 | 9.596 | 9.596 | 11.107 | -1.6 | | 11.107 | 11.743 | 12.295 | 12.872 | 13.477 | 14.111 | 4.9 |
| 175 I Coal | RS / TOE TRCOL | 1.235 | 1.235 | 1.235 | 1.461 | 1.808 | 1.758 | 1.832 | 1.842 | 1.965 | 2.071 | 2.081 | 5.4 | | 2.081 | 2.150 | 2.231 | 2.316 | 2.404 | 2.495 | 3.7 |
| 176 | | | | | | | | | | | | | | | | | | | | | |
| 177 Electricity Prices (PHY) | | | | | | | | | | | | | | | | | | | | | |
| 178 I Electricity (Industry General) | RS / kWh GPELIG | 1.72 | 1.68 | 1.66 | 1.66 | 1.65 | 1.64 | 1.80 | 1.85 | 1.91 | 1.90 | 1.87 | 0.8 | 0.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 2.0 | 0.9 |
| 179 I Electricity (Irrigation) | RS / kWh GPELIR | 1.06 | 1.07 | 1.05 | 1.04 | 1.10 | 1.05 | 1.30 | 1.32 | 1.36 | 1.35 | 1.36 | 2.5 | 0.8 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 0.8 |
| 180 I Electricity (Residential) | RS / kWh GRELDO | 1.62 | 1.62 | 1.62 | 1.62 | 1.61 | 1.61 | 1.87 | 1.98 | 2.16 | 2.17 | 2.19 | 3.1 | 1.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 1.1 |
| 181 I Electricity (Commercial) | RS / kWh GRELCO | 1.97 | 1.94 | 1.93 | 1.93 | 1.94 | 1.94 | 2.31 | 2.43 | 2.63 | 2.62 | 2.63 | 2.9 | 1.4 | 2.6 | 2.7 | 2.7 | 2.7 | 2.8 | 2.8 | 1.4 |
| 182 | | | | | | | | | | | | | | | | | | | | | |
| 183 Electricity Prices (TOE) | | | | | | | | | | | | | | | | | | | | | |
| 184 I Electricity (Industry General) | RS / TOE TPELIG | 20.000 | 19.535 | 19.302 | 19.302 | 19.186 | 19.070 | 20.930 | 21.512 | 22.209 | 22.093 | 21.744 | 0.8 | | 21.744 | 21.941 | 22.139 | 22.339 | 22.541 | 22.745 | 0.9 |
| 185 I Electricity (Irrigation) | RS / TOE TPELIR | 12.328 | 12.442 | 12.209 | 12.093 | 12.791 | 12.209 | 15.116 | 15.349 | 15.814 | 15.698 | 15.814 | 2.5 | | 15.814 | 15.939 | 16.065 | 16.192 | 16.320 | 16.449 | 0.8 |
| 186 I Electricity (Residential) | RS / TOE TRELDO | 18.837 | 18.837 | 18.837 | 18.837 | 18.721 | 18.721 | 21.744 | 23.023 | 25.116 | 25.233 | 25.465 | 3.1 | | 25.465 | 25.753 | 26.044 | 26.338 | 26.636 | 26.937 | 1.1 |
| 187 I Electricity (Commercial) | RS / TOE TRELCO | 22.907 | 22.558 | 22.442 | 22.442 | 22.558 | 22.558 | 28.860 | 28.256 | 30.581 | 30.465 | 30.581 | 2.9 | | 30.581 | 30.996 | 31.418 | 31.842 | 32.274 | 32.712 | 1.4 |
| 188 | | | | | | | | | | | | | | | | | | | | | |
| 189 Transportation Equipment | | | | | | | | | | | | | | | | | | | | | |
| 190 I Car and Dual Purpose Car (Registered) | Vehicles ATCAR | 33.982 | 35.124 | 37.544 | 40.566 | 43.379 | 46.793 | 50.018 | 53.942 | 57.393 | 61.378 | 65.374 | 6.8 | | 65.374 | 68.885 | 69.464 | 72.891 | 77.033 | 81.810 | 4.8 |
| 191 I Motor cycle and Auto Cycle (Registered) | Vehicles ATCYC | 28.528 | 29.564 | 33.580 | 39.093 | 46.404 | 57.094 | 68.574 | 77.739 | 85.540 | 92.970 | 97.809 | 13.1 | | 97.809 | 104.391 | 115.259 | 129.592 | 147.087 | 167.781 | 11.4 |
| 192 I Lorry, Truck, and Van (Registered) | Vehicles ATTRU | 7.936 | 8.157 | 8.474 | 9.172 | 10.322 | 11.506 | 13.201 | 14.823 | 16.525 | 17.829 | 18.851 | 9.0 | 0.36 | 18.851 | 18.591 | 19.593 | 20.649 | 21.762 | 22.934 | 4.0 |
| 193 I Bus (Registered) | Vehicles ATBUS | 1.369 | 1.360 | 1.529 | 1.771 | 1.858 | 1.929 | 2.021 | 2.097 | 2.217 | 2.276 | 2.364 | 5.6 | 0.05 | 2.364 | 2.512 | 2.647 | 2.790 | 2.940 | 3.098 | 5.6 |
| 194 I Tractor, Dumper and Heavy motor car (Registere | Vehicles ATHVY | 2.188 | 2.283 | 2.394 | 2.530 | 2.702 | 2.851 | 3.040 | 3.155 | 3.239 | 3.326 | 3.444 | 4.6 | 1.14 | 3.444 | 3.718 | 3.902 | 4.097 | 4.302 | 4.517 | 5.6 |
| 195 I Others (Registered) | Vehicles ATOTH | 1.371 | 1.421 | 1.478 | 1.558 | 1.664 | 1.677 | 1.775 | 1.862 | 1.949 | 2.083 | 2.212 | 4.9 | 0.04 | 2.212 | 2.259 | 2.381 | 2.509 | 2.645 | 2.787 | 4.7 |
| 196 | | | | | | | | | | | | | | | | | | | | | |
| 197 Consumption by Industry (PHY) | | | | | | | | | | | | | | | | | | | | | |
| 198 Gasoline | T GCIGAS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 199 I Diesel | T GCIDIE | 13.625 | 8.515 | 8.137 | 8.426 | 9.300 | 12.000 | 13.030 | 14.000 | 16.459 | 18.373 | 17.255 | 2.4 | | 17.255 | 18.183 | 18.908 | 19.623 | 20.355 | 21.067 | 4.1 |
| 200 Kerosene | T GCIKER | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 201 I Fuel oil | T GCIFUE | 18.335 | 17.258 | 15.435 | 19.554 | 22.270 | 23.780 | 33.479 | 32.441 | 44.511 | 32.711 | 39.880 | 8.1 | | 39.860 | 44.235 | 47.848 | 51.762 | 56.002 | 60.595 | 8.7 |
| 202 I LPG | T GCILPG | 0 | 0 | 199 | 270 | 350 | 500 | 600 | 1.724 | 2.127 | 2.470 | 2.550 | 37.8 | | 2.550 | 2.830 | 3.081 | 3.311 | 3.583 | 3.877 | 8.7 |
| 203 I Coal | T GCICOL | 2.844 | 4.036 | 14.496 | 10.213 | 12.000 | 15.000 | 16.900 | 17.500 | 31.593 | 30.647 | 32.797 | 27.7 | | 32.757 | 35.796 | 38.233 | 40.840 | 43.627 | 46.609 | 7.3 |
| 204 I Fuel Wood | T GCIFWD | 13.159 | 13.829 | 12.795 | 22.184 | 22.815 | 22.995 | 11.287 | 7.070 | 7.142 | 4.382 | 3.900 | -11.5 | | 3.900 | 0 | 0 | 0 | 0 | 0 | -100.0 |
| 205 I Electricity including irrigation | MWh GCIELE | 103.900 | 125.200 | 149.200 | 174.000 | 191.800 | 226.200 | 246.400 | 260.200 | 272.700 | 295.800 | 322.476 | 12.0 | | 322.476 | 363.420 | 394.084 | 427.393 | 463.580 | 502.898 | 9.3 |
| 206 | | | | | | | | | | | | | | | | | | | | | |
| 207 Consumption by Industry (TOE) | | | | | | | | | | | | | | | | | | | | | |
| 208 Gasoline | TOE TCIGAS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 209 I Diesel | TOE TCIDIE | 13.761 | 8.600 | 8.218 | 8.510 | 9.595 | 12.120 | 13.130 | 14.140 | 16.624 | 18.557 | 17.428 | 2.4 | | 17.428 | 18.304 | 19.097 | 19.830 | 20.558 | 21.278 | 4.1 |
| 210 Kerosene | TOE TCIKER | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 211 I Fuel Oil | TOE TCIFUE | 17.602 | 16.566 | 14.818 | 16.772 | 21.379 | 22.829 | 32.140 | 31.143 | 42.731 | 31.403 | 38.266 | 8.1 | | 38.265 | 42.465 | 45.934 | 49.692 | 53.762 | 58.171 | 8.7 |
| 212 I LPG | TOE TCILPG | 0 | 0 | 215 | 292 | 378 | 540 | 648 | 1.862 | 2.297 | 2.668 | 2.754 | 37.8 | | 2.754 | 3.056 | 3.306 | 3.576 | 3.869 | 4.187 | 8.7 |
| 213 E Coal | TOE TCICOL | 1.763 | 2.502 | 9.938 | 8.332 | 7.440 | 9.300 | 9.920 | 10.850 | 15.588 | 19.001 | 20.334 | 27.7 | | 20.334 | 22.184 | 23.705 | 25.321 | 27.049 | 28.898 | 7.3 |
| 214 E Fuel Wood | TOE TCIFWD | 5.000 | 5.255 | 4.862 | 8.422 | 8.870 | 8.738 | 4.281 | 2.687 | 2.714 | 1.665 | 1.482 | -11.5 | 1500 | 1.482 | 1.500 | 1.500 | 1.500 | 1.500 | 1.500 | 0.2 |
| 215 I Total Consumption by Industry | TOE TCITOE | 38.127 | 32.923 | 37.101 | 42.328 | 47.462 | 53.527 | 60.119 | 60.682 | 83.953 | 73.293 | 80.263 | 7.7 | | 80.241 | 87.580 | 93.542 | 99.918 | 106.738 | 114.034 | 7.3 |
| 216 E Energy Saving Rate | % TCIESR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | | 0 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 217 | | | | | | | | | | | | | | | | | | | | | |
| 218 Consumption by Commercial (PHY) | | | | | | | | | | | | | | | | | | | | | |
| 219 Gasoline | T GCCGAS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 220 Diesel | T GCCDIE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 221 Kerosene | T GCCKER | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 222 Fuel Oil | T GCCFUE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 223 I LPG | T GCCLPG | 572 | 657 | 797 | 1.079 | 1.200 | 1.500 | 1.700 | 2.587 | 3.204 | 3.281 | 3.150 | 18.6 | | 3.150 | 3.844 | 4.324 | 4.881 | 5.460 | 6.130 | 14.2 |
| 224 Coal | T GCCCOL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 225 I Charcoal | T GCCCHL | 1.250 | 1.000 | 1.000 | 1.250 | 1.750 | 1.750 | 1.500 | 1.000 | 1.000 | 1.000 | 800 | -4.4 | | 800 | 405 | 405 | 405 | 405 | 405 | -12.7 |
| 226 I Electricity | MWh GCCELE | 73.000 | 81.500 | 92.000 | 102.000 | 108.800 | 128.400 | 149.400 | 168.300 | 185.000 | 206.300 | 227.327 | 12.0 | | 227.326 | 243.620 | 261.882 | 281.529 | 302.666 | 325.408 | 7.4 |
| 227 | | | | | | | | | | | | | | | | | | | | | |
| 228 Consumption by Commercial (TOE) | | | | | | | | | | | | | | | 0 | | | | | | |
| 229 Gasoline | TOE TCCGAS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 230 Diesel | TOE TCCDIE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 231 Kerosene | TOE TCCKER | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 232 Fuel Oil | TOE TCCFUE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 233 I LPG | TOE TCCLPG | 818 | 710 | 861 | 1.165 | 1.298 | 1.620 | 1.836 | 2.794 | 3.525 | 3.543 | 3.402 | 18.5 | | 3.402 | 4.152 | 4.670 | 5.250 | 5.897 | 6.621 | 14.7 |
| 234 Coal | TOE TCCCOL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 235 E Charcoal | TOE TCCCHL | 925 | 740 | 740 | 925 | 1.295 | 1.295 | 1.110 | 740 | 740 | 740 | 592 | -4.4 | 300 | 592 | 300 | 300 | 300 | 300 | 300 | -12.7 |
| 236 I Total Consumption by Commercial | TOE TCCTOE | 1.543 | 1.450 | 1.601 | 2.090 | 2.591 | 2.915 | 2.946 | 3.534 | 4.365 | 4.283 | 3.994 | 10.0 | | 4.000 | 4.452 | 4.970 | 5.550 | 6.197 | 6.921 | 11.6 |
| 237 E Energy Saving Rate | % TCCESR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | |
| 238 | | | | | | | | | | | | | | | | | | | | | |
| 239 Consumption by Transport (PHY) | | | | | | | | | | | | | | | | | | | | | |
| 240 I Gasoline | T GCTGAS | 34.795 | 38.161 | 43.264 | 47.462 | 52.931 | 59.199 | 61.457 | 67.848 | 72.308 | 79.595 | 83.958 | 9.2 | | 83.958 | 84.905 | 88.646 | 93.626 | 99.666 | 106.675 | 4.9 |
| 241 I Diesel | T GCTDIE | 41.211 | 52.881 | 50.266 | 56.216 | 69.493 | 75.950 | 77.197 | 84.818 | 93.398 | 97.614 | 100.453 | 9.3 | | 100.453 | 101.095 | 108.027 | 115.441 | 123.370 | 131.848 | 5.6 |
| 242 Kerosene | T GCTKER | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 243 Fuel Oil | T GCTFUE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.0 | 7.6 | 7.9 | 8.3 | 8.7 | 9.1 | 9.6 | 10.0 | 10.5 | 11.0 | 11.5 | 12.0 | 4.7 | 4.0 | 12.0 | 12.7 | 13.4 | 14.1 | 14.9 | 15.7 | 16.6 | 17.5 | 18.5 | 19.5 | 20.6 | 21.6 |
| 3.0 | 5.7 | 6.0 | 6.2 | 6.5 | 6.8 | 7.2 | 7.5 | 7.8 | 8.2 | 8.6 | 9.0 | 4.7 | 3.0 | 9.0 | 9.5 | 10.0 | 10.6 | 11.2 | 11.8 | 12.5 | 13.1 | 13.9 | 14.6 | 15.5 | 15.3 |
| 2.0 | 3.1 | 3.2 | 3.4 | 3.5 | 3.7 | 3.9 | 4.1 | 4.2 | 4.4 | 4.7 | 4.9 | 4.7 | 2.0 | 4.9 | 5.1 | 5.4 | 5.7 | 6.0 | 6.4 | 6.7 | 7.1 | 7.5 | 7.9 | 8.4 | 8.8 |
| 3.0 | 15.2 | 16.0 | 16.7 | 17.5 | 18.3 | 19.2 | 20.1 | 21.0 | 22.0 | 23.0 | 24.1 | 4.7 | 3.0 | 24.1 | 25.5 | 26.9 | 28.4 | 29.9 | 31.6 | 33.4 | 35.2 | 37.2 | 39.2 | 41.4 | 43.7 |
| 1.0 | 1547 | 1,606 | 1,667 | 1,730 | 1,796 | 1,864 | 1,935 | 2,009 | 2,085 | 2,164 | 2,246 | 3.8 | 1.0 | 2,246 | 2,345 | 2,448 | 2,556 | 2,669 | 2,786 | 2,909 | 3,037 | 3,170 | 3,310 | 3,455 | 3,60 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 12,884 | 13,489 | 14,123 | 14,787 | 15,482 | 16,210 | 16,971 | 17,769 | 18,604 | 19,479 | 20,394 | 4.7 | | 20,394 | 21,526 | 22,721 | 23,982 | 25,313 | 26,717 | 28,200 | 29,765 | 31,417 | 33,161 | 35,001 | 36,94 |
| | 7,516 | 7,869 | 8,239 | 8,626 | 9,032 | 9,456 | 9,901 | 10,366 | 10,853 | 11,364 | 11,898 | 4.7 | | 11,898 | 12,558 | 13,255 | 13,991 | 14,767 | 15,587 | 16,452 | 17,365 | 18,328 | 19,345 | 20,419 | 21,55 |
| | 5,471 | 5,728 | 5,997 | 6,279 | 6,574 | 6,883 | 7,206 | 7,545 | 7,900 | 8,271 | 8,660 | 4.7 | | 8,660 | 9,140 | 9,648 | 10,183 | 10,748 | 11,345 | 11,975 | 12,639 | 13,341 | 14,081 | 14,862 | 15,86 |
| | 3,207 | 3,358 | 3,516 | 3,681 | 3,854 | 4,035 | 4,225 | 4,424 | 4,631 | 4,849 | 5,077 | 4.7 | | 5,077 | 5,359 | 5,656 | 5,970 | 6,301 | 6,651 | 7,020 | 7,410 | 7,821 | 8,255 | 8,713 | 9,15 |
| | 14,111 | 14,774 | 15,468 | 16,195 | 16,957 | 17,754 | 18,588 | 19,462 | 20,376 | 21,334 | 22,337 | 4.7 | | 22,337 | 23,576 | 24,885 | 26,266 | 27,724 | 29,263 | 30,887 | 32,601 | 34,410 | 36,320 | 38,336 | 40,46 |
| | 2,495 | 2,590 | 2,689 | 2,791 | 2,897 | 3,007 | 3,121 | 3,240 | 3,363 | 3,491 | 3,623 | 3.8 | | 3,623 | 3,783 | 3,949 | 4,123 | 4,304 | 4,494 | 4,691 | 4,898 | 5,113 | 5,338 | 5,573 | 5,81 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 0.9 | 1.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 |
| 0.8 | 1.4 | 1.4 | 1.4 | 1.4 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 0.8 | 0.9 | 1.5 | 1.5 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.7 | 1.7 | 1.7 |
| 1.1 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.5 | 2.5 | 2.5 | 2.5 | 2.6 | 2.6 | 1.1 | 1.3 | 2.6 | 2.6 | 2.7 | 2.7 | 2.7 | 2.8 | 2.8 | 2.8 | 2.9 | 2.9 | 3.0 | 3.0 |
| 1.4 | 2.8 | 2.9 | 2.9 | 2.9 | 3.0 | 3.0 | 3.1 | 3.1 | 3.1 | 3.2 | 3.2 | 1.4 | 1.6 | 3.2 | 3.3 | 3.3 | 3.4 | 3.4 | 3.5 | 3.5 | 3.6 | 3.7 | 3.7 | 3.8 | 3.8 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 22,745 | 22,951 | 23,158 | 23,367 | 23,579 | 23,792 | 24,007 | 24,224 | 24,443 | 24,664 | 24,887 | 0.9 | | 24,887 | 25,152 | 25,419 | 25,690 | 25,963 | 26,239 | 26,518 | 26,801 | 27,086 | 27,374 | 27,665 | 27,95 |
| | 16,449 | 16,579 | 16,711 | 16,843 | 16,976 | 17,110 | 17,246 | 17,382 | 17,520 | 17,659 | 17,798 | 0.8 | | 17,798 | 17,964 | 18,131 | 18,300 | 18,470 | 18,642 | 18,815 | 18,991 | 19,167 | 19,346 | 19,526 | 19,70 |
| | 26,937 | 27,241 | 27,549 | 27,860 | 28,175 | 28,493 | 28,815 | 29,141 | 29,470 | 29,803 | 30,140 | 1.1 | | 30,140 | 30,541 | 30,947 | 31,359 | 31,776 | 32,199 | 32,627 | 33,061 | 33,500 | 33,946 | 34,397 | 34,85 |
| | 32,712 | 33,155 | 33,605 | 34,061 | 34,523 | 34,991 | 35,465 | 35,946 | 36,433 | 36,927 | 37,428 | 1.4 | | 37,428 | 38,026 | 38,632 | 39,249 | 39,875 | 40,512 | 41,158 | 41,815 | 42,483 | 43,161 | 43,850 | 44,54 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| 85297 | 81,810 | 87,151 | 93,033 | 99,453 | 106,415 | 113,932 | 122,024 | 130,717 | 140,039 | 150,023 | 160,704 | 7.0 | 219,770 | 160,704 | 172,214 | 184,588 | 197,871 | 212,109 | 227,355 | 243,663 | 261,092 | 279,703 | 299,559 | 320,722 | 343,25 |
| 196458 | 167,781 | 191,719 | 219,253 | 250,829 | 286,973 | 328,294 | 375,492 | 429,302 | 490,800 | 490,800 | 490,800 | 11.3 | 219170 | 490,800 | 490,800 | 490,800 | 490,800 | 490,800 | 490,800 | 490,800 | 490,800 | 490,800 | 490,800 | 490,800 | 490,80 |
| 0.36 | 22,934 | 24,151 | 25,431 | 26,777 | 28,191 | 29,677 | 31,237 | 32,875 | 34,594 | 36,397 | 38,287 | 5.3 | 0.36 | 38,287 | 40,318 | 42,453 | 44,694 | 47,046 | 49,512 | 52,098 | 54,807 | 57,642 | 60,608 | 63,707 | 66,94 |
| 0.05 | 3,098 | 3,263 | 3,436 | 3,618 | 3,809 | 4,009 | 4,220 | 4,442 | 4,674 | 4,917 | 5,173 | 5.3 | 0.05 | 5,173 | 5,447 | 5,735 | 6,038 | 6,356 | 6,689 | 7,039 | 7,405 | 7,788 | 8,188 | 8,607 | 9,04 |
| 1.14 | 4,517 | 4,743 | 4,980 | 5,229 | 5,491 | 5,765 | 6,053 | 6,356 | 6,674 | 7,008 | 7,358 | 5.0 | 1.14 | 7,358 | 7,726 | 8,112 | 8,518 | 8,944 | 9,391 | 9,860 | 10,353 | 10,871 | 11,415 | 11,985 | 12,58 |
| 0.04 | 2,787 | 2,935 | 3,091 | 3,254 | 3,426 | 3,606 | 3,796 | 3,995 | 4,204 | 4,423 | 4,653 | 5.3 | 0.04 | 4,653 | 4,900 | 5,159 | 5,431 | 5,717 | 6,017 | 6,331 | 6,660 | 7,005 | 7,365 | 7,742 | 8,13 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 21,087 | 21,482 | 22,147 | 22,780 | 23,375 | 23,921 | 24,408 | 24,821 | 25,148 | 25,373 | 25,476 | 1.9 | | 25,476 | 21,685 | 5,314 | 5,848 | 6,425 | 7,047 | 7,718 | 8,443 | 9,224 | 10,068 | 10,978 | 11,95 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 60,595 | 65,624 | 71,076 | 76,988 | 83,393 | 90,340 | 97,874 | 106,043 | 114,903 | 124,513 | 134,936 | 8.9 | | 134,936 | 145,542 | 169,322 | 182,635 | 196,999 | 212,495 | 229,215 | 247,256 | 266,720 | 287,724 | 310,388 | 334,84 |
| | 3,877 | 4,198 | 4,547 | 4,925 | 5,335 | 5,779 | 6,261 | 6,784 | 7,351 | 7,968 | 8,632 | 8.3 | | 8,632 | 14,837 | 17,202 | 18,619 | 20,083 | 21,663 | 23,368 | 25,207 | 27,191 | 29,332 | 31,643 | 34,13 |
| | 46,609 | 49,833 | 53,282 | 56,974 | 60,926 | 65,156 | 69,683 | 74,530 | 79,720 | 85,276 | 91,225 | 6.9 | | 91,225 | 98,395 | 114,471 | 123,472 | 133,182 | 143,659 | 154,963 | 167,159 | 180,318 | 194,518 | 209,841 | 226,37 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 502892 | 502,898 | 548,831 | 594,791 | 647,157 | 704,344 | 766,605 | 835,039 | 909,591 | 991,060 | 1,080,100 | 1,177,432 | 8.9 | 1,110,107 | 1,177,432 | 1,194,190 | 1,201,909 | 1,338,525 | 1,424,891 | 1,551,812 | 1,690,354 | 1,841,556 | 2,006,587 | 2,186,722 | 2,383,359 | 2,598,02 |
| | | | | | | | | | | | | | | 0 | | | | | | | | | | | |
| | | | | | | | | | | | | | | 0 | | | | | | | | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 21,278 | 21,897 | 22,388 | 23,008 | 23,509 | 24,161 | 24,652 | 25,070 | 25,400 | 25,628 | 25,731 | 1.8 | | 25,731 | 21,902 | 5,367 | 5,907 | 6,489 | 7,117 | 7,796 | 8,527 | 9,317 | 10,168 | 11,087 | 12,07 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 58,171 | 58,171 | 62,999 | 68,233 | 73,906 | 80,057 | 86,727 | 93,959 | 101,801 | 110,307 | 119,532 | 129,539 | 8.9 | 129,539 | 129,539 | 139,720 | 162,549 | 175,330 | 189,119 | 203,996 | 220,049 | 237,385 | 256,051 | 276,215 | 297,974 | 321,45 |
| 4,187 | 4,187 | 4,534 | 4,911 | 5,319 | 5,762 | 6,242 | 6,762 | 7,327 | 7,939 | 8,603 | 9,323 | 8.3 | 9,323 | 9,323 | 16,024 | 16,643 | 20,108 | 21,690 | 23,398 | 25,237 | 27,223 | 29,366 | 31,679 | 34,174 | 36,86 |
| 28,898 | 28,898 | 30,896 | 33,035 | 35,324 | 37,774 | 40,397 | 43,204 | 46,209 | 49,426 | 52,871 | 56,559 | 6.9 | 56,559 | 58,559 | 61,005 | 70,972 | 76,553 | 82,573 | 89,069 | 96,077 | 103,638 | 111,797 | 120,601 | 130,101 | 140,35 |
| 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 0.0 | 1500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,50 |
| 116,666 | 113,759 | 121,627 | 130,046 | 139,057 | 148,702 | 159,025 | 170,076 | 181,906 | 194,572 | 208,132 | 222,652 | 6.9 | 262,344 | 222,651 | 240151 | 259,030 | 279,398 | 301,371 | 325,078 | 350,658 | 378,253 | 408,032 | 440,183 | 474,837 | 512,25 |
| | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0. |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 6,130 | 6,857 | 7,665 | 8,567 | 9,571 | 10,689 | 11,936 | 13,325 | 14,873 | 16,598 | 18,521 | 11.7 | | 18,521 | 20,469 | 22,612 | 24,982 | 27,598 | 30,486 | 33,675 | 37,196 | 41,083 | 45,376 | 50,118 | 55,35 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 405 | 405 | 405 | 405 | 405 | 405 | 405 | 405 | 405 | 405 | 405 | 0.0 | | 405 | 405 | 405 | 405 | 405 | 405 | 405 | 405 | 405 | 405 | 405 | 40 |
| 350789 | 325,408 | 349,151 | 374,642 | 402,010 | 431,396 | 462,949 | 498,830 | 533,213 | 572,283 | 614,242 | 659,303 | 7.3 | 853,652 | 659,303 | 703,285 | 750,219 | 800,306 | 853,759 | 910,805 | 971,688 | 1,036,665 | 1,106,019 | 1,180,041 | 1,259,051 | 1,343,38 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | 0 | | | | | | | | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 6,621 | 7,405 | 8,279 | 9,252 | 10,336 | 11,545 | 12,891 | 14,391 | 16,063 | 17,926 | 20,003 | 11.7 | | 20,003 | 22,103 | 24,421 | 26,981 | 29,806 | 32,925 | 36,369 | 40,171 | 44,370 | 49,005 | 54,125 | 59,77 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 600 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 0.0 | 600 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 30 |
| 5,925 | 6,921 | 7,705 | 8,579 | 9,552 | 10,636 | 11,845 | 13,191 | 14,691 | 16,363 | 18,226 | 20,303 | 11.4 | 12,276 | 20,303 | 22,403 | 24,721 | 27,281 | 30,106 | 33,225 | 36,669 | 40,471 | 44,670 | 49,306 | 54,425 | 60,07 |
| 0 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | | | | | | | | | | | | | 0 | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | 0 | | | | | | | | | | | |
| | 108,676 | 112,543 | 118,981 | 125,929 | 133,457 | 141,565 | 150,283 | 159,647 | 169,697 | 175,985 | 182,623 | 5.5 | | 182,623 | 190,180 | 197,206 | 203,602 | 212,445 | 220,670 | 228,182 | 238,415 | 247,944 | 256,640 | 268,381 | 279,30 |
| | 131,848 | 117,420 | 121,032 | 124,756 | 128,595 | 132,552 | 136,628 | 140,827 | 145,151 | 149,602 | 154,183 | 1.6 | | 154,183 | 159,439 | 164,042 | 167,923 | 173,618 | 178,590 | 182,771 | 188,916 | 194,268 | 198,749 | 205,353 | 211,06 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 23.0 | 24.3 | 25.6 | 27.0 | 5.6 | 1.1 | 7.0 | 4.7 | 5.6 | 5.5 |
| 17.2 | 18.2 | 19.2 | 20.2 | 5.6 | -0.9 | 10.2 | 4.7 | 5.6 | 6.0 |
| 9.3 | 9.8 | 10.4 | 11.0 | 5.6 | -2.4 | 4.9 | 4.7 | 5.6 | 5.2 |
| 46.1 | 48.7 | 51.4 | 54.2 | 5.6 | -1.6 | 4.9 | 4.7 | 5.6 | 5.2 |
| 3,766 | 3,932 | 4,105 | 4,286 | 4.4 | 5.4 | 3.7 | 3.8 | 4.4 | 4.1 |
| | | | | | | | | | |
| 38,994 | 41,159 | 43,443 | 45,854 | 5.6 | 1.5 | 8.2 | 4.7 | 5.6 | 5.7 |
| 22,749 | 24,011 | 25,344 | 26,751 | 6.6 | 1.1 | 7.0 | 4.7 | 5.6 | 5.5 |
| 16,558 | 17,477 | 18,447 | 19,471 | 5.6 | -0.9 | 10.2 | 4.7 | 5.6 | 6.0 |
| 9,707 | 10,246 | 10,815 | 11,415 | 5.6 | -2.4 | 4.9 | 4.7 | 5.6 | 5.2 |
| 42,709 | 45,079 | 47,581 | 50,222 | 5.6 | -1.6 | 4.9 | 4.7 | 5.6 | 5.2 |
| 6,074 | 6,342 | 6,621 | 6,912 | 4.4 | 5.4 | 3.7 | 3.8 | 4.4 | 4.1 |
| | | | | | | | | | |
| 2.4 | 2.5 | 2.5 | 2.5 | 1.1 | 0.8 | 0.9 | 0.9 | 1.1 | 1.0 |
| 1.7 | 1.7 | 1.7 | 1.8 | 0.9 | 2.5 | 0.8 | 0.8 | 0.9 | 0.9 |
| 3.0 | 3.1 | 3.1 | 3.2 | 1.3 | 3.1 | 1.1 | 1.1 | 1.3 | 1.2 |
| 3.9 | 4.0 | 4.0 | 4.1 | 1.6 | 2.9 | 1.4 | 1.4 | 1.6 | 1.5 |
| | | | | | | | | | |
| 28,257 | 28,558 | 28,862 | 29,169 | 1.1 | 0.8 | 0.9 | 0.9 | 1.1 | 1.0 |
| 19,891 | 20,078 | 20,263 | 20,452 | 0.9 | 2.5 | 0.8 | 0.8 | 0.9 | 0.9 |
| 35,319 | 35,788 | 36,264 | 36,747 | 1.3 | 3.1 | 1.1 | 1.1 | 1.3 | 1.2 |
| 45,260 | 45,983 | 46,717 | 47,462 | 1.6 | 2.9 | 1.4 | 1.4 | 1.6 | 1.5 |
| | | | | | | | | | |
| 367,232 | 392,706 | 419,741 | 448,394 | 7.1 | 0.8 | 4.6 | 7.0 | 7.1 | 5.8 |
| 490,800 | 490,800 | 490,800 | 490,800 | 0.0 | 13.1 | 11.4 | 11.3 | 0.0 | 5.5 |
| 70,316 | 73,831 | 77,437 | 81,285 | 5.1 | 9.0 | 4.0 | 5.3 | 5.1 | 5.0 |
| 9,500 | 9,975 | 10,469 | 10,982 | 5.1 | 5.6 | 5.6 | 5.3 | 5.1 | 5.3 |
| 13,214 | 13,874 | 14,568 | 15,297 | 5.0 | 4.8 | 5.6 | 5.0 | 5.0 | 5.1 |
| 8,545 | 8,972 | 9,417 | 9,878 | 5.1 | 4.9 | 4.7 | 5.3 | 5.1 | 5.1 |
| | | | | | | | | | |
| 0 | 0 | 0 | 0 | | | | | | |
| 13,020 | 14,164 | 15,398 | 16,731 | -2.8 | 2.4 | 4.1 | 1.9 | -2.8 | -0.1 |
| 0 | 0 | 0 | 0 | | | | | | |
| 361,244 | 389,733 | 420,480 | 453,669 | 8.4 | 8.1 | 8.7 | 8.3 | 8.4 | 8.4 |
| 36,827 | 39,732 | 42,866 | 46,250 | 11.8 | | 8.7 | 8.3 | 11.8 | 10.1 |
| 244,222 | 263,482 | 284,269 | 306,707 | 8.4 | 27.7 | 7.3 | 6.9 | 8.4 | 7.7 |
| 0 | 0 | 0 | 0 | | | | | | |
| 2,832,397 | 3,088,301 | 3,367,741 | 3,672,913 | 7.9 | 12.0 | 9.3 | 8.9 | 7.9 | 8.4 |
| | | | | | | | | | |
| 0 | 0 | 0 | 0 | | | | | | |
| 13,150 | 14,305 | 15,552 | 16,898 | -2.8 | 2.4 | 4.1 | 1.9 | -2.8 | -0.1 |
| 0 | 0 | 0 | 0 | | | | | | |
| 346,795 | 374,143 | 403,661 | 435,525 | 8.4 | 8.1 | 8.7 | 8.3 | 8.4 | 8.4 |
| 39,774 | 42,910 | 46,296 | 49,950 | 11.8 | | 8.7 | 8.3 | 11.8 | 10.1 |
| 151,418 | 163,359 | 176,247 | 190,158 | 8.4 | 27.7 | 7.3 | 6.9 | 8.4 | 7.7 |
| 1,500 | 1,500 | 1,500 | 1,500 | 0.0 | -11.5 | 0.2 | 0.0 | 0.0 | 0.0 |
| 552,638 | 595,217 | 643,256 | 694,029 | 7.9 | 7.7 | 7.3 | 6.9 | 7.9 | 7.5 |
| 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | | | 1.0 | 1.0 | |
| | | | | | | | | | |
| 0 | 0 | 0 | 0 | | | | | | |
| 0 | 0 | 0 | 0 | | | | | | |
| 0 | 0 | 0 | 0 | | | | | | |
| 0 | 0 | 0 | 0 | | | | | | |
| 61,130 | 67,514 | 74,564 | 82,351 | 10.5 | 18.6 | 14.2 | 11.7 | 10.5 | 11.5 |
| 0 | 0 | 0 | 0 | | | | | | |
| 405 | 405 | 405 | 405 | 0.0 | -4.4 | -12.7 | 0.0 | 0.0 | -2.2 |
| 1,433,405 | 1,529,497 | 1,632,073 | 1,741,575 | 6.7 | 12.0 | 7.4 | 7.3 | 6.7 | 7.0 |
| | | | | | | | | | |
| 0 | 0 | 0 | 0 | | | | | | |
| 0 | 0 | 0 | 0 | | | | | | |
| 0 | 0 | 0 | 0 | | | | | | |
| 0 | 0 | 0 | 0 | | | | | | |
| 66,021 | 72,915 | 80,529 | 88,939 | 10.5 | 18.6 | 14.2 | 11.7 | 10.5 | 11.5 |
| 0 | 0 | 0 | 0 | | | | | | |
| 300 | 300 | 300 | 300 | 0.0 | -4.4 | -12.7 | 0.0 | 0.0 | -2.2 |
| 66,321 | 73,215 | 80,829 | 89,239 | 10.4 | 10.0 | 11.6 | 11.4 | 10.4 | 10.9 |
| 0 | 0 | 0 | 0 | | 0.0 | 1.0 | 1.0 | 1.0 | |
| | | | | | | | | | |
| 259,266 | 302,823 | 315,026 | 325,290 | 3.9 | 9.2 | 4.9 | 5.5 | 3.9 | 4.6 |
| 215,849 | 222,906 | 228,995 | 234,020 | 2.8 | 9.3 | 5.5 | 1.6 | 2.8 | 2.9 |
| 0 | 0 | 0 | 0 | | | | | | |
| 0 | 0 | 0 | 0 | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 244 | LPG | T | GCTLPG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 245 | Coal | T | GCTCOL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 246 I | Electricity | KWh | GCTELE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 247 | | | | | | | | | | | | | | | | | | | | | | | |
| 248 | Consumption by Transport (TOE) | | | | | | | | | | | | | | | | | | | | | | |
| 249 I | Gasoline | TOE | TCTGAS | 37,579 | 41,214 | 46,725 | 51,259 | 57,165 | 63,935 | 66,369 | 73,276 | 78,003 | 85,963 | 90,675 | 9.2 | | 90,673 | 91,597 | 95,738 | 101,116 | 107,639 | 115,210 | 4.9 |
| 250 I | Diesel | TOE | TCTDIE | 41,323 | 54,420 | 60,869 | 65,873 | 70,188 | 76,710 | 77,969 | 85,666 | 94,332 | 98,590 | 101,458 | 9.3 | | 101,500 | 102,105 | 109,106 | 116,596 | 124,603 | 133,166 | 5.6 |
| 251 | Kerosene | TOE | TCTKER | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 252 | Fuel Oil | TOE | TCTFUE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 253 | LPG | TOE | TCTLPG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 254 | Coal | TOE | TCTCOL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 255 I | Total Consumption by Transport | TOE | TCTTOE | 79,202 | 95,634 | 107,594 | 118,137 | 127,353 | 140,644 | 144,338 | 158,942 | 172,425 | 184,553 | 192,132 | 9.3 | | 192,132 | 193,903 | 204,845 | 217,712 | 232,243 | 248,375 | 5.3 |
| 256 E | Energy Saving Rate ( Reduction of total mileag | % | TCTESR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | |
| 257 | | | | | | | | | | | | | | | | | | | | | | | |
| 258 | Consumption by Residential (PHY) | | | | | | | | | | | | | | | | | | | | | | |
| 259 I | Kerosene | T | GCDKER | 17,362 | 19,908 | 21,347 | 18,170 | 16,349 | 15,472 | 14,082 | 12,296 | 11,699 | 10,793 | 10,590 | -4.8 | | 10,590 | 9,531 | 8,578 | 7,720 | 6,948 | 6,253 | -10.0 |
| 260 I | Fuel Wood | T | GCDFWD | 38,044 | 32,287 | 29,855 | 41,161 | 42,370 | 42,705 | 26,291 | 16,498 | 16,664 | 10,226 | 9,100 | -13.3 | | 9,100 | 7,366 | 7,280 | 5,895 | 5,824 | 4,716 | -12.3 |
| 261 I | LPG | T | GCDLPG | 1,986 | 2,833 | 7,110 | 11,200 | 18,370 | 20,543 | 23,413 | 25,978 | 26,781 | 27,000 | 28,000 | 30.4 | | 28,000 | 31,310 | 33,538 | 35,909 | 37,580 | 39,438 | 7.1 |
| 262 I | Charcoal | T | GCDCHL | 1,250 | 1,000 | 1,000 | 1,250 | 1,250 | 1,250 | 1,000 | 1,000 | 1,000 | 500 | 500 | -8.8 | | 500 | 400 | 320 | 256 | 205 | 164 | -20.0 |
| 263 I | Electricity | KWh | GCDELE | 138,200 | 143,400 | 154,400 | 167,300 | 179,800 | 198,900 | 220,400 | 249,300 | 274,300 | 295,500 | 330,792 | 9.1 | | 330,774 | 379,397 | 415,970 | 443,189 | 463,288 | 478,302 | 7.7 |
| 264 | | | | | | | | | | | | | | | | | | | | | | | |
| 265 | Consumption by Residential (TOE) | | | | | | | | | | | | | | | | | | | | | | |
| 266 I | Kerosene | TOE | TCDKER | 18,056 | 20,704 | 22,201 | 18,897 | 17,003 | 16,091 | 14,645 | 12,788 | 12,167 | 11,225 | 11,014 | -4.8 | 11,000 | 11,014 | 9,912 | 8,921 | 8,029 | 7,225 | 6,503 | -10.0 |
| 267 E | Fuel Wood | TOE | TCDFWD | 14,457 | 12,261 | 11,345 | 15,641 | 10,101 | 16,228 | 9,991 | 6,269 | 6,332 | 3,888 | 3,456 | -13.3 | 3,500 | 3,458 | 2,800 | 2,766 | 2,240 | 2,213 | 1,792 | -12.7 |
| 268 I | LPG | TOE | TCDLPG | 2,123 | 3,060 | 7,679 | 12,096 | 19,840 | 22,188 | 25,286 | 28,056 | 28,902 | 29,160 | 30,240 | 30.4 | | 30,240 | 33,815 | 36,221 | 38,782 | 40,585 | 42,587 | 7.1 |
| 269 E | Charcoal | TOE | TCDCHL | 925 | 740 | 740 | 925 | 925 | 925 | 740 | 740 | 740 | 370 | 370 | -8.0 | 370 | 370 | 296 | 237 | 189 | 152 | 121 | -20.0 |
| 270 I | Total Consumption by Residential | TOE | TCDTOE | 35,581 | 36,765 | 41,965 | 47,559 | 53,868 | 55,430 | 50,662 | 47,853 | 48,141 | 44,341 | 45,082 | 2.4 | | 45,082 | 45,923 | 48,146 | 49,240 | 50,177 | 51,004 | 2.5 |
| 271 E | Energy Saving Rate | % | TCDESR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | |
| 272 | | | | | | | | | | | | | | | | | | | | | | | |
| 273 | Electricity Consumption as Whole | | | | | | | | | | | | | | | | | | | | | | |
| 274 I | Electricity Consumption (PHY) | KWh | GCEMWh | 315,100 | 350,200 | 395,500 | 443,300 | 480,000 | 551,500 | 616,200 | 677,800 | 732,000 | 798,200 | 880,595 | 10.8 | | 880,595 | 986,438 | 1,071,936 | 1,152,091 | 1,229,534 | 1,306,608 | 8.2 |
| 275 | Electricity Consumption by Others | KWh | GCOMWh | 5,800 | 6,000 | 6,300 | 6,600 | 6,600 | 7,500 | 8,500 | 10,300 | 10,900 | 11,800 | 14,490 | 9.6 | | 14,600 | 15,783 | 17,151 | 18,433 | 19,673 | 20,906 | 7.4 |
| 276 | Total Electricity Consumption(PHY) | KWh | GCTMWh | 320,900 | 356,200 | 401,900 | 449,900 | 486,600 | 559,100 | 624,700 | 688,100 | 742,900 | 810,000 | 895,085 | 10.8 | | 895,195 | 1,002,221 | 1,089,087 | 1,170,524 | 1,249,206 | 1,327,514 | 8.2 |
| 277 I | Electricity Consumption per Hour | KWh | GCPMWh | 36.0 | 40.0 | 45.2 | 50.6 | 54.5 | 63.0 | 70.3 | 77.4 | 83.6 | 91.1 | 100.5 | 10.8 | | 101 | 114.4 | 124.3 | 133.6 | 142.6 | 151.5 | 8.5 |
| 278 E | Load Factor | % | GCLOAD | 51.1 | 52.0 | 53.6 | 55.5 | 53.7 | 50.4 | 55.7 | 57.7 | 56.7 | 55.9 | 57.9 | 1.3 | | 58 | 60.0 | 60.3 | 60.6 | 60.9 | 61.2 | 1.1 |
| 279 I | Peak Electricity Demand per Hour | KWh | GCPEAK | 85.0 | 92.0 | 101.1 | 108.8 | 120.8 | 131.3 | 147.1 | 155.7 | 169.6 | 175.0 | 200.0 | 8.9 | | 200 | 221 | 240 | 255 | 270 | 285 | 7.4 |
| 280 E | Self consumption & Loss | % | GCSELF | 22.4 | 22.4 | 21.2 | 20.9 | 19.5 | 19.0 | 17.9 | 17.5 | 16.5 | 16.6 | 15.9 | -2.8 | | 15.9 | 15.2 | 15.5 | 15.0 | 14.5 | 14.8 | -2.6 |
| 281 | | | | | | | | | | | | | | | | | | | | | | | |
| 282 | | | | | | | | | | | | | | | | | | | | | | | |
| 283 | Electricity Generation by Sources (PHY) | | | | | | | | | | | | | | | | | | | | | | |
| 284 I | Total Generation | KWh | GEGMWh | 391,500 | 438,100 | 487,100 | 545,000 | 584,000 | 667,000 | 737,200 | 808,700 | 869,200 | 915,100 | 1,047,330 | 10.3 | | 1,047,330 | 1,163,252 | 1,268,563 | 1,355,401 | 1,438,051 | 1,533,578 | 7.9 |
| 285 E | Hydro | KWh | GEGHYD | 114,900 | 109,800 | 139,800 | 99,700 | 148,300 | 84,900 | 75,500 | 113,100 | 103,700 | 75,500 | 134,400 | 1.8 | 130,000 | 134,400 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | -0.7 |
| 286 I | Kerosene | KWh | GEGKER | 0 | 0 | 0 | 5,100 | 7,100 | 36,000 | 43,800 | 69,300 | 39,600 | 47,600 | 105,840 | 54.2 | 100,000 | 105,840 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | -1.1 |
| 287 I | Diesel and Fuel Oil | KWh | GEGFUDI | 173,600 | 213,100 | 244,000 | 334,000 | 303,900 | 448,700 | 494,300 | 497,900 | 614,800 | 659,300 | 682,090 | 14.7 | | 682,090 | 799,047 | 894,943 | 972,144 | 1,044,927 | 1,130,342 | 10.6 |
| 288 E | Coal | KWh | GEGCOL | 45,200 | 43,500 | 28,800 | 32,300 | 68,500 | 44,900 | 52,500 | 43,100 | 40,300 | 48,100 | 40,900 | -1.0 | 5,000 | 40,900 | 45,900 | 50,900 | 55,900 | 60,900 | 65,900 | 10.0 |
| 289 E | Bagasse | KWh | GEGBAG | 57,800 | 71,700 | 74,700 | 73,900 | 56,200 | 52,500 | 70,100 | 85,300 | 70,600 | 76,600 | 84,100 | 3.8 | 5.0 | 84,100 | 88,305 | 92,720 | 97,356 | 102,224 | 107,335 | 5.0 |
| 290 | | | | | | | | | | | | | | | | | | | | | | | |
| 291 | Generation Efficiency by Sources | | | | | | | | | | | | | | | | | | | | | | |
| 292 E | Diesel | T / KWh | EFFDIE | 0.1996 | 0.1996 | 0.2042 | 0.2046 | 0.2025 | 0.2009 | 0.2023 | 0.2075 | 0.1908 | 0.1917 | 0.1909 | -0.5 | 0.1908 | 0.191 | 0.1908 | 0.1908 | 0.1908 | 0.1908 | 0.1908 | 0.0 |
| 293 E | Kerosene | T / KWh | EFFKER | 0.3268 | 0.3268 | 0.3268 | 0.3268 | 0.3175 | 0.3129 | 0.3137 | 0.3150 | 0.3154 | 0.3161 | 0.3078 | -0.9 | 0.3100 | 0.308 | 0.3100 | 0.3100 | 0.3100 | 0.3100 | 0.3100 | 0.1 |
| 294 E | Fuel Oil | T / KWh | EFFFUE | 0.2244 | 0.2244 | 0.2296 | 0.2301 | 0.2277 | 0.2259 | 0.2281 | 0.2333 | 0.2145 | 0.2155 | 0.2145 | -0.5 | 0.2150 | 0.214 | 0.2150 | 0.2150 | 0.2150 | 0.2150 | 0.2150 | 0.0 |
| 295 E | Coal | T / KWh | EFFCOL | 0.7345 | 0.7345 | 0.7729 | 0.8207 | 0.7229 | 0.8075 | 0.7190 | 0.7709 | 0.7683 | 0.6936 | 0.7407 | 0.1 | 0.7400 | 0.741 | 0.7400 | 0.7400 | 0.7400 | 0.7400 | 0.7400 | 0.0 |
| 296 E | Bagasse | T / KWh | EFFBAG | 3.5935 | 3.5935 | 3.6184 | 3.5825 | 3.6193 | 3.6565 | 3.5864 | 3.5681 | 3.5801 | 3.5743 | 3.5743 | -0.1 | 2.3671 | 3.574 | 3.5743 | 3.5743 | 3.5743 | 3.5743 | 3.5743 | 0.0 |
| 297 | | | | | | | | | | | | | | | | | | | | | | | |
| 298 | Fuel Input for Electricity Generation (PHY) | | | | | | | | | | | | | | | | | | | | | | |
| 299 I | Diesel | T | CFIDIE | 1,452 | 1,493 | 1,905 | 2,237 | 2,128 | 3,139 | 3,801 | 3,646 | 2,788 | 2,844 | 2,599 | 6.0 | | 2,599 | 3,045 | 3,411 | 3,705 | 3,982 | 4,308 | 10.6 |
| 300 I | Kerosene | T | CFIKER | 0 | 0 | 0 | 3,226 | 3,787 | 11,132 | 13,558 | 29,252 | 12,272 | 14,769 | 32,332 | 29.0 | | 32,332 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | -0.8 |
| 301 I | Fuel Oil | T | CFIFUE | 37,586 | 48,073 | 53,687 | 74,242 | 86,944 | 97,959 | 108,897 | 102,129 | 128,125 | 147,129 | 142,885 | 14.3 | | 142,886 | 157,784 | 187,920 | 204,131 | 219,414 | 237,349 | 10.7 |
| 302 I | Coal | T | CFICOL | 33,218 | 31,921 | 22,104 | 27,787 | 49,560 | 36,289 | 38,468 | 33,262 | 30,853 | 31,949 | 30,269 | -0.9 | | 30,289 | 33,966 | 37,656 | 41,356 | 45,066 | 48,756 | 10.0 |
| 303 I | Bagasse | T | CFIBAG | 142,086 | 170,772 | 185,310 | 180,242 | 182,682 | 173,571 | 179,020 | 191,070 | 172,700 | 184,232 | 197,389 | 3.3 | | 197,389 | 315,630 | 331,412 | 347,983 | 365,382 | 383,651 | 14.2 |
| 304 | | | | | | | | | | | | | | | | | | | | | | | |
| 305 | Fuel Input for Electricity Generation (TOE) | | | | | | | | | | | | | | | | | | | | | | |
| 306 I | Diesel | TOE | TFIDIE | 1,467 | 1,508 | 1,924 | 2,259 | 2,149 | 3,221 | 3,839 | 3,682 | 2,795 | 2,872 | 2,625 | 6.0 | | 2,625 | 3,187 | 3,547 | 3,853 | 4,142 | 4,480 | 11.2 |
| 307 I | Kerosene | TOE | TFIKER | 0 | 0 | 0 | 3,355 | 3,938 | 11,577 | 14,100 | 30,422 | 12,763 | 15,381 | 33,625 | 29.0 | | 33,625 | 29,760 | 29,760 | 29,760 | 29,760 | 29,760 | -2.4 |
| 308 I | Fuel Oil | TOE | TFIFUE | 38,083 | 44,230 | 51,540 | 71,272 | 84,266 | 94,079 | 104,541 | 98,044 | 123,000 | 141,244 | 137,171 | 14.3 | | 137,171 | 161,073 | 180,403 | 195,966 | 210,637 | 227,855 | 10.7 |
| 309 I | Coal | TOE | TFICOL | 20,595 | 19,791 | 13,704 | 17,228 | 30,690 | 22,499 | 23,850 | 20,622 | 19,129 | 19,808 | 18,779 | -0.9 | | 18,779 | 21,059 | 23,352 | 25,647 | 27,941 | 30,235 | 10.0 |
| 310 I | Bagasse | TOE | TFIBAG | 22,734 | 27,324 | 29,650 | 28,839 | 29,261 | 27,771 | 28,643 | 30,571 | 27,632 | 29,477 | 31,582 | 3.3 | | 31,582 | 50,501 | 53,026 | 55,677 | 58,461 | 61,384 | 14.2 |
| 311 I | Total Fuel Input for Electricity | TOE | TFITOE | 80,878 | 92,853 | 96,818 | 122,953 | 130,305 | 159,148 | 174,974 | 183,342 | 185,319 | 208,782 | 223,782 | 10.7 | | 223,782 | 265,560 | 290,090 | 310,393 | 332,941 | 353,715 | 3.6 |
| 312 | | | | | | | | | | | | | | | | | | | | | | | |
| 313 | Energy Consumption (PHY) | | | | | | | | | | | | | | | | | | | | | | |
| 314 I | Gasoline (Consumption) | T | GESGAS | 34,795 | 38,161 | 43,284 | 47,482 | 52,931 | 59,199 | 61,453 | 67,848 | 72,308 | 79,595 | 83,958 | 9.2 | | 83,958 | 84,905 | 88,648 | 93,629 | 99,566 | 106,676 | 4.9 |
| 315 I | Diesel (Consumption) | T | GESDIE | 56,288 | 63,865 | 70,308 | 76,879 | 81,121 | 91,139 | 93,998 | 102,484 | 112,625 | 118,831 | 120,307 | 7.9 | | 120,307 | 122,323 | 130,346 | 138,780 | 147,707 | 157,223 | 5.5 |
| 316 I | Kerosene (Consumption) | T | GESKER | 17,362 | 19,908 | 21,347 | 21,398 | 20,136 | 26,604 | 27,640 | 41,548 | 23,971 | 25,582 | 42,922 | 9.5 | | 42,922 | 40,531 | 39,578 | 38,720 | 37,948 | 37,253 | -2.8 |
| 317 I | Fuel Oil (Consumption) | T | GESFUE | 55,921 | 63,329 | 69,122 | 93,799 | 89,214 | 121,779 | 142,376 | 134,570 | 172,636 | 179,840 | 182,746 | 12.6 | | 182,746 | 212,019 | 235,768 | 255,893 | 275,416 | 297,945 | 10.3 |
| 318 I | LPG (Consumption) | T | GESLPG | 2,538 | 3,490 | 8,108 | 12,549 | 19,920 | 22,543 | 25,713 | 30,289 | 32,152 | 32,751 | 33,700 | 29.5 | | 33,700 | 37,985 | 40,924 | 44,082 | 46,423 | 48,440 | 8.0 |
| 319 I | Coal (Consumption) | T | GESCOL | 36,082 | 35,957 | 35,600 | 38,000 | 61,500 | 51,289 | 54,468 | 50,762 | 62,446 | 62,596 | 63,086 | 5.8 | | 63,086 | 69,762 | 75,899 | 82,206 | 88,693 | 95,375 | 8.6 |
| 320 I | Fuel Wood (Consumption) | T | GESFWD | 51,203 | 46,096 | 42,650 | 63,325 | 55,195 | 65,700 | 37,558 | 23,558 | 23,806 | 14,808 | 13,000 | -12.8 | | 13,000 | 7,368 | 7,280 | 5,895 | 5,824 | 4,716 | -18.4 |
| 321 I | Charcoal (Consumption) | T | GESCHL | 2,500 | 2,000 | 2,000 | 2,500 | 3,000 | 3,000 | 2,500 | 2,000 | 2,000 | 1,500 | 1,300 | -6.3 | | 1,300 | 905 | 725 | 581 | 610 | 569 | -15.2 |
| 322 I | Bagasse (For National Grid) | T | GESBAG | 142,088 | 170,772 | 185,310 | 180,242 | 182,682 | 173,571 | 179,020 | 191,070 | 172,700 | 184,232 | 197,389 | 3.3 | | 197,389 | 315,630 | 331,412 | 347,983 | 365,382 | 383,651 | 14.2 |
| 323 E | Hydro (Consumption) | KWh | GEGHYD | 114,900 | 109,800 | 139,800 | 99,700 | 148,300 | 84,900 | 75,500 | 113,100 | 103,700 | 75,500 | 134,400 | 1.8 | 130,000 | 134,400 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | -0.7 |
| 324 | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 116,374 | 115,211 | 121,546 | 128,478 | 136,003 | 144,133 | 152,690 | 162,308 | 172,419 | 183,273 | 190,094 | 197,233 | 5.5 |
| 112,304 | 133,168 | 118,595 | 122,243 | 126,004 | 129,881 | 133,877 | 137,994 | 142,235 | 146,602 | 151,098 | 155,725 | 1.8 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 248,376 | 240,141 | 250,721 | 262,007 | 274,014 | 286,787 | 300,300 | 314,654 | 329,876 | 341,162 | 352,958 | 3.8 |
| 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | |
| | 8,253 | 5,003 | 4,002 | 3,202 | 2,561 | 2,049 | 1,639 | 1,311 | 1,049 | 839 | 671 | -20.0 |
| | 4,716 | 3,773 | 3,018 | 2,414 | 1,932 | 1,545 | 1,236 | 989 | 791 | 633 | 506 | -20.0 |
| | 39,433 | 43,497 | 46,632 | 49,084 | 50,973 | 52,494 | 53,728 | 54,750 | 55,615 | 56,363 | 57,023 | 5.8 |
| | 164 | 131 | 105 | 84 | 67 | 54 | 43 | 34 | 27 | 22 | 19 | -20.0 |
| #REF! | 477,815 | 537,353 | 593,653 | 646,578 | 695,228 | 742,873 | 786,854 | 828,554 | 868,354 | 906,614 | 943,667 | 7.0 |
| 11,000 | 6,503 | 5,203 | 4,162 | 3,330 | 2,664 | 2,131 | 1,705 | 1,364 | 1,091 | 873 | 698 | -20.0 |
| 3,500 | 1,792 | 1,434 | 1,147 | 918 | 734 | 587 | 470 | 376 | 301 | 241 | 192 | -20.0 |
| 42,587 | 42,587 | 46,977 | 50,362 | 52,985 | 55,050 | 56,693 | 58,026 | 59,130 | 60,084 | 60,872 | 61,585 | 9.8 |
| 370 | 121 | 97 | 78 | 62 | 50 | 40 | 32 | 25 | 20 | 16 | 13 | -20.0 |
| 49,597 | 51,004 | 53,711 | 55,749 | 57,298 | 58,498 | 59,451 | 60,233 | 60,895 | 61,476 | 62,002 | 62,488 | 2.1 |
| 0 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | |
| | 1,308,608 | 1,433,335 | 1,563,088 | 1,695,743 | 1,831,968 | 1,972,626 | 2,118,720 | 2,271,358 | 2,431,697 | 2,600,956 | 2,780,403 | 7.8 |
| | 20,906 | 22,933 | 25,009 | 27,132 | 29,311 | 31,562 | 33,500 | 36,042 | 38,907 | 41,615 | 44,488 | 7.8 |
| | 1,327,514 | 1,456,268 | 1,588,095 | 1,722,875 | 1,861,280 | 2,004,188 | 2,152,620 | 2,307,700 | 2,470,604 | 2,642,572 | 2,824,889 | 7.8 |
| | 152 | 168.2 | 181.3 | 196.7 | 212.5 | 228.9 | 245.7 | 263.4 | 282.0 | 301.7 | 322.5 | 7.8 |
| | 61.2 | 61.5 | 61.8 | 62.1 | 62.4 | 62.7 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 0.5 |
| | 286 | 313 | 341 | 370 | 399 | 425 | 452 | 481 | 512 | 545 | 579 | 7.3 |
| | 14.8 | 15.1 | 15.4 | 15.7 | 16.0 | 15.5 | 15.0 | 14.5 | 14.0 | 13.5 | 13.0 | -1.3 |
| | 1,533,578 | 1,688,282 | 1,847,619 | 2,011,558 | 2,180,914 | 2,334,489 | 2,492,618 | 2,656,559 | 2,827,554 | 3,005,886 | 3,195,865 | 7.6 |
| 130,600 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 0.0 |
| 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 0.0 |
| | 1,130,342 | 1,274,660 | 1,423,382 | 1,576,404 | 1,734,548 | 1,876,579 | 2,022,878 | 2,174,628 | 2,333,271 | 2,499,474 | 2,675,127 | 8.0 |
| 5,000 | 65,900 | 70,900 | 75,900 | 80,900 | 85,900 | 90,900 | 95,900 | 100,900 | 105,900 | 110,900 | 115,900 | 5.8 |
| 5.0 | 107,335 | 112,702 | 118,337 | 124,254 | 130,467 | 136,990 | 143,840 | 151,032 | 158,583 | 166,512 | 174,838 | 5.0 |
| 0.1908 | 0.191 | 0.1908 | 0.1908 | 0.1908 | 0.1908 | 0.1908 | 0.1908 | 0.1908 | 0.1908 | 0.1908 | 0.1908 | 0.0 |
| 0.3100 | 0.310 | 0.3100 | 0.3100 | 0.3100 | 0.3100 | 0.3100 | 0.3100 | 0.3100 | 0.3100 | 0.3100 | 0.3100 | 0.0 |
| 0.2150 | 0.215 | 0.2150 | 0.2150 | 0.2150 | 0.2150 | 0.2150 | 0.2150 | 0.2150 | 0.2150 | 0.2150 | 0.2150 | 0.0 |
| 0.7400 | 0.740 | 0.7400 | 0.7400 | 0.7400 | 0.7400 | 0.7400 | 0.7400 | 0.7400 | 0.7400 | 0.7400 | 0.7400 | 0.0 |
| 2.3671 | 3.574 | 2.7932 | 2.7932 | 2.7932 | 2.7932 | 2.7932 | 2.7932 | 2.7932 | 2.7932 | 2.7932 | 2.7932 | -7.4 |
| | 4,308 | 4,858 | 5,425 | 6,008 | 6,611 | 7,152 | 7,710 | 8,298 | 8,892 | 9,526 | 10,195 | 9.0 |
| | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 0.0 |
| | 237,349 | 267,853 | 298,882 | 331,013 | 364,220 | 394,044 | 424,794 | 456,629 | 489,898 | 524,840 | 561,723 | 5.0 |
| | 48,766 | 52,466 | 56,166 | 59,866 | 63,566 | 67,266 | 70,966 | 74,666 | 78,365 | 82,066 | 85,766 | 5.8 |
| | 363,651 | 314,797 | 330,537 | 347,064 | 364,417 | 382,638 | 401,769 | 421,858 | 442,951 | 465,098 | 488,353 | 2.4 |
| | 4,480 | 5,052 | 5,642 | 6,248 | 6,875 | 7,428 | 8,018 | 8,620 | 9,248 | 9,907 | 10,603 | 8.0 |
| | 29,760 | 29,760 | 29,760 | 29,760 | 29,760 | 29,760 | 29,760 | 29,760 | 29,760 | 29,760 | 29,760 | 0.0 |
| | 227,955 | 256,947 | 286,927 | 317,773 | 349,652 | 378,282 | 407,773 | 438,363 | 470,303 | 503,846 | 539,255 | 9.0 |
| | 30,235 | 32,529 | 34,823 | 37,117 | 39,411 | 41,705 | 43,999 | 46,293 | 48,587 | 50,881 | 53,175 | 5.8 |
| | 61,384 | 50,387 | 52,886 | 55,530 | 58,307 | 61,222 | 64,283 | 67,497 | 70,872 | 74,418 | 78,137 | 2.4 |
| | 353,715 | 374,656 | 410,097 | 446,428 | 484,004 | 518,408 | 553,833 | 590,533 | 628,765 | 668,610 | 710,929 | 7.2 |
| | 106,675 | 112,543 | 118,961 | 125,929 | 133,457 | 141,565 | 150,283 | 159,647 | 169,697 | 175,985 | 182,623 | 5.5 |
| | 157,223 | 143,761 | 148,604 | 153,545 | 158,581 | 163,625 | 168,745 | 173,936 | 179,191 | 184,501 | 189,855 | 1.9 |
| | 37,253 | 36,003 | 35,002 | 34,202 | 33,561 | 33,049 | 32,639 | 32,311 | 32,049 | 31,839 | 31,671 | -1.6 |
| | 297,945 | 333,277 | 369,958 | 407,999 | 447,613 | 484,384 | 522,637 | 562,671 | 604,801 | 649,352 | 696,660 | 8.9 |
| | 49,440 | 54,552 | 58,844 | 62,556 | 65,878 | 68,903 | 71,925 | 74,859 | 77,839 | 80,927 | 84,177 | 5.5 |
| | 95,375 | 102,299 | 109,448 | 116,840 | 124,492 | 132,422 | 140,649 | 149,196 | 158,088 | 167,342 | 176,991 | 8.4 |
| | 4,716 | 3,773 | 3,018 | 2,414 | 1,932 | 1,545 | 1,236 | 989 | 791 | 633 | 506 | -20.0 |
| | 569 | 536 | 510 | 489 | 473 | 459 | 448 | 440 | 433 | 427 | 423 | -2.9 |
| | 383,651 | 314,797 | 330,537 | 347,064 | 364,417 | 382,636 | 401,769 | 421,858 | 442,951 | 465,098 | 488,353 | 2.4 |
| 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 0.0 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 222,069 | 197,233 | 205,395 | 212,982 | 219,890 | 229,441 | 238,330 | 248,437 | 257,488 | 267,780 | 277,171 | 289,851 | 301,65 |
| 146,191 | 146,188 | 151,034 | 165,682 | 169,602 | 175,352 | 180,375 | 184,599 | 190,805 | 196,211 | 200,738 | 207,406 | 213,19 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 352,959 | 366,428 | 378,665 | 389,492 | 404,792 | 418,706 | 431,036 | 448,292 | 463,991 | 477,907 | 497,257 | 514,84 |
| | 0.5 | 0 | 0 | 0.5 | 0 | 0 | 0.5 | 0 | 0 | 0.5 | 0 | |
| | 671 | 537 | 430 | 344 | 275 | 220 | 176 | 141 | 113 | 90 | 72 | 5 |
| | 506 | 405 | 324 | 259 | 207 | 166 | 133 | 106 | 85 | 68 | 54 | 4 |
| | 57,023 | 63,844 | 68,953 | 72,680 | 75,354 | 77,254 | 78,600 | 79,555 | 80,236 | 80,727 | 81,087 | 81,35 |
| | 18 | 14 | 11 | 9 | 7 | 6 | 5 | 4 | 3 | 2 | 2 | |
| #REF! | 943,666 | 1,049,044 | 1,132,633 | 1,199,867 | 1,255,401 | 1,303,071 | 1,345,369 | 1,384,237 | 1,420,971 | 1,456,450 | 1,491,262 | 1,525,79 |
| 11,000 | 698 | 559 | 447 | 358 | 286 | 229 | 183 | 146 | 117 | 94 | 75 | [illegible] |
| 3,500 | 192 | 154 | 123 | 99 | 79 | 63 | 50 | 40 | 32 | 26 | 21 | 1 |
| 61,585 | 61,585 | 68,952 | 74,470 | 78,494 | 81,382 | 83,434 | 84,868 | 85,920 | 86,655 | 87,186 | 87,574 | 87,86 |
| 370 | 13 | 10 | 8 | 7 | 5 | 4 | 3 | 3 | 2 | 2 | 1 | |
| 55,502 | 62,488 | 69,675 | 75,048 | 78,957 | 81,752 | 83,731 | 85,125 | 86,109 | 86,807 | 87,307 | 87,671 | 87,94 |
| | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0. |
| | 2,780,403 | 2,858,525 | 3,084,761 | 3,308,698 | 3,534,081 | 3,765,688 | 4,007,411 | 4,252,460 | 4,533,577 | 4,823,214 | 5,133,672 | 5,487,20 |
| | 44,486 | 45,704 | 49,358 | 52,939 | 56,545 | 60,251 | 64,119 | 68,199 | 72,537 | 77,171 | 82,139 | 87,47 |
| | 2,824,889 | 2,902,230 | 3,134,118 | 3,361,637 | 3,590,626 | 3,825,939 | 4,071,529 | 4,330,659 | 4,606,114 | 4,900,385 | 5,215,811 | 5,554,68 |
| | 322 | 331.3 | 357.8 | 383.7 | 409.9 | 436.8 | 464.8 | 494.4 | 525.8 | 559.4 | 595.4 | 634.1 |
| 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 |
| | 579 | 595 | 642 | 689 | 736 | 784 | 835 | 889 | 944 | 1005 | 1069 | 113 |
| 13.0 | 13. | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13. |
| | 3,195,865 | 3,283,362 | 3,545,703 | 3,803,101 | 4,062,182 | 4,328,377 | 4,606,219 | 4,899,379 | 5,211,008 | 5,543,924 | 5,900,773 | 6,284,14 |
| 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,00 |
| 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,00 |
| | 2,675,127 | 2,753,882 | 3,007,044 | 3,254,805 | 3,503,745 | 3,759,334 | 4,026,020 | 4,307,465 | 4,606,793 | 4,926,793 | 5,270,060 | 4,763,21 |
| 0 | 115,900 | 115,900 | 115,900 | 115,900 | 115,900 | 115,900 | 115,900 | 115,900 | 115,900 | 115,900 | 115,900 | 991,90 |
| 5.0 | 174,838 | 183,580 | 192,759 | 202,397 | 212,517 | 223,142 | 234,299 | 246,014 | 258,315 | 271,231 | 284,792 | 299,03 |
| 0.1908 | 0.1908 | 0.1908 | 0.1908 | 0.1908 | 0.1908 | 0.1908 | 0.1908 | 0.1908 | 0.1908 | 0.1908 | 0.1908 | 0.1908 |
| 0.3100 | 0.3100 | 0.3100 | 0.3100 | 0.3100 | 0.3100 | 0.3100 | 0.3100 | 0.3100 | 0.3100 | 0.3100 | 0.3100 | 0.3100 |
| 0.2150 | 0.2150 | 0.2150 | 0.2150 | 0.2150 | 0.2150 | 0.2150 | 0.2150 | 0.2150 | 0.2150 | 0.2150 | 0.2150 | 0.2150 |
| 0.7400 | 0.7400 | 0.7400 | 0.7400 | 0.7400 | 0.7400 | 0.7400 | 0.7400 | 0.7400 | 0.7400 | 0.7400 | 0.7400 | 0.7400 |
| 2.3671 | 2.7932 | 2.7932 | 2.7932 | 2.7932 | 2.7932 | 2.7932 | 2.7932 | 2.7932 | 2.7932 | 2.7932 | 2.7932 | 2.7932 |
| | 10,198 | 10,496 | 11,451 | 12,405 | 13,354 | 14,328 | 15,344 | 16,417 | 17,558 | 18,777 | 20,085 | 15,15 |
| | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,000 | 31,00 |
| | 561,723 | 578,250 | 631,415 | 683,444 | 735,717 | 789,385 | 845,384 | 904,487 | 967,335 | 1,034,528 | 1,106,612 | 1,000,18 |
| | 85,766 | 85,766 | 85,766 | 85,766 | 85,766 | 85,766 | 85,766 | 85,766 | 85,766 | 85,766 | 85,766 | 734,00 |
| | 488,353 | 512,771 | 538,409 | 565,330 | 593,596 | 623,276 | 654,440 | 687,152 | 721,520 | 757,596 | 795,476 | 835,25 |
| | 10,603 | 10,915 | 11,919 | 12,901 | 13,888 | 14,901 | 15,958 | 17,073 | 18,260 | 19,528 | 20,889 | 18,88 |
| | 29,760 | 29,760 | 29,760 | 29,760 | 29,760 | 29,760 | 29,760 | 29,760 | 29,760 | 29,760 | 29,760 | 29,76 |
| | 539,255 | 565,130 | 608,163 | 658,105 | 706,288 | 757,810 | 811,569 | 868,303 | 928,941 | 993,147 | 1,062,347 | 960,17 |
| | 53,175 | 53,175 | 53,175 | 53,175 | 53,175 | 53,175 | 53,175 | 53,175 | 53,175 | 53,175 | 53,175 | 455,09 |
| | 78,137 | 82,043 | 86,146 | 90,453 | 94,975 | 99,724 | 104,710 | 109,946 | 115,443 | 121,215 | 127,276 | 133,64 |
| | 710,929 | 731,024 | 787,162 | 842,395 | 898,096 | 955,370 | 1,015,172 | 1,078,257 | 1,145,279 | 1,216,826 | 1,293,447 | 1,597,53 |
| | 182,623 | 190,180 | 197,208 | 203,602 | 212,445 | 220,676 | 228,182 | 238,415 | 247,944 | 256,640 | 266,381 | 275,30 |
| | 189,855 | 191,620 | 180,816 | 186,176 | 193,394 | 199,564 | 205,833 | 213,775 | 221,050 | 227,594 | 236,415 | 241,19 |
| | 31,671 | 31,537 | 31,430 | 31,344 | 31,275 | 31,220 | 31,176 | 31,141 | 31,113 | 31,090 | 31,072 | 31,05 |
| | 696,660 | 723,802 | 800,741 | 866,079 | 932,715 | 1,001,881 | 1,074,599 | 1,151,737 | 1,234,055 | 1,322,252 | 1,417,001 | 1,335,02 |
| | 84,177 | 99,148 | 105,827 | 115,281 | 123,035 | 129,404 | 135,543 | 141,958 | 148,511 | 155,435 | 162,845 | 170,84 |
| | 176,991 | 184,181 | 200,237 | 209,238 | 218,949 | 229,425 | 240,729 | 252,925 | 266,084 | 280,284 | 295,607 | 950,35 |
| | 506 | 405 | 324 | 259 | 207 | 166 | 133 | 106 | 85 | 68 | 54 | 4 |
| | 423 | 419 | 417 | 414 | 413 | 411 | 410 | 409 | 408 | 408 | 407 | 40 |
| | 488,353 | 512,771 | 538,409 | 565,330 | 593,596 | 623,276 | 654,440 | 687,152 | 721,520 | 757,596 | 795,478 | 835,25 |
| 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,000 | 130,00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 0 | 0 | | | | | | |
| 0 | 0 | 0 | 0 | | | | | | |
| 0 | 0 | 0 | 0 | | | | | | |
| | | | | | | | | | |
| 312,407 | 326,833 | 340,228 | 352,993 | 3.8 | 9.2 | 4.9 | 5.5 | 3.9 | 4.6 |
| 218,008 | 225,135 | 231,285 | 236,360 | 5.3 | 9.3 | 5.8 | 1.6 | 2.8 | 2.9 |
| 0 | 0 | 0 | 0 | | | | | | |
| 0 | 0 | 0 | 0 | | | | | | |
| 0 | 0 | 0 | 0 | | | | | | |
| 0 | 0 | 0 | 0 | | | | | | |
| 530,415 | 551,968 | 571,512 | 588,753 | 6.5 | 9.3 | 5.3 | 3.6 | 3.5 | 3.8 |
| 0.5 | 0 | 0 | 0.5 | | | | 1.0 | 1.0 | |
| | | | | | | | | | |
| 48 | 37 | 30 | 24 | -20.0 | -4.8 | -10.0 | -20.0 | -20.0 | -18.4 |
| 35 | 28 | 22 | 18 | -20.0 | -13.3 | -12.3 | -20.0 | -20.0 | -18.8 |
| 81,560 | 81,722 | 81,854 | 81,964 | 2.4 | 30.4 | 7.1 | 3.8 | 2.4 | 3.6 |
| 1 | 1 | 1 | 1 | -20.0 | -8.8 | -20.0 | -20.0 | -20.0 | -20.0 |
| 1,560,306 | 1,594,950 | 1,629,824 | 1,664,980 | 3.9 | 9.1 | 7.7 | 7.0 | 3.9 | 5.5 |
| | | | | | | | | | |
| 48 | 38 | 31 | 25 | -20.0 | -4.8 | -10.0 | -20.0 | -20.0 | -18.4 |
| 13 | 11 | 8 | 7 | -20.0 | -13.3 | -12.9 | -20.0 | -20.0 | -18.8 |
| 88,085 | 88,260 | 88,407 | 88,522 | 2.4 | 30.4 | 7.1 | 3.8 | 2.4 | 3.6 |
| 1 | 1 | 1 | 0 | -20.0 | -8.8 | -20.0 | -20.0 | -20.0 | -20.0 |
| 88,147 | 88,310 | 88,442 | 88,553 | 2.4 | 2.4 | 2.5 | 2.1 | 2.4 | 2.3 |
| 0.3 | 0.3 | 0.3 | 0.3 | | 0.0 | 0.0 | 1.0 | 1.0 | |
| | | | | | | | | | |
| 5,826,108 | 6,212,747 | 6,629,638 | 7,079,468 | 6.4 | 10.8 | 8.2 | 7.8 | 6.4 | 7.2 |
| 93,218 | 99,404 | 106,074 | 113,271 | 6.4 | 9.6 | 7.6 | 7.8 | 6.4 | 7.1 |
| 5,919,326 | 6,312,151 | 6,795,713 | 7,192,740 | | 10.8 | 8.2 | 7.8 | 6.4 | 7.2 |
| 675.7 | 720.6 | 768.9 | 821.1 | 6.4 | 10.8 | 8.6 | 7.8 | 6.4 | 7.3 |
| 63.0 | 63.0 | 63.0 | 63.0 | 0.0 | 1.3 | 1.1 | 0.3 | 0.0 | 0.3 |
| 1213 | 1294 | 1381 | 1474 | 6.4 | 8.9 | 7.4 | 7.3 | 6.4 | 6.9 |
| 13.0 | 13.0 | 13.0 | 13.0 | 0.0 | -2.8 | -2.6 | -1.3 | 0.0 | -0.9 |
| | | | | | | | | | |
| 6,696,676 | 7,141,089 | 7,620,274 | 8,137,920 | 6.4 | 10.3 | 7.9 | 7.6 | 6.4 | 7.1 |
| 130,000 | 130,000 | 130,000 | 130,000 | 0.0 | 1.6 | -0.7 | 0.0 | 0.0 | -0.1 |
| 100,000 | 100,000 | 100,000 | 100,000 | 0.0 | | -1.1 | 0.0 | 0.0 | -0.2 |
| 4,284,792 | 3,837,506 | 3,424,207 | 3,047,945 | -0.9 | 14.7 | 10.6 | 9.0 | 0.9 | 5.1 |
| 1,867,900 | 2,743,900 | 3,619,900 | 4,495,900 | 27.6 | -1.0 | 10.0 | 5.8 | 27.6 | 17.0 |
| 313,984 | 329,683 | 346,167 | 363,475 | 5.0 | 3.8 | 5.0 | 5.0 | 5.0 | 5.0 |
| | | | | | | | | | |
| 0.1908 | 0.1908 | 0.1908 | 0.1908 | 0.0 | -0.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.3100 | 0.3100 | 0.3100 | 0.3100 | 0.0 | -0.6 | 0.1 | 0.0 | 0.0 | 0.0 |
| 0.2150 | 0.2150 | 0.2150 | 0.2150 | 0.0 | -0.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.7400 | 0.7400 | 0.7400 | 0.7400 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2.7932 | 2.7932 | 2.7932 | 2.7932 | 0.0 | -0.1 | 0.0 | -2.4 | 0.0 | -0.8 |
| | | | | | | | | | |
| 16,390 | 14,626 | 13,050 | 11,616 | -0.9 | 6.0 | 10.6 | 9.0 | 0.9 | 5.1 |
| 31,000 | 31,000 | 31,000 | 31,000 | 0.0 | | -0.8 | 0.0 | 0.0 | -0.1 |
| 899,721 | 805,800 | 719,015 | 640,008 | -0.9 | 14.8 | 10.7 | 9.0 | 0.9 | 5.1 |
| 1,382,246 | 2,030,486 | 2,678,726 | 3,326,966 | 27.6 | -0.9 | 10.0 | 5.8 | 27.6 | 17.0 |
| 877,012 | 920,863 | 966,906 | 1,015,251 | 5.0 | 3.3 | 14.2 | 2.4 | 5.0 | 5.6 |
| | | | | | | | | | |
| 16,984 | 15,211 | 13,572 | 12,081 | -0.9 | 6.0 | 11.3 | 9.0 | 0.9 | 5.2 |
| 29,760 | 29,760 | 29,760 | 29,760 | 0.0 | | -2.4 | 0.0 | 0.0 | -0.4 |
| 853,732 | 773,568 | 690,255 | 614,407 | -0.9 | 14.9 | 10.7 | 9.0 | 0.9 | 5.1 |
| 856,993 | 1,258,901 | 1,660,810 | 2,062,719 | 27.6 | -0.9 | 10.0 | 5.8 | 27.6 | 17.0 |
| 140,322 | 147,338 | 154,705 | 162,440 | 5.0 | 3.3 | 14.2 | 2.4 | 5.0 | 5.6 |
| 1,907,790 | 2,224,776 | 2,549,102 | 2,881,408 | 9.8 | 10.7 | 9.6 | 7.2 | 9.8 | 8.9 |
| | | | | | | | | | |
| 289,266 | 302,629 | 315,026 | 326,290 | 3.9 | 9.2 | 4.9 | 5.5 | 3.9 | 4.6 |
| 245,199 | 251,695 | 257,443 | 262,367 | 2.2 | 7.9 | 5.5 | 1.9 | 2.2 | 2.6 |
| 31,046 | 31,037 | 31,030 | 31,024 | -0.1 | 9.5 | -2.8 | -1.6 | -0.1 | -1.1 |
| 1,260,965 | 1,195,532 | 1,139,496 | 1,093,677 | -3.1 | 12.6 | 10.3 | 8.9 | 3.1 | 6.1 |
| 179,518 | 188,968 | 199,284 | 210,565 | 5.3 | 29.5 | 8.0 | 5.5 | 5.3 | 6.3 |
| 1,626,468 | 2,293,968 | 2,962,995 | 3,633,673 | 22.3 | 5.8 | 8.6 | 6.4 | 22.3 | 14.5 |
| 35 | 28 | 22 | 18 | -20.0 | -12.8 | -18.4 | -20.0 | -20.0 | -19.7 |
| 407 | 406 | 406 | 406 | -0.3 | -6.3 | -15.2 | -2.9 | -0.3 | -3.8 |
| 877,012 | 920,863 | 966,906 | 1,015,251 | 5.0 | 3.3 | 14.2 | 2.4 | 5.0 | 5.6 |
| 130,000 | 130,000 | 130,000 | 130,000 | 0.0 | 1.6 | -0.7 | 0.0 | 0.0 | -0.1 |

| No. | | Item | Unit | Code | | | | | | | | | | | | Rate | | | | | | | | Rate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 325 | | Energy Consumption (TOE) | | | | | | | | | | | | | | | | | | | | | | |
| 326 | I | Gasoline (Consumption) | TOE | TESGAS | 37,579 | 41,214 | 46,725 | 51,259 | 57,165 | 63,935 | 66,359 | 73,276 | 78,003 | 85,963 | 90,675 | 9.2 | | 90,675 | 91,697 | 95,738 | 101,116 | 107,639 | 115,210 | 4.9 |
| 327 | I | Diesel (Consumption) | TOE | TESDIE | 56,851 | 64,528 | 71,011 | 77,648 | 81,932 | 92,050 | 94,938 | 103,489 | 113,751 | 120,019 | 121,510 | 7.9 | | 121,510 | 123,546 | 131,649 | 140,167 | 149,184 | 158,798 | 5.5 |
| 328 | I | Kerosene (Consumption) | TOE | TESKER | 18,056 | 20,704 | 22,201 | 22,252 | 20,941 | 27,668 | 28,746 | 43,210 | 24,930 | 25,605 | 44,639 | 9.5 | | 44,639 | 42,152 | 41,161 | 40,269 | 39,466 | 38,743 | -2.8 |
| 329 | I | Fuel Oil (Consumption) | TOE | TESFUE | 53,584 | 60,796 | 66,357 | 90,044 | 85,645 | 116,908 | 136,681 | 129,187 | 165,731 | 172,646 | 175,436 | 12.6 | | 175,436 | 208,538 | 226,338 | 245,657 | 264,399 | 286,027 | 10.3 |
| 330 | I | LPG (Consumption) | TOE | TESLPG | 2,741 | 3,769 | 8,754 | 13,553 | 21,514 | 24,346 | 27,770 | 32,712 | 34,724 | 35,371 | 36,398 | 29.5 | | 36,356 | 41,023 | 44,198 | 47,608 | 50,353 | 53,395 | 8.0 |
| 331 | I | Coal (Consumption) | TOE | TESCOL | 22,358 | 22,293 | 22,692 | 23,560 | 38,130 | 31,799 | 33,770 | 31,472 | 38,717 | 38,810 | 39,113 | 5.8 | | 39,113 | 43,253 | 47,058 | 50,968 | 54,990 | 59,155 | 8.6 |
| 332 | I | Fuel Wood (Consumption) | TOE | TESFWD | 19,457 | 17,516 | 16,207 | 24,064 | 24,770 | 24,966 | 14,272 | 8,955 | 9,046 | 5,551 | 4,940 | -12.8 | | 4,940 | 2,800 | 2,766 | 2,240 | 2,213 | 1,792 | -14.4 |
| 333 | I | Charcoal (Consumption) | TOE | TESCHL | 1,850 | 1,480 | 1,480 | 1,850 | 2,220 | 2,220 | 1,850 | 1,480 | 1,480 | 1,110 | 962 | -6.3 | | 962 | 596 | 537 | 489 | 452 | 421 | -15.2 |
| 334 | I | Bagasse (For National Grid) | TOE | TESBAG | 22,734 | 27,324 | 25,650 | 28,839 | 29,261 | 27,771 | 28,543 | 30,571 | 27,632 | 29,477 | 31,552 | 3.9 | | 31,582 | 50,501 | 53,026 | 55,677 | 58,461 | 61,384 | 14.2 |
| 335 | E | Hydro (Consumption) | TOE | TESHYD | 9,881 | 9,443 | 12,023 | 8,574 | 12,754 | 7,301 | 8,493 | 9,727 | 8,918 | 6,493 | 11,558 | 1.5 | | 11,558 | 11,180 | 11,180 | 11,180 | 11,180 | 11,180 | -0.7 |
| 336 | I | Total Inland Energy Consumption (TOE) | TOE | TESTOE | 245,192 | 269,057 | 297,100 | 341,642 | 374,333 | 418,966 | 439,532 | 464,080 | 503,021 | 522,045 | 556,812 | 8.5 | | 556,812 | 610,286 | 653,650 | 695,372 | 738,337 | 786,080 | 7.1 |
| 337 | | | | | | | | | | | | | | | | | | | | | | | | |
| 338 | | Energy for bunkers (PHY) | | | | | | | | | | | | | | | | | | | | | | |
| 339 | E | Diesel | T | GEXDIE | 36,095 | 46,923 | 63,538 | 71,949 | 82,205 | 58,630 | 59,385 | 50,061 | 36,780 | 101,868 | 133,960 | 14.0 | | 133,960 | 135,639 | 139,372 | 142,159 | 145,003 | 152,253 | |
| 340 | E | Fuel | T | GEXFUE | 19,600 | 20,777 | 24,104 | 25,074 | 21,190 | 20,335 | 19,376 | 33,804 | 25,259 | 34,567 | 21,419 | 0.9 | | 21,419 | 21,847 | 22,284 | 22,730 | 23,185 | 23,648 | |
| 341 | I | Jet Fuel | T | CCTJFL | 55,329 | 67,406 | 77,539 | 119,699 | 121,000 | 138,664 | 130,254 | 145,369 | 123,604 | 122,555 | 120,232 | 8.1 | | 120,232 | 122,637 | 125,089 | 127,591 | 130,143 | 132,748 | 2.0 |
| 342 | | | | | | | | | | | | | | | | | | | | | | | | |
| 343 | | Energy for bunkers (TOE) | | | | | | | | | | | | | | | | | | | | | | |
| 344 | I | Diesel | TOE | TEXDIE | 36,456 | 47,392 | 64,173 | 72,668 | 83,027 | 59,216 | 53,919 | 50,562 | 37,148 | 102,887 | 135,300 | | | 135,300 | 138,006 | 140,766 | 143,581 | 146,453 | 153,775 | |
| 345 | I | Fuel | TOE | TEXFUE | 18,816 | 19,946 | 23,140 | 24,071 | 20,342 | 16,522 | 18,601 | 32,452 | 24,249 | 23,164 | 20,562 | | | 20,562 | 20,973 | 21,393 | 21,821 | 22,257 | 22,702 | |
| 346 | I | Jet Fuel | TOE | TCTJFL | 57,542 | 70,102 | 80,641 | 124,487 | 125,840 | 144,211 | 141,704 | 152,224 | 128,548 | 127,457 | 125,041 | 8.1 | | 125,041 | 127,542 | 130,093 | 132,695 | 135,349 | 138,056 | 2.0 |
| 347 | | | | | | | | | | | | | | | | | | | | | | | | |
| 348 | | Total energy demand including bunkers (TOE) | TOE | TSTOB | 358,006 | 406,508 | 465,054 | 562,889 | 603,543 | 641,514 | 653,756 | 699,317 | 692,966 | 785,574 | 837,715 | 8.9 | | 837,715 | 896,807 | 945,902 | 993,469 | 1,042,395 | 1,100,614 | 5.6 |
| 349 | | | | | | | | | | | | | | | | | | | | | | | | |
| 350 | | Bagasse Production and Utilization (PHY) | | | | | | | | | | | | | | | | | | | | | | |
| 351 | E | Bagasse Production | T | GBGPRD | 1,516,994 | 1,642,708 | 1,716,558 | 1,572,831 | 1,662,888 | 1,575,992 | 1,543,273 | 1,625,479 | 1,562,287 | 1,424,144 | 1,639,810 | 0.8 | 1,600,000 | 1,639,810 | 1,600,000 | 1,600,000 | 1,600,000 | 1,600,000 | 1,600,000 | -0.5 |
| 352 | I | Electricity | T | GBGELE | 142,086 | 170,772 | 185,310 | 180,242 | 182,882 | 173,571 | 179,020 | 191,070 | 172,700 | 184,232 | 157,389 | 3.3 | | 197,389 | 315,630 | 331,412 | 347,983 | 365,382 | 383,651 | 14.2 |
| 353 | I | Bagasse Remaining for Sugar Manufacturing | T | GBGSUG | 1,374,908 | 1,471,934 | 1,531,248 | 1,392,589 | 1,479,986 | 1,402,421 | 1,304,253 | 1,434,409 | 1,389,567 | 1,239,912 | 1,442,421 | 0.5 | | 1,442,421 | 1,284,370 | 1,268,588 | 1,252,017 | 1,234,618 | 1,216,349 | -3.4 |
| 354 | | | | | | | | | | | | | | | | | | | | | | | | |
| 355 | | Bagasse Production and Utilization (TOE) | | | | | | | | | | | | | | | | | | | | | | |
| 356 | I | Bagasse Production | TOE | TBGPRD | 242,719 | 262,833 | 274,649 | 251,653 | 268,059 | 252,159 | 246,924 | 260,077 | 245,983 | 227,863 | 262,370 | 0.6 | 256,000 | 262,370 | 256,000 | 256,000 | 256,000 | 256,000 | 256,000 | -0.5 |
| 357 | I | Electricity | TOE | TBGELE | 12,219 | 14,688 | 15,937 | 15,501 | 15,728 | 14,927 | 15,396 | 16,432 | 14,852 | 15,844 | 16,975 | 3.3 | | 16,975 | 50,501 | 53,026 | 55,677 | 58,461 | 61,384 | 29.2 |
| 358 | I | Bagasse for Sugar Manufacturing and Remaining | TOE | TBGSUG | 230,500 | 248,147 | 258,713 | 236,152 | 250,331 | 237,232 | 231,528 | 243,645 | 235,111 | 212,019 | 245,394 | 0.6 | | 245,394 | 205,499 | 202,974 | 200,323 | 197,539 | 194,516 | -4.5 |
| 359 | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 115.210 | 121.546 | 128.478 | 136.003 | 144.133 | 152.890 | 162.306 | 172.419 | 183.273 | 190.064 | 197.233 | 5.5 |
| | 158.796 | 145.198 | 150.090 | 155.080 | 160.107 | 165.261 | 170.433 | 175.676 | 180.983 | 186.346 | 191.754 | 1.9 |
| | 38.743 | 37.443 | 36.402 | 35.570 | 34.904 | 34.371 | 33.945 | 33.604 | 33.331 | 33.113 | 32.938 | -1.6 |
| | 286.027 | 319.546 | 355.159 | 391.679 | 429.709 | 465.009 | 501.732 | 540.165 | 580.609 | 623.378 | 668.793 | 8.9 |
| | 53.395 | 58.916 | 63.552 | 67.560 | 71.149 | 74.480 | 77.679 | 80.848 | 84.065 | 87.401 | 90.911 | 5.5 |
| | 59.133 | 63.425 | 67.858 | 72.441 | 77.185 | 82.101 | 87.203 | 92.502 | 98.013 | 103.752 | 109.734 | 6.4 |
| | 1.792 | 1.434 | 1.117 | 918 | 734 | 587 | 470 | 376 | 301 | 241 | 192 | -20.0 |
| | 421 | 397 | 378 | 362 | 350 | 340 | 332 | 325 | 320 | 318 | 313 | -2.9 |
| | 81.384 | 50.367 | 52.886 | 55.530 | 58.307 | 61.222 | 64.283 | 67.497 | 70.872 | 74.416 | 78.137 | 2.4 |
| | 11.180 | 11.180 | 11.180 | 11.180 | 11.180 | 11.180 | 11.180 | 11.180 | 11.180 | 11.180 | 11.180 | 0.0 |
| | 786.080 | 809.854 | 867.129 | 926.323 | 987.817 | 1.047.441 | 1.109.562 | 1.174.591 | 1.242.949 | 1.310.206 | 1.381.185 | 5.8 |
| | 152.253 | 155.298 | 158.404 | 161.572 | 164.903 | 168.099 | 171.461 | 174.891 | 178.386 | 181.956 | 185.595 | |
| | 23.648 | 24.121 | 24.604 | 25.096 | 25.598 | 26.110 | 26.632 | 27.164 | 27.708 | 28.262 | 28.827 | |
| | 132.746 | 135.401 | 138.109 | 140.871 | 143.685 | 146.562 | 149.493 | 152.463 | 155.500 | 158.644 | 161.816 | 2.0 |
| | 153.775 | 156.851 | 159.988 | 163.188 | 166.451 | 169.780 | 173.176 | 176.639 | 180.172 | 183.776 | 187.451 | |
| | 22.702 | 23.156 | 23.620 | 24.092 | 24.574 | 25.065 | 25.567 | 26.078 | 26.599 | 27.131 | 27.674 | |
| 205,129 | 138.056 | 140.817 | 143.633 | 146.506 | 149.438 | 152.425 | 155.473 | 158.583 | 161.754 | 164.989 | 168.289 | 2.0 |
| | 1.100.614 | 1.130.678 | 1.194.370 | 1.260.108 | 1.328.279 | 1.394.712 | 1.463.777 | 1.535.891 | 1.611.475 | 1.686.102 | 1.764.600 | 4.8 |
| 1,600,000 | 1.600.000 | 1.600.000 | 1.600.000 | 1.600.000 | 1.600.000 | 1.600.000 | 1.600.000 | 1.600.000 | 1.600.000 | 1.600.000 | 1.600.000 | 0.0 |
| | 383.651 | 314.797 | 330.537 | 347.064 | 364.417 | 382.638 | 401.769 | 421.858 | 442.951 | 465.098 | 488.353 | 2.4 |
| | 1.216.349 | 1.285.203 | 1.269.463 | 1.252.936 | 1.235.583 | 1.217.362 | 1.198.231 | 1.178.142 | 1.157.049 | 1.134.902 | 1.111.647 | -0.9 |
| 256,000 | 256.000 | 256.000 | 256.000 | 256.000 | 256.000 | 256.000 | 256.000 | 256.000 | 256.000 | 256.000 | 256.000 | 0.0 |
| | 61.394 | 50.367 | 52.886 | 55.530 | 58.307 | 61.222 | 64.283 | 67.497 | 70.872 | 74.416 | 78.137 | 2.4 |
| | 194.616 | 205.633 | 203.114 | 200.470 | 197.693 | 194.778 | 191.717 | 188.503 | 185.128 | 181.584 | 177.863 | -0.9 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 197.233 | 205.395 | 212.982 | 219.890 | 229.441 | 238.330 | 246.437 | 257.488 | 267.760 | 277.171 | 289.651 | 301.65 |
| | 191.754 | 193.537 | 182.624 | 188.038 | 195.328 | 201.964 | 207.892 | 215.913 | 223.261 | 229.870 | 238.780 | 242.60 |
| | 32.938 | 32.799 | 32.587 | 32.598 | 32.526 | 32.459 | 32.423 | 32.386 | 32.357 | 32.334 | 32.315 | 32.30 |
| | 668.793 | 694.850 | 766.711 | 831.436 | 895.407 | 961.805 | 1.031.615 | 1.105.667 | 1.184.093 | 1.269.362 | 1.360.321 | 1.281.62 |
| | 90.911 | 107.080 | 117.534 | 125.597 | 132.878 | 139.756 | 146.494 | 153.314 | 160.391 | 167.870 | 175.873 | 184.50 |
| | 109.734 | 114.180 | 124.147 | 129.728 | 135.748 | 142.244 | 149.252 | 156.813 | 164.972 | 173.776 | 183.276 | 595.43 |
| | 192 | 154 | 123 | 99 | 79 | 63 | 50 | 40 | 32 | 26 | 21 | 1[illegible] |
| | 313 | 310 | 308 | 307 | 305 | 304 | 303 | 303 | 302 | 302 | 301 | 30[illegible] |
| | 78.137 | 82.043 | 86.146 | 90.453 | 94.975 | 99.724 | 104.710 | 109.946 | 115.443 | 121.215 | 127.276 | 133.64 |
| | 11.180 | 11.180 | 11.180 | 11.180 | 11.180 | 11.180 | 11.180 | 11.180 | 11.180 | 11.180 | 11.180 | 11.18 |
| | 1.381.185 | 1.441.527 | 1.536.443 | 1.629.310 | 1.727.867 | 1.827.839 | 1.930.357 | 2.043.051 | 2.160.412 | 2.283.106 | 2.419.194 | 2.784.27 |
| | 185.595 | 189.307 | 193.093 | 196.955 | 200.894 | 204.912 | 209.010 | 213.191 | 217.454 | 221.803 | 226.240 | 230.76 |
| | 28.827 | 29.404 | 29.992 | 30.592 | 31.203 | 31.828 | 32.464 | 33.113 | 33.776 | 34.451 | 35.140 | 35.84 |
| | 161.816 | 165.053 | 168.354 | 171.721 | 175.155 | 178.658 | 182.232 | 185.876 | 189.594 | 193.386 | 197.253 | 201.19 |
| | 187.451 | 191.200 | 195.024 | 198.925 | 202.903 | 206.961 | 211.100 | 215.323 | 219.629 | 224.022 | 228.502 | 233.07 |
| | 27.674 | 28.228 | 28.792 | 29.368 | 29.955 | 30.554 | 31.165 | 31.789 | 32.425 | 33.073 | 33.735 | 34.43 |
| 405,372 | 168.289 | 171.655 | 175.088 | 178.590 | 182.162 | 185.805 | 189.521 | 193.311 | 197.178 | 201.121 | 205.143 | 209.24 |
| | 1.764.600 | 1.832.610 | 1.935.347 | 2.036.193 | 2.142.887 | 2.251.160 | 2.362.144 | 2.483.473 | 2.609.643 | 2.741.321 | 2.886.574 | 3.260.99 |
| 1,600,000 | 1.600.000 | 1.600.000 | 1.600.000 | 1.600.000 | 1.600.000 | 1.600.000 | 1.600.000 | 1.600.000 | 1.600.000 | 1.600.000 | 1.600.000 | 1.600.00 |
| | 488.353 | 512.771 | 538.409 | 565.330 | 593.596 | 623.276 | 654.440 | 687.162 | 721.520 | 757.596 | 795.476 | 835.25 |
| | 1.111.647 | 1.087.229 | 1.061.591 | 1.034.670 | 1.006.404 | 976.724 | 945.560 | 912.838 | 878.480 | 842.404 | 804.524 | 764.75 |
| 256,000 | 256.000 | 256.000 | 256.000 | 256.000 | 256.000 | 256.000 | 256.000 | 256.000 | 256.000 | 256.000 | 256.000 | 256.00 |
| | 78.137 | 82.043 | 86.146 | 90.453 | 94.975 | 99.724 | 104.710 | 109.946 | 115.443 | 121.215 | 127.276 | 133.64 |
| | 177.863 | 173.957 | 169.854 | 165.547 | 161.025 | 156.276 | 151.290 | 146.054 | 140.557 | 134.785 | 128.724 | 122.36 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 312,407 | 326,833 | 340,228 | 352,393 | 3.9 | 9.2 | 4.9 | 5.5 | 3.9 | 4.6 |
| 247,651 | 254,212 | 260,018 | 264,991 | 2.2 | 7.9 | 5.5 | 1.9 | 2.2 | 2.6 |
| 32,288 | 32,278 | 32,271 | 32,265 | -0.1 | 9.5 | -2.8 | -1.6 | -0.1 | -1.1 |
| 1,210,527 | 1,147,711 | 1,093,916 | 1,049,930 | -3.1 | 12.6 | 10.3 | 8.9 | 3.1 | 6.1 |
| 193,879 | 204,085 | 215,227 | 227,410 | 6.3 | 29.5 | 8.0 | 5.5 | 6.3 | 8.3 |
| 1,008,410 | 1,422,260 | 1,837,057 | 2,252,877 | 22.3 | 5.8 | 8.6 | 6.4 | 22.3 | 14.5 |
| 13 | 11 | 8 | 7 | -20.0 | -12.8 | -18.4 | -20.0 | -20.0 | -19.7 |
| 301 | 301 | 301 | 300 | -0.3 | -8.3 | -15.2 | -2.9 | -0.3 | -3.8 |
| 140,322 | 147,338 | 154,705 | 162,440 | 5.0 | 3.3 | 14.2 | 2.4 | 5.0 | 5.6 |
| 11,180 | 11,180 | 11,180 | 11,180 | 0.0 | 1.6 | -0.7 | 0.0 | 0.0 | -0.1 |
| 3,156,978 | 3,546,209 | 3,944,910 | 4,353,793 | 8.0 | 8.5 | 7.1 | 5.8 | 8.0 | 7.1 |
| | | | | | | | | | |
| 235,380 | 240,067 | 244,889 | 249,787 | 2.0 | 14.0 | 2.6 | 2.0 | 2.0 | 2.1 |
| 36,560 | 37,291 | 38,037 | 38,798 | 2.0 | 0.9 | 2.0 | 2.0 | 2.0 | 2.0 |
| 205,222 | 209,327 | 213,513 | 217,784 | 2.0 | 8.1 | 2.0 | 2.0 | 2.0 | 2.0 |
| | | | | | | | | | |
| 237,733 | 242,483 | 247,338 | 252,285 | 2.0 | | | | | |
| 35,097 | 35,799 | 36,515 | 37,246 | 2.0 | | | | | |
| 213,431 | 217,700 | 222,054 | 226,495 | 2.0 | 8.1 | 2.0 | 2.0 | 2.0 | 2.0 |
| | | | | | | | | | |
| 3,643,241 | 4,042,197 | 4,450,817 | 4,869,819 | 7.0 | 8.9 | 5.6 | 4.8 | 7.0 | 6.0 |
| | | | | | | | | | |
| 1,600,000 | 1,600,000 | 1,600,000 | 1,600,000 | 0.0 | 0.8 | -0.5 | 0.0 | 0.0 | -0.1 |
| 877,012 | 920,863 | 966,906 | 1,015,251 | 5.0 | 3.3 | 14.2 | 2.4 | 5.0 | 5.6 |
| 722,988 | 679,137 | 633,094 | 584,749 | -4.2 | 0.5 | -3.4 | -0.9 | -4.2 | -3.0 |
| | | | | | | | | | |
| 256,000 | 256,000 | 256,000 | 256,000 | 0.0 | 0.8 | -0.5 | 0.0 | 0.0 | -0.1 |
| 140,322 | 147,338 | 154,705 | 162,440 | 5.0 | 3.9 | 29.3 | 2.4 | 5.0 | 7.8 |
| 115,678 | 108,662 | 101,295 | 93,560 | -4.2 | 0.6 | -4.5 | -0.9 | -4.2 | -3.2 |

# ◆ *Appendix 3 Sample Form for Energy Audit* ◆

# *Appendix 3 Sample Form for Energy Audit*

## MONTHLY REPORT FOR ENERGY USE

Company and Factory Name :
Manager Energy Controller :

Name of Facilities :
Design Capacity :

Summary of Operation :
Operation Capacity :
Operation Factor :

Energy Consumed :

| | Design | Normal | Current | Ope. Hrs. | Mon. Cons. |
|---|---|---|---|---|---|
| FACILITIES | | | | | |
| Fuel (Kg/Hr) | | | | | |
| Fuel oil | | | | | |
| LPG | | | | | |
| Coal | | | | | |
| Elec. Power(Kwh) | | | | | |
| Driver | | | | | |
| Heating | | | | | |
| Lighting | | | | | |
| Steam (Kg/Hr) | | | | | |
| Heating | | | | | |
| Driver | | | | | |
| Heat Media (Kcal/Hr) | | | | | |

Specific Item : (Data shall be filled for each equipment specified )
(a) Combustion Equipment (Steam boiler and other heater) :
- Fuel Consumption :
- Thermal Efficiency :
- Evaluation by comparing with design efficiency :

(b) Electric Motor :
- Power Consumption :
- Evaluation comparing design and operating conditions :

(c) Indirect Heater (by steam, heating media, etc.) :
-Heat transferred :
-Evaluation comparing design and operating conditions :

(d) Steam Turbine (for driver):
-Steam Consumption:
-Evaluation comparing standered value and operating conditions :

(e) Steam turbine - Alternator :
-Steam Rate : (inlet, extructed, exhaust or condensate)
-Power Generated :
-Efficiency :
-Evaluation by comparing stadard value and operating conditions :

Plan to Improve Energy Efficiency :

Attachment :
* Operation Record
* Simplified Flow Scheme ( showing equipment specified as above)

Attachment - 1 for Monthly Report

## DAILY OPERATION RECORD

### (1) Whole Factory

| | Standard | | | | |
|---|---|---|---|---|---|
| **Fuel (Kg/Hr)** | | | | | |
| Fuel Oil | | | | | |
| LPG | | | | | |
| Coal | | | | | |
| | | | | | |
| **Elec. Power(Kwh)** | | | | | |
| Purchased | | | | | |
| Generated | | | | | |
| Consumed | | | | | |
| Loss | | | | | |
| Elec. for Lighting | | | | | |
| | | | | | |
| **Steam ( Kg/Hr)** | | | | | |
| Generated(HP) | | | | | |
| (MP) | | | | | |
| (LP) | | | | | |
| | | | | | |
| to Power Generator | | | | | |
| from Power Generator | | | | | |
| extruct | | | | | |
| exhaust | | | | | |
| condensate | | | | | |
| Power Gener. Eff. | | | | | |
| Boiler( for power gen.) | | | | | |
| Fuel consump. | | | | | |
| 02 in flue gas | | | | | |
| Flue gas temp. | | | | | |
| Boiler Eff. | | | | | |
| | | | | | |

### (2) Production / Process Facilities

| | Standard | | | | |
|---|---|---|---|---|---|
| **Combustion Equip.** | | | | | |
| Fuel cons.(Kg/Hr) | | | | | |
| 02 Cont. in flue gas | | | | | |
| Flue gas temp. | | | | | |
| Cold side fluid | | | | | |
| flow rate | | | | | |
| in/out temp. | | | | | |
| Heater Eff. | | | | | |
| **Electric Motor** | | | | | |
| Ampare | | | | | |
| Power factor | | | | | |
| Power cons.(Kwh) | | | | | |
| **Indirect Heater** | | | | | |
| Heating Media. | | | | | |
| Flow rate(Kg/Hr) | | | | | |
| Temp.(in/out) | | | | | |
| Cold side fluid | | | | | |
| Flow rate(Kg/Hr) | | | | | |
| Temp.(in/out) | | | | | |
| Heat transferred | | | | | |
| **Steam Turbine** | | | | | |
| Steam cons.(kg/hr) | | | | | |
| Press. (in/out) | | | | | |
| Temp.(in/out) | | | | | |
| | | | | | |

## ◆ Appendix 4  Supplement Technical Information ◆

# Appendix 4 Supplement Technical Information

## A. WIND POWER

### 1. Wind Power

(1) Potential of Wind Power Generation

1) We estimated potential of wind power generation shown as Table A4.1
This estimation is based on UNDP and we select the type of wind turbine is MICON in Denmark (capacity is 600kW).
Main specification is shown as Figure A4.1.

2) Case study of Wind Power Generation in Mauritius is given in Table A4.2.
Figure A4.2 shows Annual production toward Mean wind speed.

(2) Situation of Wind Power Generation

1) Installed capacity
Table A4.3 shows development of wind power generation of IEA major countries.

2) Trend of wind power turbine
Table A4.4 shows big turbine in the world.

3) Operation record on Japan
Table A4.5-6 show operation record of Miyakojima wind power station and Tappi wind park.

### 2. Subsidy System for Photovoltaic Power Generation in Japan

MITI (Ministry of International Trade and Industry) operates the subsidy system to introduce photovoltaic Power Generation.
In fiscal 1994, number of scope was 700, subsidiary rate was half of cost of equipment (including installation cost) and subsidy was upper 900,000YEN per 1kW.

### 3. Waste Power Generation in Japan

In Japan, practical power generation in a waste incineration facility was started in 1965.

Initially, the calorific value of waste was low at 1,500 to 2,000 kcal/kg. the power generation efficiency was also low at 5-10%. For these reasons, the power generated was used only for the station service.

Recently, however, as it now contains more plastic and paper, the calorific value of waste has increased to 2,500 to 3,000kcal/kg. The power generation efficiency has also increased to 15% to 20%.

Accordingly, the utility companies now purchase excess power from waste plants.

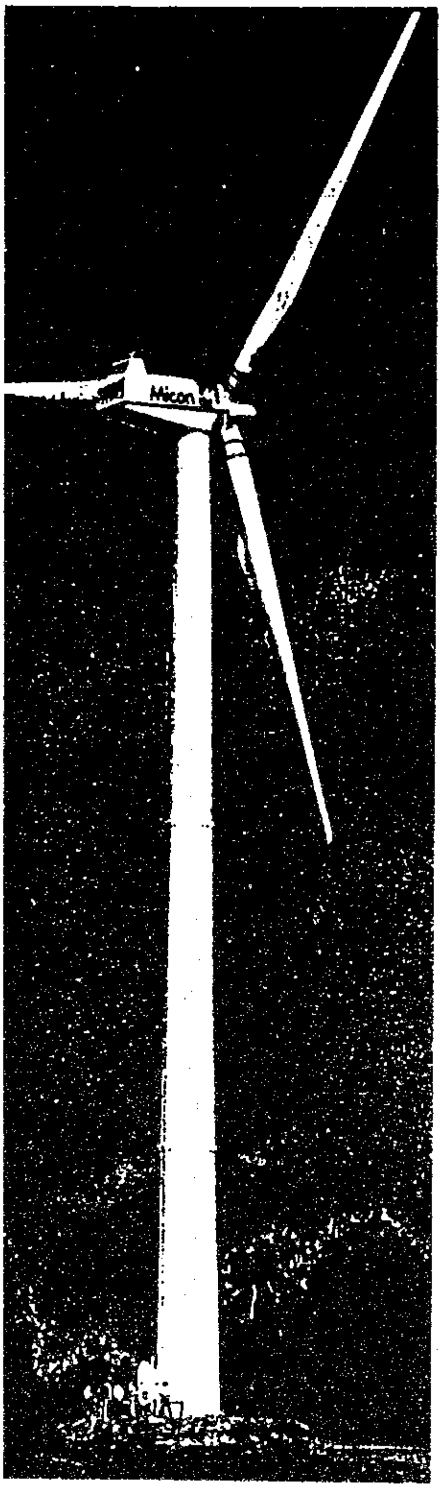
As of the end of fiscal 1994, a total of 390MW of power was generated by approximately 1,900 waste incineration plants.

## 4. Demand and installed capacity in the other countries

Table A4.7 shows demand and installed capacity in the other countries.

**Table A4.1 POTENTIAL OF WIND POWER GENERATION**

| Mauritius | | | | |
|---|---|---|---|---|
| Site | Mean Speed<br>m/s | Mean Speed (at 40m height)<br>m/s | Annual Average Generation Power<br>GWh/year | Utilization<br>% |
| Grand Basin | 5.10 | 6.8 | 1.60 | 30.4 |
| Bois Cheri | 3.70 | 5.0 | 0.74 | 14.1 |
| Gris Gris | 6.07 | 8.2 | 2.20 | 41.9 |
| St Felix | 4.10 | 5.5 | 0.85 | 16.2 |
| Bel Ombre | 6.00 | 8.1 | 2.10 | 40.0 |
| Union Park | 3.40 | 4.6 | | |
| Grand Port | 5.60 | 7.5 | 1.80 | 34.2 |
| Palmar | 4.60 | 6.2 | 1.20 | 22.8 |
| St Antonie | 5.30 | 7.1 | 1.70 | 32.3 |
| M.G.I. (Moka) | 4.10 | 5.5 | 0.90 | 17.1 |
| Bigara | 5.00 | 6.7 | 1.40 | 26.6 |
| **Rodrigues** | | | | |
| Site | Mean Speed<br>m/s | Mean Speed (at 40m height)<br>m/s | Annual Average Generation Power<br>GWh/year | Utilization<br>% |
| Batarand | 4.90 | 6.6 | 1.30 | 24.7 |
| Anse Quitor | 5.90 | 7.9 | 1.80 | 34.2 |
| Roche Bon Dieu | 5.10 | 6.8 | 1.60 | 30.4 |
| Rivere Coco | 4.90 | 6.6 | 1.30 | 24.7 |




# Main Specifications

**Type:**
3-bladed, strallregulated, grid-connected, up-wind turbine.

**Generator type:**
Asynchronous, 3-phase, 2-speed (1000/1500 rpm.).

**Nominal Rating:**
600 kW.

**Nominal Voltage:**
690 V.

**Frequency:**
50 Hz or 60 Hz.

**Cut-in wind speed:**
3.5 m/s.

**Cut-out wind speed:**
25 m/s.

**Survival wind speed:**
69 m/s.

**Rotor revolutions:**
27/18 rpm.

**Rotor Diameter:**
43.0 m.

**Swept rotor-area:**
1452 $m^2$.

**Hub height:**
40 m or 46 m.

**Tower:**
Painted, 24-edged, conical, tubular steel lower.

**Brake system:**
Fail safe disc brake and blade tip brakes.

**Control system:**
Selfdiagnostic Computer Control.

**Weights:**
**Tower:** 40 t.
**Nacelle:** 19 t.
**Rotor:** 13 t.

*Under usual reserve for changes.*

**Figure A4.1 MAIN SPECIFICATION OF WIND TURBINE**

**Table A4.2 CASE STUDY OF WIND POWER GENERATION IN MAURITIUS**

| | |
|---|---|
| 1. Location | Gris Gris |
| 2. Data | |
| 1) Mean Wind Speed | 8.2m/s (at 40m height) |
| 2) Annual Production | 2.2 x $10^6$kWh/year/unit |
| 3) Area | 1km$^2$ |
| 4) Number of Unit | 25 |
| 5) Output | 600kW/unit x 25 units = 15MW |
| 6) Construction Cost | 30 x $10^3$Rs/kW |
| 3. Generation Cost | |
| 1) Total Construction Cost | 450 Million Rs |
| 2) Annual Expenditure Rate | 0.15 p.u. |
| 3) Annual Production | 55 x $10^6$kWh |
| 450 x 0.15 x $10^6$Rs/55 x $10^6$ kWh = 1.23Rs/kWh | |

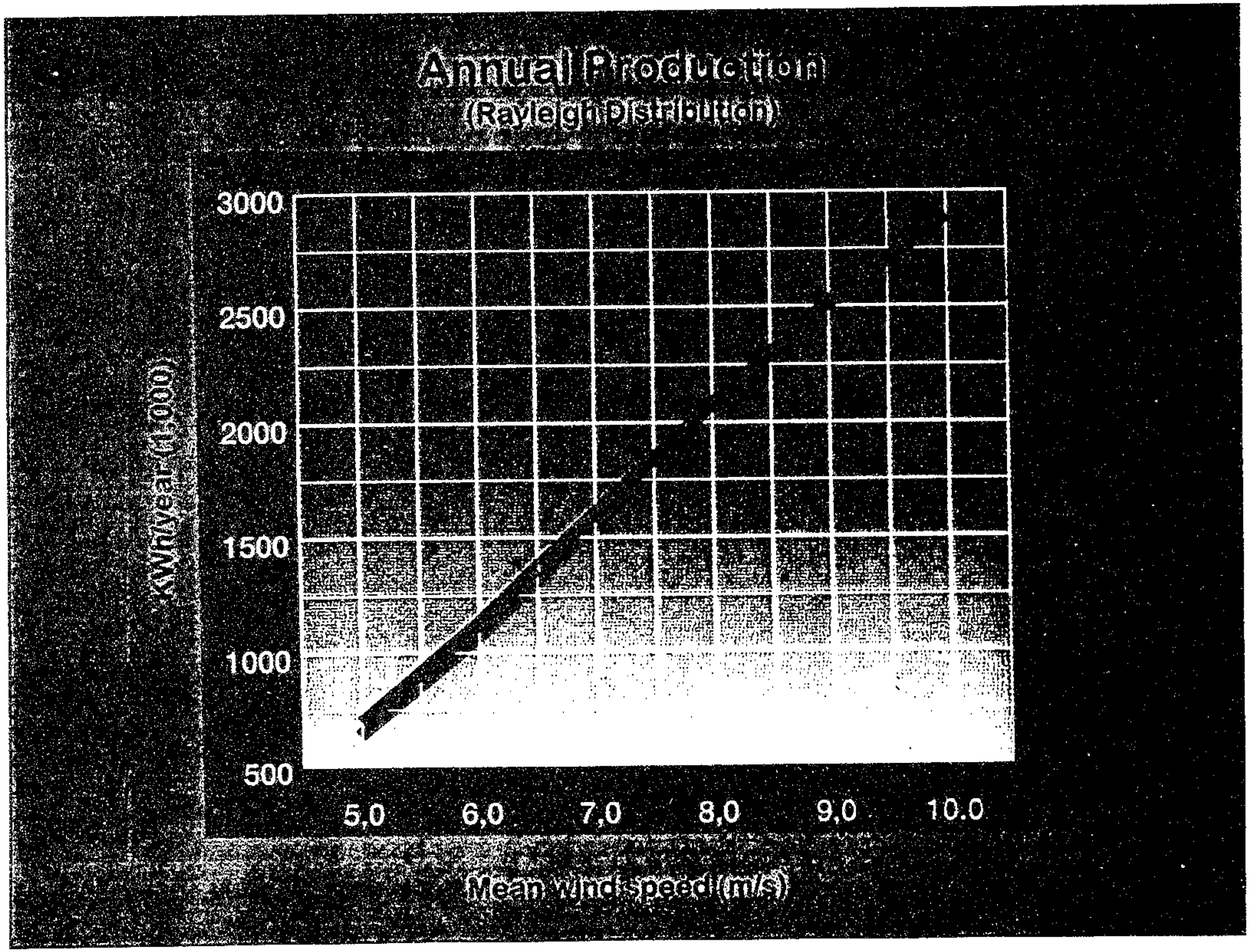



Figure A4.2 ANNUAL PRODUCTION TOWARD MEAN WIND SPEED

**Table A4.3 WIND POWER GENERATION IN THE WORLD**

as of Dec.,1995

| Country | Output (MW) Dec.,1994 | Output (MW) Dec.,1995 | Main sites & Output (MW) | |
|---|---|---|---|---|
| U.S.A. | 1,630 | 1,770 | Califolnia Altamont Pass | 667 |
| | | | Califolnia Tehachapi | 643 |
| | | | Califolnia San Gorgonia Pass | 225 |
| Germany | 643 | 1,137 | Schleswig Holstein Region | 7 |
| | | | Ostfriesland Region | 7 |
| | | | Wilheimshaben | 5 |
| Denmark | 540 | 630 | Kappel | 9.6 |
| | | | Vindeby Off-Shore Plant | 3.7 |
| India | 120 | 550 | | |
| Netherland | 153 | 250 | North Holland | 40 |
| | | | Sexbirum Regin | 40 |
| | | | Maasvlakte | 12 |
| U.K. | 147 | 193 | Cornwall | 16 |
| | | | Burgur Hill | 4 |
| Spain | 72 | 126 | | |
| Sweden | 40 | 67 | | |
| China | 25 | 36 | | |
| Greece | 27 | 28 | | |
| Italy | 22 | 23 | | |
| Canada | 23 | 21 | | |
| Japan | 5 | 10 | | |
| Others | 52 | 56 | | |
| | | | | |
| Total | 3,499 | 4,897 | 140% up | |

Source:IEA

## Table A4.4 MAJOR WIND TURBINE IN THE WORLD

| Country | Equipment | | Type | Number | Specification | | | | Annual Average Power Generation | | | Operation Recard | | Commissioning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Wind Velocity at 10m | | | | | |
| | Manufacture | Model | | | Number of Blade | Diameter of Roter (m) | Wind Velocity (m/s) | Output (kW) | 5m/s | 6.5m/s | 8.0m/s | Operating Hours (h) | Total Generation (MWh) | |
| Canada | Shawinigan | EOLE | P | 1 | 2 | 61.0 | 23.0 | 4,000 | 3,990 | 7,105 | 9,230 | 480 | 360 | 3/88 |
| | Indal Technol | 6100 | C | 2 | 2 | 24.4 | 18.2 | 522 | 297 | 602 | 1,064 | 3,000 | 300 | 3/88 |
| Denmark | DWT(Blade) | NIBE-A | P | 1 | 3 | 40.0 | 13.0 | 630 | | 1,000 | | 6,146 | 1,313 | 3/88 |
| | DWT(Blade) | NIBE-B | P | 1 | 3 | 40.0 | 13.0 | 630 | | 1,300 | 14,597 | 17,800 | 4,744 | 3/88 |
| | DWT | WINDANE 40 | C | 5 | 3 | 40.0 | 15.0 | 750 | 947 | 1,861 | 2,693 | | | 3/86 |
| | DWT(Blade) | 2MW | P | 1 | 3 | 60.0 | 15.0 | 2,000 | | 4,500 | | | | 3/88 |
| Italy | Aeritalia | GAMMA 60 | P | 0 | 2 | 60.0 | 13.3 | 1,500 | | 4,300 | | | | 3/88 |
| Germany | M.A.N. | WKA60 | P | 0 | 3 | 60.0 | 12.2 | 1,200 | | | 2,400 | | | 10/87 |
| | M.A.N. | GROWLAN | P | 1 | 2 | 100.0 | 12.0 | 3,000 | | | | 350 | | 3/88 |
| | MBB | MONOPT.50 | C | 3 | 1 | 56.0 | 11.0 | 610 | | | 2,000 | | | 6/88 |
| | MBB | MONOPT.50 | P | 1 | 1 | | | 5,000 | | | | | | 8/88 |
| Netherlands | Stork-FDD | NEWECS 45 | P | 1 | 2 | 45.0 | 13.9 | 1,000 | | | 2,300 | | | 10/87 |
| Spain | Asinel.M.A.N. | AWEC 60 | P | 0 | 3 | 60.0 | 12.2 | 1,200 | | | | | | 8/88 |
| Sweden | KMWAB | WTS-75 | P | 1 | 2 | 75.0 | 12.5 | 2,000 | 4,082 | 6,989 | 8,821 | 11,258 | 13,185 | 2/88 |
| | Kariskrona-varvet AB | WTS-3 | P | 1 | 2 | 78.0 | 14.0 | 3,000 | 4,883 | 8,703 | 11,158 | 12,732 | 18,541 | 8/88 |
| U.K. | WEG | LS-1 | P | 1 | 2 | 60.0 | 17.0 | 3,000 | 1,695 | 4,319 | 7,371 | | | 10/87 |
| | WEG | LS-2 | P | 0 | 2 | 70.0 | | 2,400 | | | | | | 10/87 |
| | Howden | 750kW | P | 1 | 3 | 45.0 | | 750 | | | | | | 1/86 |
| | Howden | 1MW | P | 0 | 3 | 55.0 | | 1,000 | | | | | | |
| U.S.A | Boeing | MOD-2 | P | 4 | 2 | 91.4 | 12.3 | 2,500 | 5,171 | 8,740 | 10,929 | 14,400 | 18,000 | 1/88 |
| | Boeing | MOD-2(PG&E) | P | 1 | 2 | 91.4 | 12.3 | 2,500 | 5,171 | 8,740 | 10,929 | 9,198 | 15,165 | 8/88 |
| | Boeing | MOD-5B | P | 1 | 2 | 99.0 | 20.5 | 3,200 | 6,112 | 10,623 | 14,128 | 4,510 | 4,996 | 8/88 |
| | Hami. Standard | WTS-4 | P | 1 | 2 | 78.0 | 15.0 | 4,000 | 4,954 | 9,919 | 14,221 | 4,100 | 8,000 | 8/87 |
| | Westinghouse | WWG 0600 | C | 14 | 2 | 43.0 | 13.0 | 600 | 935 | 1,766 | 2,447 | 143,800 | 34,560 | 8/88 |

## Table A4.5 OPERATION RECORD OF MIYAKOJIMA WIND POWER STATION

| | No.1 | | No.2 | |
|---|---|---|---|---|
| 1993 | Generation (kWh) | Utilization (%) | Generation (kWh) | Utilization (%) |
| 4 | 47,940 | 26.6 | 47,580 | 26.4 |
| 5 | 26,640 | 14.3 | 24,830 | 13.3 |
| 6 | 46,350 | 25.8 | 47,480 | 26.4 |
| 7 | 16,860 | 9.1 | 22,740 | 12.2 |
| 8 | 36,050 | 19.4 | 34,450 | 18.5 |
| 9 | 21,690 | 12.1 | 24,070 | 13.4 |
| 10 | 28,270 | 15.2 | 83,860 | 45.1 |
| 11 | 61,220 | 34.0 | 64,760 | 36.0 |
| 12 | 96,980 | 52.1 | 101,030 | 54.3 |
| 1 | 57,430 | 30.9 | 60,730 | 32.7 |
| 2 | 61,390 | 36.5 | 62,840 | 37.4 |
| 3 | 63,790 | 34.3 | 67,760 | 36.4 |
| Total | 564,610 | 25.8 | 642,130 | 29.3 |

| | No.1 | | No.2 | |
|---|---|---|---|---|
| 1994 | Generation (kWh) | Utilization (%) | Generation (kWh) | Utilization (%) |
| 4 | 27,280 | 15.2 | 28,150 | 15.6 |
| 5 | 38,950 | 20.9 | 39,970 | 21.5 |
| 6 | 39,220 | 21.8 | 38,890 | 21.6 |
| 7 | 20,290 | 10.9 | 23,520 | 12.6 |
| 8 | 36,750 | 19.8 | 40,170 | 21.6 |
| 9 | 50,250 | 27.9 | 52,110 | 29.0 |
| 10 | 82,530 | 44.4 | 84,700 | 45.5 |
| 11 | 51,840 | 28.8 | 59,090 | 32.8 |
| 12 | 80,850 | 43.5 | 78,780 | 42.4 |
| 1 | 82,100 | 44.1 | 84,400 | 45.4 |
| 2 | 71,260 | 42.4 | 75,160 | 44.7 |
| 3 | 66,460 | 35.7 | 68,530 | 36.8 |
| Total | 647,780 | 29.6 | 673,470 | 30.8 |

| 1995 | No.1 | | No.2 | |
|---|---|---|---|---|
| | Generation (kWh) | Utilization (%) | Generation (kWh) | Utilization (%) |
| 4 | 48,570 | 27.0 | 49,460 | 27.5 |
| 5 | 41,890 | 22.5 | 43,900 | 23.6 |
| 6 | 57,420 | 31.9 | 56,070 | 31.2 |
| 7 | 40,980 | 22.0 | 42,620 | 22.9 |
| 8 | 18,990 | 10.2 | 20,470 | 11.0 |
| 9 | 40,290 | 22.4 | 41,700 | 23.2 |
| 10 | 62,280 | 33.5 | 67,250 | 36.2 |
| 11 | 68,910 | 38.3 | 77,640 | 43.1 |
| 12 | 56,450 | 30.3 | 79,190 | 42.6 |
| 1 | 68,420 | 36.8 | 72,500 | 39.0 |
| 2 | 78,850 | 45.3 | 79,180 | 45.5 |
| 3 | 33,490 | 18.0 | 38,600 | 20.8 |
| Total | 616,540 | 28.2 | 668,580 | 30.5 |

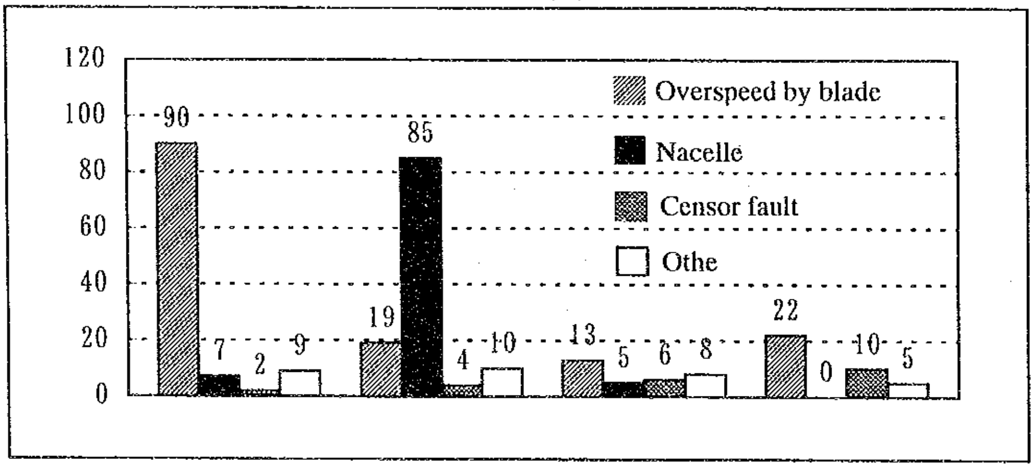
| 1996 | No.1 | | No.2 | |
|---|---|---|---|---|
| | Generation (kWh) | Utilization (%) | Generation (kWh) | Utilization (%) |
| 4 | 68,910 | 38.3 | 70,990 | 39.4 |
| 5 | 55,210 | 29.7 | 57,550 | 30.9 |
| 6 | 45,050 | 25.0 | 42,320 | 23.5 |
| 7 | 33,050 | 17.8 | 32,770 | 17.6 |
| 8 | 21,180 | 11.4 | 20,570 | 11.1 |
| 9 | 57,750 | 32.1 | 56,960 | 31.6 |
| 10 | 59,840 | 32.2 | 51,740 | 27.8 |
| 11 | | | | |
| 12 | | | | |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| Total | 340,990 | 26.6 | 332,900 | 25.9 |

## Table A4.6 OPERATION RECORD OF TAPPI WIND PARK

### 1. Performance

| | No.1~5 | No.6~10 | NEDO |
|---|---|---|---|
| Installation date | 1991.10 | 1995.9 | 1996.10 |
| Commissioning | 1992.4 | 1995.1 | 1996.10 |
| Number of units | 5 | 5 | 1 |
| Type of rotor | upwind | Horizontal shaf propeller | Horizontal shaf propeller |
| Orientation | upwind | upwind | upwind |
| Rated power | 275kW | 300kW | 500kW |
| Hub Height | 30m | 30m | 38m |
| Rotor Diameter | 28m | 29m | 38.5m |
| Rotational speed | 43rpm | 43rpm | 32rpm |
| Cut in wind speed | 5.5m/s | 5.5m/s | 5.5m/s |
| Rated wind speed | 13.0m/s | 14.5m/s | 12.5m/s |
| Cut out wind speed | 24.0m/s | 24.0m/s | 24m/s |
| Power control | full span blade pitch | full span blade pitch | full span blade pitch |

**Trouble Record**




### 2. Operation record of No.1 - No.5 from 1992 - 1995

| | | 1992 | 1993 | 1994 | 1995 | Average |
|---|---|---|---|---|---|---|
| Mean wind speed | (m/s) | 6.1 | 6.7 | 6.0 | 6.8 | 6.4 |
| Generation | (MWh) | 2,290 | 2,880 | 2,290 | 2,950 | 2,600 |
| Utilization factor | (%) | 19.1 | 24.0 | 19.0 | 24.5 | 21.7 |
| Availability | (%) | 85.7 | 88.3 | 86.4 | 97.3 | 89.4 |
| Standby time rate | (%) | 38.1 | 30.8 | 37.7 | 40.6 | 36.8 |
| Operation time rate | (%) | 47.6 | 57.6 | 48.7 | 56.6 | 52.6 |
| O/M time rate | (%) | 2.0 | 3.8 | 5.1 | 0.9 | 3.0 |
| Breakdown time rate | (%) | 2.4 | 1.7 | 4.1 | 0.4 | 2.2 |
| Other breakdown time rate | (%) | 9.9 | 6.1 | 4.4 | 1.4 | 5.4 |

## 3. Operation record of No.1 - No.10 in 1996

| | | | 1996 | | | | | | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Average |
| No.1 ~ No.5 | Mean wind speed | (m/s) | 9.9 | 8.0 | 7.6 | 6.8 | 6.2 | 6.0 | 6.0 | 6.1 | 4.8 | 6.0 | 8.4 | 7.5 | 6.9 |
| | Generation | (MWh) | 471.0 | 347.2 | 338.8 | 282.7 | 214.9 | 168.2 | 213.2 | 182.2 | 107.0 | 185.6 | 343.3 | 328.3 | 3182.4 |
| | Utilization factor | (%) | 46.0 | 36.3 | 33.1 | 28.6 | 21.0 | 17.0 | 20.8 | 17.8 | 10.8 | 18.1 | 34.7 | 32.1 | 26.4 |
| | Operation time rate | (%) | 77.3 | 74.8 | 66.2 | 61.8 | 57.4 | 62.8 | 59.4 | 54.8 | 39.8 | 49.8 | 67.1 | 62.2 | 61.1 |
| | Availability | (%) | 99.5 | 100 | 100 | 95.7 | 97.9 | 100 | 100 | 100 | 100 | 96.9 | 94.1 | 95.6 | 98.3 |
| No.6 ~ No.10 | Mean wind speed | (m/s) | 10.7 | 9.6 | 9.5 | 10.2 | 9.0 | 8.4 | 9.5 | 7.7 | 6.3 | 7.6 | 9.2 | 8.9 | 8.9 |
| | Generation | (MWh) | 539.2 | 430.3 | 459.0 | 510.2 | 379.1 | 332.6 | 463.5 | 295.0 | 185.6 | 266.9 | 407.6 | 424.9 | 4687.6 |
| | Utilization factor | (%) | 47.8 | 41.2 | 41.1 | 47.2 | 34.0 | 30.8 | 41.5 | 26.4 | 17.2 | 23.9 | 37.7 | 38.1 | 35.6 |
| | Operation time rate | (%) | 80.0 | 80.5 | 76.9 | 80.0 | 70.0 | 80.1 | 78.0 | 73.2 | 55.3 | 58.4 | 69.4 | 70.8 | 72.7 |
| | Availability | (%) | 100 | 100 | 100 | 100 | 91.3 | 100 | 100 | 100 | 99.2 | 92.1 | 92.4 | 94.9 | 97.5 |

## 4. Utilization factor of each unit

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No.1 | 52.5 | 56.1 | 50.9 | 48.1 | 34.0 | 27.4 | 33.9 | 25.6 | 18.8 | 29.4 | 46.2 | 49.5 | 39.4 |
| No.2 | 53.4 | 45.8 | 37.2 | 30.9 | 26.3 | 19.2 | 21.0 | 19.9 | 13.1 | 19.6 | 40.7 | 37.6 | 30.4 |
| No.3 | 50.4 | 36.6 | 30.1 | 19.7 | 14.7 | 9.5 | 8.9 | 10.8 | 7.2 | 15.1 | 36.3 | 32.0 | 22.6 |
| No.4 | 43.6 | 26.5 | 27.9 | 25.5 | 16.8 | 14.9 | 20.3 | 17.2 | 8.2 | 15.9 | 30.6 | 25.6 | 22.7 |
| No.5 | 45.1 | 16.5 | 19.5 | 18.6 | 13.2 | 13.9 | 20.1 | 15.6 | 6.8 | 10.7 | 19.7 | 15.8 | 16.7 |
| No.6 | 45.1 | 40.5 | 40.6 | 49.6 | 36.7 | 33.7 | 43.4 | 29.2 | 18.7 | 25.2 | 32.4 | 38.1 | 36.1 |
| No.7 | 31.9 | 28.1 | 32.7 | 44.3 | 25.8 | 30.0 | 40.7 | 26.3 | 14.0 | 16.8 | 30.7 | 27.7 | 29.1 |
| No.8 | 54.7 | 43.8 | 40.6 | 42.7 | 33.2 | 27.2 | 38.6 | 26.1 | 16.2 | 22.8 | 39.8 | 38.2 | 35.3 |
| No.9 | 42.6 | 35.6 | 38.0 | 46.0 | 35.1 | 31.1 | 43.2 | 25.1 | 16.2 | 21.8 | 37.9 | 33.2 | 33.8 |
| No.10 | 64.5 | 58.1 | 53.7 | 53.6 | 39.1 | 31.9 | 41.8 | 25.5 | 20.9 | 32.9 | 47.9 | 53.1 | 43.6 |
| No.1-5(Average) | 46.0 | 36.3 | 33.1 | 28.6 | 21.0 | 17.0 | 20.8 | 17.8 | 10.8 | 18.1 | 34.7 | 32.1 | 26.4 |
| No.6-10(Average) | 47.8 | 41.2 | 41.1 | 47.2 | 34.0 | 30.8 | 41.5 | 26.4 | 17.2 | 23.9 | 37.7 | 38.1 | 35.6 |
| No.1-10(Average) | 46.9 | 38.7 | 37.1 | 37.8 | 27.5 | 23.9 | 31.2 | 22.1 | 14.0 | 21.0 | 36.2 | 35.1 | 31.0 |

## 5. Generation Cost

| | | 1992 | 1993 | 1994 | 1995 | 1996-1 | 1996-12 |
|---|---|---|---|---|---|---|---|
| | | No.1 - No.5 | No.1 - No.5 | No.1 - No.5 | No.1 - No.10 | No.1 - No.10 | NEDO |
| Construction cost | (yen/unit) | 174,900,000 | 174,900,000 | 174,900,000 | 174,900,000 | 174,900,000 | 185,500,000 |
| (a) O&M Cost | (yen/unit) | 5,280,000 | 5,280,000 | 5,280,000 | 5,280,000 | 3,000,000 | 3,000,000 |
| (b) O&M Cost | (yen/kWh) | 11.5 | 9.2 | 11.5 | 8.9 | 4.7 | 3.2 |
| (c) O&M Cost / Construction cost | (%) | 3.0 | 3.0 | 3.0 | 3.0 | 1.7 | 1.6 |
| Expenditure rate / year | (%) | 0.102 | 0.102 | 0.102 | 0.102 | 0.102 | 0.102 |
| Interest rate | (%) | 8 | 8 | 8 | 8 | 8 | 8 |
| Durable period | (year) | 20 | 20 | 20 | 20 | 20 | 20 |
| Average generation per annum | (kWh/unit) | 458,680 | 576,840 | 458,220 | 590,640 | 636,480 | 937,520 |
| Generation cost | (Yen/kWh) | 50.3 | 40.0 | 50.4 | 39.1 | 32.7 | 23.4 |

## TableA4.7 DEMAND AND INSTALLED CAPACITY IN OTHER COUNTRIES

### 1. Taiwan

| Year | Installed capacity(MW) | Peak demand (MW) | I.C/P.D |
|---|---|---|---|
| 1973 | 4,582 | 3,134 | 1.46 |
| 1974 | 4,842 | 3,452 | 1.40 |
| 1975 | 5,889 | 3,765 | 1.56 |
| 1976 | 6,538 | 4,302 | 1.52 |
| 1977 | 7,800 | 4,818 | 1.62 |
| 1978 | 8,537 | 5,630 | 1.52 |
| 1979 | 9,092 | 6,070 | 1.50 |
| 1980 | 10,066 | 6,703 | 1.50 |
| 1981 | 11,288 | 6,797 | 1.66 |

### 2. Thailand

| Year | Installed capacity(MW) | Peak demand (MW) | I.C/P.D |
|---|---|---|---|
| 1980 | 3,831 | 2,379 | 1.61 |
| 1981 | 4,453 | 2,561 | 1.74 |
| 1982 | 4,892 | 2,823 | 1.73 |
| 1983 | 5,591 | 3,200 | 1.75 |
| 1984 | 6,809 | 3,545 | 1.92 |
| 1985 | 7,450 | 3,826 | 1.95 |
| 1986 | 7,539 | 4,202 | 1.79 |
| 1987 | 7,761 | 4,842 | 1.60 |
| 1988 | 7,774 | 5,414 | 1.44 |
| 1989 | 8,151 | 6,208 | 1.31 |

### 3. Indonesia

| Year | Installed capacity(MW) | Peak demand (MW) | I.C/P.D |
|---|---|---|---|
| 1986 | 6,889 | 3,403 | 2.02 |
| 1987 | 8,041 | 3,890 | 2.07 |
| 1988 | 9,477 | 4,497 | 2.11 |
| 1989 | 10,098 | 5,167 | 1.95 |
| 1990 | 10,130 | 5,897 | 1.72 |
| 1991 | 10,208 | 6,167 | 1.66 |
| 1992 | 12,081 | 6,415 | 1.88 |
| 1993 | 15,111 | 7,122 | 2.12 |

**4. Israel**

| Year | Installed capacity(MW) | Peak demand (MW) | I.C/P.D |
|---|---|---|---|
| 1986 | 4,061 | 2,820 | 1.44 |
| 1987 | 4,061 | 3,240 | 1.25 |
| 1988 | 4,061 | 3,510 | 1.16 |
| 1989 | 4,926 | 3,760 | 1.31 |
| 1990 | 5,066 | 3,800 | 1.33 |
| 1991 | 5,886 | 4,540 | 1.30 |
| 1992 | 5,886 | 5,010 | 1.17 |
| 1993 | 6,116 | 5,090 | 1.20 |
| 1994 | 6,346 | 5,490 | 1.16 |
| 1995 | 6,920 | 5,600 | 1.24 |

**5. Central America**

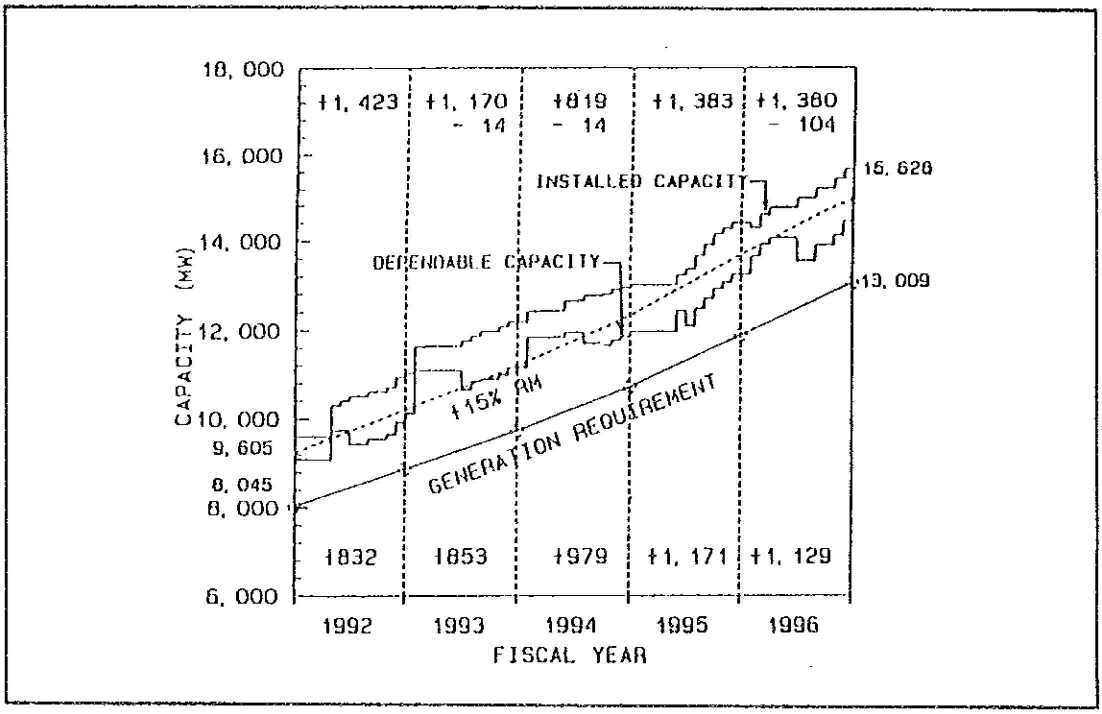
| Country | Installed capacity(MW) | Peak demand (MW) | I.C/P.D |
|---|---|---|---|
| Guatemala | 836 | 495 | 1.69 |
| El Sadvador | 650 | 447 | 1.45 |
| Honduras | 525 | 377 | 1.39 |
| Nicaragua | 363 | 271 | 1.34 |
| Costa Rica | 1,006 | 717 | 1.40 |

**6. Okinawa in Japan**

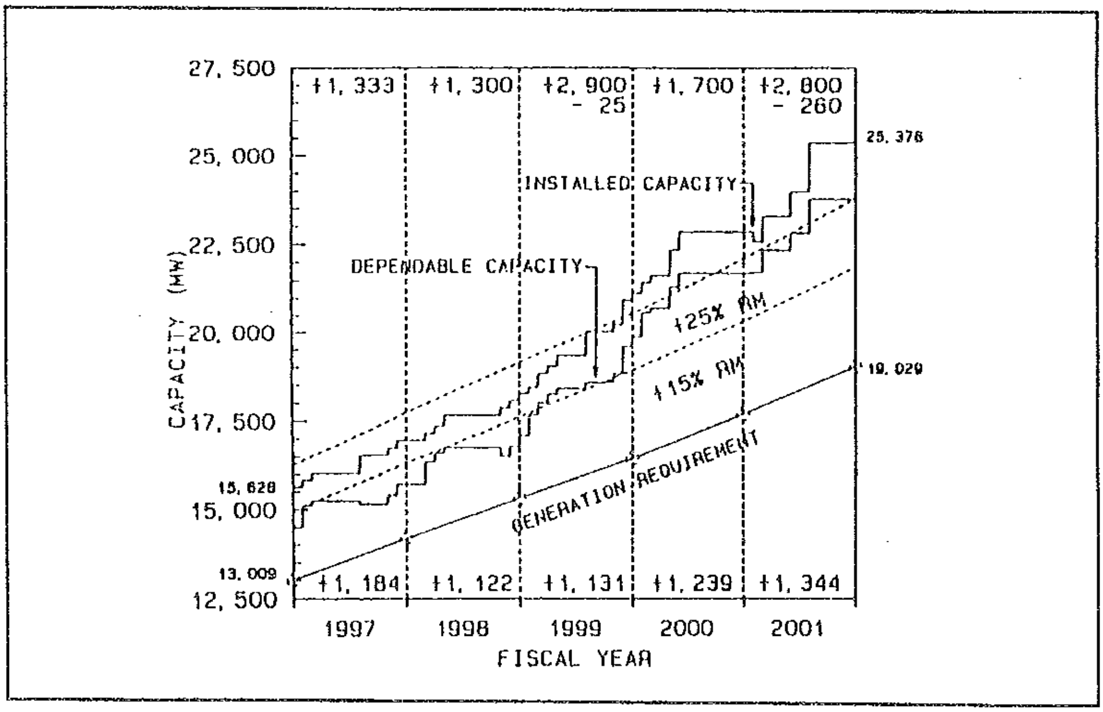
| Year | Installed capacity(MW) | Peak demand (MW) | I.C/P.D |
|---|---|---|---|
| 1996 | 1,630 | 1,280 | 1.27 |

**7. Mauritius**

| Year | Installed capacity(MW) | Peak demand (MW) | I.C/P.D |
|---|---|---|---|
| 1990 | 297 | 131 | 2.27 |
| 1991 | 320 | 147 | 2.18 |
| 1992 | 332 | 156 | 2.13 |
| 1993 | 339 | 170 | 1.99 |
| 1994 | 339 | 187 | 1.81 |
| 1995 | 364 | 201 | 1.81 |
| 1996 | 393 | 217 | 1.81 |
| 1997 | 421 | 232 | 1.81 |
| 1998 | 421 | 249 | 1.69 |
| 1999 | 440 | 271 | 1.62 |
| 2000 | 465 | 288 | 1.61 |
| 2001 | 469 | 315 | 1.49 |
| 2002 | 494 | 344 | 1.44 |
| 2003 | 525 | 372 | 1.41 |




**INSTALLED CAPACITY AND PEAK GENERATION PROFILE IN THE 7TH PLAN**




**INSTALLED CAPACITY AND PEAK GENERATION PROFILE IN THE 8TH PLAN**

# B. CO-GENERATION

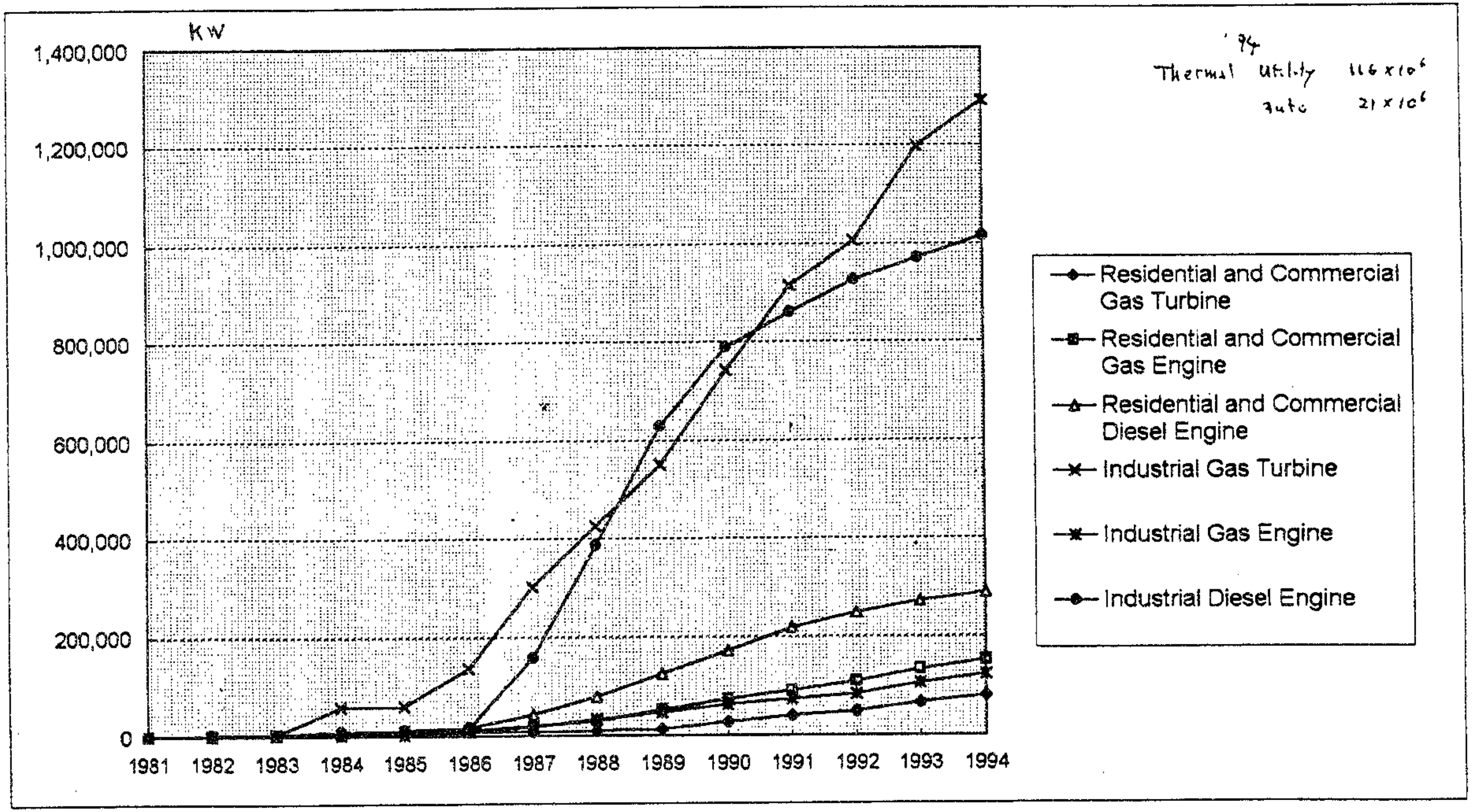
## CO-GENERATION PROJECTS IN JAPAN

E: ELECTRICITY C:COOLING W:HOT WATER H:HEATING
GT: GAS TURBINE E:GAS ENGINE DE:DIESEL ENGINE

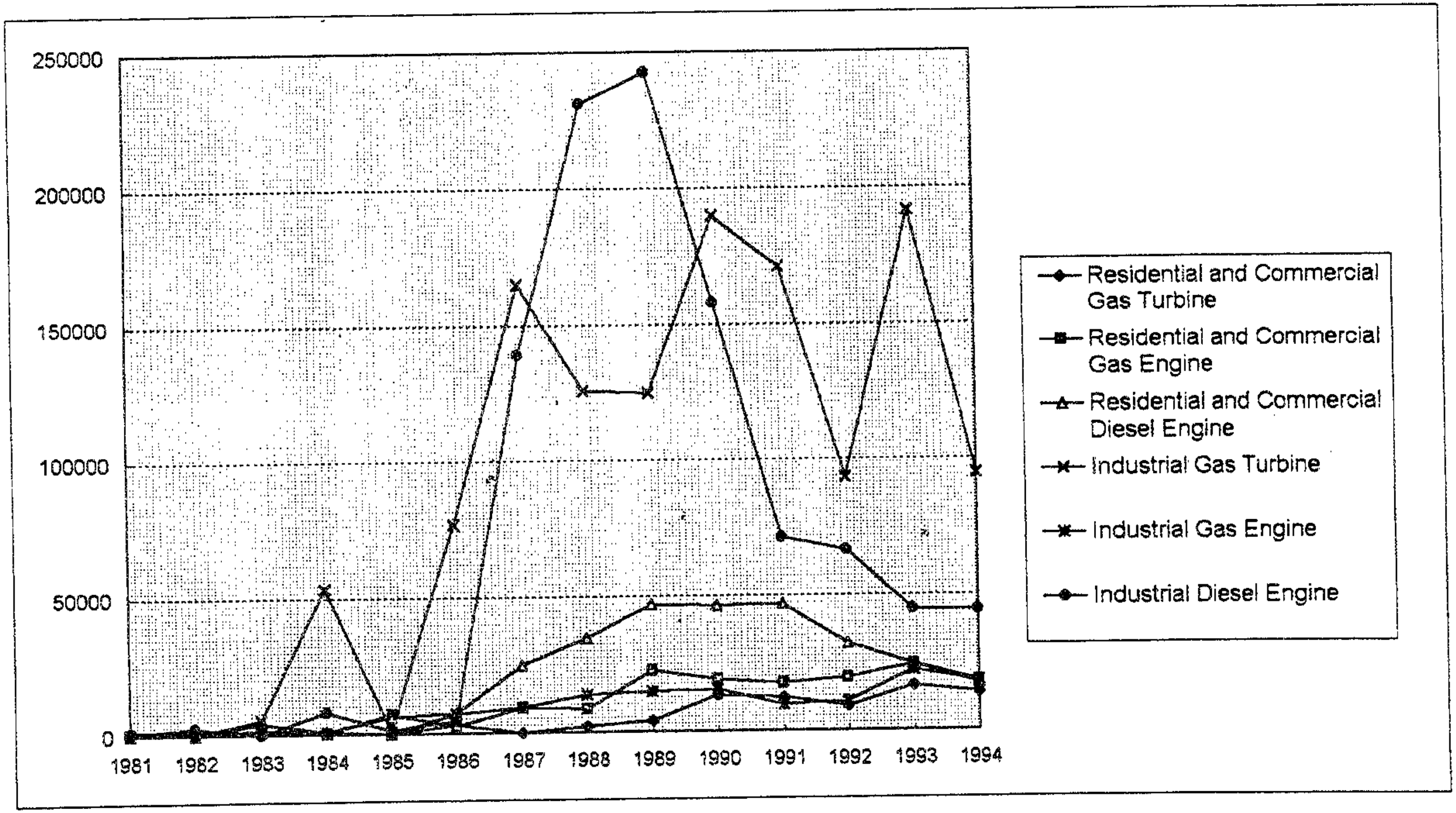
| Time Completion Commercial | Type of Owner | Type | Engine | KW |
|---|---|---|---|---|
| (1) 1986 June | Computer Center Town Gas Company | E.H.C. | G.E | 1,100 x 3 |
| (2) 1986 March | Commercial Building | E.H. | G.E | 2,178 |
| (3) 1986 February | Hotel (Central) | E.H.C.W | D.E (F.O.A) | 600 |
| (4) 1985 December | Research Center | E.C.H. | D.E (F.O.A) | 96 |
| (5) 1985 June | Hotel (North) | E.H.W | D.E | 400 x 2 |
| (6) 1984 February | Hotel (Okinawa) | E.H.C.W | G.T (Kerosene) | 400 |
| (7) 1983 December | Office Building of Town Gas Co. | E.H.C.W | G.T (Town Gas) | 1,000 x 2 |

## GENERAL STATISTICS

| Engine Type | Number of Project | Total Cap (x $10^3$ kwh) | | Average Cap kwg/project |
|---|---|---|---|---|
| Gas Turbine | Commercial | 36 | 86 | 2,381 |
| Gas Turbine | Industry | 201 | 1,522 | 2,573 |
| Gas Engine | Commercial | 513 | 168 | 328 |
| Gas Engine | Industry | 202 | 130 | 648 |
| Diesel Engine | Commercial | 656 | 333 | 507 |
| Diesel Engine | Industry | 477 | 1,203 | 2,522 |




**DEVELOPMENT OF CO-GENERATION PROJECTS IN JAPAN**




**DEVELOPMENT OF CO-GENERATION PROJECTS IN JAPAN**

## CHARACTERISTIC OF CO-GENERATION BY TYPE OF ENGINE

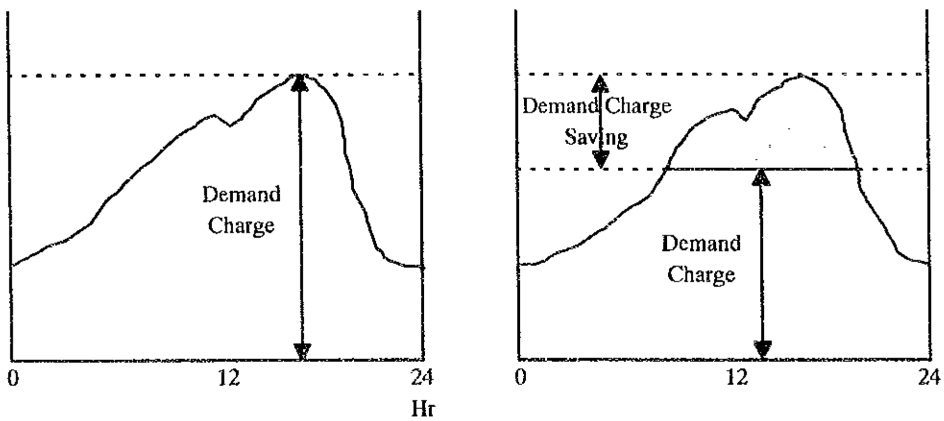
| | Diesel Engine | Gas Engine | Gas Turbine |
|---|---|---|---|
| Adequate Size (kw) | 15 - 10,000 | 20 - 5,000 | 1,000 - 230,000 |
| Power Gene Efficiency (%) | 30 - 45 | 28 - 38 | 25 - 40 |
| Overall Efficiency (%) | 40 - 70 | 60 - 80 | 60 - 85 |
| Fuel | Gas oil Fuel oil | Natural Gas LPG | Gas Oil Kerosene Natural Gas |
| Temp of Engine (℃) Exhaust | 350 - 450 | 400 - 500 | 500 - 600 |

Gas Turbine suitable to heat load oriented system, Diesel/Gas Engine suitable to electricity oriented system any case. The heat requirement throught the day is to be significant for economy improvement.

Viability Depend

* Demand Charge V.S. Energy Charge
* Tariff (Energy Charge) during peak time
* Cost of Fuel for hot water or steam
* Cost of energy for air cooling

## ELECTRICITY DEMAND



# C. BIO-COAL

## DESCRIPTION

### 1. Features of Bio-Coal

**(1) Little smoke generation**

The smoke generation rate of Bio-Coal is reduced to 1/5 to 1/10 of the rate of the unblended coal. The combustion of wood fibre or other Biomass with a low ignition temperature present between the coal particles, creates the phenomenon that no volatile matters in coal remain unburnt at a low temperature zone (200 to 400℃) and thus emission smoke will not occur. Since each Bio-Coal briquette has been formed by high compressive force, during combustion, briquettes will not disintegrate to cause separation of coal particles and wood fibre.

**(2) Good ignitability and burning quality**

The Bio-Coal has a low ignition temperature because of the blended wood fibre, and will burn evenly at low combustion rates.

**(3) No clinker produced**

Since wood fibre is present between coal particles, clinkering is prevented by wood ash. The ash will pass like sand gravitationally through a fire grate, thus causing no impediment to combustion. No clinker generation means that there is less unburnt coal contained in clinker, thus leaving almost no unburnt residue.

Moreover, disposal of ash is easy.

**(4) Less SOx in the flue gases**

Since the Bio-Coal has been formed by high compressive force with a desulfurizing agent such as Ca $(OH)_2$ dispersed between coal particles, catalytic reaction between the sulfur content and desulfurizing agent is achieved effectively during combustion, thus leading to the fixation of 60% to 80% of sulfur in the coal.

### 2. Features of Production Process

**(1) The production flow is simple and high in safety**

As a technique for making coal smokeless, the dry distillation (carbonization) process has conventionally been used. The Bio-Coal process can eliminate such complicated operations as may be required in the dry distillation process and causes no problems such as disposal of tar and other by-products.

Moreover, The Bio-Coal process involves no danger because it is not performed at high temperatures.

(2) **Briquetting by high compressive force**

Since the coal particles, biomass materials and desulfurizing agent are subjected to briquetting by high compressive force, they are bound strongly to each other, with the result that separation does not occur even during combustion.

Though a binder may be added depending on the coal grades, the addition rate of such binder can be reduced due to the briquetting by high compressive force.

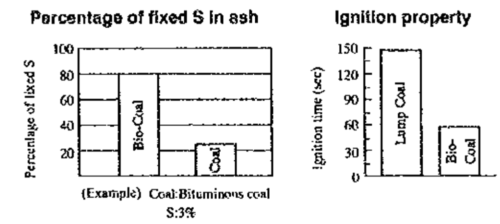
(3) **A variety of coal grades and biomass materials can be used as raw materials.**

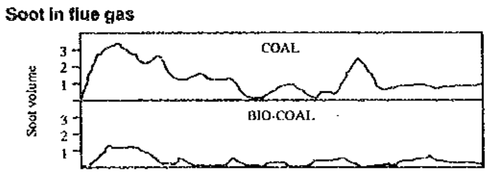
A wide variety of coal grades ranging from low grade coal such as brown coal and lignite to bituminous coal and anthracite can be used.

As for the biomass materials, waste wood, bagasse, peat pulp etc, can be used.

## 3. Applications of Bio-Coal

The Bio-coal is suitable as a domestic clean burning fuel for stove, boiler or cooking, as well as industrial applications : such as greenhouse boilers, and boilers for office, apartment or institutions.

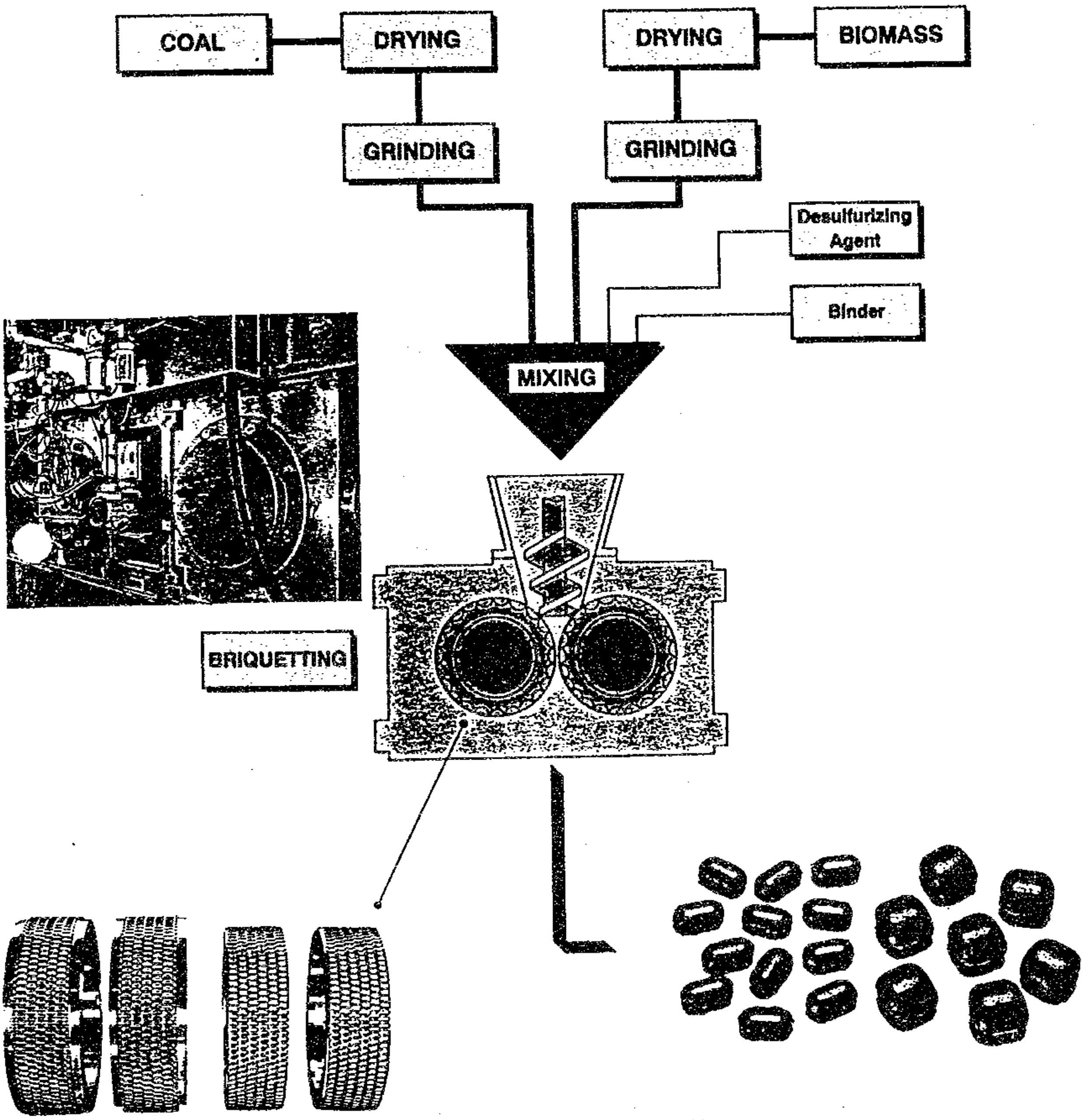


## BIO-COAL

The New Clean Burning Fuel by the New Production Process

Bio-Coal is produced by mixing biomass materials (vegetable matter) such as wood fibre or bagasse with coal in a ratio of 10% to 25% and briquetting the mixture with a high compressive force. Depending on the coal grades, a small amount of binder and desulfurizing agent may be required.




Briquetting Rolls

BIO-COAL

## *Appendix 5 Case Study in the Philippines Successful Privatization of Power Generation Business*

## Appendix 5　発電事業の民営化に成功したﾌｨﾘﾋﾟﾝにおけるｹｰｽｽﾀﾃﾞｨ

フィリピンは1989～1991年に電力設備の能力不足による大規模の停電が継続し、国民生活および産業に大きな打撃を与えた。この危機を乗り切るために政府は Built Operate Transfer (BOT)の手法により大規模の国際的な投資を含む民間投資を発電事業に呼び込み、国の発電能力の33%に当たる新設備（3,000MW相当）を1991～1994年に建設するのに成功した。しかもその新設備能力の96%は民間資本によるものである。この BOT の発電事業への導入に当たり政府は次のような法律・規制の改革を行った。

1) 1987年7月、大統領令　No.215

この中で National Power Corporation (NPC)の全国送電に関する責任を明確化し、次の形式の発電につき民間資本（Shall be allowed）の参入を求め、その場合の条件を明確化した。

a) Co-generation
b) NPCの開発計画に沿った発電
c) 自家用発電中心の場合で余剰を外部に売る
d) NPCの送電網の外での発電

* 民営の発電はNPCの制定する Rules and Regulation による
* その Rules and Regulation は Office of Energy Affair (Department of Energy)と民間団体と相談して決める。その規則は以下を含む。

a) 民間発電業者の資格
b) 発電業認可手続き
c) 民間発電業者の守るべき責任（エネルギー効率、技術的信頼性、ペナルティー）
d) 電力の購入、送配電についての条件
e) その他、本法実現の必要事項

さらに本法に背くすべての既存の法規の廃止が決定されている。

2) Executive Order No.215 : ENERGY REGULATIONS No.1-95 IMPLEMENTING RULES & REGULATION

上記 E.O.215 (1)の実施規則として民間に発電への参入を可能とするために、1995 年 1 月に Department of Energy により制定された。その内容は次のようになっている。

| | | |
|---|---|---|
| **Part I** | **GENERAL PROVISIONS OF THE RULES AND REGULATION** | |
| | Article I | Statement of Policy, Scope and Definition of Term |
| | Article II | Juridiction of the DOE, NAPOCOR, NEA and ERB |
| | Article III | Qualification of A Private Sector Generation Facility and a Private Sector Generator |
| | Article IV | General Procedures for Applying for Accreditation as A Private Sector Generation Facility |
| | Article V | Right of NAPOCOR & Others on the Design and Operation of the Private Sector Generation Facility |
| | Article VI | Obligation of Concerned Parties |
| | Article VII | Purchase of Power |
| | Article VIII | Rates of Sales |
| | Article IX | Operating Standards, Environmental Concerns and Other Matters |
| **Part II** | **SPECIFIC PROVISIONS FOR COGENERATION AND RENEWABLE** | |
| | Article I | Definition of Cogeneration and Renewable Power Production Facilities |
| | Article II | Qualification RRPPPFs and Cogeneration Facilities |
| | Article III | Procedurs for Applying for Accreditation as Cogene-RRPPPF |
| | Article IV | Obligation of NAPCOCOR And Owner of Qualified Cogene, RRPPPF |
| | Article V | Rates for Purchase |
| **Part III** | **SPECIFIC PROVISIONS ON BLOCK POWER PRODUCTION FACILITIES** | |
| | Article I | Definition and Qualification of A Block Power Production facility as A Qualified PSGF |
| | Article II | Procedures for Applying for Accreditation as A Block Power Production Facility |
| | Article III | Obligation of NAPOCOR and Owners of Block Power Production Facilities |
| | Article IV | Rates for Purchases and Sales |
| | Article V | Operating Procedures and Environmental Concerns |
| **Part IV** | **SPECIFIC PROVISION ON ELECTRIC-UTILITY-OWNED GENERATION FACILITY** | |
| | Article I | Qualification as A Private Sector Generation Facility |
| | Article II | Procudures for Applying for Accreditation as A Private Sector Generation Facility |
| | Article III | NAPOCOR's Relationship |
| **Part V** | **OTHER PROVISIONS** | |

3) 他の BOT 関連法規

a) オムニバス投資令（Executive Order 226）

上記の BOT の投資者に対して政府としての奨励策が公布されている（発電のみならず政府にとって望ましい投資全体）。国内および国外の投資に対して Board of Investment の認める地域における投資に対して以下のような Incentive を与えている。

免税、輸入資本に対する関税引き下げ、二重の労務費控除、外国人の雇用。

b) 外資法（Republic Act No.7042）

民間電力プロジェクトを PIONEER-STATUS として認めることにより 6 年間の免税、資本財の無税輸入、国産品の免税、外資送金の保証、外国人雇用の承認などを保証している。

c) エネルギー庁法（Republic Act No.7638）

エネルギーに関する開発、利用、分配およびコンサーベーションについて政府として活動を準備し、統合し、調整し、すべての計画プロジェクトを管理する政府組織として DOE の設立が規定されている。DOE は 1992 年に設立され民営発電の早急の実現に貢献した。

d) BOT 法（Republic Act No. 6957）

本法は国益に沿うインフラストラクチャープロジェクトに対する民間の参入に関して各種の枠組みの利用を可能にした。すなわち Built-Operate-Transfer のみならず、BOO、BLT、BTO、CAO などの可能性が開かれた。

JICA