

**Table A3. Approximate Heat Content of Petroleum Consumption and Biofuels Production**  
(Million Btu per Barrel)

|            | Total Petroleum <sup>a</sup> Consumption by Sector |                         |                         |                             |                               |                    | Liquefied Petroleum Gases Consumption <sup>e</sup> | Motor Gasoline Consumption <sup>f</sup> | Fuel Ethanol | Fuel Ethanol Feed-stock <sup>g</sup> | Biodiesel | Biodiesel Feed-stock <sup>h</sup> |
|------------|--|-------------------------|-------------------------|-----------------------------|-------------------------------|--------------------|--|---|--------------|--------------------------------------|-----------|-----------------------------------|
|            | Residential  | Commercial <sup>b</sup> | Industrial <sup>b</sup> | Transportation <sup>b</sup> | Electric Power <sup>c,d</sup> | Total <sup>b</sup> |  |   |              |                                      |           |                                   |
| 1973 ..... | 5.205  | 5.749                   | 5.569                   | 5.395                       | 6.245                         | 5.515              | 3.746  | 5.253                                   | 3.539        | NA                                   | NA        | NA                                |
| 1974 ..... | 5.196  | 5.740                   | 5.538                   | 5.394                       | 6.238                         | 5.504              | 3.730  | 5.253                                   | 3.539        | NA                                   | NA        | NA                                |
| 1975 ..... | 5.192  | 5.704                   | 5.527                   | 5.392                       | 6.250                         | 5.494              | 3.715  | 5.253                                   | 3.539        | NA                                   | NA        | NA                                |
| 1976 ..... | 5.215  | 5.726                   | 5.536                   | 5.395                       | 6.251                         | 5.504              | 3.711  | 5.253                                   | 3.539        | NA                                   | NA        | NA                                |
| 1977 ..... | 5.213  | 5.733                   | 5.554                   | 5.400                       | 6.249                         | 5.518              | 3.677  | 5.253                                   | 3.539        | NA                                   | NA        | NA                                |
| 1978 ..... | 5.213  | 5.716                   | 5.554                   | 5.404                       | 6.251                         | 5.519              | 3.669  | 5.253                                   | 3.539        | NA                                   | NA        | NA                                |
| 1979 ..... | 5.298  | 5.769                   | 5.419                   | 5.428                       | 6.258                         | 5.494              | 3.680  | 5.253                                   | 3.539        | NA                                   | NA        | NA                                |
| 1980 ..... | 5.245  | 5.803                   | 5.374                   | 5.440                       | 6.254                         | 5.479              | 3.674  | 5.253                                   | 3.539        | 6.586                                | NA        | NA                                |
| 1981 ..... | 5.191  | 5.751                   | 5.312                   | 5.432                       | 6.258                         | 5.448              | 3.643  | 5.253                                   | 3.539        | 6.486                                | NA        | NA                                |
| 1982 ..... | 5.167  | 5.751                   | 5.263                   | 5.422                       | 6.258                         | 5.415              | 3.615  | 5.253                                   | 3.539        | 6.428                                | NA        | NA                                |
| 1983 ..... | 5.022  | 5.642                   | 5.275                   | 5.415                       | 6.255                         | 5.406              | 3.614  | 5.253                                   | 3.539        | 6.388                                | NA        | NA                                |
| 1984 ..... | 5.184  | 5.705                   | 5.223                   | 5.418                       | 6.251                         | 5.395              | 3.599  | 5.253                                   | 3.539        | 6.356                                | NA        | NA                                |
| 1985 ..... | 5.153  | 5.661                   | 5.215                   | 5.422                       | 6.247                         | 5.387              | 3.603  | 5.253                                   | 3.539        | 6.331                                | NA        | NA                                |
| 1986 ..... | 5.169  | 5.694                   | 5.283                   | 5.425                       | 6.257                         | 5.418              | 3.640  | 5.253                                   | 3.539        | 6.310                                | NA        | NA                                |
| 1987 ..... | 5.144  | 5.661                   | 5.248                   | 5.429                       | 6.249                         | 5.403              | 3.659  | 5.253                                   | 3.539        | 6.291                                | NA        | NA                                |
| 1988 ..... | 5.165  | 5.661                   | 5.241                   | 5.433                       | 6.250                         | 5.410              | 3.652  | 5.253                                   | 3.539        | 6.275                                | NA        | NA                                |
| 1989 ..... | 5.105  | 5.621                   | 5.234                   | 5.438                       | <sup>c</sup> 6.240            | 5.410              | 3.683  | 5.253                                   | 3.539        | 6.260                                | NA        | NA                                |
| 1990 ..... | 5.027  | 5.621                   | 5.270                   | 5.442                       | 6.244                         | 5.411              | 3.625  | 5.253                                   | 3.539        | 6.247                                | NA        | NA                                |
| 1991 ..... | 4.968  | 5.599                   | 5.186                   | 5.440                       | 6.246                         | 5.384              | 3.614  | 5.253                                   | 3.539        | 6.235                                | NA        | NA                                |
| 1992 ..... | 5.004  | 5.589                   | 5.185                   | 5.442                       | 6.238                         | 5.378              | 3.624  | 5.253                                   | 3.539        | 6.224                                | NA        | NA                                |
| 1993 ..... | 4.975  | <sup>b</sup> 5.580      | <sup>b</sup> 5.196      | <sup>b</sup> 5.436          | 6.230                         | <sup>b</sup> 5.379 | 3.606  | 5.253                                   | 3.539        | 6.214                                | NA        | NA                                |
| 1994 ..... | 4.983  | 5.592                   | 5.166                   | 5.424                       | 6.213                         | 5.361              | 3.635  | <sup>f</sup> 5.230                      | 3.539        | 6.204                                | NA        | NA                                |
| 1995 ..... | 4.940  | 5.554                   | 5.137                   | 5.417                       | 6.188                         | 5.341              | 3.623  | 5.215                                   | 3.539        | 6.196                                | NA        | NA                                |
| 1996 ..... | 4.869  | 5.498                   | 5.133                   | 5.420                       | 6.195                         | 5.336              | 3.613  | 5.216                                   | 3.539        | 6.187                                | NA        | NA                                |
| 1997 ..... | 4.859  | 5.459                   | 5.138                   | 5.416                       | 6.199                         | 5.336              | 3.616  | 5.213                                   | 3.539        | 6.180                                | NA        | NA                                |
| 1998 ..... | 4.837  | 5.446                   | 5.155                   | 5.413                       | 6.210                         | 5.349              | 3.614  | 5.212                                   | 3.539        | 6.172                                | NA        | NA                                |
| 1999 ..... | 4.761  | 5.369                   | 5.113                   | 5.413                       | 6.205                         | 5.328              | 3.616  | 5.211                                   | 3.539        | 6.165                                | NA        | NA                                |
| 2000 ..... | 4.761  | 5.394                   | 5.082                   | 5.421                       | 6.189                         | 5.326              | 3.607  | 5.210                                   | 3.539        | 6.159                                | NA        | NA                                |
| 2001 ..... | 4.796  | 5.403                   | 5.164                   | 5.412                       | 6.199                         | 5.345              | 3.614  | 5.210                                   | 3.539        | 6.152                                | 5.359     | 5.433                             |
| 2002 ..... | 4.742  | 5.364                   | 5.116                   | 5.410                       | 6.173                         | 5.324              | 3.613  | 5.208                                   | 3.539        | 6.146                                | 5.359     | 5.433                             |
| 2003 ..... | 4.763  | 5.407                   | 5.161                   | 5.408                       | 6.182                         | 5.340              | 3.629  | 5.207                                   | 3.539        | 6.141                                | 5.359     | 5.433                             |
| 2004 ..... | 4.807  | 5.434                   | 5.164                   | 5.420                       | 6.192                         | 5.350              | 3.618  | 5.215                                   | 3.539        | 6.135                                | 5.359     | 5.433                             |
| 2005 ..... | 4.783  | 5.427                   | 5.200                   | 5.426                       | 6.188                         | 5.365              | 3.620  | 5.218                                   | 3.539        | 6.130                                | 5.359     | 5.433                             |
| 2006 ..... | <sup>E</sup> 4.667                                 | <sup>E</sup> 5.343      | <sup>E</sup> 5.197      | <sup>E</sup> 5.430          | 6.143                         | 5.353              | 3.605  | 5.218                                   | 3.539        | 6.125                                | 5.359     | 5.433                             |
| 2007 ..... | <sup>E</sup> 4.640                                 | <sup>E</sup> 5.340      | <sup>E</sup> 5.167      | <sup>E</sup> 5.432          | <sup>P</sup> 6.150            | 5.346              | 3.591  | 5.219                                   | 3.539        | 5.987                                | 5.359     | 5.433                             |
| 2008 ..... | <sup>E</sup> 4.640                                 | <sup>E</sup> 5.340      | <sup>E</sup> 5.167      | <sup>E</sup> 5.432          | <sup>E</sup> 6.150            | <sup>E</sup> 5.346 | <sup>E</sup> 3.591                                 | <sup>E</sup> 5.219                      | 3.539        | <sup>E</sup> 5.986                   | 5.359     | 5.433                             |

<sup>a</sup> Petroleum products supplied, including natural gas plant liquids and crude oil burned directly as fuel. Quantity-weighted averages of the petroleum products included in each category are calculated by using heat content values shown in Table A1.

<sup>b</sup> Beginning in 1993, includes ethanol blended into motor gasoline.

<sup>c</sup> Electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 1988, data are for electric utilities only; beginning in 1989, data are for electric utilities and independent power producers.

<sup>d</sup> Electric power sector factors are weighted average heat contents for distillate fuel oil, petroleum coke, and residual fuel oil; they exclude other liquids.

<sup>e</sup> Quantity-weighted averages of the major components of liquefied petroleum gases are calculated by using heat content values shown in Table A1.

<sup>f</sup> There is a discontinuity in this time series between 1993 and 1994; beginning in 1994, the single constant factor is replaced by a quantity-weighted factor—quantity-weighted averages of the major components of motor gasoline, including fuel ethanol, are calculated by using heat content values shown in Table A1.

<sup>g</sup> Corn input to the production of fuel ethanol (million Btu corn per barrel denatured ethanol), used as the approximate heat content for total biomass inputs to the production of fuel ethanol.

<sup>h</sup> Soybean oil input to the production of biodiesel (million Btu soybean oil per barrel biodiesel), used as the approximate heat content for total biomass inputs to the production of biodiesel.

P=Preliminary. E=Estimate. NA=Not available.

Note: The values in this table are for gross heat contents. See "Heat Content" in Glossary.

Web Page: [http://www.eia.doe.gov/emeu/mer/append\\_a.html](http://www.eia.doe.gov/emeu/mer/append_a.html).

Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.