

Table 10.3 Fuel Ethanol Overview

	Feed-stock ^b	Losses and Co-products ^c	Denaturant ^d	Production ^a			Trade ^a	Stocks ^{a,f}	Stock Change ^{a,g}	Consumption ^a			Consumption Minus Denaturant ^h
							Net Imports ^e						
				TBtu	TBtu	Mbbl	Mbbl			MMgal	TBtu	Mbbl	
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
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	822	800
2009 Total	1,503	602	5,688	260,424	10,938	928	4,720	16,594	2,368	262,776	11,037	937	910
2010 Total	1,823	726	6,506	316,617	13,298	1,128	-9,115	17,941	1,347	306,155	12,858	1,091	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	1,809	711	6,181	316,493	13,293	1,127	-5,761	16,424	-3,926	314,658	13,216	1,120	1,092
2014 Total	1,947	764	6,476	340,781	14,313	1,213	-18,371	18,739	2,315	320,095	13,444	1,139	1,111
2015 Total	2,013	788	6,636	352,553	14,807	1,254	-17,632	21,599	2,857	332,062	13,947	1,181	1,153
2016 Total	2,092	818	6,920	366,981	15,413	1,306	-27,002	19,758	-1,838	341,817	14,356	1,216	1,187
2017 Total	2,164	844	6,657	379,435	15,936	1,349	-31,268	23,043	3,285	344,882	14,485	1,226	1,199
2018 Total	2,187	852	5,819	383,127	16,091	1,361	-39,410	23,418	375	343,342	14,420	1,220	1,197
2019 Total	2,140	832	6,089	375,678	15,778	1,336	-30,276	22,352	-1,066	346,468	14,552	1,232	1,206
2020 Total	1,886	732	5,892	331,928	13,941	1,181	-27,692	24,663	2,311	301,925	12,681	1,074	1,050
2021 January	164	63	491	28,809	1,210	102	-3,875	26,117	1,454	23,480	986	83	82
February	130	50	391	22,895	962	81	-2,227	24,712	-1,405	22,073	927	78	77
March	166	65	507	29,327	1,232	104	-3,409	22,869	-1,843	27,761	1,166	99	97
April	160	62	475	28,213	1,185	100	-2,508	22,368	-500	26,205	1,101	93	91
May	177	69	535	31,224	1,311	111	-1,897	22,057	-312	29,639	1,245	105	103
June	174	67	528	30,641	1,287	109	-1,668	21,980	-77	29,049	1,220	103	101
July	179	69	542	31,449	1,321	112	-883	22,656	676	29,890	1,255	106	104
August	165	64	471	29,087	1,222	103	-1,643	21,135	-1,521	28,965	1,217	103	101
September	160	62	466	28,080	1,179	100	-1,603	20,235	-900	27,377	1,150	97	95
October	183	71	529	32,276	1,356	115	-2,207	20,067	-169	30,237	1,270	107	105
November	184	71	548	32,383	1,360	115	-3,190	20,503	436	28,757	1,208	102	100
December	188	73	613	33,132	1,392	118	-3,023	22,036	1,533	28,576	1,200	102	99
Total	2,030	786	6,094	357,517	15,016	1,271	-28,135	22,036	-2,627	332,010	13,944	1,180	1,155
2022 January	183	71	600	32,191	1,352	114	-2,311	25,874	3,838	26,042	1,094	93	90
February	161	62	488	28,304	1,189	101	-3,420	26,521	647	24,237	1,018	86	84
March	179	70	520	31,581	1,326	112	-2,694	26,700	179	28,708	1,206	102	100
April	165	64	435	28,956	1,216	103	-4,628	24,284	-2,416	26,744	1,123	95	93
May	178	69	467	31,256	1,313	111	-3,064	23,426	-858	29,049	1,220	103	101
June	178	69	485	31,288	1,314	111	-2,360	23,384	-41	28,969	1,217	103	101
July	179	69	470	31,498	1,323	112	-2,615	24,197	813	28,070	1,179	100	98
August	174	67	460	30,520	1,282	108	-1,469	23,509	-688	29,740	1,249	106	104
September	154	60	400	27,072	1,137	96	-2,144	21,540	-1,969	26,896	1,130	96	94
October	179	69	493	31,440	1,321	112	-1,843	21,708	168	29,430	1,236	105	103
November	179	69	539	31,580	1,326	112	-1,414	23,575	1,867	28,299	1,189	101	98
December	171	66	512	30,046	1,262	107	-1,668	24,245	670	27,708	1,164	98	96
Total	2,079	805	5,869	365,731	15,361	1,299	-29,631	24,245	2,209	333,891	14,023	1,186	1,163
2023 January	177	69	541	31,189	1,310	111	-2,812	25,383	i-957	27,421	1,152	97	95
February	160	62	477	28,089	1,180	100	-2,483	26,299	917	24,690	1,037	88	86
March	175	68	514	30,753	1,292	109	-3,158	24,951	-1,349	28,944	1,216	103	101
April	166	64	500	29,236	1,228	104	-3,000	24,085	-865	27,102	1,138	96	94
May	176	68	515	31,016	1,303	110	-2,704	23,110	-975	29,287	1,230	104	102
June	177	69	519	31,146	1,308	111	-2,675	22,299	-812	29,283	1,230	104	102
July	182	70	527	32,024	1,345	114	-2,664	23,101	802	28,558	1,199	101	99
August	177	68	531	31,137	1,308	111	-2,193	21,815	-1,285	30,229	1,270	107	105
September	172	67	496	30,290	1,272	108	-2,516	22,174	359	27,416	1,151	97	95
October	181	70	538	31,870	1,339	113	-2,796	21,309	-866	29,940	1,257	106	104
November	180	70	534	31,609	1,328	112	-2,768	21,885	576	28,265	1,187	100	98
December	191	74	545	33,534	1,408	119	-3,713	23,589	1,705	28,116	1,181	100	98
Total	2,112	818	6,236	371,895	15,620	1,322	-33,481	23,589	i-837	339,251	14,249	1,206	1,180

^a Includes denaturant.
^b Total corn and other biomass inputs to the production of undenatured ethanol used for fuel ethanol.
^c 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.
^d The amount of denaturant in fuel ethanol produced.
^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 2022 stocks value (24,426 thousand barrels), not the final 2022 value (24,245 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.