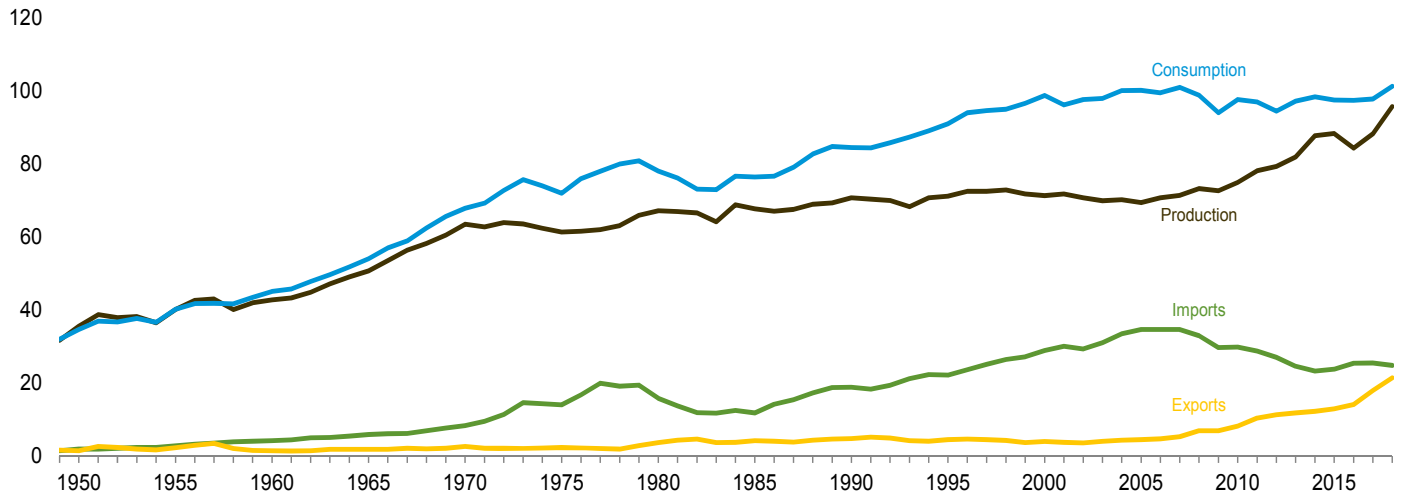


1. Energy Overview

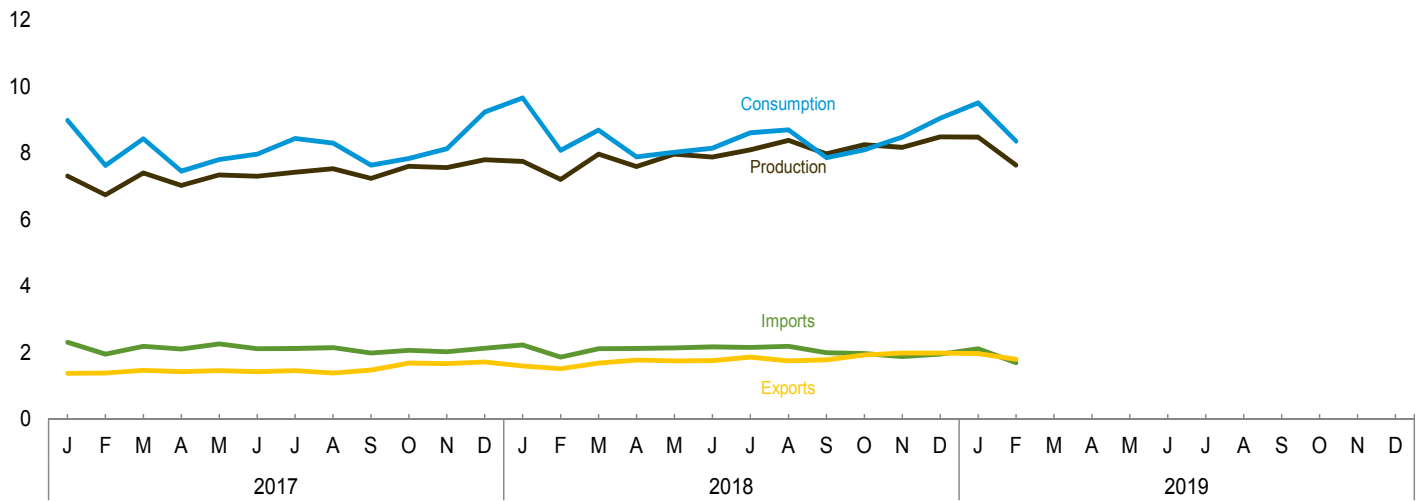
Figure 1.1 Primary Energy Overview

(Quadrillion Btu)

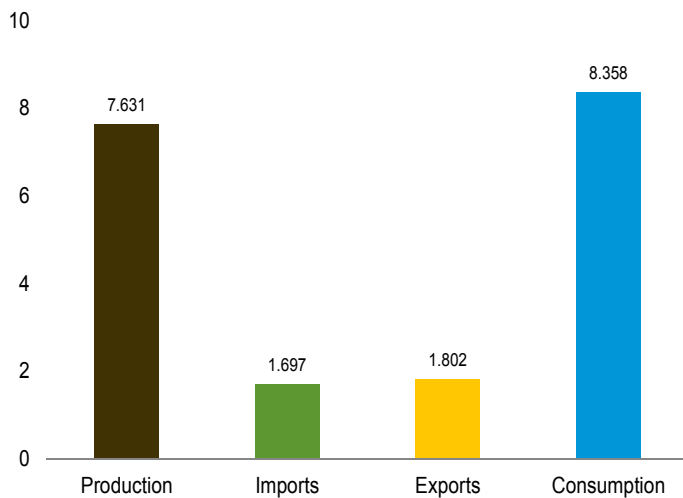
Overview, 1949–2018



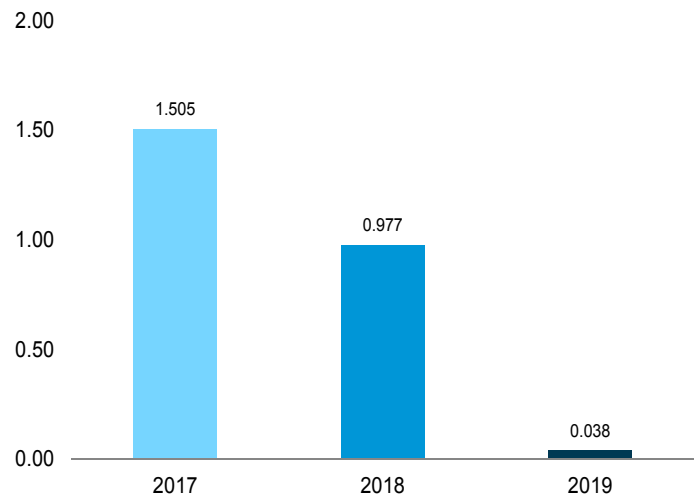
By Source, Monthly



Overview, February 2019



Net Imports, January–February



Web Page: <http://www.eia.gov/totalenergy/data/monthly/#summary>.

Source: Table 1.1.

Table 1.1 Primary Energy Overview
(Quadrillion Btu)

	Production				Trade			Stock Change and Other ^d	Consumption			
	Fossil Fuels ^a	Nuclear Electric Power	Renewable Energy ^b	Total	Imports	Exports	Net Imports ^c		Fossil Fuels ^e	Nuclear Electric Power	Renewable Energy ^b	Total ^f
1950 Total	32.563	0.000	2.978	35.540	1.913	1.465	0.448	-1.372	31.632	0.000	2.978	34.616
1955 Total	37.364	.000	2.784	40.148	2.790	2.286	.504	-.444	37.410	.000	2.784	40.208
1960 Total	39.869	.006	2.928	42.803	4.188	1.477	2.710	-.427	42.137	.006	2.928	45.086
1965 Total	47.235	.043	3.396	50.674	5.892	1.829	4.063	-.722	50.577	.043	3.396	54.015
1970 Total	59.186	.239	4.070	63.495	8.342	2.632	5.709	-1.367	63.522	.239	4.070	67.838
1975 Total	54.733	1.900	4.687	61.320	14.032	2.323	11.709	-1.065	65.357	1.900	4.687	71.965
1980 Total	59.008	2.739	5.428	67.175	15.796	3.695	12.101	-1.210	69.828	2.739	5.428	78.067
1985 Total	57.539	4.076	6.084	67.698	11.781	4.196	7.584	1.110	66.093	4.076	6.084	76.392
1990 Total	58.560	6.104	6.040	70.704	18.817	4.752	14.065	-.284	72.332	6.104	6.040	84.485
1995 Total	55.540	7.075	6.557	71.173	22.180	4.496	17.684	2.134	77.222	7.075	6.559	90.991
2000 Total	57.366	7.862	6.102	71.330	28.865	3.962	24.904	2.543	84.694	7.862	6.104	98.776
2001 Total	58.541	8.029	5.162	71.732	30.052	3.731	26.321	-1.924	82.865	8.029	5.160	96.129
2002 Total	56.834	8.145	5.731	70.710	29.331	3.608	25.722	1.172	83.662	8.145	5.726	97.605
2003 Total	56.033	7.960	5.942	69.935	31.007	4.013	26.994	.969	83.972	7.960	5.944	97.898
2004 Total	55.942	8.223	6.063	70.228	33.492	4.351	29.141	.704	85.737	8.223	6.075	100.073
2005 Total	55.049	8.161	6.221	69.431	34.659	4.462	30.197	.540	85.689	8.161	6.234	100.168
2006 Total	55.934	8.215	6.586	70.735	34.649	4.727	29.921	-1.192	84.550	8.215	6.637	99.464
2007 Total	56.429	8.459	6.510	71.398	34.679	5.338	29.341	.232	85.883	8.459	6.523	100.971
2008 Total	57.587	8.426	7.192	73.205	32.970	6.949	26.021	-.401	83.112	8.426	7.175	98.825
2009 Total	56.661	8.355	7.625	72.641	29.690	6.920	22.770	-1.388	77.944	8.355	7.608	94.023
2010 Total	58.222	8.434	8.314	74.970	29.866	8.176	21.690	.949	80.818	8.434	8.267	97.608
2011 Total	60.567	8.269	9.300	78.136	28.748	10.373	18.375	.439	79.350	8.269	9.204	96.950
2012 Total	62.334	8.062	8.886	79.282	27.068	11.267	15.801	-.603	77.409	8.062	8.847	94.480
2013 Total	64.200	8.244	9.418	81.862	24.623	11.788	12.835	2.521	79.326	8.244	9.451	97.218
2014 Total	69.642	8.338	9.766	87.746	23.241	12.270	10.971	-.336	80.122	8.338	9.740	98.382
2015 Total	70.259	8.337	9.729	88.325	23.794	12.902	10.892	-1.732	79.200	8.337	9.720	97.484
2016 Total	65.507	8.427	10.428	84.362	25.378	14.119	11.259	1.824	78.424	8.427	10.368	97.445
2017 Total	68.541	8.419	11.301	88.261	25.467	17.960	7.507	2.042	78.017	8.419	11.181	97.809
2017 January	5.620	.765	.926	7.311	2.315	1.382	.933	.738	7.292	.765	.904	8.982
February	5.209	.665	.867	6.741	1.959	1.387	.572	.309	6.089	.665	.852	7.623
March	5.698	.681	1.023	7.401	2.195	1.467	.728	.301	6.723	.681	1.010	8.430
April	5.433	.593	.997	7.023	2.112	1.429	.683	-.254	5.851	.593	.993	7.452
May	5.663	.641	1.035	7.340	2.264	1.459	.805	-.344	6.110	.641	1.034	7.800
June	5.610	.701	.991	7.302	2.117	1.430	.688	-.025	6.254	.701	.992	7.964
July	5.747	.746	.932	7.425	2.129	1.459	.670	.337	6.742	.746	.927	8.433
August	5.895	.757	.874	7.526	2.153	1.392	.760	.011	6.652	.757	.869	8.298
September	5.670	.712	.852	7.234	1.993	1.481	.512	-.116	6.060	.712	.842	7.630
October	5.988	.690	.924	7.603	2.067	1.686	.382	-.146	6.223	.690	.914	7.838
November	5.941	.697	.921	7.559	2.027	1.671	.356	.214	6.517	.697	.905	8.130
December	6.066	.771	.959	7.795	2.136	1.718	.417	1.016	7.504	.771	.940	9.229
2018 Total	68.541	8.419	11.301	88.261	25.467	17.960	7.507	2.042	78.017	8.419	11.181	97.809
2018 January	5.965	.781	1.002	7.748	2.231	1.602	.629	1.277	7.872	.781	.989	9.655
February	5.576	.678	.949	7.203	1.864	1.516	.347	.526	6.463	.678	.924	8.077
March	6.230	.701	1.033	7.964	2.119	1.691	.427	.293	6.950	.701	1.018	8.684
April	5.940	.618	1.034	7.593	2.126	1.782	.343	-.052	6.239	.618	1.016	7.884
May	6.197	.704	1.063	7.964	2.145	1.751	.394	-.339	6.248	.704	1.053	8.019
June	6.095	.729	1.051	7.875	2.176	1.759	.417	-.148	6.365	.729	1.036	8.144
July	6.394	.758	.946	8.098	2.161	R 1.864	R .297	R .212	6.905	.758	.930	8.607
August	6.666	.756	.958	8.380	2.194	R 1.757	R .437	R -.123	6.979	.756	.943	8.694
September	6.425	.677	.874	7.976	2.001	R 1.786	R .215	R -.331	6.318	.677	.854	7.860
October	6.713	.621	.912	8.246	1.976	R 1.935	R .041	R -.192	6.570	.621	.894	8.095
November	6.572	.669	.928	8.168	1.887	R 1.986	R -.099	R .407	R 6.890	.669	.908	R 8.476
December	R 6.768	.749	.970	R 8.488	1.959	R 1.993	R -.034	R .589	R 7.330	.749	.953	R 9.043
2018 Total	R 75.541	8.441	11.722	R 95.705	24.838	R 21.423	R 3.416	R 2.119	R 81.128	8.441	11.518	R 101.239
2019 January	R 6.728	.771	R .978	R 8.477	R 2.117	R 1.975	R .142	R .891	R 7.768	.771	.954	R 9.510
February	6.058	.677	.896	7.631	1.697	1.802	-.104	.831	6.786	.677	.883	8.358
2-Month Total	12.786	1.448	1.874	16.108	3.815	3.777	.038	1.722	14.555	1.448	1.837	17.868
2018 2-Month Total	11.542	1.458	1.952	14.952	4.095	3.118	.977	1.803	14.335	1.458	1.913	17.732
2017 2-Month Total	10.830	1.430	1.794	14.053	4.274	2.769	1.505	1.048	13.380	1.430	1.756	16.606

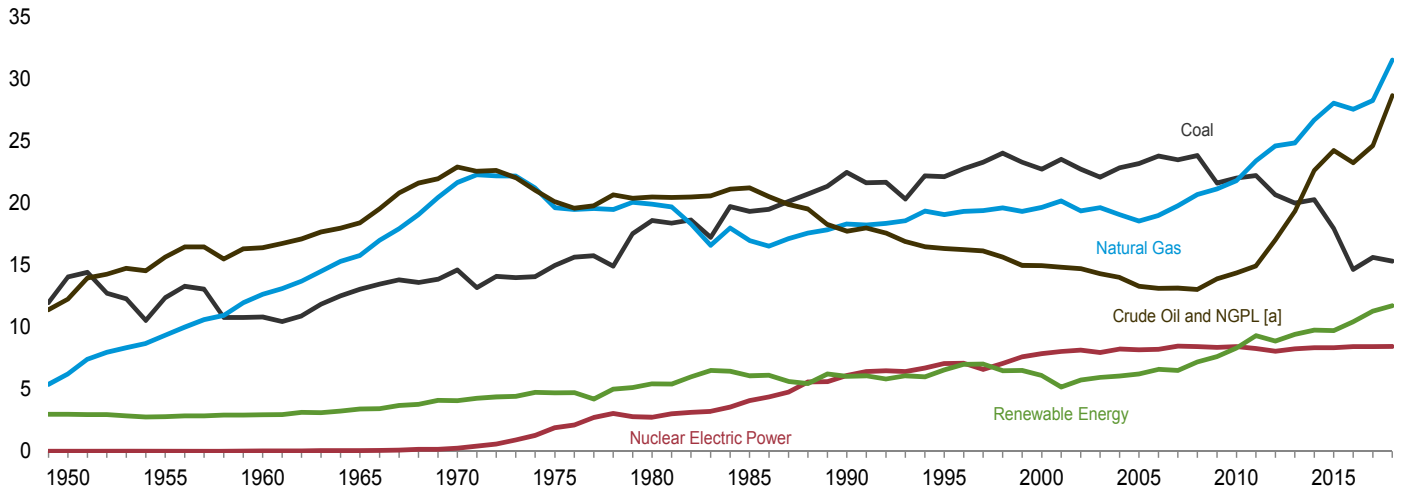
^a Coal, natural gas (dry), crude oil, and natural gas plant liquids.
^b See Tables 10.1–10.2c for notes on series components and estimation; and see Note, "Renewable Energy Production and Consumption," at end of Section 10.
^c Net imports equal imports minus exports.
^d Includes petroleum stock change and adjustments; natural gas net storage withdrawals and balancing item; coal stock change, losses, and unaccounted for; fuel ethanol stock change; and biodiesel stock change and balancing item.
^e Coal, coal coke net imports, natural gas, and petroleum.
^f Also includes electricity net imports.
R=Revised.

Notes: • See "Primary Energy," "Primary Energy Production," and "Primary Energy Consumption," 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/#summary> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.
Sources: • **Production:** Table 1.2. • **Trade:** Tables 1.4a and 1.4b. • **Stock Change and Other:** Calculated as consumption minus production and net imports. • **Consumption:** Table 1.3.

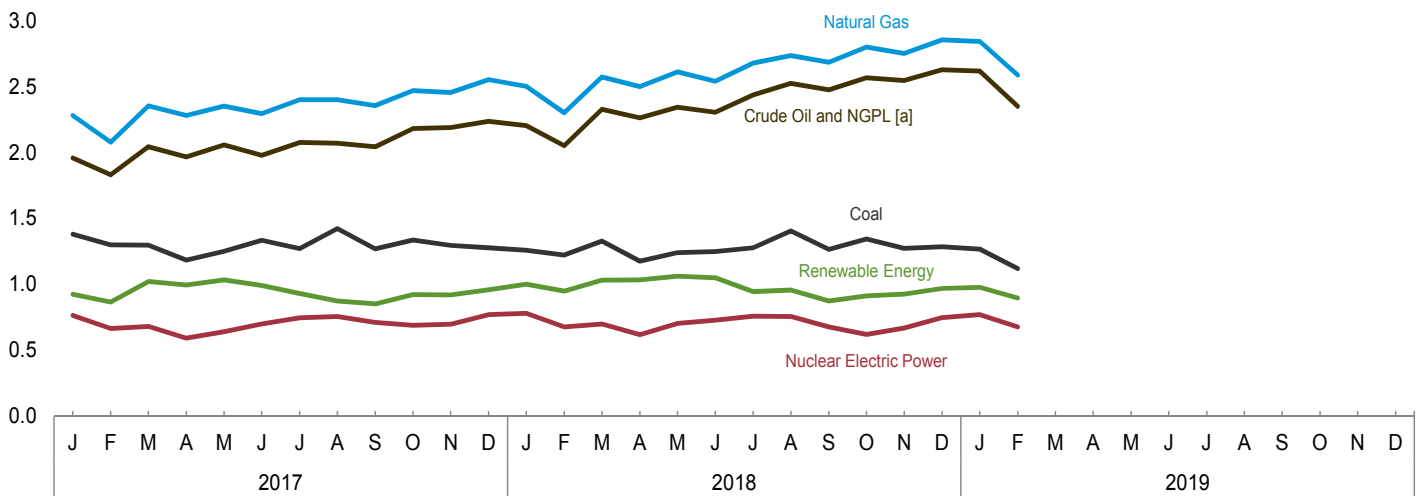
Figure 1.2 Primary Energy Production

(Quadrillion Btu)

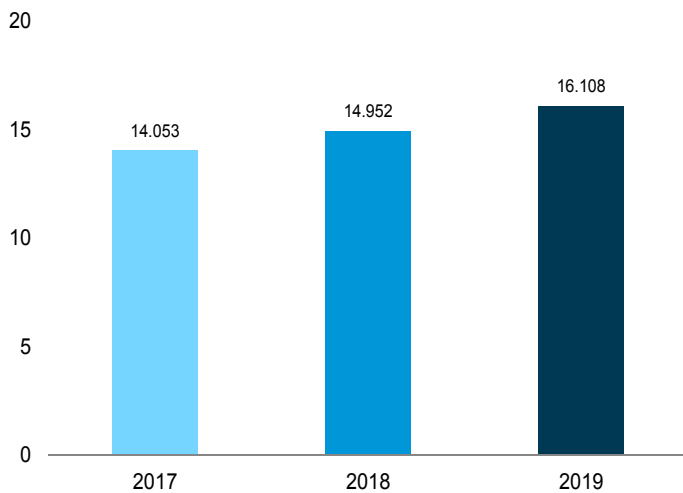
By Source, 1949–2018



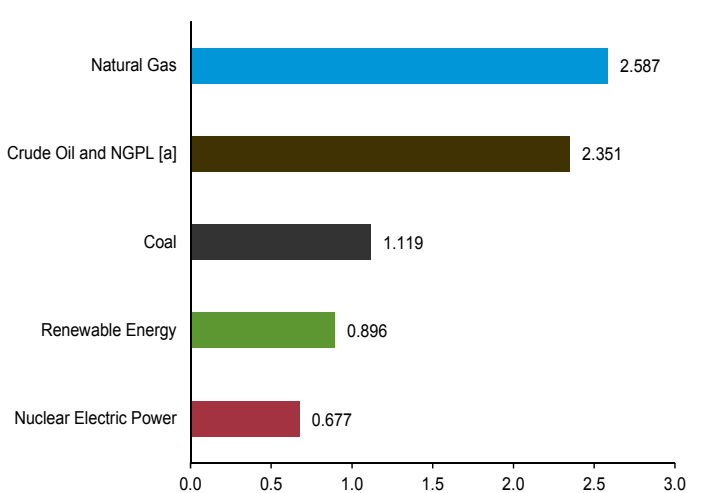
By Source, Monthly



Total, January–February



By Source, February 2019



[a] National gas plant liquids.

Web Page: <http://www.eia.gov/totalenergy/data/monthly/#summary>.

Source: Table 1.2.

Table 1.2 Primary Energy Production by Source
(Quadrillion Btu)

	Fossil Fuels					Nuclear Electric Power	Renewable Energy ^a						Total
	Coal ^b	Natural Gas (Dry)	Crude Oil ^c	NGPL ^d	Total		Hydro-electric Power ^e	Geo-thermal	Solar	Wind	Bio-mass	Total	
1950 Total	14.060	6.233	11.447	0.823	32.563	0.000	1.415	NA	NA	NA	1.562	2.978	35.540
1955 Total	12.370	9.345	14.410	1.240	37.364	.000	1.360	NA	NA	NA	1.424	2.784	40.148
1960 Total	10.817	12.656	14.935	1.461	39.869	.006	1.608	(s)	NA	NA	1.320	2.928	42.803
1965 Total	13.055	15.775	16.521	1.883	47.235	.043	2.059	.002	NA	NA	1.335	3.396	50.674
1970 Total	14.607	21.666	20.401	2.512	59.186	.239	2.634	.006	NA	NA	1.431	4.070	63.495
1975 Total	14.989	19.640	17.729	2.374	54.733	1.900	3.155	.034	NA	NA	1.499	4.687	61.320
1980 Total	18.598	19.908	18.249	2.254	59.008	2.739	2.900	.053	NA	NA	2.475	5.428	67.175
1985 Total	19.325	16.980	18.992	2.241	57.539	4.076	2.970	.097	(s)	(s)	3.016	6.084	67.698
1990 Total	22.488	18.326	15.571	2.175	58.560	6.104	3.046	.171	.059	.029	2.735	6.040	70.704
1995 Total	22.130	19.082	13.887	2.442	57.540	7.075	3.205	.152	.068	.033	3.099	6.557	71.173
2000 Total	22.735	19.662	12.358	2.611	57.366	7.862	2.811	.164	.063	.057	3.006	6.102	71.330
2001 Total	23.547	20.166	12.282	2.547	58.541	8.029	2.242	.164	.062	.070	2.624	5.162	71.732
2002 Total	22.732	19.382	12.160	2.559	56.834	8.145	2.689	.171	.060	.105	2.705	5.731	70.710
2003 Total	22.094	19.633	11.960	2.346	56.033	7.960	2.793	.173	.058	.113	2.805	5.942	69.935
2004 Total	22.852	19.074	11.550	2.466	55.942	8.223	2.688	.178	.058	.142	2.996	6.063	70.228
2005 Total	23.185	18.556	10.974	2.334	55.049	8.161	2.703	.181	.058	.178	3.101	6.221	69.431
2006 Total	23.790	19.022	10.767	2.356	55.934	8.215	2.869	.181	.061	.264	3.212	6.586	70.735
2007 Total	23.493	19.786	10.741	2.409	56.429	8.459	2.446	.186	.066	.341	3.472	6.510	71.398
2008 Total	23.851	20.703	10.613	2.419	57.587	8.426	2.511	.192	.074	.546	3.868	7.192	73.205
2009 Total	21.624	21.139	11.324	2.574	56.661	8.355	2.669	.200	.078	.721	3.957	7.625	72.641
2010 Total	22.038	21.806	11.596	2.781	58.222	8.434	2.539	.208	.091	.923	4.553	8.314	74.970
2011 Total	22.221	23.406	11.970	2.970	60.567	8.269	3.103	.212	.112	1.168	4.704	9.300	78.136
2012 Total	20.677	24.610	13.801	3.246	62.334	8.062	2.629	.212	.159	1.340	4.547	8.886	79.282
2013 Total	20.001	24.859	15.807	3.532	64.200	8.244	2.562	.214	.225	1.601	4.816	9.418	81.862
2014 Total	20.286	26.718	18.542	4.096	69.642	8.338	2.467	.214	.337	1.728	5.020	9.766	87.746
2015 Total	17.946	28.067	19.679	4.567	70.259	8.337	2.321	.212	.427	1.777	4.992	9.729	88.325
2016 Total	14.667	27.576	18.494	4.770	65.507	8.427	2.472	.210	.570	2.096	5.081	10.428	84.362
2017 January	1.382	2.281	1.568	.389	5.620	.765	.247	.018	.034	.183	.445	.926	7.311
February	1.300	2.078	1.456	.376	5.209	.665	.218	.016	.040	.195	.398	.867	6.741
March	1.299	2.354	1.622	.423	5.698	.681	.270	.018	.063	.230	.442	1.023	7.401
April	1.184	2.281	1.560	.409	5.433	.593	.271	.018	.069	.227	.412	.997	7.023
May	1.252	2.353	1.626	.432	5.663	.641	.298	.017	.081	.207	.432	1.035	7.340
June	1.335	2.295	1.558	.422	5.610	.701	.278	.016	.087	.183	.427	.991	7.302
July	1.271	2.400	1.638	.438	5.747	.746	.244	.018	.083	.147	.439	.932	7.425
August	1.424	2.400	1.640	.432	5.895	.757	.201	.018	.080	.125	.450	.874	7.526
September	1.269	2.357	1.630	.414	5.670	.712	.176	.017	.074	.164	.421	.852	7.234
October	1.336	2.470	1.721	.461	5.988	.690	.168	.017	.068	.233	.438	.924	7.603
November	1.296	2.455	1.735	.456	5.941	.697	.189	.017	.050	.222	.443	.921	7.559
December	1.277	2.552	1.781	.455	6.066	.771	.206	.020	.049	.226	.458	.959	7.795
Total	15.625	28.274	19.535	5.107	68.541	8.419	2.767	.210	.777	2.343	5.204	11.301	88.261
2018 January	1.259	E 2.502	E 1.768	.437	5.965	.781	.236	.018	.050	.247	.451	1.002	7.748
February	1.223	E 2.302	E 1.637	.415	5.576	.678	.235	.017	.058	.222	.417	.949	7.203
March	1.329	E 2.574	E 1.850	.476	6.230	.701	.239	.018	.076	.251	.448	1.033	7.964
April	1.177	E 2.500	E 1.793	.471	5.940	.618	.253	.017	.089	.247	.429	1.034	7.593
May	1.241	E 2.611	E 1.851	.493	6.197	.704	.280	.019	.100	.217	.447	1.063	7.964
June	1.249	E 2.541	E 1.827	.478	6.095	.729	.258	.018	.107	.225	.445	1.051	7.875
July	1.278	E 2.678	E 1.934	.504	6.394	.758	.221	.019	.100	.148	.459	.946	8.098
August	1.406	E 2.735	E 2.003	.522	6.666	.756	.197	.019	.099	.180	.464	.958	8.380
September	1.266	E 2.684	E 1.963	.512	6.425	.677	.172	.018	.090	.166	.428	.874	7.976
October	1.345	E 2.800	E 2.044	.523	6.713	.621	.173	.018	.076	.195	.451	.912	8.246
November	1.273	E 2.752	E 2.041	.505	6.572	.669	.204	.018	.058	.207	.440	.928	8.168
December	1.286	RE 2.856	RE 2.116	.511	R 6.768	.749	.219	.020	.050	.229	.454	.970	R 8.488
Total	15.333	RE 31.536	E 22.826	5.846	R 75.541	8.441	2.688	.218	.951	2.533	5.332	11.722	R 95.705
2019 January	1.267	E 2.843	E 2.099	.519	R 6.728	.771	.226	.019	.055	.232	R .446	R .978	R 8.477
February	1.119	E 2.587	E 1.866	.485	6.058	.677	.203	.017	.059	.212	.404	.896	7.631
2-Month Total	2.387	E 5.430	E 3.965	1.004	12.786	1.448	.429	.036	.114	.444	.850	1.874	16.108
2018 2-Month Total	2.482	E 4.804	E 3.405	.852	11.542	1.458	.471	.035	.108	.469	.868	1.952	14.952
2017 2-Month Total	2.682	4.359	3.024	.766	10.830	1.430	.465	.034	.074	.378	.843	1.794	14.053

^a Most data are estimates. See Tables 10.1–10.2c for notes on series components and estimation; and see Note, "Renewable Energy Production and Consumption," at end of Section 10.

^b Beginning in 1989, includes waste coal supplied. Beginning in 2001, also includes a small amount of refuse recovery. See Table 6.1.

^c Includes lease condensate.

^d Natural gas plant liquids.

^e Conventional hydroelectric power.

R=Revised. E=Estimate. NA=Not available. (s)=Less than 0.5 trillion Btu.

Notes: • See "Primary Energy Production" in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

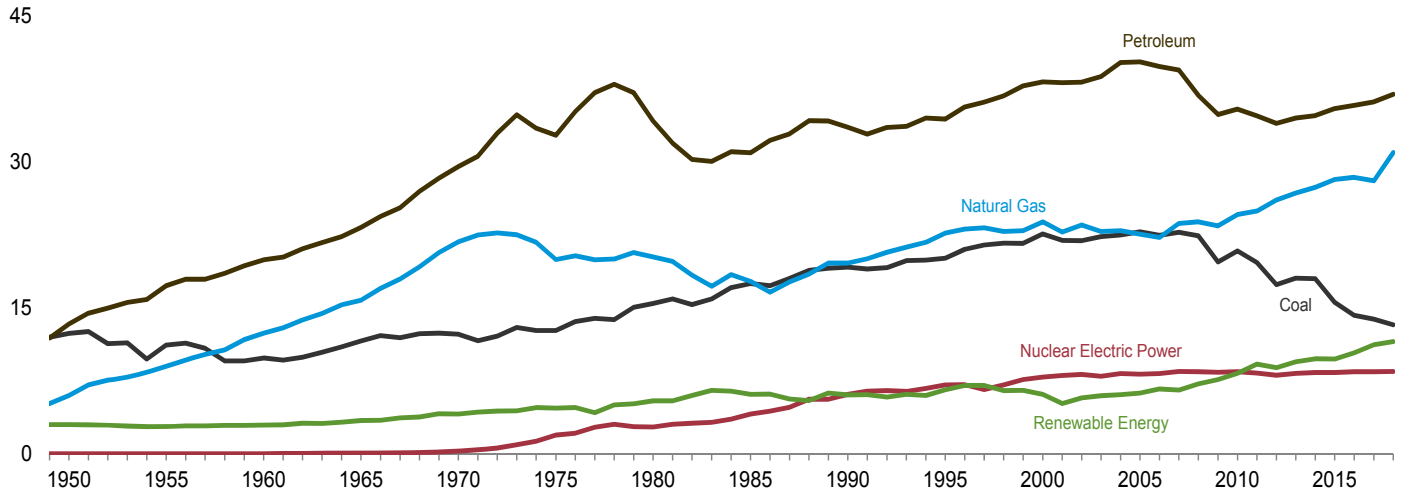
Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#summary> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

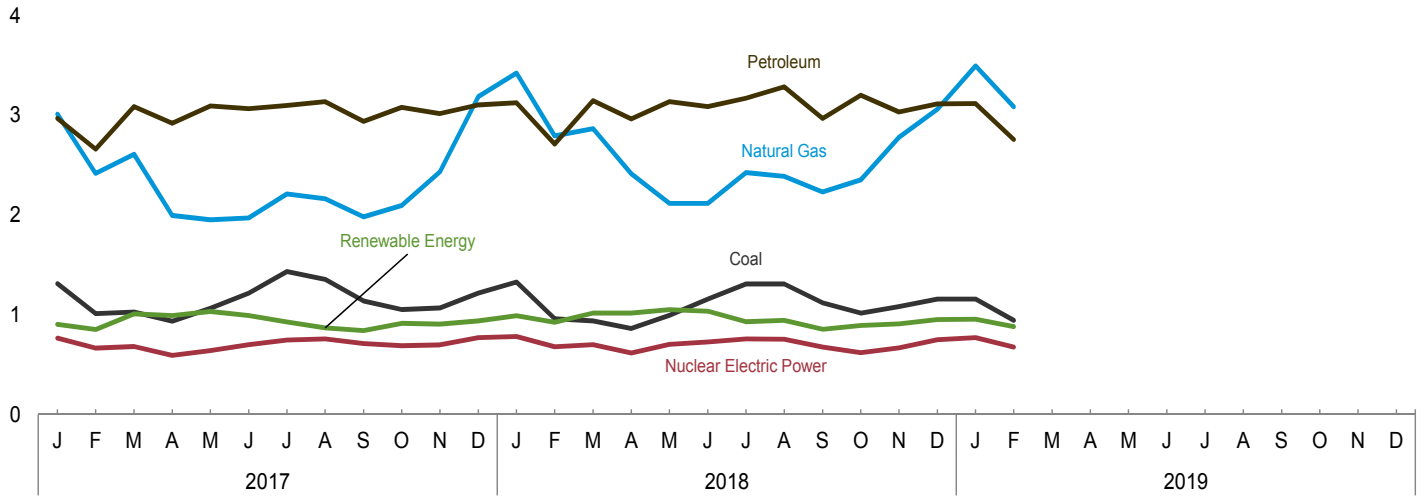
Figure 1.3 Primary Energy Consumption

(Quadrillion Btu)

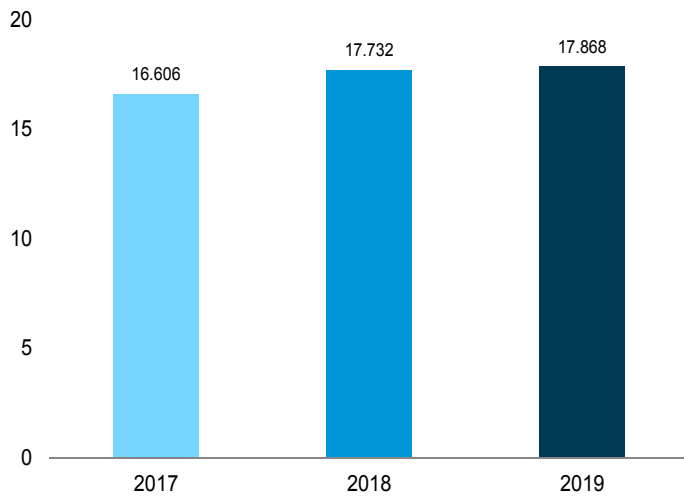
By Source, [a] 1949–2018



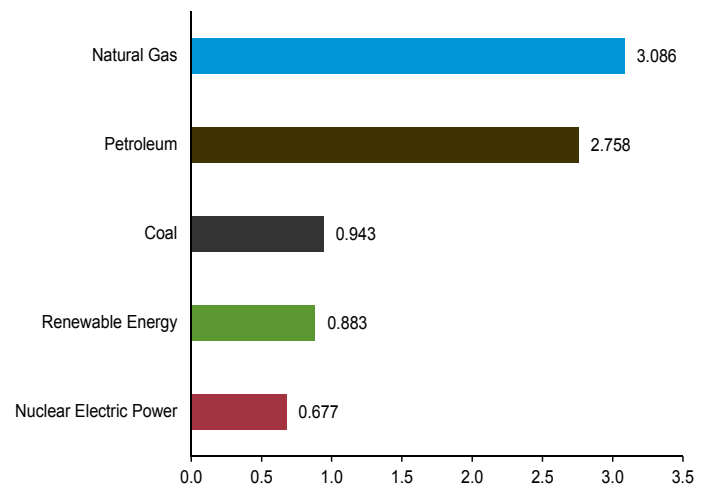
By Source, [a] Monthly



Total, January–February



By Source, [a] February 2019



[a] Small quantities of net imports of coal coke and electricity are not shown.
 Web Page: <http://www.eia.gov/totalenergy/data/monthly/#summary>.
 Source: Table 1.3.

Table 1.3 Primary Energy Consumption by Source
(Quadrillion Btu)

	Fossil Fuels ^a				Nuclear Electric Power	Renewable Energy ^b						Total ^g
	Coal	Natural Gas ^c	Petroleum ^d	Total ^e		Hydroelectric Power ^f	Geothermal	Solar	Wind	Bio-mass	Total	
1950 Total	12.347	5.968	13.315	31.632	0.000	1.415	NA	NA	NA	1.562	2.978	34.616
1955 Total	11.167	8.998	17.255	37.410	.000	1.360	NA	NA	NA	1.424	2.784	40.208
1960 Total	9.838	12.385	19.919	42.137	.006	1.608	(s)	NA	NA	1.320	2.928	45.086
1965 Total	11.581	15.769	23.246	50.577	.043	2.059	.002	NA	NA	1.335	3.396	54.015
1970 Total	12.265	21.795	29.521	63.522	.239	2.634	.006	NA	NA	1.431	4.070	67.838
1975 Total	12.663	19.948	32.732	65.357	1.900	3.155	.034	NA	NA	1.499	4.687	71.965
1980 Total	15.423	20.235	34.205	69.828	2.739	2.900	.053	NA	NA	2.475	5.428	78.067
1985 Total	17.478	17.703	30.925	66.093	4.076	2.970	.097	(s)	(s)	3.016	6.084	76.392
1990 Total	19.173	19.603	33.552	72.332	6.104	3.046	.171	.059	.029	2.735	6.040	84.485
1995 Total	20.089	22.671	34.401	77.222	7.075	3.205	.152	.068	.033	3.101	6.559	90.991
2000 Total	22.580	23.824	38.226	84.694	7.862	2.811	.164	.063	.057	3.008	6.104	98.776
2001 Total	21.914	22.773	38.149	82.865	8.029	2.242	.164	.062	.070	2.622	5.160	96.129
2002 Total	21.904	23.510	38.187	83.662	8.145	2.689	.171	.060	.105	2.701	5.726	97.605
2003 Total	22.321	22.831	38.770	83.972	7.960	2.793	.173	.058	.113	2.806	5.944	97.898
2004 Total	22.466	22.923	40.210	85.737	8.223	2.688	.178	.058	.142	3.008	6.075	100.073
2005 Total	22.797	22.565	40.283	85.689	8.161	2.703	.181	.058	.178	3.114	6.234	100.168
2006 Total	22.447	22.239	39.803	84.550	8.215	2.869	.181	.061	.264	3.262	6.637	99.464
2007 Total	22.749	23.663	39.445	85.883	8.459	2.446	.186	.066	.341	3.485	6.523	100.971
2008 Total	22.387	23.843	36.841	83.112	8.426	2.511	.192	.074	.546	3.851	7.175	98.825
2009 Total	19.691	23.416	34.860	77.944	8.355	2.669	.200	.078	.721	3.940	7.608	94.023
2010 Total	20.834	24.575	35.416	80.818	8.434	2.539	.208	.091	.923	4.506	8.267	97.608
2011 Total	19.658	24.955	34.727	79.350	8.269	3.103	.212	.112	1.168	4.609	9.204	96.950
2012 Total	17.378	26.089	33.939	77.409	8.062	2.629	.212	.159	1.340	4.508	8.847	94.480
2013 Total	18.039	26.805	34.500	79.326	8.244	2.562	.214	.225	1.601	4.848	9.451	97.218
2014 Total	17.998	27.383	34.763	80.122	8.338	2.467	.214	.337	1.728	4.994	9.740	98.382
2015 Total	15.549	28.191	35.478	79.200	8.337	2.321	.212	.427	1.777	4.983	9.720	97.484
2016 Total	14.226	28.400	35.817	78.424	8.427	2.472	.210	.570	2.096	5.020	10.368	97.445
2017 January	1.313	3.012	2.970	7.292	.765	.247	.018	.034	.183	.422	.904	8.982
February	1.011	2.418	2.661	6.089	.665	.218	.016	.040	.195	.383	.852	7.623
March	1.029	2.608	3.087	6.723	.681	.270	.018	.063	.230	.429	1.010	8.430
April	.937	1.995	2.920	5.851	.593	.271	.018	.069	.227	.408	.993	7.452
May	1.066	1.953	3.093	6.110	.641	.298	.017	.081	.207	.431	1.034	7.800
June	1.218	1.972	3.067	6.254	.701	.278	.016	.087	.183	.428	.992	7.964
July	1.433	2.212	3.099	6.742	.746	.244	.018	.083	.147	.434	.927	8.433
August	1.356	2.163	3.137	6.652	.757	.201	.018	.080	.125	.445	.869	8.298
September	1.140	1.983	2.939	6.060	.712	.176	.017	.074	.164	.411	.842	7.630
October	1.051	2.097	3.080	6.223	.690	.168	.017	.068	.233	.427	.914	7.838
November	1.069	2.433	3.018	6.517	.697	.189	.017	.050	.222	.426	.905	8.130
December	1.216	3.187	3.104	7.504	.771	.206	.020	.049	.226	.439	.940	9.229
Total	13.837	28.034	36.174	78.017	8.419	2.767	.210	.777	2.343	5.084	11.181	97.809
2018 January	1.328	3.423	3.125	7.872	.781	.236	.018	.050	.247	.437	.989	9.655
February	.961	2.792	2.711	6.463	.678	.235	.017	.058	.222	.391	.924	8.077
March	.939	2.867	3.146	6.950	.701	.239	.018	.076	.251	.433	1.018	8.684
April	.863	2.416	2.963	6.239	.618	.253	.017	.089	.247	.411	1.016	7.884
May	.996	2.116	3.137	6.248	.704	.280	.019	.100	.217	.437	1.053	8.019
June	1.159	2.118	3.089	6.365	.729	.258	.018	.107	.225	.429	1.036	8.144
July	1.310	2.425	3.171	6.905	.758	.221	.019	.100	.148	.442	.930	8.607
August	1.308	2.388	3.284	6.979	.756	.197	.019	.099	.180	.448	.943	8.694
September	1.120	2.230	2.968	6.318	.677	.172	.018	.090	.166	.408	.854	7.860
October	1.018	2.352	3.201	6.570	.621	.173	.018	.076	.195	.433	.894	8.095
November	1.082	R 2.779	3.033	R 6.890	.669	.204	.018	.058	.207	.421	.908	R 8.476
December	1.157	R 3.060	3.116	R 7.330	.749	.219	.020	.050	.229	.436	.953	R 9.043
Total	13.242	R 30.966	36.945	R 81.128	8.441	2.688	.218	.951	2.533	5.128	11.518	R 101.239
2019 January	1.157	R 3.495	3.118	R 7.768	.771	.226	.019	.055	.232	.423	.954	R 9.510
February	.943	3.086	2.758	6.786	.677	.203	.017	.059	.212	.391	.883	8.358
2-Month Total	2.100	6.581	5.876	14.555	1.448	.429	.036	.114	.444	.814	1.837	17.868
2018 2-Month Total	2.289	6.214	5.836	14.335	1.458	.471	.035	.108	.469	.829	1.913	17.732
2017 2-Month Total	2.324	5.431	5.630	13.380	1.430	.465	.034	.074	.378	.805	1.756	16.606

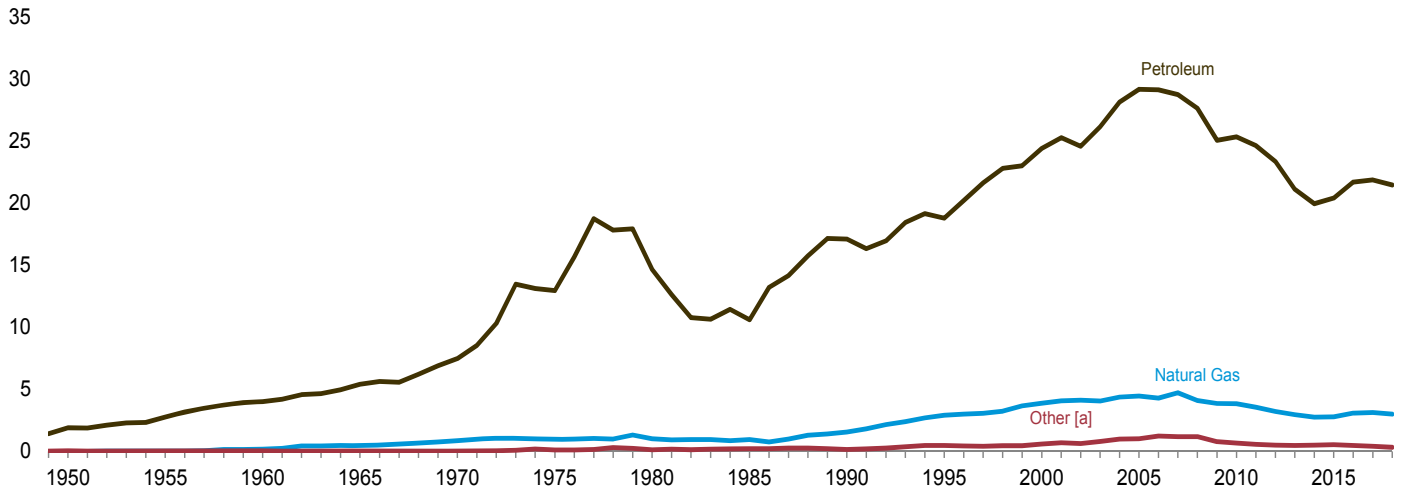
^a Includes non-combustion use of fossil fuels.
^b Most data are estimates. See Tables 10.1–10.2c for notes on series components and estimation; and see Note, "Renewable Energy Production and Consumption," at end of Section 10.
^c Natural gas only; excludes supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.
^d Petroleum products supplied; excludes biofuels that have been blended with petroleum—biofuels are included in "Biomass."
^e Includes coal coke net imports. See Tables 1.4a and 1.4b.
^f Conventional hydroelectric power.
^g Includes coal coke net imports and electricity net imports, which are not

separately displayed. See Tables 1.4a and 1.4b.
R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.
Notes: • See "Primary Energy Consumption" in Glossary.
• See Table D1 for estimated energy consumption for 1635–1945. • 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/#summary> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.
Sources: See end of section.

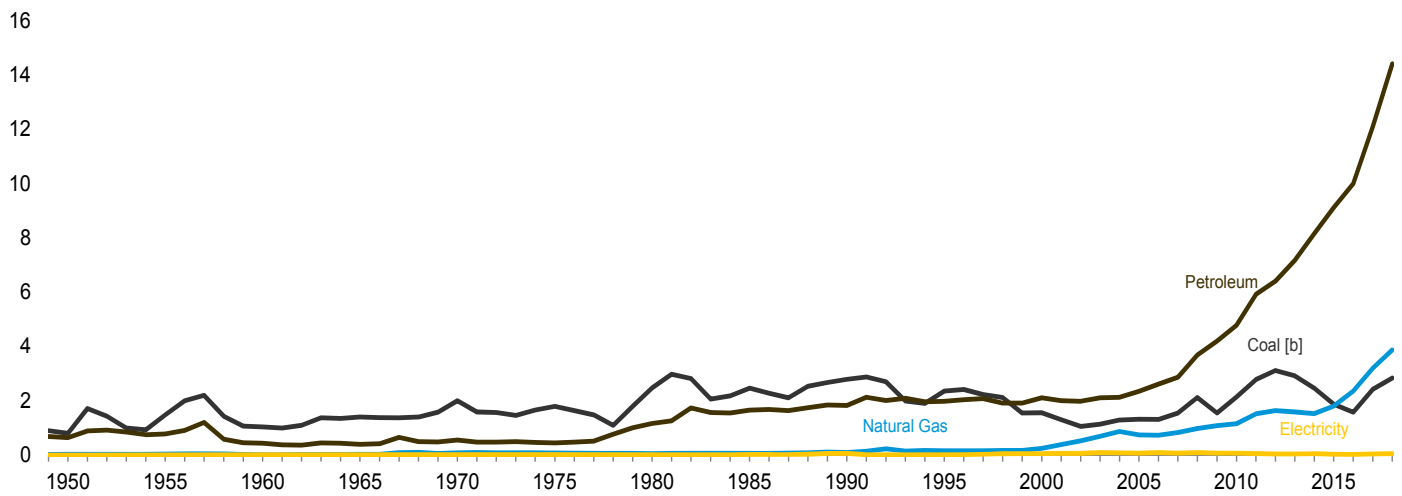
Figure 1.4a Primary Energy Imports and Exports

(Quadrillion Btu)

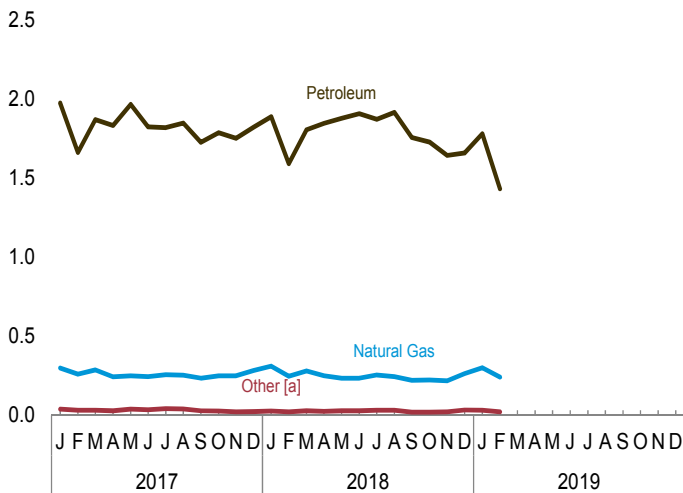
Imports by Source, 1949–2018



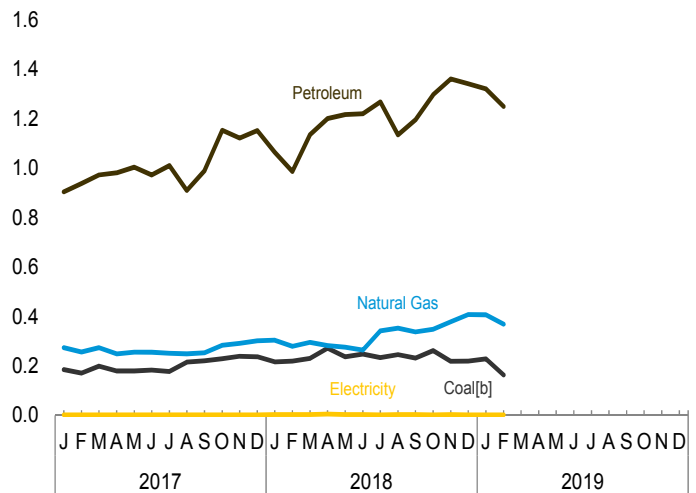
Exports by Source, 1949–2018



Imports by Source, Monthly



Exports by Major Source, Monthly



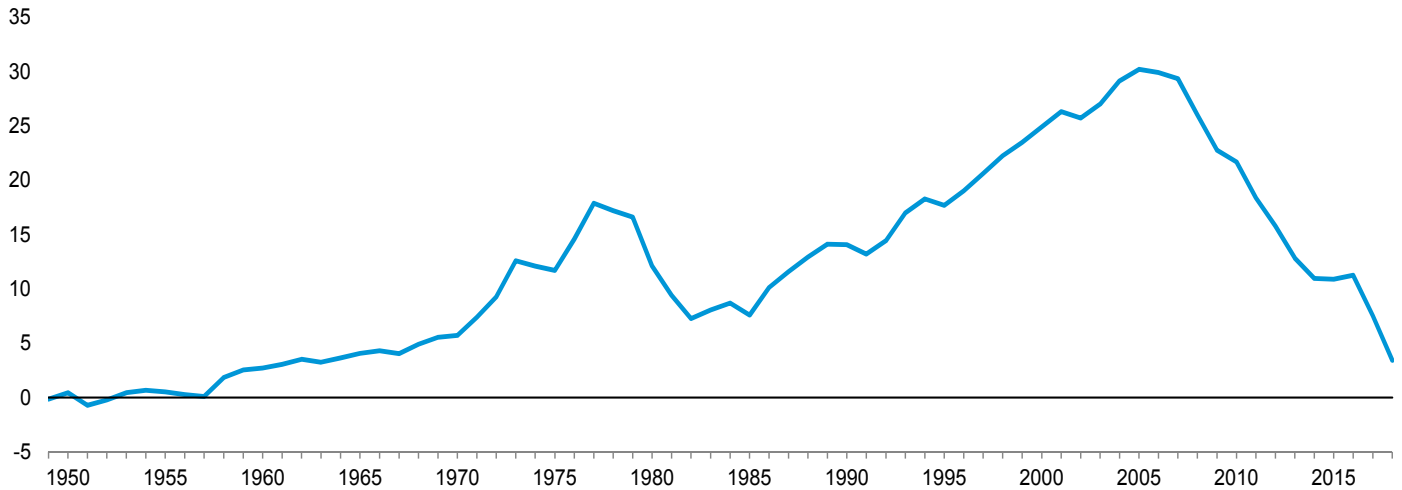
[a] Coal, coal coke, biomass, and electricity.
[b] Includes coal coke.

Web Page: <http://www.eia.gov/totalenergy/data/monthly/#summary>.
Sources: Tables 1.4a and 1.4b.

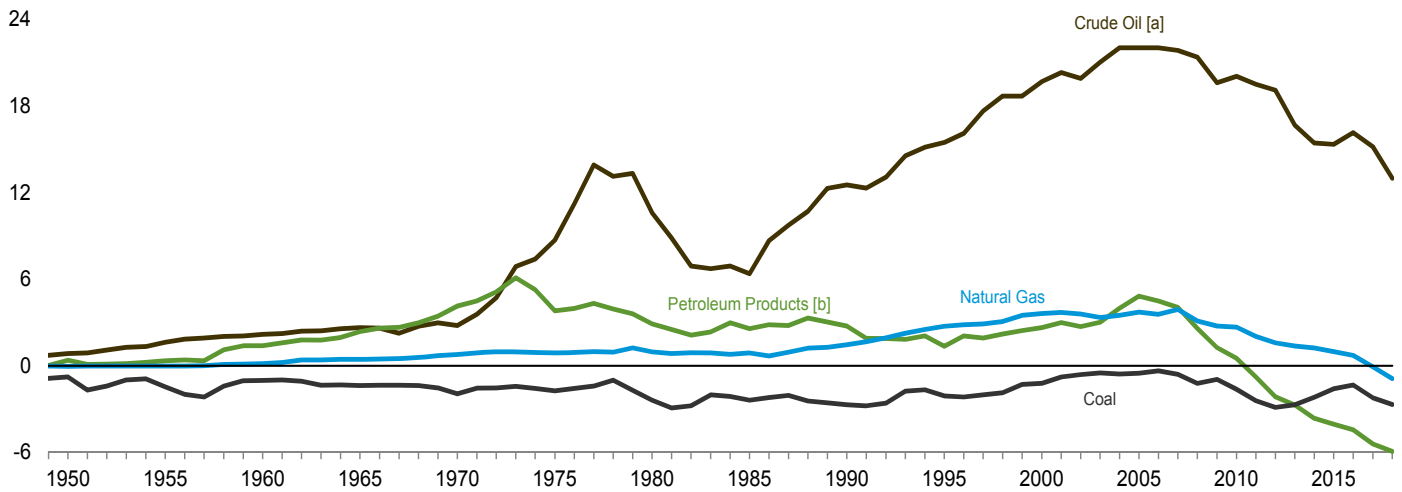
Figure 1.4b Primary Energy Net Imports

(Quadrillion Btu)

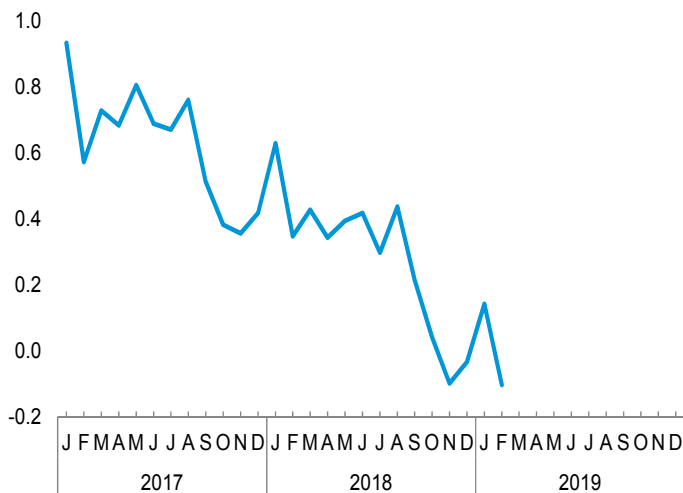
Total, 1949–2018



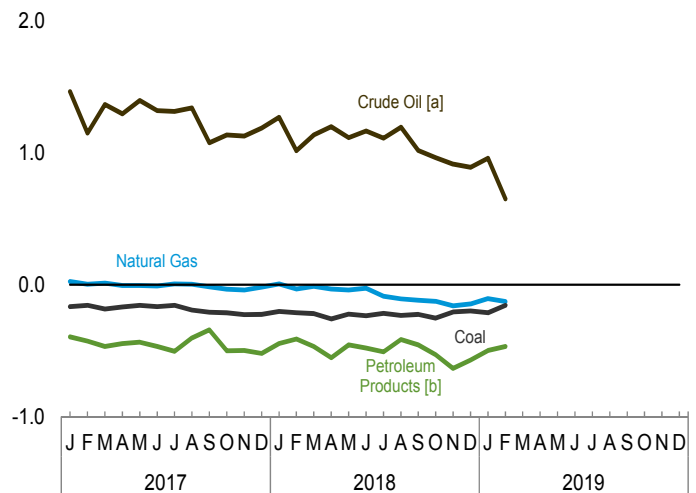
By Major Source, 1949–2018



Total, Monthly



By Major Source, Monthly



[a] Crude oil and lease condensate. Includes imports into the Strategic Petroleum Reserve, which began in 1977.

[b] Petroleum products, unfinished oils natural gasoline, and gasoline

blending components. Does not include biofuels.

Web Page: <http://www.eia.gov/totalenergy/data/monthly/#summary>.

Sources: Tables 1.4a and 1.4b.

Table 1.4a Primary Energy Imports by Source
(Quadrillion Btu)

	Imports								
	Coal	Coal Coke	Natural Gas	Petroleum			Biomass ^c	Electricity	Total
				Crude Oil ^a	Petroleum Products ^b	Total			
1950 Total	0.009	0.011	0.000	1.056	0.830	1.886	NA	0.007	1.913
1955 Total .....	.008	.003	.011	1.691	1.061	2.752	NA	.016	2.790
1960 Total .....	.007	.003	.161	2.196	1.802	3.999	NA	.018	4.188
1965 Total .....	.005	.002	.471	2.654	2.748	5.402	NA	.012	5.892
1970 Total .....	.001	.004	.846	2.814	4.656	7.470	NA	.021	8.342
1975 Total .....	.024	.045	.978	8.721	4.227	12.948	NA	.038	14.032
1980 Total .....	.030	.016	1.006	11.195	3.463	14.658	NA	.085	15.796
1985 Total .....	.049	.014	.952	6.814	3.796	10.609	NA	.157	11.781
1990 Total .....	.067	.019	1.551	12.766	4.351	17.117	NA	.063	18.817
1995 Total .....	.237	.095	2.901	15.669	3.131	18.800	.001	.146	22.180
2000 Total .....	.313	.094	3.869	19.783	4.641	24.424	(s)	.166	28.865
2001 Total .....	.495	.063	4.068	20.348	4.946	25.294	.002	.131	30.052
2002 Total .....	.422	.080	4.104	19.920	4.677	24.597	.002	.125	29.331
2003 Total .....	.626	.068	4.042	21.060	5.105	26.165	.002	.104	31.007
2004 Total .....	.682	.170	4.365	22.082	6.063	28.145	.013	.117	33.492
2005 Total .....	.762	.088	4.450	22.091	7.108	29.198	.012	.150	34.659
2006 Total .....	.906	.101	4.291	22.085	7.054	29.139	.066	.146	34.649
2007 Total .....	.909	.061	4.723	21.914	6.842	28.756	.055	.175	34.679
2008 Total .....	.855	.089	4.084	21.448	6.214	27.662	.085	.195	32.970
2009 Total .....	.566	.009	3.845	19.699	5.367	25.066	.027	.178	29.690
2010 Total .....	.484	.030	3.834	20.140	5.219	25.359	.004	.154	28.866
2011 Total .....	.327	.035	3.555	19.595	5.038	24.633	.019	.178	28.748
2012 Total .....	.212	.028	3.216	19.239	4.122	23.361	.049	.202	27.068
2013 Total .....	.199	.003	2.955	16.957	4.169	21.126	.102	.236	24.623
2014 Total .....	.252	.002	2.763	16.178	3.773	19.951	.046	.227	23.241
2015 Total .....	.256	.003	2.786	16.299	4.111	20.410	.079	.259	23.794
2016 Total .....	.220	.006	3.082	17.392	4.309	21.700	.123	.248	25.378
2017 January .....	.016	(s)	.299	1.590	.383	1.973	.003	.024	2.315
February .....	.013	(s)	.261	1.334	.327	1.661	.004	.019	1.959
March .....	.012	(s)	.288	1.531	.337	1.869	.006	.021	2.195
April .....	.011	(s)	.244	1.489	.342	1.831	.006	.019	2.112
May .....	.023	(s)	.250	1.592	.374	1.965	.008	.017	2.264
June .....	.014	.001	.246	1.468	.355	1.824	.013	.020	2.117
July .....	.021	(s)	.257	1.484	.335	1.819	.012	.020	2.129
August .....	.018	(s)	.254	1.486	.361	1.847	.011	.022	2.153
September .....	.011	(s)	.235	1.329	.396	1.725	.004	.018	1.993
October .....	.012	(s)	.250	1.441	.346	1.787	.004	.013	2.067
November .....	.008	(s)	.250	1.393	.358	1.751	.005	.013	2.027
December .....	.009	(s)	.285	1.460	.362	1.822	.004	.016	2.136
Total .....	.167	.001	3.118	17.597	4.277	21.874	.081	.224	25.467
2018 January .....	.010	(s)	.311	1.507	.381	1.888	.004	.018	2.231
February .....	.007	(s)	.247	1.273	.318	1.591	.003	.016	1.864
March .....	.011	(s)	.281	1.432	.371	1.804	.004	.019	2.119
April .....	.010	.001	.250	1.501	.345	1.846	.004	.015	2.126
May .....	.011	.001	.235	1.472	.405	1.877	.004	.018	2.145
June .....	.010	(s)	.236	1.543	.363	1.906	.004	.019	2.176
July .....	.014	(s)	.255	1.490	.381	1.871	.002	.018	2.161
August .....	.010	(s)	.245	1.505	.409	1.914	.005	.021	2.194
September .....	.005	(s)	.221	1.381	.375	1.756	.003	.015	2.001
October .....	.006	.001	.223	1.375	.352	1.727	.006	.013	1.976
November .....	.008	(s)	.218	1.363	.279	1.642	.005	.013	1.887
December .....	.018	(s)	.264	1.335	.323	1.658	.004	.014	1.959
Total .....	.122	.003	2.987	17.177	4.303	21.480	.048	.199	24.838
2019 January .....	.013	(s)	.301	1.414	.365	1.779	.005	R .019	R 2.117
February .....	.007	(s)	.242	1.130	.301	1.431	.003	.015	1.697
2-Month Total .....	.020	(s)	.543	2.544	.666	3.210	.008	.034	3.815
2018 2-Month Total .....	.017	(s)	.558	2.780	.699	3.479	.007	.034	4.095
2017 2-Month Total .....	.029	(s)	.560	2.924	.710	3.634	.007	.043	4.274

^a Crude oil and lease condensate. Includes imports into the Strategic Petroleum Reserve, which began in 1977.

^b Petroleum products, unfinished oils, natural gasoline, and gasoline blending components. Does not include biofuels.

^c Fuel ethanol (minus denaturant) and biodiesel.
R=Revised, NA=Not available. (s)=Less than 0.5 trillion Btu.

Notes: • See "Primary Energy" 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/#summary> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

Table 1.4b Primary Energy Exports by Source and Total Net Imports
(Quadrillion Btu)

	Exports									Net Imports ^a
	Coal	Coal Coke	Natural Gas	Petroleum			Biomass ^d	Electricity	Total	
				Crude Oil ^b	Petroleum Products ^c	Total				
1950 Total	0.786	0.010	0.027	0.202	0.440	0.642	NA	0.001	1.465	0.448
1955 Total	1.465	.013	.032	.067	.707	.774	NA	.002	2.286	.504
1960 Total	1.023	.009	.012	.018	.413	.431	NA	.003	1.477	2.710
1965 Total	1.376	.021	.027	.006	.386	.392	NA	.013	1.829	4.063
1970 Total	1.936	.061	.072	.029	.520	.549	NA	.014	2.632	5.709
1975 Total	1.761	.032	.074	.012	.427	.439	NA	.017	2.323	11.709
1980 Total	2.421	.051	.049	.609	.551	1.160	NA	.014	3.695	12.101
1985 Total	2.438	.028	.056	.432	1.225	1.657	NA	.017	4.196	7.584
1990 Total	2.772	.014	.087	.230	1.594	1.824	NA	.055	4.752	14.065
1995 Total	2.318	.034	.156	.200	1.776	1.976	NA	.012	4.496	17.684
2000 Total	1.528	.028	.245	.106	2.003	2.110	NA	.051	3.962	24.904
2001 Total	1.265	.033	.377	.043	1.956	1.999	(s)	.056	3.731	26.321
2002 Total	1.032	.020	.520	.019	1.963	1.982	(s)	.054	3.608	25.722
2003 Total	1.117	.018	.686	.026	2.083	2.110	.001	.082	4.013	26.994
2004 Total	1.253	.033	.862	.057	2.068	2.125	.001	.078	4.351	29.141
2005 Total	1.273	.043	.735	.067	2.276	2.344	.001	.065	4.462	30.197
2006 Total	1.264	.040	.730	.052	2.554	2.606	.005	.083	4.727	29.921
2007 Total	1.507	.036	.830	.058	2.803	2.861	.036	.069	5.338	29.341
2008 Total	2.071	.049	.972	.061	3.626	3.686	.089	.083	6.949	26.021
2009 Total	1.515	.032	1.082	.093	4.101	4.194	.035	.062	6.920	22.770
2010 Total	2.101	.036	1.147	.088	4.691	4.780	.047	.065	8.176	21.690
2011 Total	2.751	.024	1.519	.100	5.820	5.919	.108	.051	10.373	18.375
2012 Total	3.087	.024	1.633	.143	6.261	6.404	.078	.041	11.267	15.801
2013 Total	2.895	.021	1.587	.284	6.886	7.170	.076	.039	11.788	12.835
2014 Total	2.435	.023	1.528	.744	7.414	8.158	.081	.045	12.270	10.971
2015 Total	1.852	.021	1.800	.964	8.153	9.118	.080	.031	12.902	10.892
2016 Total	1.546	.025	2.356	1.238	8.752	9.990	.181	.021	14.119	11.259
2017 January .....	.182	.003	.274	.126	.778	.904	.017	.002	1.382	.933
February .....	.170	.001	.257	.184	.754	.938	.018	.002	1.387	.572
March .....	.197	.002	.274	.165	.807	.972	.018	.003	1.467	.728
April .....	.178	.001	.249	.194	.787	.981	.015	.004	1.429	.683
May .....	.178	.001	.256	.195	.808	1.004	.017	.003	1.459	.805
June .....	.180	.003	.256	.149	.823	.972	.016	.003	1.430	.688
July .....	.177	.001	.251	.170	.840	1.010	.018	.002	1.459	.670
August .....	.211	.004	.249	.145	.764	.910	.017	.003	1.392	.760
September .....	.219	.002	.253	.252	.738	.990	.015	.002	1.481	.512
October .....	.226	.005	.284	.306	.847	1.153	.016	.002	1.686	.382
November .....	.235	.003	.291	.266	.856	1.122	.016	.003	1.671	.356
December .....	.234	.003	.302	.271	.882	1.152	.024	.003	1.718	.417
Total	2.388	.030	3.196	2.424	9.684	12.108	.206	.032	17.960	7.507
2018 January .....	.213	.004	.304	.238	.826	1.064	.013	.004	1.602	.629
February .....	.219	.001	.279	.257	.729	.986	.027	.004	1.516	.347
March .....	.229	.002	.295	.296	.840	1.136	.025	.004	1.691	.427
April .....	.269	.003	.282	.301	.899	1.201	.022	.006	1.782	.343
May .....	.234	.002	.276	.356	.861	1.217	.018	.004	1.751	.394
June .....	.246	.002	.264	.378	.843	1.220	.023	.004	1.759	.417
July .....	.232	.002	R .342	.379	.889	1.268	.017	.003	R 1.864	R .297
August .....	.244	.001	R .353	.310	.825	1.135	.020	.004	R 1.757	R .437
September .....	.230	.001	R .338	.363	.832	1.195	.017	.004	R 1.786	R .215
October .....	.259	.002	R .349	.412	.884	1.297	.025	.003	R 1.935	R .041
November .....	.216	.003	R .379	.448	.913	1.361	.022	.004	R 1.986	R -.099
December .....	.217	.003	R .408	.445	.895	1.341	.021	.003	R 1.993	R -.034
Total	2.809	.029	R 3.867	4.184	10.237	14.421	.250	.047	R 21.423	R 3.416
2019 January .....	.226	.003	R .407	.457	.863	1.320	R .017	R .002	R 1.975	R .142
February .....	.163	.001	.369	.479	.770	1.249	.018	.003	1.802	-.104
2-Month Total .....	.388	.004	.776	.936	1.633	2.569	.035	.005	3.777	.038
2018 2-Month Total .....	.432	.005	.582	.495	1.555	2.050	.040	.008	3.118	.977
2017 2-Month Total .....	.352	.004	.532	.311	1.531	1.842	.035	.004	2.769	1.505

^a Net imports equal imports minus exports.

^b Crude oil and lease condensate.

^c Petroleum products, unfinished oils, natural gasoline, and gasoline blending components. Does not include biofuels.

^d Beginning in 2001, includes biodiesel. Beginning in 2010, also includes fuel ethanol (minus denaturant). Beginning in 2016, also includes wood and wood-derived fuels.

R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.

Notes: • See "Primary Energy" in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

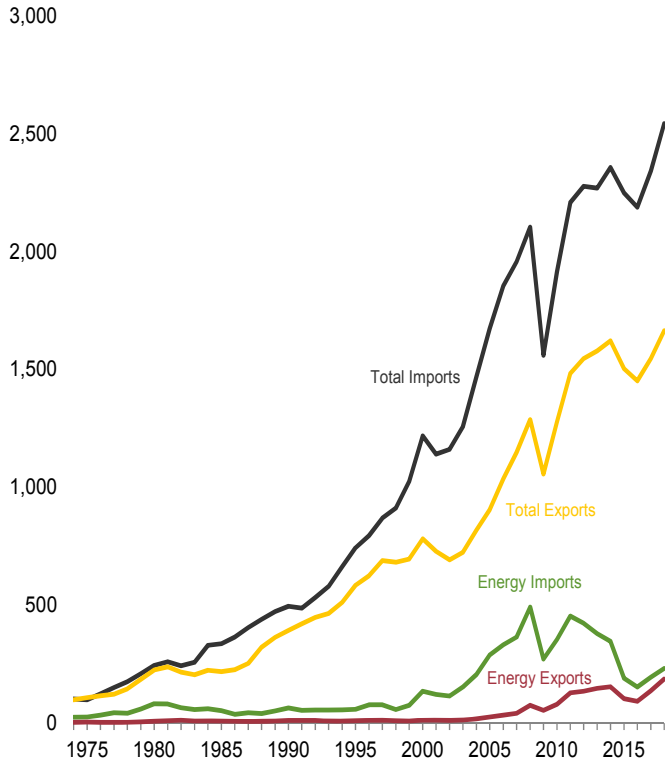
Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#summary> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

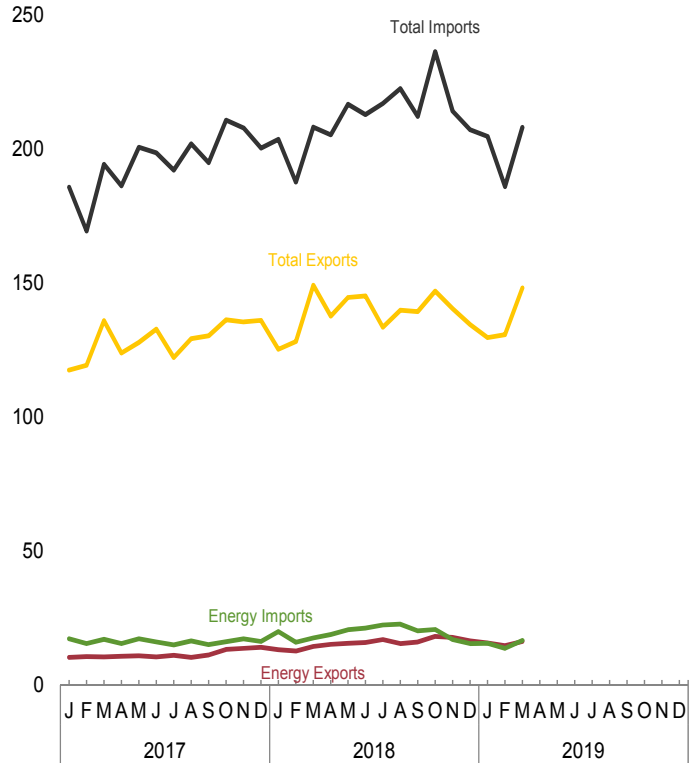
Figure 1.5 Merchandise Trade Value

(Billion Dollars[a])

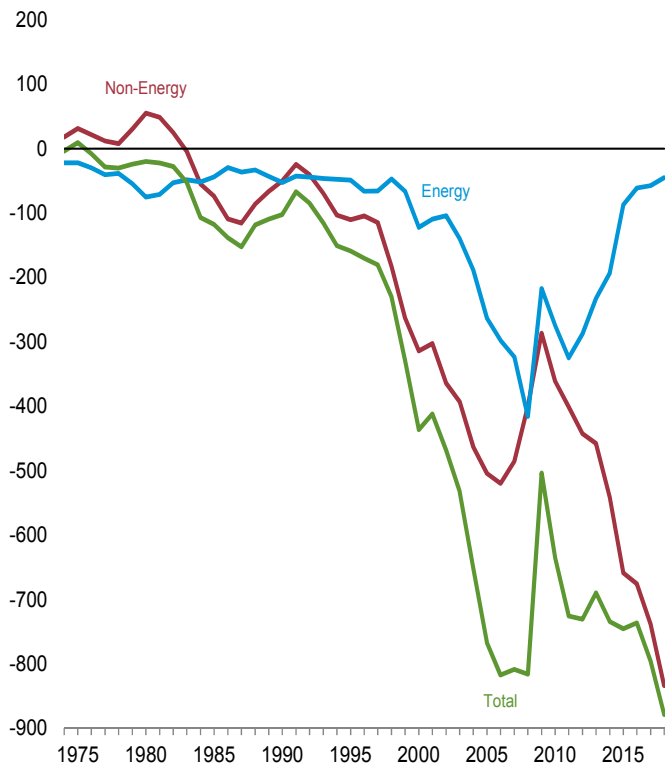
Imports and Exports, 1974–2018



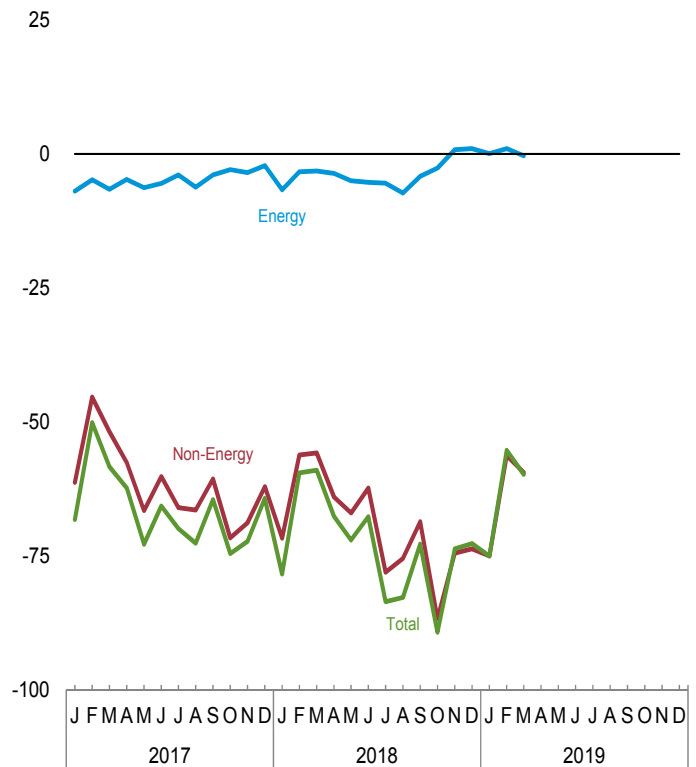
Imports and Exports, Monthly



Trade Balance, 1974–2018



Trade Balance, Monthly



[a] Prices are not adjusted for inflation. See “Nominal Dollars” in Glossary.
 Web Page: <http://www.eia.gov/totalenergy/data/monthly/#summary>.
 Source: Table 1.5.

Table 1.5 Merchandise Trade Value
(Million Dollars^a)

	Petroleum ^b			Energy ^c			Non-Energy Balance	Total Merchandise		
	Exports	Imports	Balance	Exports	Imports	Balance		Exports	Imports	Balance
1974 Total	792	24,668	-23,876	3,444	25,454	-22,010	18,126	99,437	103,321	-3,884
1975 Total	907	25,197	-24,289	4,470	26,476	-22,006	31,557	108,856	99,305	9,551
1980 Total	2,833	78,637	-75,803	7,982	82,924	-74,942	55,246	225,566	245,262	-19,696
1985 Total	4,707	50,475	-45,768	9,971	53,917	-43,946	-73,765	218,815	336,526	-117,712
1990 Total	6,901	61,583	-54,682	12,233	64,661	-52,428	-50,068	393,592	496,088	-102,496
1995 Total	6,321	54,368	-48,047	10,358	59,109	-48,751	-110,050	584,742	743,543	-158,801
2000 Total	10,192	119,251	-109,059	13,179	135,367	-122,188	-313,916	781,918	1,218,022	-436,104
2001 Total	8,868	102,747	-93,879	12,494	121,923	-109,429	-302,470	729,100	1,140,999	-411,899
2002 Total	8,569	102,663	-94,094	11,541	115,748	-104,207	-364,056	693,103	1,161,366	-468,263
2003 Total	10,209	132,433	-122,224	13,768	153,298	-139,530	-392,820	724,771	1,257,121	-532,350
2004 Total	13,130	179,266	-166,136	18,642	206,660	-188,018	-462,912	818,775	1,469,704	-650,930
2005 Total	19,155	250,068	-230,913	26,488	289,723	-263,235	-504,242	905,978	1,673,455	-767,477
2006 Total	28,171	299,714	-271,543	34,711	332,500	-297,789	-519,515	1,036,635	1,853,938	-817,304
2007 Total	33,293	327,620	-294,327	41,725	364,987	-323,262	-485,501	1,148,199	1,956,962	-808,763
2008 Total	61,695	449,847	-388,152	76,075	491,885	-415,810	-400,389	1,287,442	2,103,641	-816,199
2009 Total	44,509	251,833	-207,324	54,536	271,739	-217,203	-286,379	1,056,043	1,559,625	-503,582
2010 Total	64,753	333,472	-268,719	80,625	354,982	-274,357	-361,005	1,278,495	1,913,857	-635,362
2011 Total	^b 102,180	^b 431,866	^b -329,686	128,989	453,839	-324,850	-400,597	1,482,508	2,207,954	-725,447
2012 Total	111,951	408,509	-296,558	136,054	423,862	-287,808	-442,638	1,545,821	2,276,267	-730,446
2013 Total	123,218	363,141	-239,923	147,539	379,758	-232,219	-457,712	1,578,439	2,268,370	-689,931
2014 Total	127,818	326,709	-198,891	154,498	347,474	-192,976	-541,506	1,621,874	2,356,356	-734,482
2015 Total	85,890	177,455	-91,565	103,612	190,501	-86,889	-658,594	1,503,328	2,248,811	-745,483
2016 Total	74,703	142,900	-68,197	92,757	153,781	-61,024	-675,553	1,451,024	2,187,600	-736,577
2017 January	7,458	15,772	-8,314	10,329	17,258	-6,929	-61,285	117,458	185,672	-68,214
February	7,799	14,238	-6,439	10,634	15,420	-4,786	-45,354	119,252	169,392	-50,140
March	7,710	15,889	-8,179	10,460	17,030	-6,570	-51,783	135,905	194,258	-58,353
April	8,077	14,440	-6,363	10,714	15,449	-4,735	-57,573	123,842	186,150	-62,308
May	8,374	16,226	-7,852	10,950	17,257	-6,307	-66,508	127,782	200,597	-72,815
June	8,244	15,081	-6,837	10,555	16,062	-5,507	-60,199	132,741	198,447	-65,706
July	8,820	13,991	-5,171	11,083	14,985	-3,902	-66,001	122,140	192,044	-69,903
August	7,799	15,479	-7,680	10,302	16,500	-6,198	-66,437	129,186	201,821	-72,635
September	8,446	14,155	-5,709	11,213	15,105	-3,892	-60,626	130,278	194,796	-64,518
October	10,237	15,247	-5,010	13,294	16,207	-2,913	-71,620	136,199	210,732	-74,533
November	10,676	16,158	-5,482	13,728	17,212	-3,484	-68,809	135,477	207,770	-72,293
December	10,884	14,987	-4,103	14,112	16,298	-2,186	-62,084	136,014	200,285	-64,270
Total	104,525	181,662	-77,137	137,374	194,784	-57,410	-738,280	1,546,273	2,341,963	-795,690
2018 January	10,139	18,086	-7,947	13,231	19,944	-6,713	-71,661	125,219	203,593	-78,374
February	9,504	14,996	-5,492	12,643	15,947	-3,304	-56,179	128,057	187,540	-59,483
March	11,130	16,622	-5,492	14,373	17,567	-3,194	-55,775	149,164	208,133	-58,969
April	11,972	18,002	-6,030	15,200	18,813	-3,613	-64,010	137,648	205,271	-67,623
May	12,098	19,781	-7,683	15,557	20,585	-5,028	-66,981	144,593	216,602	-72,009
June	12,764	20,315	-7,551	15,865	21,188	-5,323	-62,319	145,134	212,775	-67,642
July	13,338	21,549	-8,211	16,988	22,448	-5,460	-78,051	133,429	216,940	-83,511
August	11,836	21,667	-9,831	15,424	22,699	-7,275	-75,450	139,760	222,485	-82,725
September	12,651	19,277	-6,626	16,022	20,207	-4,185	-68,600	139,262	212,047	-72,785
October	14,465	19,713	-5,248	18,130	20,737	-2,607	-86,640	146,983	236,230	-89,247
November	14,107	15,797	-1,690	17,719	16,930	789	-74,464	140,373	214,048	-73,675
December	12,551	14,040	-1,489	16,467	15,456	1,011	-73,670	^R 134,360	^R 207,018	^R -72,657
Total	146,555	219,845	-73,290	187,619	232,520	-44,901	-833,801	^R 1,663,982	^R 2,542,683	^R -878,701
2019 January	12,021	14,017	-1,996	15,619	15,589	30	-75,022	129,608	204,600	-74,992
February	11,734	12,260	-526	14,687	13,704	983	^R -56,249	^R 130,634	^R 185,900	^R -55,266
March	12,812	15,294	-2,482	16,289	16,630	-341	-59,461	148,172	207,974	-59,802
3-Month Total	36,567	41,571	-5,004	46,595	45,923	672	-190,732	408,414	598,474	-190,060
2018 3-Month Total	30,773	49,704	-18,931	40,247	53,458	-13,211	-183,615	402,440	599,266	-196,826
2017 3-Month Total	22,967	45,899	-22,932	31,423	49,708	-18,285	-158,422	372,615	549,322	-176,707

^a Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.

^b Through 2010, data are for crude oil, petroleum preparations, liquefied propane and butane, and other mineral fuels. Beginning in 2011, data are for petroleum products and preparations.

^c Petroleum, coal, natural gas, and electricity.

^R=Revised.

Notes: • Monthly data are not adjusted for seasonal variations. • See Note 1, "Merchandise Trade Value," at end of section. • Totals may not equal sum of

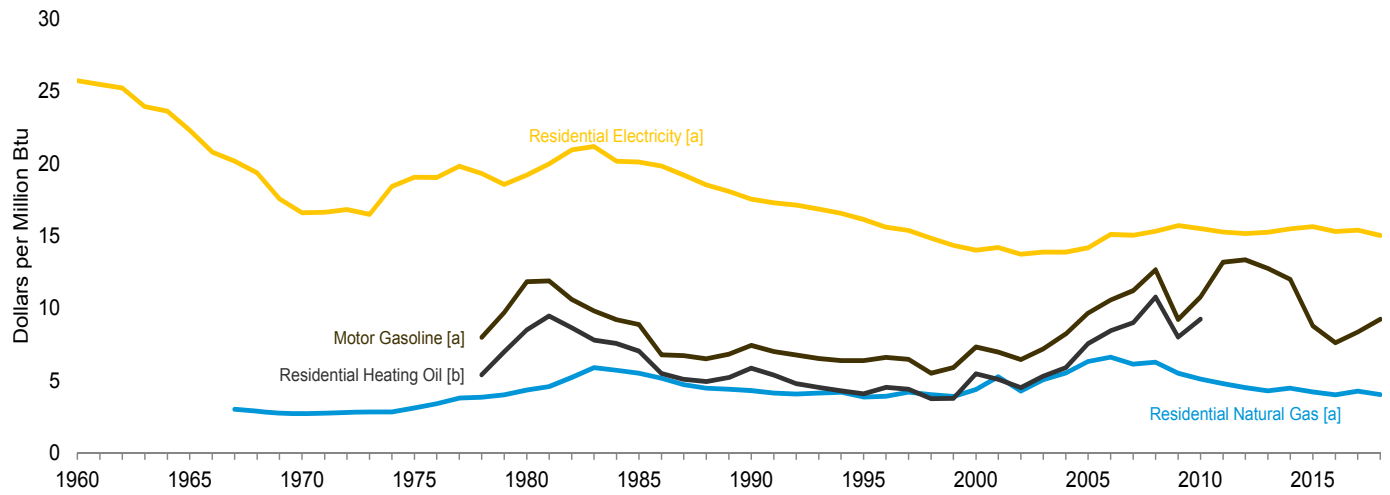
components due to independent rounding. • The U.S. import statistics reflect both government and nongovernment imports of merchandise from foreign countries into the U.S. customs territory, which comprises the 50 states, the District of Columbia, Puerto Rico, and the Virgin Islands.

Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#summary> (Excel and CSV files) for all available annual and monthly data beginning in 1974.

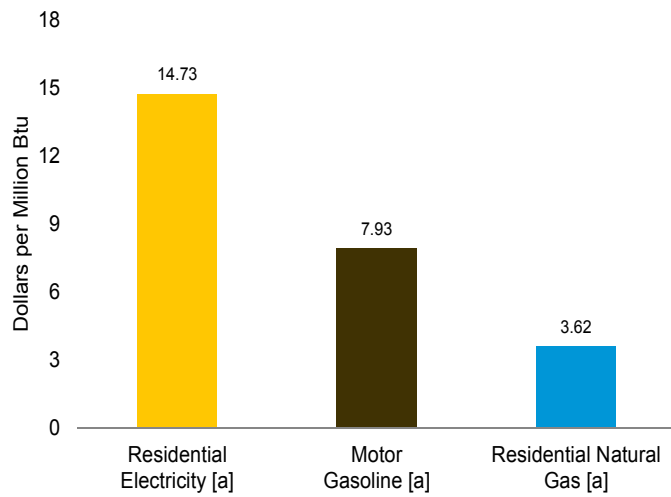
Sources: See end of section.

Figure 1.6 Cost of Fuels to End Users In Real (1982-1984) Dollars

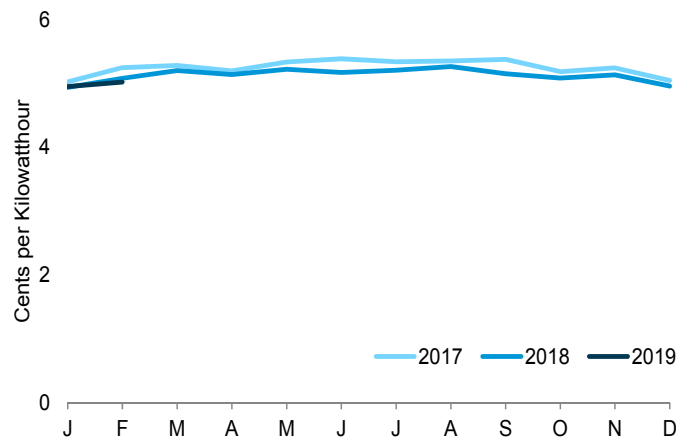
Costs, 1960–2018



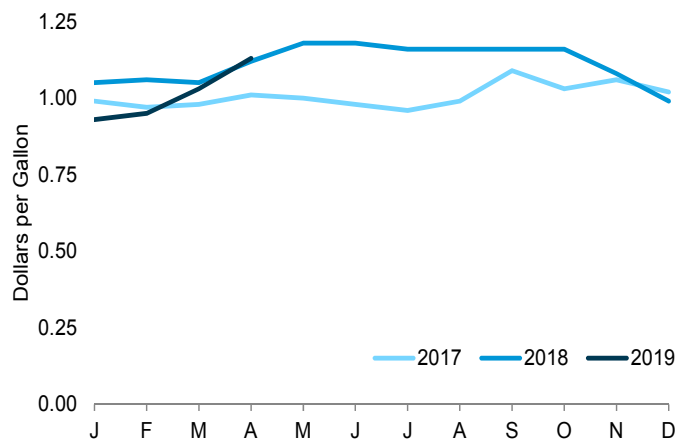
Costs, February 2019



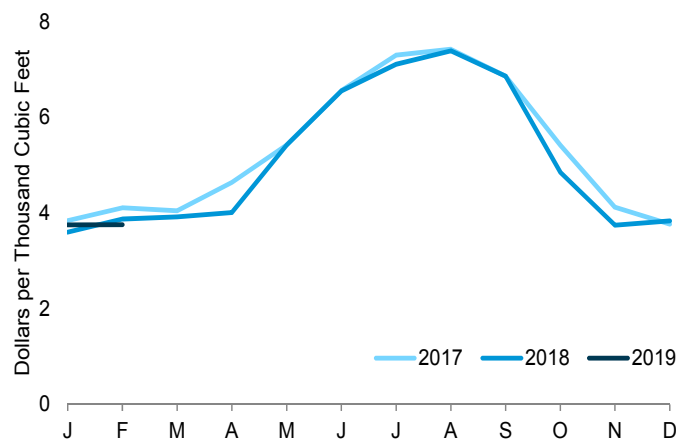
Residential Electricity, [a] Monthly



Motor Gasoline, [a] Monthly



Residential Natural Gas, [a] Monthly



[a] Includes Taxes.

[b] Excludes Taxes.

Note: See "Real Dollars" in Glossary.

Web Page: <http://www.eia.gov/totalenergy/data/monthly/#summary>.

Sources: Tables 1.6.

Table 1.6 Cost of Fuels to End Users in Real (1982–1984) Dollars

	Consumer Price Index, All Urban Consumers ^a	Motor Gasoline ^b		Residential Heating Oil ^c		Residential Natural Gas ^b		Residential Electricity ^b	
	Index 1982–1984=100	Dollars per Gallon	Dollars per Million Btu	Dollars per Gallon	Dollars per Million Btu	Dollars per Thousand Cubic Feet	Dollars per Million Btu	Cents per Kilowatthour	Dollars per Million Btu
1960 Average	29.6	NA	NA	NA	NA	NA	NA	8.8	25.74
1965 Average	31.5	NA	NA	NA	NA	NA	NA	7.6	22.33
1970 Average	38.8	NA	NA	NA	NA	2.81	2.72	5.7	16.62
1975 Average	53.8	NA	NA	NA	NA	3.18	3.12	6.5	19.07
1980 Average	82.4	1.482	11.85	1.182	8.52	4.47	4.36	6.6	19.21
1985 Average	107.6	1.112	8.89	0.979	7.06	5.69	5.52	6.87	20.13
1990 Average	130.7	0.931	7.44	0.813	5.86	4.44	4.31	5.99	17.56
1995 Average	152.4	0.791	6.38	0.569	4.10	3.98	3.87	5.51	16.15
2000 Average	172.2	0.908	7.33	0.761	5.49	4.51	4.39	4.79	14.02
2001 Average	177.1	0.864	6.98	0.706	5.09	5.44	5.28	4.84	14.20
2002 Average	179.9	0.801	6.47	0.628	4.52	4.39	4.28	4.69	13.75
2003 Average	184.0	0.890	7.19	0.736	5.31	5.23	5.09	4.74	13.89
2004 Average	188.9	1.018	8.23	0.819	5.91	5.69	5.55	4.74	13.89
2005 Average	195.3	1.197	9.68	1.051	7.58	6.50	6.33	4.84	14.18
2006 Average	201.6	1.307	10.59	1.173	8.46	6.81	6.63	5.16	15.12
2007 Average	207.342	1.374	11.22	1.250	9.01	6.31	6.14	5.14	15.05
2008 Average	215.303	1.541	12.67	1.495	10.78	6.45	6.28	5.23	15.33
2009 Average	214.537	1.119	9.24	1.112	8.02	5.66	5.52	5.37	15.72
2010 Average	218.056	1.301	10.78	1.283	9.25	5.22	5.11	5.29	15.51
2011 Average	224.939	1.590	13.19	NA	NA	4.90	4.80	5.21	15.27
2012 Average	229.594	1.609	13.35	NA	NA	4.64	4.53	5.17	15.17
2013 Average	232.957	1.538	12.77	NA	NA	4.43	4.31	5.21	15.26
2014 Average	236.736	1.447	12.01	NA	NA	4.63	4.49	5.29	15.50
2015 Average	237.017	1.059	8.80	NA	NA	4.38	4.22	5.34	15.64
2016 Average	240.007	0.918	7.63	NA	NA	4.19	4.03	5.23	15.33
2017 January	242.839	0.992	8.25	NA	NA	3.84	3.70	5.03	14.74
February	243.603	0.969	8.05	NA	NA	4.11	3.96	5.25	15.39
March	243.801	0.979	8.13	NA	NA	4.04	3.90	5.29	15.50
April	244.524	1.014	8.43	NA	NA	4.64	4.47	5.20	15.25
May	244.733	1.000	8.31	NA	NA	5.42	5.22	5.34	15.65
June	244.955	0.980	8.14	NA	NA	6.56	6.32	5.39	15.79
July	244.786	0.958	7.96	NA	NA	7.30	7.04	5.34	15.66
August	245.519	0.992	8.25	NA	NA	7.42	7.16	5.36	15.70
September	246.819	1.089	9.05	NA	NA	6.86	6.61	5.38	15.77
October	246.663	1.032	8.58	NA	NA	5.42	5.22	5.19	15.21
November	246.669	1.057	8.79	NA	NA	4.12	3.97	5.25	15.37
December	246.524	1.023	8.50	NA	NA	3.77	3.63	5.05	14.80
Average	245.120	1.007	8.37	NA	NA	4.45	4.29	5.26	15.41
2018 January	247.867	1.047	8.70	NA	NA	3.60	3.46	4.94	14.48
February	248.991	1.057	8.78	NA	NA	3.87	3.73	5.08	14.90
March	249.554	1.054	8.76	NA	NA	3.92	3.78	5.21	15.26
April	250.546	1.116	9.27	NA	NA	4.01	3.86	5.14	15.07
May	251.588	1.178	9.79	NA	NA	5.42	5.22	5.23	15.32
June	251.989	1.179	9.79	NA	NA	6.55	6.31	5.17	15.17
July	252.006	1.163	9.66	NA	NA	7.11	6.85	5.21	15.27
August	252.146	1.158	9.62	NA	NA	7.39	7.12	5.27	15.44
September	252.439	1.161	9.65	NA	NA	6.86	6.61	5.15	15.10
October	252.885	1.165	9.68	NA	NA	4.85	4.67	5.09	14.92
November	252.038	1.084	9.01	NA	NA	3.74	3.60	5.14	15.06
December	251.233	0.987	8.20	NA	NA	3.83	3.69	4.96	14.55
Average	251.107	1.113	9.25	NA	NA	4.19	4.04	5.13	15.04
2019 January	251.712	0.934	7.77	NA	NA	3.75	3.61	4.95	14.52
February	252.776	0.954	7.93	NA	NA	^R 3.75	^R 3.62	^R 5.02	^R 14.73
March	254.202	1.031	8.57	NA	NA	NA	NA	NA	NA
April	255.548	1.132	9.41	NA	NA	NA	NA	NA	NA

^a Data are U.S. city averages for all items, and are not seasonally adjusted.

^b Includes taxes.

^c Excludes taxes.

R=Revised. NA=Not available.

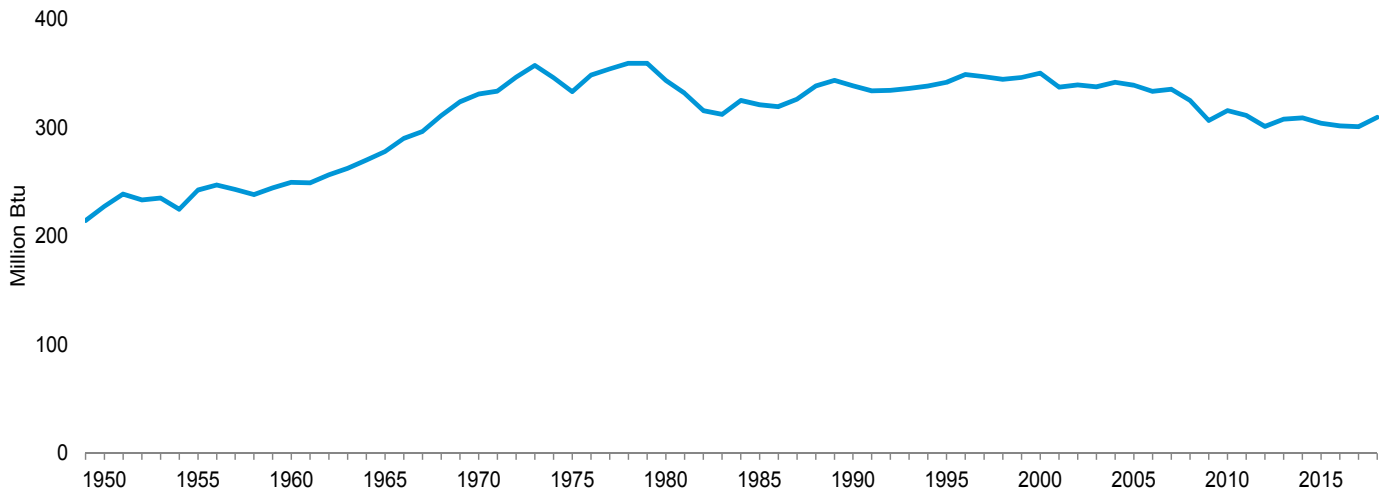
Notes: • See "Real Dollars" in Glossary. • Fuel costs are calculated by using the Urban Consumer Price Index (CPI) developed by the Bureau of Labor Statistics. • Annual averages may not equal average of months due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#summary> (Excel and CSV files) for all available annual data beginning in 1960 and monthly data beginning in 1995.

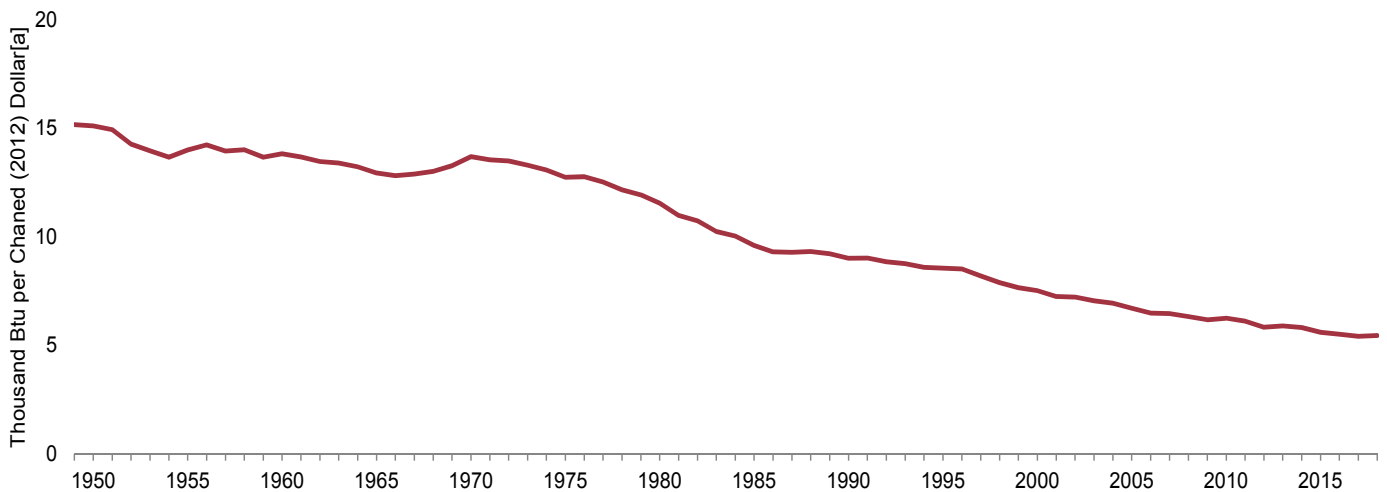
Sources: • **Fuel Prices:** Tables 9.4 (All Grades), 9.8, and 9.10, adjusted by the CPI; and *Monthly Energy Review*, September 2012, Table 9.8c. • **Consumer Price Index, All Urban Consumers:** U.S. Department of Labor, Bureau of Labor Statistics, series ID CUUR0000SA0. • **Conversion Factors:** Tables A1, A3, A4, and A6.

Figure 1.7 Primary Energy Consumption and Energy Expenditures Indicators

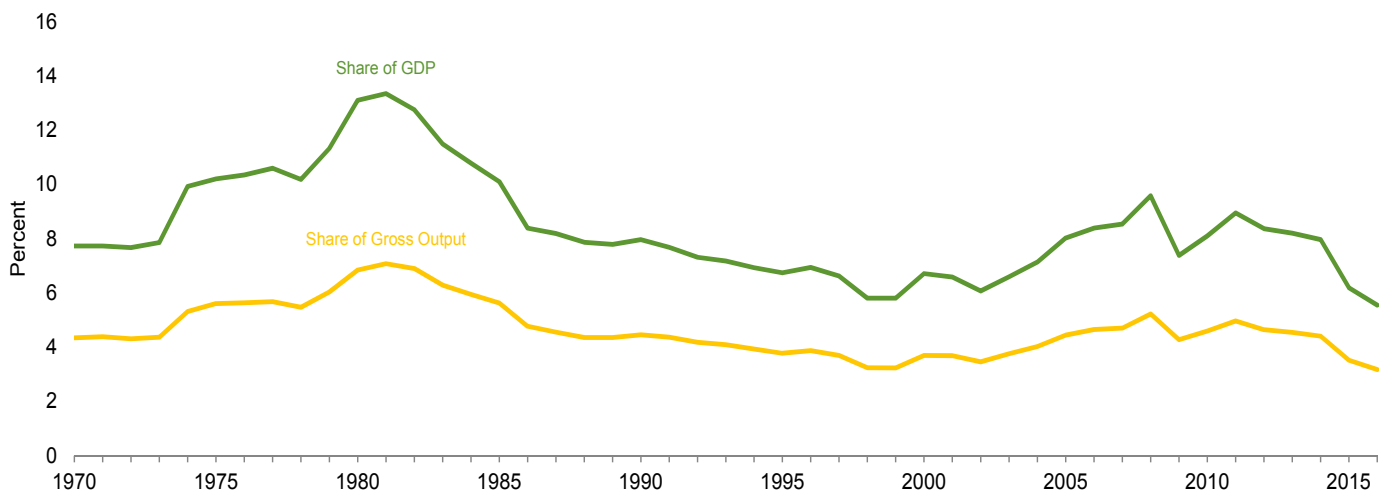
Energy Consumption per Capita, 1949–2018



Primary Energy Consumption per Real Dollar [a] of Gross Domestic Product, 1949–2018



Energy Expenditures as Share of Gross Domestic Product and Gross Output,[b] 1970–2016



[a] See “Chained Dollars” and “Real Dollars” in Glossary.

[b] Gross output is the value of gross domestic product (GDP) plus the value of intermediate inputs used to produce GDP. Through 1996, data have been

adjusted by EIA based on BEA’s 2012 comprehensive revision.

Web Page: <http://www.eia.gov/totalenergy/data/monthly/#summary>.

Source: Table 1.7.

Table 1.7 Primary Energy Consumption, Energy Expenditures, and Carbon Dioxide Emissions Indicators

	Primary Energy Consumption ^a			Energy Expenditures ^b				Carbon Dioxide Emissions ^c		
	Consumption	Consumption per Capita	Consumption per Real Dollar ^d of GDP ^e	Expenditures	Expenditures per Capita	Expenditures as Share of GDP ^e	Expenditures as Share of Gross Output ^f	Emissions	Emissions per Capita	Emissions per Real Dollar ^d of GDP ^e
	Quadrillion Btu	Million Btu	Thousand Btu per Chained (2012) Dollar ^d	Million Nominal Dollars ^g	Nominal Dollars ^g	Percent	Percent	Million Metric Tons Carbon Dioxide	Metric Tons Carbon Dioxide	Metric Tons Carbon Dioxide per Million Chained (2012) Dollars ^d
1950	34.616	227	15.12	NA	NA	NA	NA	2,382	15.6	1,040
1955	40.208	242	14.00	NA	NA	NA	NA	2,685	16.2	935
1960	45.086	250	13.83	NA	NA	NA	NA	2,914	16.1	894
1965	54.015	278	12.95	NA	NA	NA	NA	3,462	17.8	830
1970	67.838	331	13.70	82,875	404	7.7	4.3	4,261	20.8	861
1975	71.965	333	12.75	171,851	796	10.2	5.6	4,421	20.5	783
1980	78.067	344	11.55	374,347	1,647	13.1	6.8	4,750	20.9	703
1981	76.106	332	10.98	427,898	1,865	13.3	7.1	4,625	20.2	667
1982	73.099	316	10.74	426,479	1,841	12.8	6.9	4,393	19.0	645
1983	72.971	312	10.25	417,617	1,786	11.5	6.3	4,371	18.7	614
1984	76.632	325	10.04	435,309	1,846	10.8	5.9	4,600	19.5	603
1985	76.392	321	9.61	438,339	1,842	10.1	5.6	4,593	19.3	578
1986	76.647	319	9.32	384,088	1,599	8.4	4.8	4,598	19.1	559
1987	79.054	326	9.29	397,623	1,641	8.2	4.6	4,757	19.6	559
1988	82.709	338	9.33	411,565	1,683	7.9	4.4	4,982	20.4	562
1989	84.785	344	9.22	439,046	1,779	7.8	4.4	5,066	20.5	551
1990	84.485	338	9.02	474,647	1,901	8.0	4.5	5,038	20.2	538
1991	84.437	334	9.03	472,434	1,867	7.7	4.4	4,993	19.7	534
1992	85.782	334	8.86	476,840	1,859	7.3	4.2	5,090	19.8	526
1993	87.325	336	8.78	492,267	1,894	7.2	4.1	5,181	19.9	521
1994	89.040	338	8.60	504,854	1,919	6.9	3.9	5,258	20.0	508
1995	90.991	342	8.56	514,622	1,933	6.7	3.8	5,321	20.0	501
1996	94.000	349	8.52	560,292	2,080	6.9	3.9	5,510	20.5	499
1997	94.571	347	8.21	567,960	2,083	6.6	3.7	5,582	20.5	484
1998	94.982	344	7.89	526,280	1,908	5.8	3.2	5,635	20.4	468
1999	96.615	346	7.66	558,624	2,002	5.8	3.2	5,687	20.4	451
2000	98.776	350	7.52	687,708	2,437	6.7	3.7	5,864	20.8	447
2001	96.129	337	7.25	696,240	2,443	6.6	3.7	5,759	20.2	434
2002	97.605	339	7.23	663,962	2,308	6.1	3.5	5,803	20.2	430
2003	97.898	337	7.05	755,068	2,603	6.6	3.7	5,854	20.2	422
2004	100.073	342	6.95	871,209	2,975	7.1	4.0	5,969	20.4	414
2005	100.168	339	6.72	1,045,729	3,539	8.0	4.4	5,990	20.3	402
2006	99.464	333	6.48	1,158,819	3,884	8.4	4.6	5,911	19.8	385
2007	100.971	335	6.46	1,233,864	4,096	8.5	4.7	6,002	19.9	384
2008	98.825	325	6.33	1,408,750	4,633	9.6	5.2	5,811	19.1	372
2009	94.023	306	6.18	1,066,275	3,476	7.4	4.3	5,388	17.6	354
2010	97.608	316	6.26	1,213,609	3,923	8.1	4.6	5,586	18.1	358
2011	96.950	311	6.12	1,391,358	4,465	9.0	5.0	5,446	17.5	344
2012	94.480	301	5.83	1,354,948	4,317	8.4	4.6	5,237	16.7	323
2013	97.218	308	5.89	1,376,201	4,354	8.2	4.5	5,363	17.0	325
2014	98.382	309	5.82	1,394,971	4,381	8.0	4.4	5,411	17.0	320
2015	97.484	304	5.61	1,127,726	3,516	6.2	3.5	5,265	16.4	303
2016	97.445	302	5.52	1,038,504	3,214	5.6	3.2	5,172	16.0	293
2017	97.809	301	5.42	NA	NA	NA	NA	5,131	15.8	284
2018	^R 101.239	309	5.45	NA	NA	NA	NA	5,268	16.1	284

^a See "Primary Energy Consumption" in Glossary.

^b Expenditures include taxes where data are available.

^c Carbon dioxide emissions from energy consumption. See Table 12.1.

^d See "Chained Dollars" and "Real Dollars" in Glossary.

^e See "Gross Domestic Product (GDP)" in Glossary.

^f Gross output is the value of GDP plus the value of intermediate inputs used to produce GDP. Through 1996, data have been adjusted by EIA based on DOC/BEA's 2012 comprehensive revision.

^g See "Nominal Dollars" in Glossary.

R=Revised. NA=Not available.

Notes: • Data are estimates. • Geographic coverage is the 50 states and the District of Columbia.

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

Sources: • **Consumption:** Table 1.3. • **Consumption per Capita:**

Calculated as energy consumption divided by U.S. population (see Table C1).

• **Consumption per Real Dollar of GDP:** Calculated as energy consumption divided by U.S. gross domestic product in chained (2009) dollars (see Table C1).

• **Expenditures:** U.S. Energy Information Administration, "State Energy Price and Expenditure Estimates, 1970 Through 2015" (June 2017), U.S. Table ET1.

• **Expenditures per Capita:** Calculated as energy expenditures divided by U.S. population (see Table C1).

• **Expenditures as Share of GDP:** Calculated as energy expenditures divided by U.S. gross domestic product in nominal dollars (see Table C1).

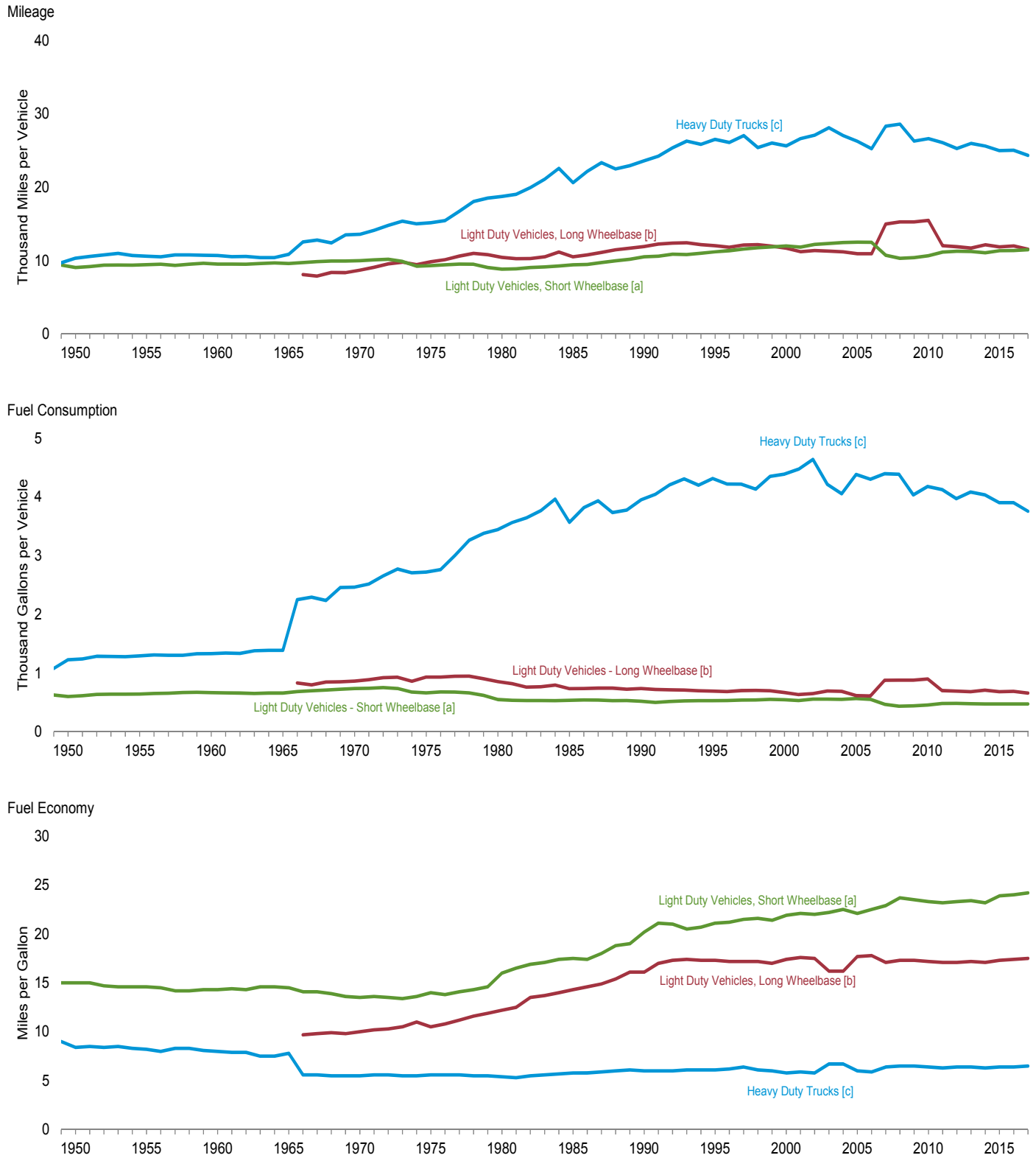
• **Expenditures as Share of Gross Output:** Calculated as energy expenditures divided by U.S. gross output (see Table C1).

• **Emissions:** 1949–1972—U.S. Energy Information Administration, *Annual Energy Review 2011*, Table 11.1. 1973 forward—Table 12.1.

• **Emissions per Capita:** Calculated as carbon dioxide emissions divided by U.S. population (see Table C1).

• **Emissions per Real Dollar of GDP:** Calculated as carbon dioxide emissions divided by U.S. gross domestic product in chained (2009) dollars (see Table C1).

Figure 1.8 Motor Vehicle Mileage, Fuel Consumption, and Fuel Economy, 1949-2016



[a] Through 1989, data are for passenger cars and motorcycles. For 1990–2006, data are for passenger cars only. Beginning in 2007, data are for light-duty vehicles (passenger cars, light trucks, vans, and sport utility vehicles) with a wheelbase less than or equal to 121 inches.

[b] For 1966–2000, data are for vans, pickup trucks, and sport utility vehicles. Beginning in 2007, data are for light-duty vehicles (passenger cars, light trucks, vans, and sport utility vehicles) with a wheelbase greater than 121 inches.

[c] For 1949–1965, data are for single-unit trucks with 2 axles and 6 or more

tires, combination trucks, and other vehicles with 2 axles and 4 tires that are not passenger cars. For 1966–2006 data are for single-unit truck with 2 axles and 6 or more tires, and combination trucks. Beginning in 2007, data are for single-unit trucks with 2 axles and 6 or more tires (or a gross vehicle weight rating exceeding 10,000 pounds), and combination trucks.

Note: Through 1965, “Light-Duty Vehicles, Long Wheelbase” data are included in “Heavy-Duty Trucks.”

Web Page: <http://www.eia.gov/totalenergy/data/monthly/#summary>.

Source: Table 1.8.

Table 1.8 Motor Vehicle Mileage, Fuel Consumption, and Fuel Economy

	Light-Duty Vehicles, Short Wheelbase ^a			Light-Duty Vehicles, Long Wheelbase ^b			Heavy-Duty Trucks ^c			All Motor Vehicles ^d		
	Mileage	Fuel Consumption	Fuel Economy	Mileage	Fuel Consumption	Fuel Economy	Mileage	Fuel Consumption	Fuel Economy	Mileage	Fuel Consumption	Fuel Economy
	Miles per Vehicle	Gallons per Vehicle	Miles per Gallon	Miles per Vehicle	Gallons per Vehicle	Miles per Gallon	Miles per Vehicle	Gallons per Vehicle	Miles per Gallon	Miles per Vehicle	Gallons per Vehicle	Miles per Gallon
1950	9,060	603	15.0	(^e)	(^e)	(^e)	10,316	1,229	8.4	9,321	725	12.8
1955	9,447	645	14.6	(^e)	(^e)	(^e)	10,576	1,293	8.2	9,661	761	12.7
1960	9,518	668	14.3	(^e)	(^e)	(^e)	10,693	1,333	8.0	9,732	784	12.4
1965	9,603	661	14.5	(^e)	(^e)	(^e)	10,851	1,387	7.8	9,826	787	12.5
1970	9,989	737	13.5	8,676	866	10.0	13,565	2,467	5.5	9,976	830	12.0
1975	9,309	665	14.0	9,829	934	10.5	15,167	2,722	5.6	9,627	790	12.2
1980	8,813	551	16.0	10,437	854	12.2	18,736	3,447	5.4	9,458	712	13.3
1981	8,873	538	16.5	10,244	819	12.5	19,016	3,565	5.3	9,477	697	13.6
1982	9,050	535	16.9	10,276	762	13.5	19,931	3,647	5.5	9,644	686	14.1
1983	9,118	534	17.1	10,497	767	13.7	21,083	3,769	5.6	9,760	686	14.2
1984	9,248	530	17.4	11,151	797	14.0	22,550	3,967	5.7	10,017	691	14.5
1985	9,419	538	17.5	10,506	735	14.3	20,597	3,570	5.8	10,020	685	14.6
1986	9,464	543	17.4	10,764	738	14.6	22,143	3,821	5.8	10,143	692	14.7
1987	9,720	539	18.0	11,114	744	14.9	23,349	3,937	5.9	10,453	694	15.1
1988	9,972	531	18.8	11,465	745	15.4	22,485	3,736	6.0	10,721	688	15.6
1989	10,157	533	19.0	11,676	724	16.1	22,926	3,776	6.1	10,932	688	15.9
1990	10,504	520	20.2	11,902	738	16.1	23,603	3,953	6.0	11,107	677	16.4
1991	10,571	501	21.1	12,245	721	17.0	24,229	4,047	6.0	11,294	669	16.9
1992	10,857	517	21.0	12,381	717	17.3	25,373	4,210	6.0	11,558	683	16.9
1993	10,804	527	20.5	12,430	714	17.4	26,262	4,309	6.1	11,595	693	16.7
1994	10,992	531	20.7	12,156	701	17.3	25,838	4,202	6.1	11,683	698	16.7
1995	11,203	530	21.1	12,018	694	17.3	26,514	4,315	6.1	11,793	700	16.8
1996	11,330	534	21.2	11,811	685	17.2	26,092	4,221	6.2	11,813	700	16.9
1997	11,581	539	21.5	12,115	703	17.2	27,032	4,218	6.4	12,107	711	17.0
1998	11,754	544	21.6	12,173	707	17.2	25,397	4,135	6.1	12,211	721	16.9
1999	11,848	553	21.4	11,957	701	17.0	26,014	4,352	6.0	12,206	732	16.7
2000	11,976	547	21.9	11,672	669	17.4	25,617	4,391	5.8	12,164	720	16.9
2001	11,831	534	22.1	11,204	636	17.6	26,602	4,477	5.9	11,887	695	17.1
2002	12,202	555	22.0	11,364	650	17.5	27,071	4,642	5.8	12,171	719	16.9
2003	12,325	556	22.2	11,287	697	16.2	28,093	4,215	6.7	12,208	718	17.0
2004	12,460	553	22.5	11,184	690	16.2	27,023	4,057	6.7	12,200	714	17.1
2005	12,510	567	22.1	10,920	617	17.7	26,235	4,385	6.0	12,082	706	17.1
2006	12,485	554	22.5	10,920	612	17.8	25,231	4,304	5.9	12,017	698	17.2
2007	^a 10,710	^a 468	^a 22.9	^b 14,970	^b 877	^b 17.1	^c 28,290	^c 4,398	6.4	11,915	693	17.2
2008	10,290	435	23.7	15,256	880	17.3	28,573	4,387	6.5	11,631	667	17.4
2009	10,391	442	23.5	15,252	882	17.3	26,274	4,037	6.5	11,631	661	17.6
2010	10,650	456	23.3	15,474	901	17.2	26,604	4,180	6.4	11,866	681	17.4
2011	11,150	481	23.2	12,007	702	17.1	26,054	4,128	6.3	11,652	665	17.5
2012	11,262	484	23.3	11,885	694	17.1	25,255	3,973	6.4	11,707	665	17.6
2013	11,244	480	23.4	11,712	683	17.2	25,951	4,086	6.4	11,679	663	17.6
2014	11,048	476	23.2	12,138	710	17.1	25,594	4,036	6.3	11,621	666	17.5
2015	11,327	475	23.9	11,855	684	17.3	24,979	3,904	6.4	11,742	656	17.9
2016	11,370	475	24.0	11,991	689	17.4	25,037	3,904	6.4	11,810	658	17.9
2017	11,467	474	24.2	11,543	659	17.5	24,335	3,758	6.5	11,789	653	18.1

^a Through 1989, data are for passenger cars and motorcycles. For 1990–2006, data are for passenger cars only. Beginning in 2007, data are for light-duty vehicles (passenger cars, light trucks, vans, and sport utility vehicles) with a wheelbase less than or equal to 121 inches.

^b For 1966–2006, data are for vans, pickup trucks, and sport utility vehicles. Beginning in 2007, data are for light-duty vehicles (passenger cars, light trucks, vans, and sport utility vehicles) with a wheelbase greater than 121 inches.

^c For 1949–1965, data are for single-unit trucks with 2 axles and 6 or more tires, combination trucks, and other vehicles with 2 axles and 4 tires that are not passenger cars. For 1966–2006, data are for single-unit trucks with 2 axles and 6 or more tires, and combination trucks. Beginning in 2007, data are for single-unit trucks with 2 axles and 6 or more tires (or a gross vehicle weight rating exceeding

10,000 pounds), and combination trucks.

^d Includes buses and motorcycles, which are not separately displayed.

^e Included in "Heavy-Duty Trucks."

Note: Geographic coverage is the 50 states and the District of Columbia.

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

Sources: • **Light-Duty Vehicles, Short Wheelbase: 1990–1994**—U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics 1998*, Table 4-13. • **All Other Data: 1949–1994**—Federal Highway Administration (FHWA), *Highway Statistics Summary to 1995*, Table VM-201A. **1995 forward**—FHWA, *Highway Statistics*, annual reports, Table VM-1.

Table 1.9 Heating Degree Days by Census Division

	New England ^a	Middle Atlantic ^b	East North Central ^c	West North Central ^d	South Atlantic ^e	East South Central ^f	West South Central ^g	Mountain ^h	Pacific ⁱ	United States
1950 Total	6,794	6,324	7,027	7,455	3,521	3,547	2,277	6,341	3,906	5,367
1955 Total	6,872	6,231	6,486	6,912	3,508	3,513	2,294	6,704	4,320	5,246
1960 Total	6,828	6,391	6,908	7,184	3,780	4,134	2,767	6,281	3,799	5,404
1965 Total	7,029	6,393	6,587	6,932	3,372	3,501	2,237	6,086	3,819	5,146
1970 Total	7,022	6,388	6,721	7,090	3,452	3,823	2,558	6,119	3,726	5,218
1975 Total	6,547	5,892	6,406	6,880	2,970	3,437	2,312	6,260	4,117	4,905
1980 Total	7,071	6,477	6,975	6,836	3,378	3,964	2,494	5,554	3,539	5,080
1985 Total	6,749	5,971	6,668	7,262	2,899	3,660	2,535	6,059	3,935	4,889
1990 Total	5,987	5,252	5,780	6,137	2,307	2,942	1,968	5,391	3,603	4,180
1995 Total	6,684	6,093	6,740	6,911	2,988	3,648	2,147	5,101	3,269	4,640
2000 Total	6,625	5,999	6,315	6,500	2,905	3,551	2,153	4,971	3,460	4,494
2001 Total	6,202	5,541	5,844	6,221	2,604	3,327	2,162	5,004	3,545	4,257
2002 Total	6,234	5,550	6,128	6,485	2,664	3,443	2,292	5,197	3,510	4,356
2003 Total	6,975	6,258	6,536	6,593	2,884	3,559	2,205	4,817	3,355	4,544
2004 Total	6,709	5,892	6,178	6,329	2,715	3,291	2,041	5,010	3,346	4,344
2005 Total	6,644	5,950	6,222	6,213	2,775	3,380	1,985	4,896	3,377	4,348
2006 Total	5,885	5,211	5,703	5,821	2,475	3,211	1,802	4,915	3,557	4,040
2007 Total	6,537	5,756	6,074	6,384	2,525	3,187	2,105	4,939	3,506	4,268
2008 Total	6,434	5,782	6,677	7,118	2,712	3,600	2,125	5,233	3,566	4,494
2009 Total	6,644	5,922	6,512	6,841	2,812	3,536	2,152	5,139	3,538	4,481
2010 Total	5,934	5,553	6,185	6,565	3,167	3,948	2,449	5,082	3,624	4,463
2011 Total	6,114	5,483	6,172	6,565	2,565	3,343	2,114	5,322	3,818	4,312
2012 Total	5,561	4,970	5,356	5,515	2,306	2,876	1,650	4,574	3,411	3,769
2013 Total	6,426	5,838	6,621	7,135	2,736	3,648	2,326	5,273	3,362	4,465
2014 Total	6,675	6,203	7,194	7,304	2,951	3,932	2,422	4,744	2,774	4,550
2015 Total	6,521	5,777	6,165	6,088	2,487	3,222	2,087	4,602	2,898	4,087
2016 Total	5,929	5,353	5,701	5,786	2,456	3,094	1,752	4,619	3,031	3,878
2017 January	1,038	971	1,082	1,212	476	579	417	962	666	766
February	906	780	776	818	323	409	208	627	496	547
March	1,037	908	834	783	346	387	147	467	392	543
April	451	341	349	401	76	94	52	404	309	248
May	303	233	249	224	47	57	14	235	171	154
June	45	25	27	37	2	3	0	59	50	25
July	9	3	6	10	0	0	0	6	14	5
August	26	18	34	50	1	1	0	27	8	15
September	57	53	64	78	14	24	3	120	45	45
October	237	215	291	363	89	146	59	358	178	193
November	743	699	773	805	322	407	180	489	351	490
December	1,186	1,087	1,197	1,218	535	729	501	815	507	798
Total	6,038	5,332	5,684	5,997	2,231	2,835	1,582	4,568	3,187	3,828
2018 January	R 1,255	R 1,213	R 1,309	1,374	R 700	930	R 659	R 771	R 459	R 896
February	R 867	R 810	981	1,177	307	411	R 346	R 748	496	R 624
March	R 926	913	922	869	R 436	R 473	R 186	602	R 486	609
April	R 674	R 617	703	715	R 206	312	R 141	380	299	R 410
May	R 166	R 108	99	89	12	13	0	163	R 176	R 85
June	R 62	29	24	23	1	0	0	R 57	65	R 26
July	2	1	R 4	11	0	0	0	9	8	3
August	3	2	8	20	0	0	0	25	14	7
September	R 64	34	48	90	2	R 2	3	90	62	38
October	R 456	355	420	494	99	R 137	R 68	R 384	R 187	253
November	R 817	R 765	913	R 1,003	R 380	565	372	677	R 354	593
December	R 1,027	928	R 1,004	R 1,103	R 488	635	R 468	R 896	R 563	731
Total	R 6,319	R 5,775	R 6,434	R 6,968	R 2,630	R 3,479	R 2,244	R 4,802	R 3,168	R 4,276
2019 January	R 1,222	R 1,153	R 1,303	R 1,359	R 582	R 749	R 546	R 894	R 544	859
February	1,029	939	1,064	1,284	377	462	356	868	657	720
2-Month Total	2,252	2,092	2,366	2,643	959	1,211	903	1,761	1,200	1,579
2018 2-Month Total	2,122	2,023	2,290	2,552	1,007	1,341	1,006	1,519	955	1,521
2017 2-Month Total	1,944	1,751	1,857	2,030	799	988	626	1,589	1,162	1,313

^a Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

^b New Jersey, New York, and Pennsylvania.

^c Illinois, Indiana, Michigan, Ohio, and Wisconsin.

^d Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota.

^e Delaware, Florida, Georgia, Maryland (and the District of Columbia), North Carolina, South Carolina, Virginia, and West Virginia.

^f Alabama, Kentucky, Mississippi, and Tennessee.

^g Arkansas, Louisiana, Oklahoma, and Texas.

^h Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming.

ⁱ Alaska, California, Hawaii, Oregon, and Washington.

R=Revised.

Notes: • Degree days are relative measurements of outdoor air temperature used as an index for heating and cooling energy requirements. Heating degree days are the number of degrees that the daily average temperature falls below 65 degrees Fahrenheit (°F). Cooling degree days are the number of degrees that the

daily average temperature rises above 65°F. The daily average temperature is the mean of the maximum and minimum temperatures in a 24-hour period. For example, a weather station recording an average daily temperature of 40°F would report 25 heating degree days for that day (and 0 cooling degree days). If a weather station recorded an average daily temperature of 78°F, cooling degree days for that station would be 13 (and 0 heating degree days). • 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/#summary> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Source: State-level degree day data are from U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Centers for Environmental Information. Using these state-level data, the U.S. Energy Information Administration calculates population-weighted census-division and U.S. degree day averages using state populations from the same year the degree days are measured. See methodology at http://www.eia.gov/forecasts/steo/special/pdf/2012_sp_04.pdf.

Table 1.10 Cooling Degree Days by Census Division

	New England ^a	Middle Atlantic ^b	East North Central ^c	West North Central ^d	South Atlantic ^e	East South Central ^f	West South Central ^g	Mountain ^h	Pacific ⁱ	United States
1950 Total	295	401	505	647	1,414	1,420	2,282	682	629	871
1955 Total	532	761	922	1,139	1,636	1,674	2,508	780	558	1,144
1960 Total	318	487	626	871	1,583	1,532	2,367	974	796	1,000
1965 Total	310	498	618	832	1,613	1,552	2,461	780	577	979
1970 Total	423	615	747	980	1,744	1,571	2,282	971	734	1,079
1975 Total	422	584	721	937	1,791	1,440	2,162	903	597	1,049
1980 Total	438	680	769	1,158	1,911	1,754	2,651	1,071	653	1,214
1985 Total	324	509	602	780	1,878	1,522	2,519	1,095	761	1,121
1990 Total	429	562	602	913	2,054	1,563	2,526	1,212	838	1,200
1995 Total	471	704	877	928	2,028	1,613	2,398	1,213	794	1,261
2000 Total	279	458	632	983	1,925	1,674	2,775	1,480	772	1,232
2001 Total	464	623	722	994	1,897	1,478	2,543	1,508	861	1,255
2002 Total	508	772	899	1,045	2,182	1,757	2,515	1,467	783	1,363
2003 Total	475	615	619	907	1,980	1,452	2,496	1,553	978	1,268
2004 Total	368	591	585	722	2,038	1,517	2,482	1,290	828	1,217
2005 Total	598	892	944	1,063	2,098	1,676	2,647	1,372	777	1,388
2006 Total	485	693	734	1,034	2,053	1,648	2,786	1,466	922	1,360
2007 Total	447	694	881	1,102	2,219	1,892	2,475	1,564	828	1,392
2008 Total	462	667	683	818	1,993	1,537	2,501	1,385	918	1,282
2009 Total	350	524	534	698	2,029	1,479	2,590	1,393	894	1,241
2010 Total	635	908	964	1,096	2,269	1,977	2,757	1,358	674	1,456
2011 Total	554	836	859	1,074	2,259	1,727	3,112	1,450	736	1,470
2012 Total	565	815	974	1,221	2,162	1,762	2,915	1,573	917	1,495
2013 Total	540	683	690	892	2,000	1,441	2,536	1,462	892	1,306
2014 Total	420	596	610	814	2,009	1,493	2,474	1,431	1,068	1,299
2015 Total	555	804	729	942	2,405	1,718	2,741	1,478	1,068	1,488
2016 Total	626	888	958	1,073	2,412	1,957	2,882	1,497	928	1,559
2017 January	0	0	0	0	50	20	36	0	7	17
February	0	0	0	3	55	18	67	5	7	22
March	0	0	1	6	56	28	111	32	17	32
April	0	2	7	9	124	74	141	51	25	56
May	3	14	37	51	213	135	240	109	46	106
June	72	123	167	206	337	272	445	308	150	241
July	170	251	242	331	469	430	582	414	283	363
August	128	162	148	166	406	341	508	329	281	292
September	66	87	92	127	282	194	368	178	139	184
October	11	22	16	14	159	66	145	92	68	78
November	0	0	0	0	66	6	67	29	21	27
December	0	0	0	0	38	1	6	1	10	10
Total	450	661	709	911	2,254	1,585	2,718	1,548	1,053	1,428
2018 January	0	0	0	0	21	1	4	5	15	8
February	0	0	0	0	R 82	R 21	33	3	8	23
March	0	0	0	2	34	15	88	14	9	21
April	0	0	0	0	R 80	7	R 58	R 72	25	R 33
May	R 25	R 65	140	168	264	268	R 399	R 138	39	R 175
June	R 56	111	192	272	384	R 375	R 552	300	117	270
July	R 253	R 287	R 257	R 304	440	431	R 609	417	321	376
August	R 265	298	R 257	R 257	R 437	393	566	345	R 256	351
September	R 64	122	122	124	R 390	339	392	240	143	R 232
October	0	4	4	6	R 176	78	R 145	46	R 46	70
November	0	0	0	0	66	1	13	5	R 16	18
December	0	0	0	0	R 40	R 3	10	0	9	11
Total	R 664	R 888	R 973	R 1,133	R 2,414	1,932	R 2,869	R 1,585	1,004	R 1,587
2019 January	0	0	0	0	30	5	12	0	8	9
February	0	0	0	0	67	13	25	0	5	18
2-Month Total	0	0	0	0	97	18	37	0	14	27
2018 2-Month Total	0	0	0	0	103	22	38	7	23	31
2017 2-Month Total	0	0	0	3	105	38	103	5	14	38

^a Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

^b New Jersey, New York, and Pennsylvania.

^c Illinois, Indiana, Michigan, Ohio, and Wisconsin.

^d Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota.

^e Delaware, Florida, Georgia, Maryland (and the District of Columbia), North Carolina, South Carolina, Virginia, and West Virginia.

^f Alabama, Kentucky, Mississippi, and Tennessee.

^g Arkansas, Louisiana, Oklahoma, and Texas.

^h Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming.

ⁱ Alaska, California, Hawaii, Oregon, and Washington.

R=Revised.

Notes: • Degree days are relative measurements of outdoor air temperature used as an index for heating and cooling energy requirements. Cooling degree days are the number of degrees that the daily average temperature rises above 65 degrees Fahrenheit (°F). Heating degree days are the number of degrees that the

daily average temperature falls below 65°F. The daily average temperature is the mean of the maximum and minimum temperatures in a 24-hour period. For example, if a weather station recorded an average daily temperature of 78°F, cooling degree days for that station would be 13 (and 0 heating degree days). A weather station recording an average daily temperature of 40°F would report 25 heating degree days for that day (and 0 cooling degree days).

• 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/#summary> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Source: State-level degree day data are from U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Centers for Environmental Information. Using these state-level data, the U.S. Energy Information Administration calculates population-weighted census-division and U.S. degree day averages using state populations from the same year the degree days are measured. See methodology at http://www.eia.gov/forecasts/steo/special/pdf/2012_sp_04.pdf.

Table 1.11a Non-Combustion Use of Fossil Fuels in Physical Units

	Coal	Natural Gas	Petroleum							Total
			Asphalt and Road Oil	Hydrocarbon Gas Liquids ^a	Lubricants	Petro-chemical Feedstocks ^b	Petroleum Coke	Special Naphthas	Other ^c	
			Thousand Barrels per Day							
Thousand Short Tons	Billion Cubic Feet									
1973 Total	3,345	792	522	736	162	375	42	88	134	2,059
1975 Total	2,972	674	419	702	137	330	41	75	159	1,863
1980 Total	2,370	674	396	871	159	709	39	100	176	2,451
1985 Total	1,050	572	425	980	145	364	43	83	114	2,154
1990 Total	641	712	483	1,067	164	553	56	56	94	2,473
1995 Total	921	868	486	1,347	156	593	55	37	87	2,762
1996 Total	884	896	484	1,420	151	593	54	39	87	2,828
1997 Total	842	909	505	1,452	160	691	40	38	86	2,972
1998 Total	786	938	521	1,375	168	693	69	56	107	2,988
1999 Total	784	906	547	1,605	169	654	98	76	99	3,248
2000 Total	807	918	525	1,586	166	666	45	51	103	3,142
2001 Total	727	839	519	1,422	153	592	79	41	104	2,911
2002 Total	660	836	512	1,504	151	630	66	53	103	3,020
2003 Total	676	808	503	1,436	140	676	56	42	101	2,954
2004 Total	660	818	537	1,481	141	784	99	27	98	3,167
2005 Total	654	761	546	1,399	141	729	85	33	102	3,034
2006 Total	640	584	521	1,454	137	726	97	37	112	3,084
2007 Total	634	598	494	1,461	142	664	91	41	104	2,997
2008 Total	616	608	417	1,340	131	574	102	44	107	2,714
2009 Total	427	524	360	1,456	118	507	82	24	99	2,648
2010 Total	588	654	362	1,587	131	539	28	14	100	2,760
2011 Total	598	680	355	1,624	125	520	28	12	103	2,767
2012 Total	579	706	340	1,642	114	444	31	8	94	2,673
2013 Total	599	721	323	1,782	121	448	28	52	97	2,853
2014 Total	594	725	327	1,780	126	410	28	55	101	2,829
2015 Total	550	703	343	1,865	138	378	28	52	102	2,906
2016 Total	460	729	351	1,882	130	371	28	49	105	2,917
2017 January	40	70	183	2,124	136	372	35	55	108	3,013
February	38	62	242	1,921	128	409	17	55	106	2,878
March	40	66	260	2,014	143	435	13	53	110	3,028
April	40	60	316	1,895	128	429	26	41	104	2,939
May	41	59	367	1,906	131	439	28	48	111	3,030
June	39	57	475	1,982	120	439	21	56	111	3,204
July	42	57	443	2,018	116	403	38	49	109	3,177
August	43	59	543	1,724	92	383	24	55	107	2,928
September	41	57	444	1,718	114	356	29	45	97	2,804
October	41	62	411	1,989	123	373	13	58	100	3,067
November	41	66	308	2,163	122	373	33	59	117	3,175
December	43	72	209	2,309	94	381	32	55	107	3,188
Total	489	748	351	1,981	121	399	26	52	107	3,037
2018 January	41	73	204	2,479	105	345	29	58	105	3,326
February	36	66	219	2,296	105	350	15	53	103	3,141
March	41	69	233	2,312	134	370	24	55	103	3,230
April	43	65	242	2,188	99	384	25	58	110	3,107
May	45	62	370	2,043	111	370	28	56	110	3,087
June	41	59	475	2,117	133	384	29	46	109	3,294
July	44	61	471	2,222	127	399	27	49	110	3,406
August	44	61	508	2,269	120	429	38	39	110	3,513
September	44	60	388	2,199	73	409	35	45	109	3,259
October	43	63	396	2,244	110	429	38	48	97	3,362
November	43	68	255	2,495	136	378	23	37	111	3,435
December	45	71	179	2,513	92	391	21	41	111	3,350
Total	511	780	329	2,282	112	387	28	49	107	3,294
2019 January	38	R 75	206	2,641	113	368	23	39	107	3,497
February	33	67	193	2,682	97	355	8	51	97	3,483
2-Month Total	71	142	200	2,661	105	362	16	45	102	3,490
2018 2-Month Total	77	139	211	2,392	105	347	22	55	104	3,238
2017 2-Month Total	78	132	211	2,027	132	390	26	55	107	2,949

^a Ethane, propane, normal butane, isobutane, natural gasoline, and refinery olefins (ethylene, propylene, butylene, and isobutylene).

^b Includes still gas not burned as refinery fuel.

^c Distillate fuel oil, residual fuel oil, waxes, and miscellaneous products.

R=Revised.

Notes: • Data are estimates. • Non-combustion use estimates are included in total energy consumption. See Table 1.3. • Non-combustion estimates are all for industrial sector consumption, except for some lubricants consumed by the

transportation sector. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia. • See Note 2, "Non-Combustion Use of Fossil Fuels," at end of section.

Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#summary> for all available annual and monthly data beginning in 1973.

Sources: • See Note 2, "Non-Combustion Use of Fossil Fuels," at end of section.

Table 1.11b Heat Content of Non-Combustion Use of Fossil Fuels
(Quadrillion Btu)

	Coal	Natural Gas	Petroleum							Total	Percent of Total Energy Consumption	
			Asphalt and Road Oil	Hydro-carbon Gas Liquids ^a	Lubri-cants	Petro-chemical Feed-stocks ^b	Petro-leum Coke	Special Naphthas	Other ^c			
1973 Total	0.107	0.808	1.264	0.977	0.359	0.767	0.088	0.169	0.290	3.914	4.829	6.4
1975 Total .....	.095	.688	1.014	.921	.304	.675	.085	.144	.341	3.485	4.268	5.9
1980 Total .....	.076	.690	.962	1.147	.354	1.464	.081	.193	.379	4.580	5.345	6.8
1985 Total .....	.034	.590	1.029	1.251	.322	.747	.090	.159	.242	3.841	4.465	5.8
1990 Total .....	.021	.732	1.170	1.393	.362	1.138	.117	.107	.198	4.486	5.239	6.2
1995 Total .....	.029	.892	1.178	1.764	.346	1.222	.115	.071	.185	4.879	5.800	6.4
1996 Total .....	.028	.921	1.176	1.856	.335	1.211	.113	.075	.185	4.951	5.900	6.3
1997 Total .....	.027	.933	1.224	1.894	.354	1.410	.083	.072	.183	5.220	6.181	6.5
1998 Total .....	.025	.969	1.263	1.789	.371	1.409	.143	.107	.229	5.310	6.304	6.6
1999 Total .....	.025	.932	1.324	2.098	.375	1.336	.205	.145	.211	5.695	6.652	6.9
2000 Total .....	.026	.942	1.276	2.065	.369	1.353	.094	.097	.222	5.476	6.443	6.5
2001 Total .....	.023	.863	1.257	1.844	.338	1.205	.165	.078	.223	5.112	5.998	6.2
2002 Total .....	.021	.856	1.240	1.945	.334	1.276	.138	.102	.220	5.257	6.134	6.3
2003 Total .....	.022	.832	1.220	1.869	.309	1.371	.117	.080	.217	5.183	6.037	6.2
2004 Total .....	.021	.840	1.304	1.924	.313	1.592	.207	.051	.211	5.602	6.463	6.5
2005 Total .....	.021	.782	1.323	1.812	.312	1.474	.177	.063	.218	5.380	6.183	6.2
2006 Total .....	.020	.600	1.261	1.871	.303	1.477	.203	.070	.242	5.427	6.048	6.1
2007 Total .....	.020	.614	1.197	1.872	.313	1.351	.191	.078	.223	5.224	5.859	5.8
2008 Total .....	.020	.625	1.012	1.722	.291	1.172	.214	.085	.230	4.725	5.370	5.4
2009 Total .....	.014	.537	.873	1.839	.262	1.031	.172	.046	.212	4.434	4.985	5.3
2010 Total .....	.019	.669	.878	2.010	.291	1.096	.058	.026	.213	4.571	5.258	5.4
2011 Total .....	.019	.695	.859	2.028	.276	1.057	.059	.023	.221	4.522	5.236	5.4
2012 Total .....	.019	.724	.827	2.062	.254	.901	.064	.015	.201	4.324	5.066	5.4
2013 Total .....	.019	.741	.783	2.248	.268	.901	.059	.100	.206	4.567	5.327	5.5
2014 Total .....	.019	.749	.793	2.234	.280	.827	.058	.106	.214	4.512	5.280	5.4
2015 Total .....	.018	.730	.832	2.351	.305	.760	.059	.099	.215	4.622	5.370	5.5
2016 Total .....	.015	.757	.853	2.358	.289	.754	.058	.094	.223	4.629	5.401	5.5
2017 January .....	.001	.073	.038	.227	.026	.064	.006	.009	.020	.388	.462	5.1
February .....	.001	.064	.045	.182	.022	.063	.003	.008	.017	.339	.405	5.3
March .....	.001	.069	.053	.214	.027	.075	.002	.009	.020	.400	.470	5.6
April .....	.001	.062	.063	.194	.023	.072	.004	.006	.018	.381	.444	6.0
May .....	.001	.061	.075	.200	.025	.076	.005	.008	.020	.409	.471	6.0
June .....	.001	.059	.095	.200	.022	.073	.004	.009	.019	.422	.482	6.1
July .....	.001	.059	.091	.214	.022	.070	.007	.008	.020	.430	.491	5.8
August .....	.001	.061	.112	.180	.017	.066	.004	.009	.019	.408	.471	5.7
September .....	.001	.060	.088	.176	.021	.060	.005	.007	.017	.374	.435	5.7
October .....	.001	.064	.085	.211	.023	.064	.002	.009	.018	.412	.478	6.1
November .....	.001	.069	.061	.219	.022	.062	.006	.009	.020	.400	.470	5.8
December .....	.001	.075	.043	.243	.018	.065	.006	.009	.019	.403	.479	5.2
Total .....	.016	.776	.849	2.459	.267	.809	.054	.100	.228	4.767	5.558	5.7
2018 January .....	.001	.076	.042	.264	.020	.059	.005	.009	.019	.418	.496	5.1
February .....	.001	.068	.041	.221	.018	.054	.002	.008	.017	.361	.430	5.3
March .....	.001	.072	.048	.241	.025	.064	.004	.009	.018	.409	.483	5.6
April .....	.001	.068	.048	.221	.018	.064	.004	.009	.019	.384	.453	5.7
May .....	.001	.065	.076	.212	.021	.064	.005	.009	.020	.407	.473	5.9
June .....	.001	.062	.095	.213	.024	.064	.005	.007	.019	.427	.490	6.0
July .....	.001	.063	.097	.232	.024	.069	.005	.008	.020	.454	.518	6.0
August .....	.001	.063	.104	.238	.022	.074	.007	.006	.020	.472	.536	6.2
September .....	.001	.062	.077	.222	.013	.068	.006	.007	.019	.413	.477	6.1
October .....	.001	.065	.081	.237	.021	.073	.007	.008	.017	.445	.512	6.3
November .....	.001	.071	.051	.255	.025	.063	.004	.006	.019	.423	.495	5.8
December .....	.001	.074	.037	.267	.017	.067	.004	.007	.020	.419	.495	5.5
Total .....	.016	.809	.797	2.824	.248	.783	.058	.093	.228	5.031	5.857	5.8
2019 January .....	.001	R .078	.042	.281	.021	.064	.004	.006	.019	.438	R .517	5.4
February .....	.001	.070	.036	.255	.016	.055	.001	.008	.016	.387	.458	5.5
2-Month Total .....	.002	.147	.078	.536	.038	.119	.005	.014	.035	.825	.974	5.5
2018 2-Month Total .....	.002	.144	.083	.485	.038	.113	.008	.017	.036	.779	.926	5.2
2017 2-Month Total .....	.002	.137	.083	.408	.047	.127	.009	.017	.037	.728	.867	5.2

^a Ethane, propane, normal butane, isobutane, natural gasoline, and refinery olefins (ethylene, propylene, butylene, and isobutylene).

^b Includes still gas not burned as refinery fuel.

^c Distillate fuel oil, residual fuel oil, waxes, and miscellaneous products.

R=Revised.

Notes: • Data are estimates. • Non-combustion use estimates are included in total energy consumption. See Table 1.3. • Non-combustion estimates are all for industrial sector consumption, except for some lubricants consumed by the transportation sector. • Totals may not equal sum of components due to

independent rounding. • Geographic coverage is the 50 states and the District of Columbia. • See Note 2, "Non-Combustion Use of Fossil Fuels," at end of section.

Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#summary> for all available annual and monthly data beginning in 1973.

Sources: • See Note 2, "Non-Combustion Use of Fossil Fuels," at end of section. • **Percent of Total Energy Consumption:** Calculated as total non-combustion use of fossil fuels divided by total primary energy consumption (see Table 1.3).

Note 1. Merchandise Trade Value. Imports data presented are based on the customs values. Those values do not include insurance and freight and are consequently lower than the cost, insurance, and freight (CIF) values, which are also reported by the Bureau of the Census. All exports data, and imports data through 1980, are on a free alongside ship (f.a.s.) basis.

“Balance” is exports minus imports; a positive balance indicates a surplus trade value and a negative balance indicates a deficit trade value. “Energy” includes mineral fuels, lubricants, and related material. “Non-Energy Balance” and “Total Merchandise” include foreign exports (i.e., re-exports) and nonmonetary gold and U.S. Department of Defense Grant-Aid shipments. The “Non-Energy Balance” is calculated by subtracting the “Energy” from the “Total Merchandise Balance.”

“Imports” consist of government and nongovernment shipments of merchandise into the 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and the U.S. Foreign Trade Zones. They reflect the total arrival from foreign countries of merchandise that immediately entered consumption channels, warehouses, the Foreign Trade Zones, or the Strategic Petroleum Reserve. They exclude shipments between the United States, Puerto Rico, and U.S. possessions, shipments to U.S. Armed Forces and diplomatic missions abroad for their own use, U.S. goods returned to the United States by its Armed Forces, and in-transit shipments.

Note 2. Non-Combustion Use of Fossil Fuels. Most fossil fuels consumed in the United States and elsewhere are combusted to produce heat and power. However, some are used directly for non-combustion use as construction materials, chemical feedstocks, lubricants, solvents, and waxes. For example, coal tars from coal coke manufacturing are used as feedstock in the chemical industry, for metallurgical work, and in anti-dandruff shampoos; natural gas is used to make nitrogenous fertilizers and as chemical feedstocks; asphalt and road oil are used for roofing and paving; hydrocarbon gas liquids are used to create intermediate products that are used in making plastics; lubricants, including motor oil and greases, are used in vehicles and various industrial processes; petrochemical feedstocks are used to make plastics, synthetic fabrics, and related products.

Coal

The U.S. Energy Information Administration (EIA) assumes all non-combustion use of coal comes from the process of manufacturing coal coke. Among the byproducts of the process are "coal tars" or "coal liquids," which typically are rich in aromatic hydrocarbons, such as benzene, and are used as chemical feedstock. EIA's Office of Energy Analysis (OEA) estimates non-combustion use ratios of coal tar. Prior to 1995, estimate ratios are based on coal tar production data from the United States International Trade Commission's Synthetic Organic Chemicals. From 1995 forward, coal tar production is estimated using the ratio of EIA's estimate of 1994 coke production, reported in EIA's Quarterly Coal Report. Coal tar ratios prior to 1980 are assumed to be equal to the 1980 ratio. For Table 1.11b, coal tar values in Table 1.11a are multiplied by 32.0067 million Btu/short ton, which is the product of 4.95 barrels/short ton (the density of coal tar) and 6.466 million Btu/barrel (the approximate heat content of coal tar).

Natural Gas

EIA assumes that all non-combustion use of natural gas takes place in the industrial sector. OEA estimates non-combustion ratios of natural gas using Form EIA-864A "Manufacturers Energy Consumption Survey" (MECS) and natural gas used as feedstock for hydrogen production using Form EIA-820 "Annual Refinery Report" data. For years when MECS data are unavailable, estimates are interpolated or extrapolated using chemical indices as scaling factors. Non-combustion ratios prior to 1980 are assumed to be equal to the 1980 ratio. For Table 1.11b, natural gas values in Table 1.11a are multiplied by the heat content factor for natural gas total consumption shown in Table A4.

Asphalt & Road Oil

EIA assumes all asphalt and road oil consumption is for non-combustion use. For Table 1.11b, asphalt and road oil values in Table 1.11a are multiplied by 6.636 million Btu/ barrel (the approximate heat content of asphalt and road oil) and the number of days in the period.

Distillate & Residual Fuels

OEA estimates non-combustion ratios of distillate and residual fuels using chemical industry fuel product data reported in MECS. Values for years after the most recent MECS are assumed to be equal to the most recent MECS values. Non-combustion ratios prior to 1980 are assumed to be equal to the 1980 ratio. Distillate and residual fuel oils are included in "other" petroleum products. For Table 1.11b, distillate fuel values in Table 1.11a are multiplied by the appropriate values in Table A3 and the number of days in the period. Residual fuel values in Table 1.11a are multiplied by 6.287 million Btu/barrel (the approximate heat content of residual fuel oil) and the number of days in the period.

Hydrocarbon Gas Liquids (HGL)

OEA estimates non-combustion ratios of liquefied petroleum gas (LPG) components, including ethane, propane, and butane, using chemical industry fuel product data reported in MECS. Values for years after the most recent MECS are assumed to be equal to the most recent MECS values. OEA estimates non-combustion ratios of natural gasoline (pentanes plus) with annual surveys of natural gas liquids and refinery gases sold to the chemical industry published in EIA's Petroleum Supply Annual (PSA). All non-combustion ratios prior to 1980 are assumed to be equal to the 1980 ratio. For Table 1.11b, HGL values in Table 1.11a are multiplied by the appropriate heat content factors in Table A1 and the number of days in the period.

Lubricants

EIA assumes all lubricants consumption are for non-combustion use in the industrial and transportation sectors. For Table 1.11b, lubricants values in Table 1.11a are multiplied by 6.065 million Btu/barrel (the approximate heat rate for lubricants) and the number of days in the period.

Petrochemical Feedstocks

EIA assumes all naphthas and other oils for petrochemical feedstock use are for non-combustion use. OEA estimates non-combustion ratios of still gas by deducting all known fuel uses (refinery fuel use from PSA and pipeline gas supplies from EIA's Natural Gas Annual) from the products supplied value from the PSA. The remainder is assumed to be dispatched to chemical plants as a feedstock. Non-combustion ratios prior to 1980 are assumed to be equal to the 1980 ratio. For Table 1.11b, petrochemical feedstock values in 1.11a are multiplied by the appropriate values in Table A1 and the number of days in the period.

Petroleum Coke

EIA assumes all non-combustion use of petroleum coke occurs in the industrial sector. Examples include petroleum coke used in the production of chemicals and metals. EIA estimates non-combustion ratios of petroleum coke using PSA and MECS data. Values for years after the most recent MECS are assumed to be equal to the most recent MECS values. Non-combustion ratios prior to 1980 are assumed to be equal to the 1980 ratio. For Table 1.11b, petroleum coke values in 1.11a are multiplied by 5.719 million Btu/barrel (the approximate heat content of marketable petroleum coke) and the number of days in the period.

Special Naphthas

EIA assumes all special naphthas consumption is for non-combustion use. For Table 1.11b, special naphthas values in Table 1.11a are multiplied by 5.248 million Btu/barrel (the approximate heat content of special naphthas) and the number of days in the period.

Waxes

EIA assumes all waxes consumption is for non-combustion use. Waxes are included in "other" petroleum products. For Table 1.11b, waxes values in Table 1.11a are multiplied by 5.537 million Btu/barrel (the approximate heat content of waxes) and the number of days in the period.

Miscellaneous Petroleum Products

Miscellaneous products include all finished petroleum products not classified elsewhere. EIA assumes all miscellaneous petroleum products consumption are for non-combustion use and are included in "other" petroleum products. For Table

1.11b, miscellaneous petroleum values in Table 1.11a are multiplied by 5.796 million Btu/barrel (the approximate heat content of miscellaneous petroleum products) and the number of days in the period.

Table 1.2 Sources

Coal

1949–1988: Coal production data from Table 6.1 are converted to Btu by multiplying by the coal production heat content factors in Table A5.

1989 forward: Coal production data from Table 6.1 are converted to Btu by multiplying by the coal production heat content factors in Table A5. Waste coal supplied data from Table 6.1 are converted to Btu by multiplying by the waste coal supplied heat content factors in Table A5. Coal production (including waste coal supplied) is equal to coal production plus waste coal supplied.

Natural Gas (Dry)

1949 forward: Natural gas (dry) production data from Table 4.1 are converted to Btu by multiplying by the natural gas (dry) production heat content factors in Table A4.

Crude Oil

1949 forward: Crude oil (including lease condensate) production data from Table 3.1 are converted to Btu by multiplying by the crude oil (including lease condensate) production heat content factors in Table A2.

NGPL

1949 forward: Natural gas plant liquids (NGPL) production data from Table 3.1 are converted to Btu by multiplying by the NGPL production heat content factors in Table A2.

Fossil Fuels Total

1949 forward: Total fossil fuels production is the sum of the production values for coal, natural gas (dry), crude oil, and NGPL.

Nuclear Electric Power

1949 forward: Nuclear electricity net generation data from Table 7.2a are converted to Btu by multiplying by the nuclear heat rate factors in Table A6.

Renewable Energy

1949 forward: Table 10.1.

Total Primary Energy Production

1949 forward: Total primary energy production is the sum of the production values for fossil fuels, nuclear electric power, and renewable energy.

Table 1.3 Sources

Coal

1949 forward: Coal consumption data from Table 6.1 are converted to Btu by multiplying by the total coal consumption heat content factors in Table A5.

Natural Gas

1949–1979: Natural gas (including supplemental gaseous fuels) consumption data from Table 4.1 are converted to Btu by multiplying by the total natural gas consumption heat content factors in Table A4.

1980 forward: Natural gas (including supplemental gaseous fuels) consumption data from Table 4.1 are converted to Btu by multiplying by the total natural gas consumption heat content factors in Table A4. Supplemental gaseous fuels data in Btu are estimated using the method described in Note 3, “Supplemental Gaseous Fuels,” at the end of Section 4. Natural

gas (excluding supplemental gaseous fuels) consumption is equal to natural gas (including supplemental gaseous fuels) consumption minus supplemental gaseous fuels.

Petroleum

1949–1992: Petroleum (excluding biofuels) consumption is equal to total petroleum products supplied from Table 3.6.

1993–2008: Petroleum (excluding biofuels) consumption is equal to total petroleum products supplied from Table 3.6 minus fuel ethanol consumption from Table 10.3.

2009–2011: Petroleum (excluding biofuels) consumption is equal to: total petroleum products supplied from Table 3.6; minus fuel ethanol (minus denaturant) consumption from Table 10.3; minus biodiesel consumption (calculated using biodiesel data from U.S. Energy Information Administration (EIA), EIA-22M, "Monthly Biodiesel Production Survey"; and biomass-based diesel fuel data from EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," and EIA-815, "Monthly Bulk Terminal and Blender Report" (the data are converted to Btu by multiplying by the biodiesel heat content factor in Table A1); minus other renewable diesel fuel and other renewables fuels consumption from Table 10.4.

2012 forward: Petroleum (excluding biofuels) consumption is equal to: total petroleum products supplied from Table 3.6; minus fuel ethanol (minus denaturant) consumption from Table 10.3; minus biodiesel consumption from Table 10.4; minus other renewable diesel fuel and other renewables fuels consumption from Table 10.4.

Coal Coke Net Imports

1949 forward: Coal coke net imports are equal to coal coke imports from Table 1.4a minus coal coke exports from Table 1.4b.

Fossil Fuels Total

1949 forward: Total fossil fuels consumption is the sum of the consumption values for coal, natural gas, and petroleum, plus coal coke net imports.

Nuclear Electric Power

1949 forward: Nuclear electricity net generation data from Table 7.2a are converted to Btu by multiplying by the nuclear heat rate factors in Table A6.

Renewable Energy

1949 forward: Table 10.1.

Electricity Net Imports

1949 forward: Electricity net imports are equal to electricity imports from Table 1.4a minus electricity exports from Table 1.4b.

Total Primary Energy Consumption

1949 forward: Total primary energy consumption is the sum of the consumption values for fossil fuels, nuclear electric power, and renewable energy, plus electricity net imports.

Table 1.4a Sources

Coal

1949 forward: Coal imports data from Table 6.1 are converted to Btu by multiplying by the coal imports heat content factors in Table A5.

Coal Coke

1949 forward: Coal coke imports data from U.S. Department of Commerce, Bureau of the Census, Monthly Report IM 145, are converted to Btu by multiplying by the coal coke imports heat content factor in Table A5.

Natural Gas

1949 forward: Natural gas imports data from Table 4.1 are converted to Btu by multiplying by the natural gas imports heat content factors in Table A4.

Crude Oil

1949 forward: Crude oil imports data from Table 3.3b are converted to Btu by multiplying by the crude oil imports heat content factors in Table A2.

Petroleum Products

1949–1992: Petroleum products (excluding biofuels) imports are equal to total petroleum imports from Table 3.3b minus crude oil imports from Table 3.3b; petroleum products (excluding biofuels) imports data are converted to Btu by multiplying by the total petroleum products imports heat content factors in Table A2.

1993–2008: Petroleum products (excluding biofuels) imports are equal to petroleum products (including biofuels) imports (see 1949–1992 sources above) minus fuel ethanol (minus denaturant) imports (see “Biomass—Fuel Ethanol (Minus Denaturant)” sources below).

2009 forward: Renewable fuels (excluding fuel ethanol) imports data are from U.S. Energy Information Administration, Petroleum Supply Annual (PSA), Tables 1 and 25, and Petroleum Supply Monthly (PSM), Tables 1 and 37 (for biomass-based diesel fuel and other renewable fuels, the data are converted to Btu by multiplying by the biodiesel heat content factor in Table A1; for other renewable diesel fuel, the data are converted to Btu by multiplying by the other renewable diesel fuel heat content factor in Table A1). Petroleum products (excluding biofuels) imports are equal to petroleum products (including biofuels) imports (see 1949–1992 sources above) minus fuel ethanol (minus denaturant) imports (see “Biomass—Fuel Ethanol (Minus Denaturant)” sources below) minus renewable fuels (excluding fuel ethanol) imports.

Total Petroleum

1949 forward: Total petroleum imports are equal to crude oil imports plus petroleum products imports.

Biomass—Fuel Ethanol (Minus Denaturant)

1993 forward: Fuel ethanol (including denaturant) imports data are from PSA/PSM Table 1. Fuel ethanol (minus denaturant) production is equal to fuel ethanol (including denaturant) production from Table 10.3 minus denaturant from Table 10.3. Fuel ethanol (minus denaturant) imports are equal to fuel ethanol (including denaturant) imports multiplied by the ratio of fuel ethanol (minus denaturant) production to fuel ethanol (including denaturant) production. Fuel ethanol (minus denaturant) imports data are converted to Btu by multiplying by 3.539 million Btu per barrel, the undenatured ethanol heat content factor in Table A3.

Biomass—Biodiesel

2001 forward: Biodiesel imports data are from Table 10.4, and are converted to Btu by multiplying by the biodiesel heat content factor in Table A1.

Biomass—Other Renewable Fuels

2009 forward: Other renewable fuels imports data are from PSA Table 25 and PSM Table 37. For other renewable diesel fuel, the data are converted to Btu by multiplying by the other renewable diesel fuel heat content factor in Table A1; for other renewable fuels, the data are converted to Btu by multiplying by the biodiesel heat content factor in Table A1.

Total Biomass

1993–2000: Total biomass imports are equal to fuel ethanol (minus denaturant) imports.

2001–2008: Total biomass imports are equal to fuel ethanol (minus denaturant) imports plus biodiesel imports.

2009 forward: Total biomass imports are the sum of imports values for fuel ethanol (minus denaturant), biodiesel, and other renewable fuels.

Electricity

1949 forward: Electricity imports data from Table 7.1 are converted to Btu by multiplying by the electricity heat content factor in Table A6.

Total Primary Energy Imports

1949 forward: Total primary energy imports are the sum of the imports values for coal, coal coke, natural gas, total petroleum, total biomass, and electricity.

Table 1.4b Sources

Coal

1949 forward: Coal exports data from Table 6.1 are converted to Btu by multiplying by the coal exports heat content factors in Table A5.

Coal Coke

1949 forward: Coal coke exports data from U.S. Department of Commerce, Bureau of the Census, Monthly Report EM 545, are converted to Btu by multiplying by the coal coke exports heat content factor in Table A5.

Natural Gas

1949 forward: Natural gas exports data from Table 4.1 are converted to Btu by multiplying by the natural gas exports heat content factors in Table A4.

Crude Oil

1949 forward: Crude oil exports data from Table 3.3b are converted to Btu by multiplying by the crude oil exports heat content factor in Table A2.

Petroleum Products

1949–2009: Petroleum products (excluding biofuels) exports are equal to total petroleum exports from Table 3.3b minus crude oil exports from Table 3.3b; petroleum products (excluding biofuels) exports data are converted to Btu by multiplying by the total petroleum products exports heat content factors in Table A2.

2010: Petroleum products (including biofuels) exports are equal to total petroleum exports from Table 3.3b minus crude oil exports from Table 3.3b; petroleum products (including biofuels) exports data are converted to Btu by multiplying by the total petroleum products exports heat content factors in Table A2. Petroleum products (excluding biofuels) exports are equal to petroleum products (including biofuels) exports minus fuel ethanol (minus denaturant) exports (see “Biomass—Fuel Ethanol (Minus Denaturant)” sources below).

2011 forward: Biomass-based diesel fuel exports data are from U.S. Energy Information Administration (EIA), Petroleum Supply Annual (PSA), Table 31, and Petroleum Supply Monthly (PSM), Table 49, and are converted to Btu by multiplying by the biodiesel heat content factor in Table A1. Petroleum products (excluding biofuels) exports are equal to petroleum products (including biofuels) exports (see 2010 sources above) minus fuel ethanol (minus denaturant) exports (see “Biomass—Fuel Ethanol (Minus Denaturant)” sources below) minus biomass-based diesel fuel exports.

Total Petroleum

1949 forward: Total petroleum exports are equal to crude oil exports plus petroleum products exports.

Biomass—Fuel Ethanol (Minus Denaturant)

2010 forward: Fuel ethanol (including denaturant) exports data are from PSA/PSM Table 1. Fuel ethanol (minus denaturant) production is equal to fuel ethanol (including denaturant) production from Table 10.3 minus denaturant from Table 10.3. Fuel ethanol (minus denaturant) exports are equal to fuel ethanol (including denaturant) exports multiplied by the ratio of fuel ethanol (minus denaturant) production to fuel ethanol (including denaturant) production. Fuel ethanol (minus denaturant) exports are converted to Btu by multiplying by 3.539 million Btu per barrel, the undenatured ethanol heat content factor in Table A3.

Biomass—Biodiesel

2001 forward: Biodiesel exports data are from Table 10.4, and are converted to Btu by multiplying by the biodiesel heat content factor in Table A1.

Biomass—Densified Biomass

2016 forward: Densified biomass exports data are from EIA, Form EIA-63C, “Densified Biomass Fuel Report.”

Total Biomass

2001–2009: Total biomass exports are equal to biodiesel exports.

2010 forward: Total biomass exports are equal to fuel ethanol (minus denaturant) exports plus biodiesel exports.

2016 forward: Total biomass exports are the sum of the exports values for fuel ethanol (minus denaturant), biodiesel, and densified biomass.

Electricity

1949 forward: Electricity exports data from Table 7.1 are converted to Btu by multiplying by the electricity heat content factor in Table A6.

Total Primary Energy Exports

1949 forward: Total primary energy exports are the sum of the exports values for coal, coal coke, natural gas, total petroleum, total biomass, and electricity.

Total Primary Energy Net Imports

1949 forward: Total primary energy net imports are equal to total primary energy imports from Table 1.4a minus total primary energy exports.

Table 1.5 Sources

U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Division:

Petroleum Exports

1974–1987: “U.S. Exports,” FT-410, December issues.

1988 and 1989: “Report on U.S. Merchandise Trade,” Final Revisions.

1990–1992: “U.S. Merchandise Trade,” Final Report.

1993–2009: “U.S. International Trade in Goods and Services,” Annual Revisions.

2010–2011: “U.S. International Trade in Goods and Services,” 2012 Annual Revisions.

2012–2014: “U.S. International Trade in Goods and Services,” 2014 Annual Revisions.

2015 forward: “U.S. International Trade in Goods and Services,” FT-900, monthly.

Petroleum Imports

1974–1987: “U.S. Merchandise Trade,” FT-900, December issues, 1975–1988.

1988 and 1989: “Report on U.S. Merchandise Trade,” Final Revisions.

1990–1993: “U.S. Merchandise Trade,” Final Report.

1994–2009: “U.S. International Trade in Goods and Services,” Annual Revisions.

2010–2011: “U.S. International Trade in Goods and Services,” 2012 Annual Revisions.

2012–2014: “U.S. International Trade in Goods and Services,” 2014 Annual Revisions.

2015 forward: “U.S. International Trade in Goods and Services,” FT-900, monthly.

Energy Exports and Imports

1974–1987: U.S. merchandise trade press releases and database printouts for adjustments.

1988: January–July, monthly FT-900 supplement, 1989 issues. August–December, monthly FT-900, 1989 issues.

1989: Monthly FT-900, 1990 issues.

1990–1992: “U.S. Merchandise Trade,” Final Report. 1993–2009: “U.S. International Trade in Goods and Services,” Annual Revisions.

1993–2009: “U.S. International Trade in Goods and Services,” Annual Revisions.

2010–2011: “U.S. International Trade in Goods and Services,” 2012 Annual Revisions.

2012–2014: “U.S. International Trade in Goods and Services,” 2014 Annual Revisions.

2015 forward: “U.S. International Trade in Goods and Services,” FT-900, monthly.

Petroleum Balance

1974 forward: The petroleum balance is calculated by the U.S. Energy Information Administration (EIA) as petroleum imports minus petroleum exports.

Energy Balance

1974 forward: The energy balance is calculated by EIA as energy imports minus energy exports.

Non-Energy Balance

1974 forward: The non-energy balance is calculated by EIA as the total merchandise balance minus the energy balance.

Total Merchandise

1974–1987: U.S. merchandise trade press releases and database printouts for adjustments.

1988: “Report on U.S. Merchandise Trade, 1988 Final Revisions,” August 18, 1989.

1989: “Report on U.S. Merchandise Trade, 1989 Revisions,” July 10, 1990.

1990: “U.S. Merchandise Trade, 1990 Final Report,” May 10, 1991, and “U.S. Merchandise Trade, December 1992,” February 18, 1993, page 3.

1991: “U.S. Merchandise Trade, 1992 Final Report,” May 12, 1993.

1992–2009: “U.S. International Trade in Goods and Services,” Annual Revisions.

2010–2011: “U.S. International Trade in Goods and Services,” 2012 Annual Revisions.

2012–2014: “U.S. International Trade in Goods and Services,” 2014 Annual Revisions.

2015 forward: “U.S. International Trade in Goods and Services,” FT-900, monthly.