

Table CT3. Total end-use sector energy consumption estimates, selected years, 1960-2022, Iowa

| Year | Coal Thousand short tons | Natural gas ^a Billion cubic feet | Petroleum | | | | | | | Hydro-electric power ^{g,h} Million kilowatt-hours | Biomass | | | Solar ^{h,k} Million kilowatt-hours | Electricity ^l End use ^{h,m} Million kilowatt-hours | Electrical system energy losses ⁿ | Total ^{h,m} |
|------|-----------------------------|--|----------------------------------|------------------|-----------------------|-----------------------------|-------------------|--------------------|----------|---|-------------------------------|-------------------------------------|--------------------------|--|--|--|----------------------|
| | | | Distillate fuel oil ^b | HGL ^c | Jet fuel ^d | Motor gasoline ^e | Residual fuel oil | Other ^f | Total | | Wood and waste ^{h,i} | Losses and co-products ^j | Geo-thermal ^h | | | | |
| | | | Thousand barrels | | | | | | | | | | | | | | |
| 1960 | 3,141 | 139 | 10,904 | 5,017 | 195 | 29,463 | 1,033 | 6,288 | 52,899 | 2 | -- | -- | -- | 8,208 | -- | -- | |
| 1970 | 2,136 | 271 | 13,350 | 11,038 | 725 | 35,701 | 352 | 4,986 | 66,152 | 1 | -- | -- | -- | 15,473 | -- | -- | |
| 1980 | 1,595 | 263 | 15,762 | 11,167 | 813 | 35,394 | 352 | 3,805 | 67,292 | 1 | -- | -- | -- | 24,858 | -- | -- | |
| 1990 | 2,599 | 215 | 15,660 | 6,355 | 891 | 31,684 | 124 | 2,741 | 57,456 | 0 | -- | -- | -- | 29,437 | -- | -- | |
| 2000 | 3,163 | 228 | 19,038 | 19,621 | 771 | 36,753 | 143 | 3,915 | 80,241 | 0 | -- | -- | -- | 39,088 | -- | -- | |
| 2005 | 3,204 | 220 | 20,205 | 20,881 | 990 | 39,215 | 194 | 4,299 | 85,784 | 0 | -- | -- | -- | 42,757 | -- | -- | |
| 2006 | 3,370 | 219 | 21,043 | 21,192 | 1,033 | 40,429 | 47 | 3,628 | 87,372 | 0 | -- | -- | -- | 43,337 | -- | -- | |
| 2007 | 3,332 | 267 | 22,431 | 16,893 | 899 | 40,251 | 44 | 3,119 | 83,637 | 0 | -- | -- | -- | 45,270 | -- | -- | |
| 2008 | 3,161 | 308 | 22,847 | 20,523 | 786 | 39,281 | 170 | 3,094 | 86,702 | 0 | -- | -- | -- | 45,488 | -- | -- | |
| 2009 | 2,947 | 305 | 22,100 | 21,389 | 525 | 39,588 | 66 | 2,728 | 86,395 | 0 | -- | -- | -- | 43,641 | -- | -- | |
| 2010 | 3,613 | 299 | 23,598 | 19,838 | 990 | 40,808 | 24 | 2,225 | 87,483 | 0 | -- | -- | -- | 45,445 | -- | -- | |
| 2011 | 3,789 | 297 | 23,934 | 19,308 | 1,018 | 41,028 | 32 | 2,102 | 87,421 | 0 | -- | -- | -- | 45,655 | -- | -- | |
| 2012 | 3,558 | 279 | 23,725 | 15,584 | 1,064 | 38,519 | 11 | 2,357 | 81,260 | 0 | -- | -- | -- | 45,709 | -- | -- | |
| 2013 | 3,643 | 314 | 23,875 | 20,678 | 974 | 39,115 | 6 | 3,157 | 87,806 | 0 | -- | -- | -- | 46,705 | -- | -- | |
| 2014 | 3,303 | 319 | 25,072 | 20,899 | 953 | 39,744 | 6 | 3,164 | 89,839 | 0 | -- | -- | -- | 47,202 | -- | -- | |
| 2015 | 3,023 | 302 | 25,595 | 18,900 | 1,051 | 39,469 | 0 | 2,876 | 87,891 | 0 | -- | -- | -- | 47,147 | -- | -- | |
| 2016 | 2,615 | 309 | 25,856 | 19,059 | 1,045 | 41,192 | 1 | R 2,949 | R 90,102 | 0 | -- | -- | -- | 48,431 | -- | -- | |
| 2017 | 2,533 | 362 | 25,776 | 19,139 | 1,139 | 37,618 | 17 | R 3,082 | R 86,771 | 0 | -- | -- | -- | 48,922 | -- | -- | |
| 2018 | 2,504 | 396 | 26,117 | 21,797 | 1,143 | 37,266 | 11 | R 2,827 | R 89,161 | 0 | -- | -- | -- | 51,211 | -- | -- | |
| 2019 | 2,425 | 391 | 27,232 | 23,688 | 1,139 | 36,992 | 16 | R 2,766 | R 91,833 | 0 | -- | -- | -- | 51,043 | -- | -- | |
| 2020 | 2,198 | 360 | R 27,055 | 21,893 | 808 | 32,656 | 0 | R 3,391 | R 85,803 | 0 | -- | -- | -- | 50,640 | -- | -- | |
| 2021 | 2,132 | 348 | R 25,720 | 20,468 | 1,004 | 36,394 | 15 | R 3,791 | R 87,391 | 0 | -- | -- | -- | 52,893 | -- | -- | |
| 2022 | 2,453 | 383 | 26,228 | 21,438 | 1,122 | 38,391 | 15 | 3,563 | 90,756 | 0 | -- | -- | -- | 54,204 | -- | -- | |

Trillion Btu

| | | | | | | | | | | | | | | | | | | |
|------|------|-------|---------|------|-----|-------|-----|--------|---------|-----|--------|-------|-----|-------|-------|-----------|---------|-----------|
| 1960 | 72.0 | 143.4 | 63.5 | 19.2 | 1.0 | 154.8 | 6.5 | 38.2 | 283.2 | (s) | 6.1 | NA | NA | NA | 28.0 | 532.7 | R 56.5 | R 589.2 |
| 1970 | 46.7 | 273.2 | 77.8 | 41.8 | 4.1 | 187.5 | 2.2 | 31.0 | 344.4 | (s) | 5.9 | NA | NA | NA | 52.8 | 722.9 | R 108.1 | R 831.0 |
| 1980 | 34.2 | 263.5 | 91.8 | 40.8 | 4.6 | 185.9 | 2.2 | 23.3 | 348.6 | (s) | 48.4 | NA | NA | NA | 84.8 | 779.5 | R 180.4 | R 960.0 |
| 1990 | 59.0 | 216.2 | 91.2 | 23.2 | 5.0 | 166.4 | 0.8 | 17.2 | 303.8 | 0.0 | 47.6 | 14.0 | 0.1 | (s) | 100.4 | 696.9 | R 244.9 | R 941.9 |
| 2000 | 67.7 | 229.0 | 110.8 | 69.7 | 4.4 | 191.2 | 0.9 | 24.7 | 401.7 | 0.0 | 30.7 | 26.9 | 0.3 | (s) | 133.4 | 859.6 | R 326.4 | R 1,186.0 |
| 2005 | 65.6 | 221.4 | 117.6 | 73.7 | 5.6 | 203.6 | 1.2 | 27.6 | 429.3 | 0.0 | 30.0 | 64.0 | 0.6 | (s) | 145.9 | 928.0 | R 331.8 | R 1,259.8 |
| 2006 | 67.9 | 221.6 | 122.1 | 74.5 | 5.9 | 209.6 | 0.3 | 23.3 | 435.6 | 0.0 | 19.8 | 86.1 | 0.7 | (s) | 147.9 | 948.9 | R 332.1 | R 1,281.0 |
| 2007 | 68.4 | 270.0 | 129.7 | 59.5 | 5.1 | 207.0 | 0.3 | 19.9 | 421.5 | 0.0 | 22.0 | 110.5 | 0.8 | (s) | 154.5 | 1,019.3 | R 335.1 | R 1,354.4 |
| 2008 | 63.4 | 311.2 | 132.1 | 72.2 | 4.5 | 200.6 | 1.1 | 19.7 | 430.1 | 0.0 | 22.2 | 131.3 | 0.9 | (s) | 155.2 | 1,085.1 | R 327.1 | R 1,412.1 |
| 2009 | 58.7 | 307.3 | 127.7 | 74.4 | 3.0 | 201.5 | 0.4 | 17.4 | 424.4 | 0.0 | 25.3 | 171.1 | 1.0 | (s) | 148.9 | 1,104.4 | R 294.4 | R 1,398.8 |
| 2010 | 72.1 | 300.3 | 136.3 | 66.7 | 5.6 | 206.8 | 0.1 | 14.0 | 429.6 | 0.0 | 26.8 | 192.9 | 1.2 | (s) | 155.1 | 1,145.1 | R 296.9 | R 1,442.0 |
| 2011 | 76.0 | 299.7 | 138.1 | 64.7 | 5.8 | 207.7 | 0.2 | 13.3 | 429.8 | 0.0 | 18.3 | 203.4 | 1.4 | (s) | 155.8 | R 1,153.3 | R 287.9 | R 1,441.2 |
| 2012 | 68.5 | 282.4 | 136.8 | 52.8 | 6.0 | 195.0 | 0.1 | 15.0 | 405.7 | 0.0 | 16.2 | 194.7 | 1.3 | (s) | 156.0 | 1,093.8 | R 264.2 | R 1,358.0 |
| 2013 | 69.1 | 323.2 | 137.6 | 69.9 | 5.5 | 197.9 | (s) | 19.5 | 430.4 | 0.0 | 18.2 | 196.4 | 1.3 | 0.1 | 159.4 | 1,170.1 | R 260.3 | R 1,430.4 |
| 2014 | 63.5 | 331.6 | 144.5 | 70.7 | 5.4 | 201.1 | (s) | 19.4 | 441.1 | 0.0 | 21.3 | 200.4 | 1.3 | R 0.1 | 161.1 | R 1,190.1 | R 254.0 | R 1,444.1 |
| 2015 | 56.5 | 317.5 | 147.5 | 63.0 | 6.0 | 199.6 | 0.0 | 17.8 | 433.8 | 0.0 | 19.6 | 210.7 | 1.3 | R 0.2 | 160.9 | R 1,170.4 | R 234.4 | R 1,404.9 |
| 2016 | 48.4 | 326.5 | 148.9 | 63.6 | 5.9 | 208.2 | (s) | 18.3 | 444.9 | 0.0 | 18.6 | 214.5 | 1.3 | R 0.2 | 165.2 | R 1,190.2 | R 223.5 | R 1,413.7 |
| 2017 | 47.4 | 381.8 | 148.4 | 63.9 | 6.5 | 190.1 | 0.1 | R 19.1 | R 428.1 | 0.0 | 16.1 | 224.3 | 1.3 | R 0.3 | 166.9 | R 1,232.4 | R 218.8 | R 1,451.2 |
| 2018 | 46.3 | 419.4 | 150.4 | 74.2 | 6.5 | 188.3 | 0.1 | R 17.4 | R 436.8 | 0.0 | 17.6 | 232.0 | 1.3 | R 0.5 | 174.7 | R 1,294.3 | R 227.2 | R 1,521.4 |
| 2019 | 45.0 | 415.9 | 156.8 | 81.4 | 6.5 | 186.9 | 0.1 | 16.9 | 448.6 | 0.0 | 18.7 | 231.2 | 1.3 | R 0.6 | 174.2 | R 1,305.7 | R 197.9 | R 1,503.6 |
| 2020 | 40.3 | 383.6 | 155.7 | 74.5 | 4.6 | 165.0 | 0.0 | R 21.0 | R 420.8 | 0.0 | R 16.2 | 203.8 | 1.3 | R 0.8 | 172.8 | R 1,208.8 | R 141.0 | R 1,349.8 |
| 2021 | 39.1 | 371.9 | R 148.2 | 69.1 | 5.7 | 183.8 | 0.1 | 22.9 | R 429.8 | 0.0 | R 16.8 | 214.9 | 1.3 | R 0.9 | 180.5 | R 1,224.5 | R 160.7 | R 1,385.1 |
| 2022 | 44.4 | 408.6 | 151.2 | 72.8 | 6.4 | 193.8 | 0.1 | 21.3 | 445.6 | 0.0 | 17.8 | 211.0 | 1.3 | 1.1 | 184.9 | 1,285.3 | 136.2 | 1,421.5 |

^a Includes supplemental gaseous fuels that are commingled with natural gas.
^b Beginning in 2009, includes biodiesel blended into distillate fuel oil. Beginning in 2011, includes renewable diesel blended into distillate fuel oil. Excludes biofuels product supplied.
^c Hydrocarbon gas liquids, include natural gas liquids and refinery olefins.
^d Through 2004, includes kerosene-type and naphtha-type jet fuel. Beginning in 2005, includes kerosene-type jet fuel only; naphtha-type jet fuel is included in "Other petroleum."
^e Beginning in 1993, includes fuel ethanol blended into motor gasoline.
^f Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke, and the "other petroleum products" category. See Technical Notes, Section 4.
^g Conventional hydroelectric power. For 1960 through 1989, includes hydroelectric pumped-storage, which cannot be separately identified.
^h There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
ⁱ Wood, wood-derived fuels, and biomass waste. Prior to 2001, includes non-biomass waste.
^j Losses and co-products from the production of biodiesel and fuel ethanol.
^k Solar thermal and photovoltaic energy.

^l Electricity sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.
^m Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in End Use and Total. For 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column. Beginning in 2009, includes a small amount of wind energy consumed by the commercial and industrial sectors. Beginning in 2021, adjusted for the double-counting of biofuels product supplied.
ⁿ Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses. Pre-1990 estimates are not comparable to those for later years. See Section 6 of Technical Notes for an explanation of changes in methodology.
 -- = Not applicable. NA = Not available.
 Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.
 Notes: Total end-use sector consumption estimates are the sum of the consumption estimates for the residential, commercial, industrial, and transportation sectors. Totals may not equal sum of components due to independent rounding. The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.
 Web Page: All data are available at <https://www.eia.gov/state/seds/seds-data-complete.php>.
 Data Source: U.S. Energy Information Administration, State Energy Data System. See Technical Notes. <http://www.eia.gov/state/seds/>