

Table 10.2b Renewable Energy Consumption: Industrial and Transportation Sectors
(Trillion Btu)

| | Industrial Sector ^a | | | | | | | | | Transportation Sector | | | |
|--------------------|----------------------------------|-------------------------|--------------------|-------------------|-------------------|--------------------|-----------------------------|-------------------------------------|-------|-----------------------|-----------------------------|-------------------------|--------------------|
| | Hydroelectric Power ^b | Geothermal ^c | Solar ^d | Wind ^e | Biomass | | | | Total | Biomass | | | |
| | | | | | Wood ^f | Waste ^g | Fuel Ethanol ^{h,i} | Losses and Co-products ^j | | Total | Fuel Ethanol ^{l,k} | Bio-diesel ^l | Total ^m |
| 1950 Total | 69 | NA | NA | NA | 532 | NA | NA | NA | 532 | 602 | NA | NA | NA |
| 1955 Total | 38 | NA | NA | NA | 631 | NA | NA | NA | 631 | 669 | NA | NA | NA |
| 1960 Total | 39 | NA | NA | NA | 680 | NA | NA | NA | 680 | 719 | NA | NA | NA |
| 1965 Total | 33 | NA | NA | NA | 855 | NA | NA | NA | 855 | 888 | NA | NA | NA |
| 1970 Total | 34 | NA | NA | NA | 1,019 | NA | NA | NA | 1,019 | 1,053 | NA | NA | NA |
| 1975 Total | 32 | NA | NA | NA | 1,063 | NA | NA | NA | 1,063 | 1,096 | NA | NA | NA |
| 1980 Total | 33 | NA | NA | NA | 1,600 | NA | NA | NA | 1,600 | 1,633 | NA | NA | NA |
| 1985 Total | 33 | NA | NA | NA | 1,645 | 230 | 1 | 42 | 1,918 | 1,951 | 50 | NA | 50 |
| 1990 Total | 31 | 2 | (s) | - | 1,442 | 192 | 1 | 49 | 1,684 | 1,717 | 60 | NA | 60 |
| 1995 Total | 55 | 3 | (s) | - | 1,652 | 195 | 2 | 86 | 1,934 | 1,992 | 112 | NA | 112 |
| 2000 Total | 42 | 4 | (s) | - | 1,636 | 145 | 1 | 99 | 1,881 | 1,928 | 135 | NA | 135 |
| 2001 Total | 33 | 5 | (s) | - | 1,443 | 129 | 3 | 108 | 1,681 | 1,719 | 141 | 1 | 142 |
| 2002 Total | 39 | 5 | (s) | - | 1,396 | 146 | 3 | 130 | 1,676 | 1,720 | 168 | 2 | 170 |
| 2003 Total | 43 | 3 | (s) | - | 1,363 | 142 | 4 | 168 | 1,678 | 1,725 | 228 | 2 | 230 |
| 2004 Total | 33 | 4 | (s) | - | 1,476 | 132 | 6 | 201 | 1,815 | 1,852 | 286 | 3 | 290 |
| 2005 Total | 32 | 4 | (s) | - | 1,452 | 148 | 7 | 227 | 1,834 | 1,871 | 327 | 12 | 339 |
| 2006 Total | 29 | 4 | 1 | - | 1,472 | 130 | 10 | 280 | 1,892 | 1,926 | 442 | 33 | 475 |
| 2007 Total | 16 | 5 | 1 | - | 1,413 | 145 | 10 | 369 | 1,937 | 1,958 | 557 | 45 | 602 |
| 2008 Total | 17 | 5 | 1 | - | 1,339 | 143 | 12 | 519 | 2,012 | 2,035 | 786 | 39 | 825 |
| 2009 Total | 18 | 4 | 2 | - | 1,178 | 154 | 13 | 603 | 1,948 | 1,972 | 894 | 41 | 935 |
| 2010 Total | 16 | 4 | 3 | - | 1,273 | 168 | 17 | 727 | 2,185 | 2,208 | 1,041 | 33 | 1,075 |
| 2011 Total | 17 | 4 | 4 | (s) | 1,309 | 165 | 17 | 756 | 2,246 | 2,272 | 1,045 | 113 | 1,158 |
| 2012 Total | 22 | 4 | 7 | (s) | 1,339 | 159 | 17 | 711 | 2,226 | 2,259 | 1,045 | 115 | 1,162 |
| 2013 Total | 33 | 4 | 9 | (s) | 1,312 | 187 | 18 | 709 | 2,226 | 2,272 | 1,072 | 182 | 1,278 |
| 2014 Total | 12 | 4 | 11 | 1 | 1,325 | 190 | 14 | 757 | 2,286 | 2,314 | 1,093 | 181 | 1,292 |
| 2015 January | 1 | (s) | 1 | (s) | 115 | 17 | 1 | 65 | 199 | 201 | 88 | 6 | 94 |
| February | 1 | (s) | 1 | (s) | 103 | 15 | 1 | 59 | 178 | 180 | 83 | 11 | 95 |
| March | 1 | (s) | 1 | (s) | 107 | 17 | 1 | 65 | 190 | 193 | 92 | 13 | 107 |
| April | 1 | (s) | 1 | (s) | 107 | 16 | 1 | 61 | 186 | 189 | 88 | 15 | 105 |
| May | 1 | (s) | 1 | (s) | 110 | 15 | 2 | 65 | 192 | 195 | 97 | 18 | 116 |
| June | 1 | (s) | 1 | (s) | 107 | 15 | 1 | 65 | 189 | 192 | 94 | 21 | 117 |
| July | 1 | (s) | 1 | (s) | 112 | 16 | 2 | 67 | 196 | 199 | 97 | 18 | 118 |
| August | 1 | (s) | 1 | (s) | 112 | 15 | 2 | 66 | 195 | 197 | 98 | 20 | 120 |
| September | 1 | (s) | 1 | (s) | 107 | 15 | 1 | 63 | 186 | 189 | 94 | 20 | 116 |
| October | 1 | (s) | 1 | (s) | 106 | 17 | 1 | 66 | 190 | 193 | 94 | 17 | 114 |
| November | 1 | (s) | 1 | (s) | 108 | 16 | 1 | 65 | 191 | 193 | 92 | 14 | 110 |
| December | 1 | (s) | 1 | (s) | 111 | 17 | 1 | 68 | 198 | 201 | 93 | 17 | 113 |
| Total | 13 | 4 | 14 | (s) | 1,306 | 190 | 18 | 776 | 2,290 | 2,321 | 1,109 | 191 | 1,325 |
| 2016 January | 1 | (s) | 1 | (s) | 113 | 16 | 1 | 66 | 196 | 198 | 88 | 13 | 102 |
| February | 1 | (s) | 1 | (s) | 103 | 15 | 1 | 63 | 182 | 185 | 90 | 15 | 107 |
| March | 1 | (s) | 1 | (s) | 106 | 16 | 2 | 67 | 191 | 194 | 96 | 17 | 116 |
| April | 1 | (s) | 2 | (s) | 102 | 16 | 1 | 61 | 180 | 183 | 89 | 18 | 108 |
| May | 1 | (s) | 2 | (s) | 106 | 16 | 2 | 66 | 190 | 193 | 97 | 23 | 122 |
| June | 1 | (s) | 2 | (s) | 107 | 16 | 2 | 66 | 191 | 194 | 97 | 21 | 121 |
| July | 1 | (s) | 2 | (s) | 109 | 17 | 2 | 69 | 196 | 199 | 99 | 27 | 128 |
| August | 1 | (s) | 2 | (s) | 109 | 16 | 2 | 70 | 195 | 198 | 101 | 28 | 131 |
| September | 1 | (s) | 2 | (s) | 103 | 15 | 1 | 66 | 185 | 187 | 94 | 26 | 124 |
| October | 1 | (s) | 1 | (s) | 104 | 14 | 2 | 68 | 188 | 190 | 96 | 25 | 123 |
| November | 1 | (s) | 1 | (s) | 108 | 15 | 1 | 67 | 192 | 194 | 95 | 26 | 124 |
| December | 1 | (s) | 1 | (s) | 113 | 16 | 2 | 71 | 202 | 205 | 100 | 26 | 127 |
| Total | 12 | 4 | 17 | 1 | 1,283 | 186 | 18 | 801 | 2,288 | 2,322 | 1,142 | 266 | 1,433 |
| 2017 January | 1 | (s) | 1 | (s) | 111 | 17 | 1 | 70 | 200 | 203 | 89 | 13 | 104 |
| February | 1 | (s) | 1 | (s) | 101 | 16 | 1 | 63 | 181 | 183 | 85 | 13 | 100 |
| March | 1 | (s) | 2 | (s) | 110 | 17 | 2 | 70 | 198 | 202 | 95 | 19 | 117 |
| April | 1 | (s) | 2 | (s) | 103 | 16 | 1 | 64 | 184 | 188 | 93 | 21 | 115 |
| May | 1 | (s) | 2 | (s) | 104 | 15 | 2 | 69 | 189 | 193 | 99 | 25 | 127 |
| June | 1 | (s) | 2 | (s) | 107 | 13 | 2 | 66 | 188 | 192 | 100 | 25 | 128 |
| July | 1 | (s) | 3 | (s) | 111 | 14 | 2 | 68 | 194 | 198 | 98 | 26 | 126 |
| August | 1 | (s) | 2 | (s) | 111 | 14 | 2 | 70 | 197 | 201 | 101 | 25 | 128 |
| 8-Month Total | 10 | 3 | 16 | (s) | 857 | 121 | 12 | 539 | 1,530 | 1,559 | 759 | 167 | 945 |
| 2016 8-Month Total | 9 | 3 | 12 | (s) | 854 | 126 | 12 | 529 | 1,521 | 1,545 | 758 | 162 | 935 |
| 2015 8-Month Total | 9 | 3 | 9 | (s) | 874 | 125 | 12 | 514 | 1,525 | 1,546 | 736 | 123 | 873 |

^a Industrial sector, including industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7.

^b Conventional hydroelectricity net generation (converted to Btu by multiplying by the total fossil fuels heat rate factors in Table A6).

^c Geothermal heat pump and direct use energy.

^d Solar photovoltaic (PV) electricity net generation in the industrial sector (converted to Btu by multiplying by the total fossil fuels heat rate factors in Table A6), both utility-scale and distributed (small-scale). See Table 10.5.

^e Wind electricity net generation (converted to Btu by multiplying by the total fossil fuels heat rate factors in Table A6).

^f Wood and wood-derived fuels.

^g Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

^h The fuel ethanol (minus denaturant) portion of motor fuels, such as E10, consumed by the industrial sector.

ⁱ There is a discontinuity in this time series between 2014 and 2015 due to a change in the method for allocating motor gasoline consumption to the end-use sectors. Beginning in 2015, the commercial and industrial sector shares of fuel ethanol consumption are larger than in 2014, while the transportation sector share

is smaller.

^j Losses and co-products from the production of fuel ethanol and biodiesel. Does not include natural gas, electricity, and other non-biomass energy used in the production of fuel ethanol and biodiesel—these are included in the industrial sector consumption statistics for the appropriate energy source.

^k The fuel ethanol (minus denaturant) portion of motor fuels, such as E10 and E85, consumed by the transportation sector.

^l Although there is biodiesel use in other sectors, all biodiesel consumption is assigned to the transportation sector.

^m Beginning in 2009, includes imports minus stock change of other renewable diesel fuel and other renewable fuels. See "Renewable Diesel Fuel (Other)" and "Renewable Fuels (Other)" in Glossary.

NA=Not available. --=No data reported. (s)=Less than 0.5 trillion Btu.

Notes: • Data are estimates, except for industrial sector hydroelectric power in 1949–1978 and 1989 forward, and wind. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#renewable> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.