

Table 10.3 Fuel Ethanol Overview

| | Feed-stock ^a | Losses and Co-products ^b | Denaturant ^c | Production ^d | | | Trade ^d | Stocks ^{d,f} | Stock Change ^{d,g} | Consumption ^d | | | Consumption Minus Denaturant ^h |
|-------------------------------|-------------------------|-------------------------------------|-------------------------|-------------------------|---------------|--------------|--------------------------|-----------------------|-----------------------------|--------------------------|---------------|--------------|---|
| | | | | | | | Net Imports ^e | | | | | | |
| | | | | | | | TBtu | | | | | | |
| 1981 Total | 13 | 6 | 40 | 1,978 | 83 | 7 | NA | NA | NA | 1,978 | 83 | 7 | 7 |
| 1985 Total | 93 | 42 | 294 | 14,693 | 617 | 52 | NA | NA | NA | 14,693 | 617 | 52 | 51 |
| 1990 Total | 111 | 49 | 356 | 17,802 | 748 | 63 | NA | NA | NA | 17,802 | 748 | 63 | 62 |
| 1995 Total | 198 | 86 | 647 | 32,325 | 1,358 | 115 | 387 | 2,186 | -207 | 32,919 | 1,383 | 117 | 114 |
| 2000 Total | 233 | 99 | 773 | 38,627 | 1,622 | 138 | 116 | 3,400 | -624 | 39,367 | 1,653 | 140 | 137 |
| 2001 Total | 253 | 108 | 841 | 42,028 | 1,765 | 150 | 315 | 4,298 | 898 | 41,445 | 1,741 | 148 | 144 |
| 2002 Total | 307 | 130 | 1,019 | 50,956 | 2,140 | 182 | 306 | 6,200 | 1,902 | 49,360 | 2,073 | 176 | 171 |
| 2003 Total | 400 | 168 | 1,335 | 66,772 | 2,804 | 238 | 292 | 5,978 | -222 | 67,286 | 2,826 | 240 | 233 |
| 2004 Total | 482 | 201 | 1,621 | 81,058 | 3,404 | 289 | 3,542 | 6,002 | 24 | 84,576 | 3,552 | 301 | 293 |
| 2005 Total | 550 | 227 | 1,859 | 92,961 | 3,904 | 331 | 3,234 | 5,563 | -439 | 96,634 | 4,059 | 344 | 335 |
| 2006 Total | 683 | 280 | 2,326 | 116,294 | 4,884 | 414 | 17,408 | 8,760 | 3,197 | 130,505 | 5,481 | 465 | 453 |
| 2007 Total | 907 | 368 | 3,105 | 155,263 | 6,521 | 553 | 10,457 | 10,535 | 1,775 | 163,945 | 6,886 | 584 | 569 |
| 2008 Total | 1,286 | 518 | 4,433 | 221,637 | 9,309 | 790 | 12,610 | 14,226 | 3,691 | 230,556 | 9,683 | 821 | 800 |
| 2009 Total | 1,503 | 602 | 5,688 | 260,424 | 10,938 | 928 | 4,720 | 16,594 | 2,368 | 262,776 | 11,037 | 936 | 910 |
| 2010 Total | 1,823 | 726 | 6,506 | 316,617 | 13,298 | 1,127 | -9,115 | 17,941 | 1,347 | 306,155 | 12,858 | 1,090 | 1,061 |
| 2011 Total | 1,904 | 754 | 6,649 | 331,646 | 13,929 | 1,181 | -24,365 | 18,238 | 297 | 306,984 | 12,893 | 1,093 | 1,065 |
| 2012 Total | 1,801 | 709 | 6,264 | 314,714 | 13,218 | 1,120 | -5,891 | 20,350 | 2,112 | 306,711 | 12,882 | 1,092 | 1,064 |
| 2013 Total | 1,805 | 707 | 6,181 | 316,493 | 13,293 | 1,126 | -5,761 | 16,424 | -3,926 | 314,658 | 13,216 | 1,120 | 1,092 |
| 2014 Total | 1,938 | 755 | 6,476 | 340,781 | 14,313 | 1,212 | -18,371 | 18,739 | 2,315 | 320,095 | 13,444 | 1,139 | 1,111 |
| 2015 January | 169 | 65 | 589 | 29,770 | 1,250 | 106 | -1,633 | 20,647 | 1,908 | 26,229 | 1,102 | 93 | 91 |
| February | 152 | 59 | 534 | 26,814 | 1,126 | 95 | -1,623 | 21,057 | 410 | 24,781 | 1,041 | 88 | 86 |
| March | 167 | 65 | 567 | 29,485 | 1,238 | 105 | -2,050 | 20,878 | -179 | 27,614 | 1,160 | 98 | 96 |
| April | 158 | 61 | 527 | 27,910 | 1,172 | 99 | -1,504 | 20,854 | -24 | 26,430 | 1,110 | 94 | 92 |
| May | 168 | 65 | 545 | 29,666 | 1,246 | 106 | -1,489 | 20,154 | -700 | 28,877 | 1,213 | 103 | 100 |
| June | 168 | 65 | 528 | 29,684 | 1,247 | 106 | -1,490 | 20,128 | -26 | 28,220 | 1,185 | 100 | 98 |
| July | 172 | 66 | 539 | 30,249 | 1,270 | 108 | -1,675 | 19,701 | -427 | 29,001 | 1,218 | 103 | 101 |
| August | 169 | 65 | 524 | 29,762 | 1,250 | 106 | -905 | 19,390 | -311 | 29,168 | 1,225 | 104 | 101 |
| September | 162 | 63 | 519 | 28,571 | 1,200 | 102 | -987 | 18,944 | -446 | 28,030 | 1,177 | 100 | 97 |
| October | 169 | 66 | 560 | 29,886 | 1,255 | 106 | -1,579 | 18,984 | 40 | 28,267 | 1,187 | 101 | 98 |
| November | 168 | 65 | 580 | 29,675 | 1,246 | 106 | -929 | 20,099 | 1,115 | 27,631 | 1,161 | 98 | 96 |
| December | 176 | 68 | 624 | 31,081 | 1,305 | 111 | -1,767 | 21,596 | 1,497 | 27,817 | 1,168 | 99 | 96 |
| Total | 1,998 | 774 | 6,636 | 352,553 | 14,807 | 1,254 | -17,632 | 21,596 | 2,857 | 332,064 | 13,947 | 1,181 | 1,153 |
| 2016 January | 172 | 66 | 617 | 30,452 | 1,279 | 108 | -2,294 | 23,347 | 1,751 | 26,407 | 1,109 | 94 | 92 |
| February | 162 | 63 | 586 | 28,810 | 1,210 | 103 | -2,024 | 23,171 | -176 | 26,962 | 1,132 | 96 | 93 |
| March | 175 | 67 | 601 | 30,957 | 1,300 | 110 | -2,612 | 22,730 | -441 | 28,786 | 1,209 | 102 | 100 |
| April | 159 | 61 | 557 | 28,208 | 1,185 | 100 | -2,919 | 21,336 | -1,394 | 26,683 | 1,121 | 95 | 93 |
| May | 171 | 66 | 586 | 30,346 | 1,275 | 108 | -1,627 | 20,962 | -374 | 29,093 | 1,222 | 104 | 101 |
| June | 172 | 66 | 567 | 30,443 | 1,279 | 108 | -1,045 | 21,284 | 322 | 29,076 | 1,221 | 103 | 101 |
| July | 178 | 68 | 570 | 31,469 | 1,322 | 112 | -1,641 | 21,381 | 97 | 29,731 | 1,249 | 106 | 103 |
| August | 180 | 69 | 564 | 31,856 | 1,338 | 113 | -1,924 | 21,198 | -183 | 30,115 | 1,265 | 107 | 105 |
| September | 170 | 65 | 544 | 30,048 | 1,262 | 107 | -2,315 | 20,713 | -485 | 28,218 | 1,185 | 100 | 98 |
| October | 175 | 67 | 563 | 31,006 | 1,302 | 110 | -2,946 | 20,113 | -600 | 28,660 | 1,204 | 102 | 100 |
| November | 173 | 67 | 559 | 30,706 | 1,290 | 109 | -3,074 | 19,463 | -650 | 28,282 | 1,188 | 101 | 98 |
| December | 185 | 71 | 606 | 32,680 | 1,373 | 116 | -2,583 | 19,758 | 295 | 29,802 | 1,252 | 106 | 104 |
| Total | 2,072 | 798 | 6,920 | 366,981 | 15,413 | 1,306 | -27,002 | 19,758 | -1,838 | 341,817 | 14,356 | 1,216 | 1,187 |
| 2017 January | 183 | 70 | 593 | 32,577 | 1,368 | 116 | -2,901 | 22,624 | 1,309 | 26,583 | 1,116 | 95 | 92 |
| February | 164 | 63 | 541 | 29,052 | 1,220 | 103 | -3,349 | 23,015 | 391 | 25,312 | 1,063 | 90 | 88 |
| March | 181 | 69 | 597 | 32,161 | 1,351 | 114 | -3,044 | 23,759 | 744 | 28,373 | 1,192 | 101 | 99 |
| April | 166 | 64 | 540 | 29,500 | 1,239 | 105 | -1,981 | 23,593 | -166 | 27,685 | 1,163 | 99 | 96 |
| May | 179 | 68 | 558 | 31,700 | 1,331 | 113 | -2,809 | 22,909 | -684 | 29,575 | 1,242 | 105 | 103 |
| June | 173 | 66 | 539 | 30,667 | 1,288 | 109 | -1,958 | 21,763 | -1,146 | 29,855 | 1,254 | 106 | 104 |
| July | 176 | 67 | 551 | 31,221 | 1,311 | 111 | -2,512 | 21,147 | -616 | 29,325 | 1,232 | 104 | 102 |
| August | 183 | 70 | 569 | 32,447 | 1,363 | 115 | -2,199 | 21,197 | 50 | 30,198 | 1,268 | 107 | 105 |
| September | 172 | 66 | 531 | 30,581 | 1,284 | 109 | -1,809 | 21,485 | 288 | 28,484 | 1,196 | 101 | 99 |
| 9-Month Total ... | 1,576 | 604 | 5,019 | 279,906 | 11,756 | 996 | -22,564 | 21,485 | 1,954 | 255,388 | 10,726 | 909 | 888 |
| 2016 9-Month Total ... | 1,539 | 593 | 5,192 | 272,589 | 11,449 | 970 | -18,398 | 20,713 | -883 | 255,074 | 10,713 | 908 | 886 |
| 2015 9-Month Total ... | 1,485 | 575 | 4,872 | 261,911 | 11,000 | 932 | -13,357 | 18,944 | 205 | 248,349 | 10,431 | 884 | 863 |

^a Total corn and other biomass inputs to the production of undenatured ethanol used for fuel ethanol.

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

^c The amount of denaturant in fuel ethanol produced.

^d Includes denaturant.

^e Through 2009, data are for fuel ethanol imports only; data for fuel ethanol exports are not available. Beginning in 2010, data are for fuel ethanol imports minus fuel ethanol (including industrial alcohol) exports.

^f Stocks are at end of period.

^g A negative value indicates a decrease in stocks and a positive value indicates an increase.

^h Consumption of fuel ethanol minus denaturant. Data for fuel ethanol minus denaturant are used to develop data for "Renewable Energy/Biomass" in Tables 10.1–10.2b, as well as in Sections 1 and 2.

ⁱ Derived from the preliminary 2016 stocks value (19,531 thousand barrels), not the final 2016 value (19,758 thousand barrels) that is shown under "Stocks." NA=Not available.

Notes: • Mbbl = thousand barrels. MMgal = million U.S. gallons. TBtu = trillion Btu. • Fuel ethanol data in thousand barrels are converted to million gallons by multiplying by 0.042, and are converted to Btu by multiplying by the approximate heat content of fuel ethanol—see Table A3. • Through 1980, data are not available. For 1981–1992, data are estimates. For 1993–2008, only data for feedstock, losses and co-products, and denaturant are estimates. Beginning in 2009, only data for feedstock, and losses and co-products, are estimates. • See "Denaturant," "Ethanol," "Fuel Ethanol," and "Fuel Ethanol Minus Denaturant" in Glossary. • 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 and monthly data beginning in 1981.

Sources: See end of section.