

Table 3. Energy Consumption by Sector and Source
 (quadrillion Btu, unless otherwise noted) - Eas North Central-03

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Total Energy Consumption | | | | | | | | | | | | | |
| Liquefied Petroleum Gases | 0.280 | 0.265 | 0.275 | 0.276 | 0.277 | 0.276 | 0.276 | 0.277 | 0.278 | 0.279 | 0.279 | 0.280 | 0.281 |
| E85 8/ | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| Motor Gasoline 2/ | 2.702 | 2.699 | 2.728 | 2.685 | 2.657 | 2.642 | 2.635 | 2.647 | 2.661 | 2.678 | 2.699 | 2.720 | 2.741 |
| Jet Fuel 9/ | 0.288 | 0.287 | 0.290 | 0.298 | 0.307 | 0.320 | 0.336 | 0.341 | 0.344 | 0.346 | 0.348 | 0.349 | 0.351 |
| Kerosene | 0.012 | 0.013 | 0.012 | 0.009 | 0.009 | 0.009 | 0.009 | 0.009 | 0.009 | 0.010 | 0.010 | 0.010 | 0.010 |
| Distillate Fuel Oil | 1.198 | 1.225 | 1.262 | 1.265 | 1.270 | 1.278 | 1.288 | 1.303 | 1.317 | 1.329 | 1.328 | 1.337 | 1.349 |
| Residual Fuel Oil | 0.039 | 0.023 | 0.021 | 0.016 | 0.016 | 0.016 | 0.016 | 0.016 | 0.016 | 0.018 | 0.018 | 0.018 | 0.018 |
| Petrochemical Feedstocks | 0.153 | 0.135 | 0.130 | 0.140 | 0.144 | 0.144 | 0.145 | 0.145 | 0.145 | 0.145 | 0.144 | 0.144 | 0.144 |
| Liquid Hydrogen | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Other Petroleum 12/ | 0.679 | 0.690 | 0.676 | 0.641 | 0.612 | 0.605 | 0.603 | 0.602 | 0.609 | 0.613 | 0.615 | 0.614 | 0.612 |
| Liquid Fuels Subtotal | 5.350 | 5.337 | 5.394 | 5.329 | 5.293 | 5.290 | 5.308 | 5.341 | 5.381 | 5.417 | 5.442 | 5.473 | 5.507 |
| Natural Gas | 3.639 | 3.673 | 3.717 | 3.962 | 4.026 | 4.051 | 4.075 | 4.128 | 4.155 | 4.217 | 4.218 | 4.276 | 4.299 |
| Natural-Gas-to-Liquids Heat and Power | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Lease and Plant Fuel 6/ | 0.010 | 0.010 | 0.011 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 |
| Pipeline Natural Gas | 0.063 | 0.062 | 0.057 | 0.065 | 0.065 | 0.066 | 0.066 | 0.067 | 0.067 | 0.067 | 0.067 | 0.068 | 0.067 |
| Natural Gas Subtotal | 3.711 | 3.745 | 3.785 | 4.038 | 4.102 | 4.127 | 4.151 | 4.204 | 4.232 | 4.294 | 4.295 | 4.353 | 4.376 |
| Metallurgical Coal | 0.285 | 0.272 | 0.285 | 0.266 | 0.261 | 0.255 | 0.251 | 0.246 | 0.242 | 0.238 | 0.235 | 0.231 | 0.227 |
| Other Coal | 5.015 | 5.150 | 5.171 | 5.237 | 5.322 | 5.454 | 5.595 | 5.683 | 5.641 | 5.703 | 5.856 | 5.839 | 5.896 |
| Coal-to-Liquids Heat and Power | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Net Coal Coke Imports | 0.986 | 0.327 | 0.371 | 0.156 | 0.155 | 0.153 | 0.152 | 0.151 | 0.150 | 0.150 | 0.149 | 0.148 | 0.147 |
| Coal Subtotal | 6.286 | 5.748 | 5.828 | 5.658 | 5.737 | 5.862 | 5.998 | 6.080 | 6.033 | 6.091 | 6.240 | 6.218 | 6.269 |
| Nuclear Power | 1.544 | 1.538 | 1.534 | 1.605 | 1.600 | 1.588 | 1.588 | 1.591 | 1.592 | 1.592 | 1.592 | 1.592 | 1.592 |
| Biofuels Heat and Coproducts | 0.213 | 0.245 | 0.315 | 0.354 | 0.454 | 0.613 | 0.689 | 0.707 | 0.722 | 0.727 | 0.731 | 0.736 | 0.740 |
| Renewable Energy 16/ | 0.384 | 0.375 | 0.395 | 0.423 | 0.430 | 0.458 | 0.459 | 0.449 | 0.452 | 0.446 | 0.452 | 0.473 | 0.476 |
| Electricity Imports | -0.011 | -0.008 | -0.009 | -0.006 | -0.005 | -0.002 | -0.004 | -0.003 | -0.004 | -0.005 | -0.004 | -0.003 | -0.003 |
| Total | 17.476 | 16.979 | 17.243 | 17.402 | 17.610 | 17.935 | 18.189 | 18.371 | 18.408 | 18.564 | 18.748 | 18.843 | 18.958 |
| Energy Use & Related Statistics | | | | | | | | | | | | | |
| Delivered Energy Use | 12.869 | 12.231 | 12.204 | 12.283 | 12.406 | 12.620 | 12.802 | 12.924 | 13.034 | 13.130 | 13.193 | 13.276 | 13.344 |
| Total Energy Use | 17.476 | 16.979 | 17.243 | 17.402 | 17.610 | 17.935 | 18.189 | 18.371 | 18.408 | 18.564 | 18.748 | 18.843 | 18.958 |
| Population (millions) | 46.122 | 46.308 | 46.485 | 46.655 | 46.817 | 46.977 | 47.133 | 47.282 | 47.426 | 47.563 | 47.692 | 47.813 | 47.925 |
| Carbon Dioxide Emissions (million metric tons) | 1121.58 | 1075.19 | 1090.25 | 1082.02 | 1089.16 | 1100.33 | 1114.91 | 1128.07 | 1127.77 | 1139.02 | 1155.09 | 1158.18 | 1166.51 |

Table 3. Energy Consumption by Sector and Source
(quadrillion Btu, unless otherwise noted) - Eas North Central-03

- 1/ Includes wood used for residential heating.
2/ Includes ethanol (blends of 10 percent or less) and ethers blended into gasoline.
3/ Includes commercial sector consumption of wood and wood waste, landfill gas, municipal solid waste, and other biomass for combined heat and power.
4/ Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.
5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, tire-derived fuel, and miscellaneous petroleum products.
6/ Represents natural gas used in well, field, and lease operations, and in natural gas processing plant machinery.
7/ Includes consumption of energy produced from hydroelectric, wood and wood waste, municipal solid waste, and other biomass sources.
8/ E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol actually varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.
9/ Includes only kerosene type.
10/ Diesel fuel for on- and off- road use.
11/ Includes aviation gasoline and lubricants.
12/ Includes unfinished oils, natural gasoline, motor gasoline blending components, aviation gasoline, lubricants, still gas, asphalt, road oil, petroleum coke, tire-derived fuel, and miscellaneous petroleum products.
13/ Includes electricity generated for sale to the grid and for own use from renewable sources, and non-electric energy from renewable sources. Excludes nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.
14/ Includes consumption of energy by electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators.
15/ Includes conventional hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, petroleum coke, wind, photovoltaic and solar thermal sources.
Excludes net electricity imports.
16/ Includes hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10 percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2004 and 2005 are model results and may differ slightly from official EIA data reports.

Consumption values of 0.00 are values that round to 0.00, because they are less than 0.005.

Sources: 2004 and 2005 consumption based on: Energy Information Administration (EIA), Annual Energy Review 2005, DOE/EIA-0384(2005) (Washington, DC, July 2006). 2004 and 2005 population and gross domestic product: Global Insight macroeconomic model CTL0806. 2004 and 2005 carbon dioxide emissions: EIA, Emissions of Greenhouse Gases in the United States 2005, DOE/EIA-0573(2005) (Washington, DC, December 2006). Projections: EIA, AEO2007 National Energy Modeling System run aeo2007.d112106a.