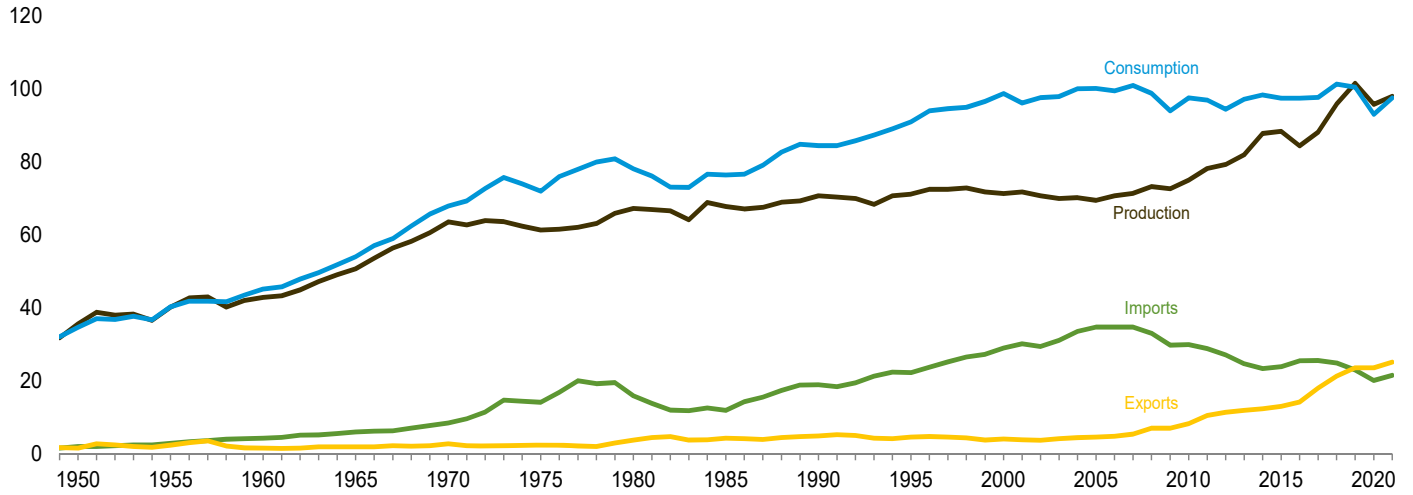


1. Energy Overview

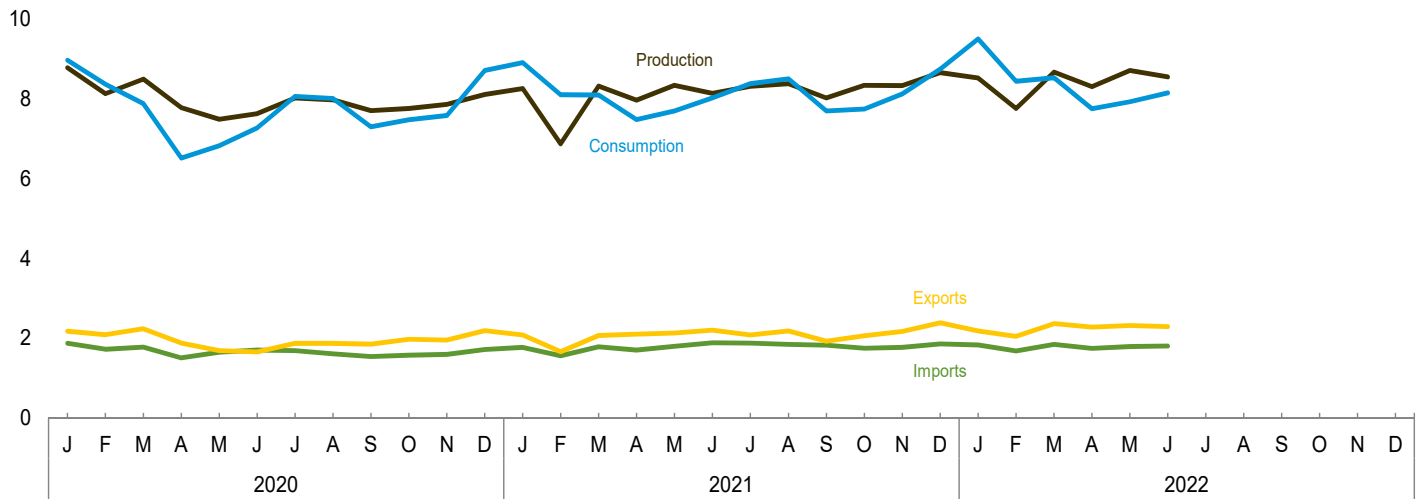
Figure 1.1 Primary Energy Overview

(Quadrillion Btu)

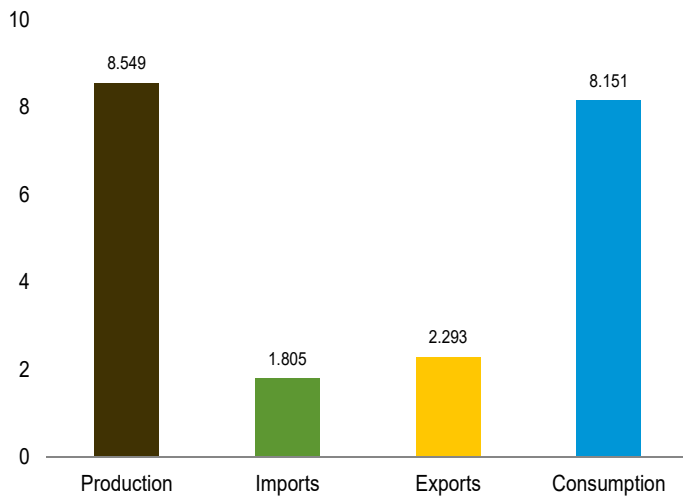
Overview, 1949–2021



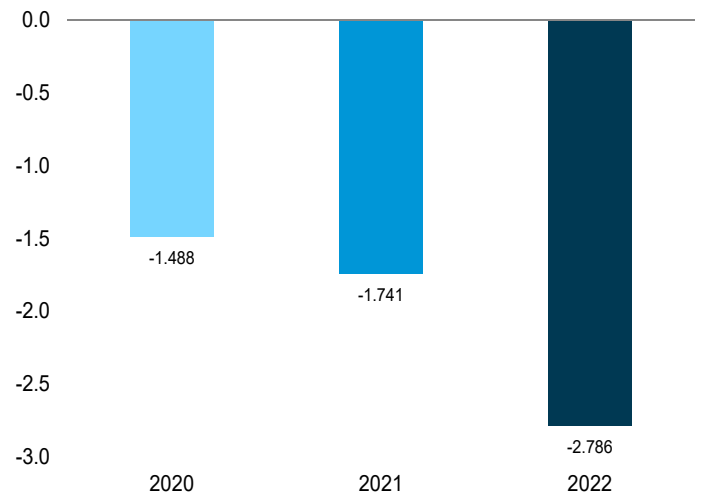
Overview, Monthly



Overview, June 2022



Net Imports, January–June



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	32.553	0.000	2.978	35.531	1.913	1.465	0.448	-1.380	31.615	0.000	2.978	34.599
1955 Total	37.347	.000	2.784	40.131	2.790	2.286	.504	-.457	37.380	.000	2.784	40.178
1960 Total	39.855	.006	2.928	42.789	4.188	1.477	2.710	-.458	42.091	.006	2.928	45.041
1965 Total	47.205	.043	3.396	50.644	5.892	1.829	4.063	-.754	50.515	.043	3.396	53.953
1970 Total	59.152	.239	4.070	63.462	8.342	2.632	5.709	-1.354	63.501	.239	4.070	67.817
1975 Total	54.697	1.900	4.687	61.284	14.032	2.323	11.709	-1.062	65.323	1.900	4.687	71.931
1980 Total	58.979	2.739	5.428	67.147	15.796	3.695	12.101	-1.227	69.782	2.739	5.428	78.021
1985 Total	57.502	4.076	6.084	67.661	11.781	4.196	7.584	1.088	66.035	4.076	6.084	76.334
1990 Total	58.523	6.104	6.040	70.668	18.817	4.752	14.065	-.299	72.281	6.104	6.040	84.433
1995 Total	57.496	7.075	6.557	71.129	22.180	4.496	17.684	2.118	77.162	7.075	6.559	90.931
2000 Total	57.307	7.862	6.102	71.271	28.865	3.962	24.904	2.528	84.620	7.862	6.104	98.702
2005 Total	54.995	8.161	6.221	69.377	34.659	4.462	30.197	.527	85.623	8.161	6.234	100.102
2006 Total	55.877	8.215	6.587	70.678	34.649	4.727	29.921	-1.207	84.477	8.215	6.637	99.392
2007 Total	56.369	8.459	6.511	71.338	34.679	5.338	29.341	.215	85.805	8.459	6.523	100.894
2008 Total	57.527	8.426	7.192	73.146	32.970	6.949	26.021	-.412	83.041	8.426	7.175	98.754
2009 Total	56.612	8.355	7.626	72.593	29.690	6.920	22.770	-1.420	77.862	8.355	7.609	93.943
2010 Total	58.159	8.434	8.315	74.909	29.866	8.176	21.690	.916	80.723	8.434	8.268	97.514
2011 Total	60.529	8.269	9.310	78.108	28.748	10.373	18.375	-.389	79.263	8.269	9.214	96.872
2012 Total	R 62.298	8.062	8.896	R 79.256	R 27.068	11.267	15.801	R -.670	R 77.304	8.062	8.860	R 94.387
2013 Total	R 64.184	8.244	9.438	R 81.866	24.623	11.788	12.835	2.429	79.224	8.244	9.464	R 97.130
2014 Total	R 69.624	8.338	9.798	R 87.760	23.241	12.270	10.971	R -.434	R 80.017	8.338	9.762	R 98.297
2015 Total	R 70.191	8.337	9.768	R 88.296	23.794	12.902	10.892	R -1.781	R 79.090	8.337	9.752	R 97.407
2016 Total	R 65.437	8.427	10.480	R 84.343	25.378	14.119	11.259	R 1.781	R 78.319	8.427	10.411	R 97.384
2017 Total	R 68.452	8.419	11.263	R 88.134	25.458	17.946	7.512	R 2.014	R 77.907	8.419	11.142	R 97.660
2018 Total	R 75.785	8.438	11.584	R 95.807	24.833	21.224	3.610	R 1.828	R 81.281	8.438	11.374	R 101.244
2019 Total	R 81.407	8.452	11.632	R 101.491	22.865	23.476	-.610	R -.398	R 80.425	8.452	11.473	R 100.482
2020 January	7.023	.775	.982	8.780	1.871	2.175	-.304	R .496	R 7.227	.775	.960	R 8.972
February	6.457	.689	.986	8.131	1.727	2.089	-.362	R .596	6.699	.689	.968	R 8.366
March	6.829	.669	.996	R 8.494	1.782	2.236	-.454	R -.157	R 6.237	.669	.964	R 7.883
April	6.242	.618	.923	7.783	1.507	1.880	-.372	R -.896	R 4.969	.618	.916	R 6.514
May	5.794	.672	1.022	7.488	1.651	1.694	-.042	R -.617	R 5.121	.672	1.023	R 6.828
June	5.889	.702	1.039	7.631	1.705	1.659	.046	R -.401	R 5.521	.702	1.038	R 7.275
July	6.302	.725	.995	8.022	1.692	1.874	-.182	R .228	R 6.338	.725	.986	R 8.067
August	6.301	.721	.955	7.977	1.613	1.877	-.264	R .300	R 6.328	.721	.944	R 8.013
September	6.138	.687	.885	7.709	1.545	1.853	-.308	R -.101	R 5.727	.687	.874	R 7.300
October	6.204	.620	.939	7.763	1.578	1.975	-.397	R .110	R 5.924	.620	.919	R 7.476
November	6.234	.645	.981	7.860	1.596	1.957	-.361	R .082	5.961	.645	.963	R 7.581
December	6.393	.730	.985	8.108	1.720	2.194	-.475	R 1.078	6.998	.730	.969	R 8.712
Total	75.806	8.251	11.688	R 95.745	19.988	23.463	-3.475	R .715	R 73.050	8.251	11.523	R 92.986
2021 January	R 6.502	.749	R 1.008	R 8.259	R 1.772	R 2.083	R -.312	R .962	R 7.169	.749	.977	R 8.909
February	R 5.334	.658	R .884	R 6.876	R 1.566	R 1.667	R -.101	R 1.330	R 6.560	.658	.877	R 8.105
March	R 6.558	.665	R 1.098	R 8.322	R 1.788	R 2.067	R -.279	R .057	R 6.334	.665	1.087	R 8.099
April	R 6.328	.596	R 1.043	R 7.967	R 1.703	R 2.105	R -.402	R -.081	R 5.843	.596	R 1.033	R 7.484
May	R 6.580	.662	1.101	R 8.343	R 1.799	R 2.131	R -.332	R -.312	R 5.931	.662	1.093	R 7.699
June	R 6.412	.690	R 1.038	R 8.140	R 1.890	R 2.205	R -.314	R .200	R 6.294	.690	R 1.026	R 8.025
July	R 6.601	.719	R .993	R 8.313	R 1.878	R 2.086	R -.208	R .279	R 6.669	.719	R .981	R 8.384
August	R 6.648	.726	R 1.010	R 8.383	R 1.846	R 2.184	R -.338	.454	R 6.759	.726	R 1.004	R 8.500
September	R 6.375	.674	R .972	R 8.021	R 1.829	R 1.925	R -.096	R -.225	R 6.054	.674	R .962	R 7.699
October	R 6.732	.595	1.011	R 8.338	R 1.752	R 2.063	R -.311	R -.283	R 6.137	.595	1.002	R 7.744
November	R 6.632	.655	1.044	8.331	R 1.774	R 2.172	R -.398	R .193	R 6.444	.655	R 1.023	R 8.126
December	R 6.786	.739	1.133	R 8.658	1.859	R 2.387	R -.528	R .614	R 6.891	.739	1.106	R 8.744
Total	R 77.487	8.129	R 12.335	R 97.950	R 21.455	R 25.075	R -3.620	R 3.188	R 77.084	8.129	R 12.172	R 97.518
2022 January	R 6.658	.737	1.129	8.525	R 1.833	2.185	R -.352	1.332	7.664	.737	1.093	9.505
February	R 6.043	.646	1.072	R 7.761	R 1.683	R 2.049	-.366	R 1.049	6.745	.646	1.047	8.444
March	6.804	.660	1.211	8.675	1.846	2.366	-.520	.378	6.675	.660	1.191	8.533
April	R 6.549	.578	1.177	R 8.304	R 1.747	R 2.280	R -.533	R -.020	R 5.996	.578	1.165	7.750
May	R 6.825	.662	R 1.222	R 8.710	1.794	R 2.321	R -.526	R -.254	6.050	.662	1.203	7.930
June	6.684	.686	1.179	8.549	1.805	2.293	-.488	.090	6.282	.686	1.166	8.151
6-Month Total	39.564	3.969	6.991	50.523	10.708	13.494	-2.786	2.576	39.412	3.969	6.866	50.313
2021 6-Month Total	37.714	4.021	6.171	47.906	10.518	12.259	-1.741	2.156	38.131	4.021	6.093	48.321
2020 6-Month Total	38.235	4.124	5.948	48.306	10.244	11.733	-1.488	-.980	35.774	4.124	5.869	45.837

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.

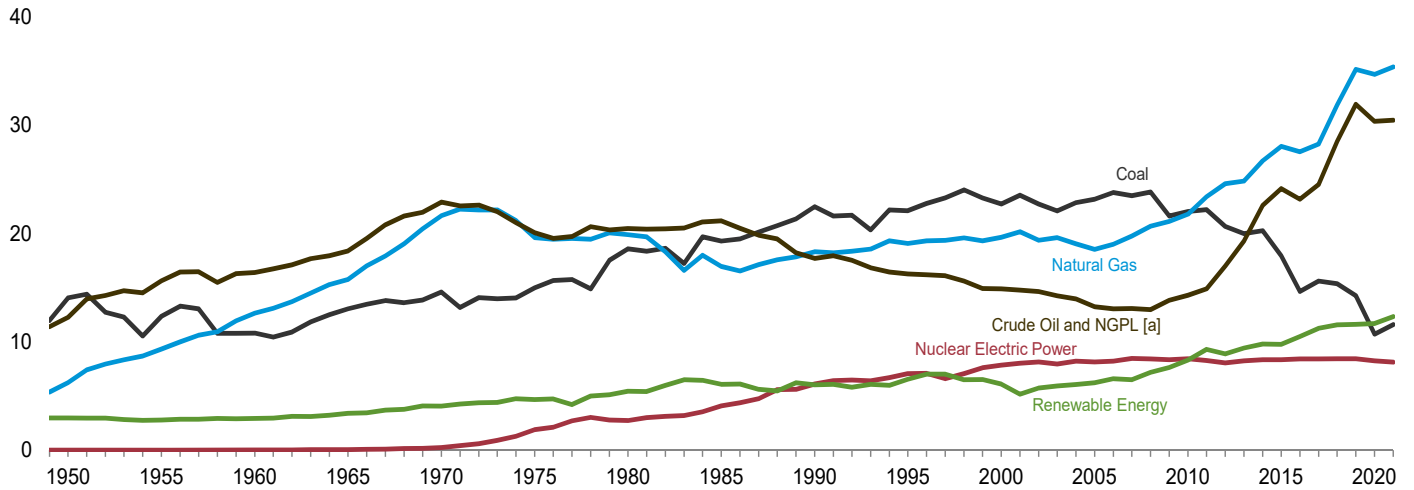
Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#summary> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

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.

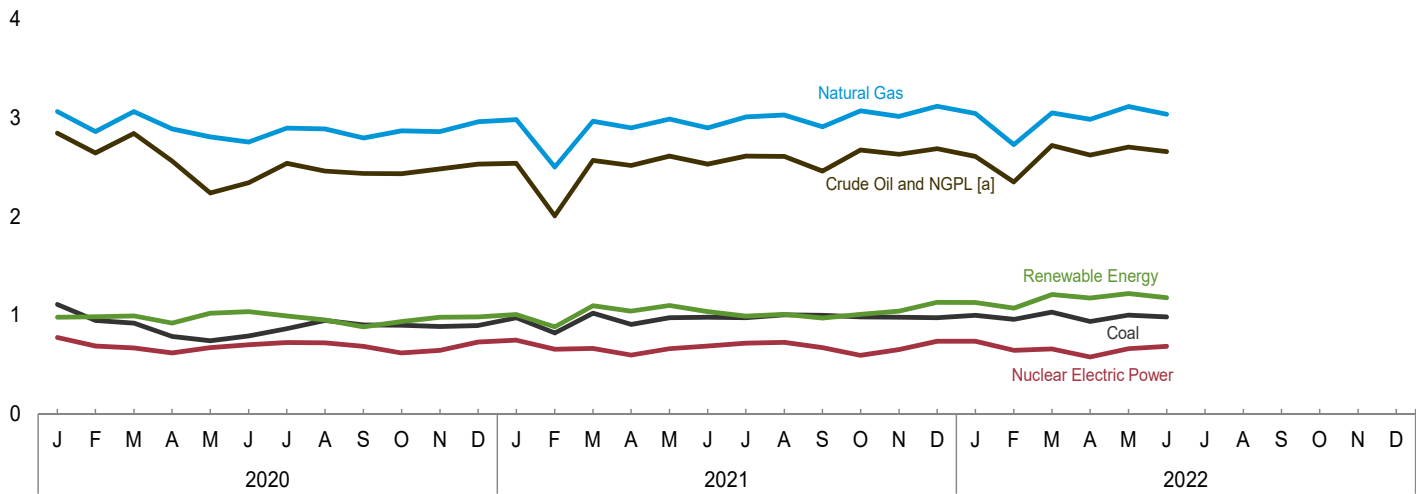
Figure 1.2 Primary Energy Production

(Quadrillion Btu)

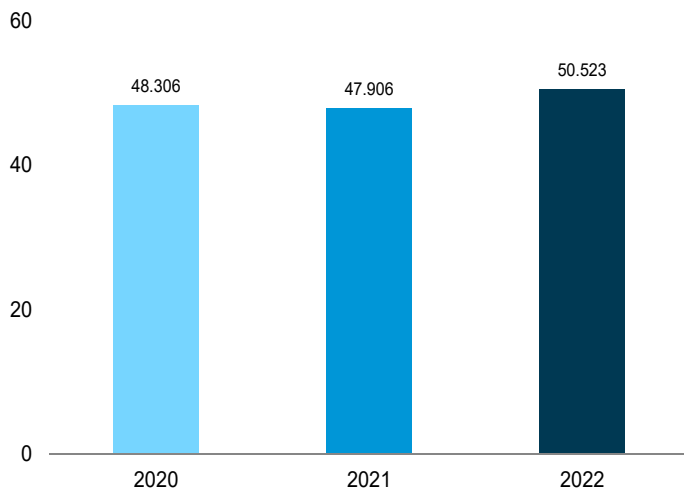
By Source, 1949–2021



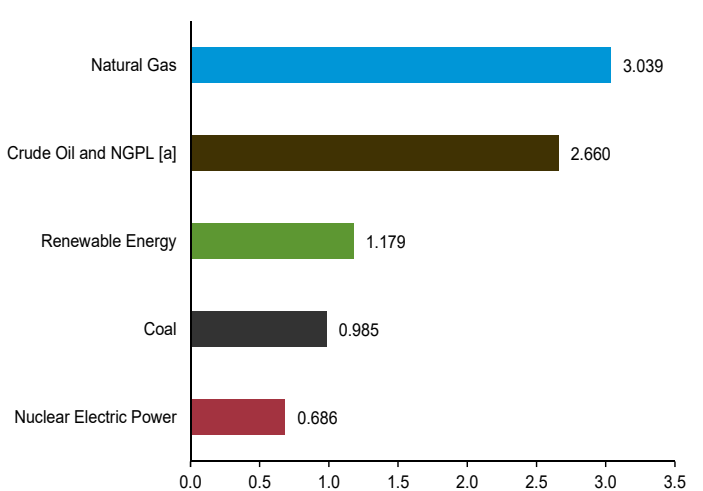
By Source, Monthly



Total, January–June



By Source, June 2022



[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	0.813	32.553	0.000	1.415	NA	NA	NA	1.562	2.978	35.531
1955 Total	12.370	9.345	14.410	1.223	37.347	.000	1.360	NA	NA	NA	1.424	2.784	40.131
1960 Total	10.817	12.656	14.935	1.447	39.855	.006	1.608	(s)	NA	NA	1.320	2.928	42.789
1965 Total	13.055	15.775	16.521	1.853	47.205	.043	2.059	.002	NA	NA	1.335	3.396	50.644
1970 Total	14.607	21.666	20.401	2.478	59.152	.239	2.634	.006	NA	NA	1.431	4.070	63.462
1975 Total	14.989	19.640	17.729	2.338	54.697	1.900	3.155	.034	NA	NA	1.499	4.687	61.284
1980 Total	18.598	19.908	18.249	2.225	58.979	2.739	2.900	.053	NA	NA	2.475	5.428	67.147
1985 Total	19.325	16.980	18.992	2.204	57.502	4.076	2.970	.097	(s)	(s)	3.016	6.084	67.661
1990 Total	22.488	18.326	15.571	2.138	58.523	6.104	3.046	.171	.059	.029	2.735	6.040	70.668
1995 Total	22.130	19.082	13.887	2.398	57.496	7.075	3.205	.152	.068	.033	3.099	6.557	71.129
2000 Total	22.735	19.662	12.358	2.551	57.307	7.862	2.811	.164	.064	.057	3.006	6.102	71.271
2005 Total	23.185	18.556	10.974	2.280	54.995	8.161	2.703	.181	.058	.178	3.101	6.221	69.377
2006 Total	23.790	19.022	10.767	2.299	55.877	8.215	2.869	.181	.061	.264	3.212	6.587	70.678
2007 Total	23.493	19.786	10.741	2.349	56.369	8.459	2.446	.186	.066	.341	3.472	6.511	71.338
2008 Total	23.851	20.703	10.613	2.359	57.527	8.426	2.511	.192	.075	.546	3.868	7.192	73.146
2009 Total	21.624	21.139	11.340	2.508	56.612	8.355	2.669	.200	.079	.721	3.957	7.626	72.593
2010 Total	22.038	21.806	11.610	2.705	58.159	8.434	2.539	.208	.093	.923	4.553	8.315	74.909
2011 Total	22.221	23.406	12.012	2.890	60.529	8.269	3.103	.212	.114	1.168	4.712	9.310	78.108
2012 Total	20.677	24.610	R 13.849	3.162	R 62.298	8.062	2.629	.212	.162	1.340	4.554	8.896	R 79.256
2013 Total	20.001	24.859	R 15.872	3.451	R 64.184	8.244	2.562	.214	.225	1.601	4.835	9.438	R 81.866
2014 Total	20.286	26.718	R 18.616	4.005	R 69.624	8.338	2.467	.214	.337	1.728	5.052	9.798	R 87.760
2015 Total	17.946	28.067	R 19.702	4.476	R 70.191	8.337	2.321	.212	.427	1.777	5.031	9.768	R 88.296
2016 Total	14.667	27.576	R 18.529	4.665	R 65.437	8.427	2.472	.210	.570	2.096	5.132	10.480	R 84.343
2017 Total	15.625	28.289	R 19.550	4.987	R 68.452	8.419	2.767	.210	.777	2.343	5.166	11.263	R 88.134
2018 Total	15.363	31.882	R 22.812	5.727	R 75.785	8.438	2.663	.209	.915	2.482	5.314	11.584	R 95.807
2019 Total	14.256	35.187	R 25.612	6.352	R 81.407	8.452	2.564	.201	1.017	2.635	5.215	11.632	R 101.491
2020													
January	1.112	3.064	2.267	.580	7.023	.775	.215	.015	.063	.247	.442	.982	8.780
February	.949	2.863	2.119	.526	6.457	.689	.227	.016	.076	.255	.412	.986	8.131
March	.921	3.066	2.258	.585	6.829	.669	.209	.018	.091	.257	.420	.996	R 8.494
April	.787	2.889	2.034	.532	6.242	.618	.203	.017	.109	.261	.333	.923	7.783
May	.744	2.808	1.714	.529	5.794	.672	.203	.017	.129	.249	.364	1.022	7.488
June	.791	2.756	1.783	.560	5.889	.702	.246	.016	.129	.265	.383	1.039	7.631
July	.864	2.898	1.942	.598	6.301	.725	.235	.017	.139	.201	.404	.995	8.022
August	.950	2.889	1.866	.596	6.301	.721	.204	.017	.125	.202	.407	.955	7.977
September	.903	2.798	1.865	.572	6.138	.687	.164	.017	.106	.203	.395	.885	7.709
October	.899	2.870	1.845	.590	6.204	.620	.165	.017	.096	.253	.408	.939	7.763
November	.886	2.863	1.911	.574	6.234	.645	.183	.017	.078	.291	.411	.981	7.860
December	.897	2.963	1.970	.563	6.393	.730	.189	.018	.070	.281	.427	.985	8.108
Total	10.703	34.724	23.574	6.805	75.806	8.251	2.503	.203	1.212	2.965	4.805	R 11.688	R 95.745
2021													
January	.976	E 2.983	E 1.962	R .580	R 6.502	.749	.226	.017	.078	.267	R .419	R 1.008	R 8.259
February	.823	E 2.504	E 1.581	R .426	R 5.334	.658	.190	.016	.086	.236	R .356	R .884	R 6.876
March	R 1.021	E 2.967	E 1.998	R .572	R 6.558	.665	.189	.016	.123	.350	R .420	R 1.098	R 8.322
April	.909	E 2.901	E 1.930	R .589	R 6.328	.596	.168	.017	.141	.317	R .399	R 1.043	R 7.967
May	.976	E 2.990	E 2.003	R .611	R 6.580	.662	.200	.017	.159	.294	R .431	R 1.101	R 8.343
June	.980	E 2.900	E 1.939	R .593	R 6.412	.690	.211	.018	.156	.233	R .420	R 1.038	R 8.140
July	.976	E 3.012	E 2.001	R .611	R 6.601	.719	.194	.018	.157	.189	R .436	R .993	R 8.313
August	1.006	E 3.030	E 1.989	R .622	R 6.648	.726	.184	.017	.154	.235	R .420	R 1.010	R 8.383
September	1.000	E 2.912	E 1.864	R .599	R 6.375	.674	.158	.017	.142	.252	R .404	R .972	R 8.021
October	.983	E 3.072	E 2.041	R .636	R 6.732	.595	.158	.017	.120	.285	R .432	1.011	R 8.338
November	.981	E 3.017	E 2.013	R .621	R 6.632	.655	.179	.017	.102	.316	.429	1.044	8.331
December	.977	E 3.119	E 2.052	R .638	R 6.786	.739	.225	.018	.085	.357	R .449	1.133	R 8.658
Total	R 11.668	E 35.408	E 23.372	R 7.099	R 77.487	8.129	2.283	.206	1.501	3.332	R 5.013	R 12.335	R 97.950
2022													
January	1.001	E 3.047	RE 2.005	.605	R 6.658	.737	.237	.019	.103	.335	.436	1.129	8.525
February	.959	E 2.731	RE 1.803	R .550	R 6.043	.646	.208	.016	.117	.335	.397	1.072	R 7.761
March	1.032	E 3.051	E 2.064	R .657	R 6.804	.660	.229	.017	.154	.379	.432	1.211	8.675
April	R .939	RE 2.986	RE 1.992	.632	R 6.549	.578	.177	.016	.173	.405	.405	1.177	R 8.304
May	R 1.003	RE 3.117	RE 2.049	.657	R 6.825	.662	.210	.017	.193	.368	R .434	R 1.222	R 8.710
June	.985	E 3.039	E 2.017	.643	R 6.684	.686	.237	.017	.200	.296	.430	1.179	8.549
6-Month Total	5.919	E 17.971	E 11.930	3.744	39.564	3.969	1.298	.102	.939	2.118	2.535	6.991	50.523
2021 6-Month Total	5.685	E 17.245	E 11.412	3.371	37.714	4.021	1.185	.102	.742	1.699	2.443	6.171	47.906
2020 6-Month Total	5.304	E 17.444	E 12.175	3.312	38.235	4.124	1.363	.101	.597	1.534	2.353	5.948	48.306

^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 processing plant production of natural gas liquids (ethane, propane, normal butane, isobutane, and natural gasoline). Through 1980, also includes natural gas processing plant production of finished petroleum products (aviation gasoline, distillate fuel oil, jet fuel, kerosene, motor gasoline, special

naphthas, and miscellaneous products).

^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.

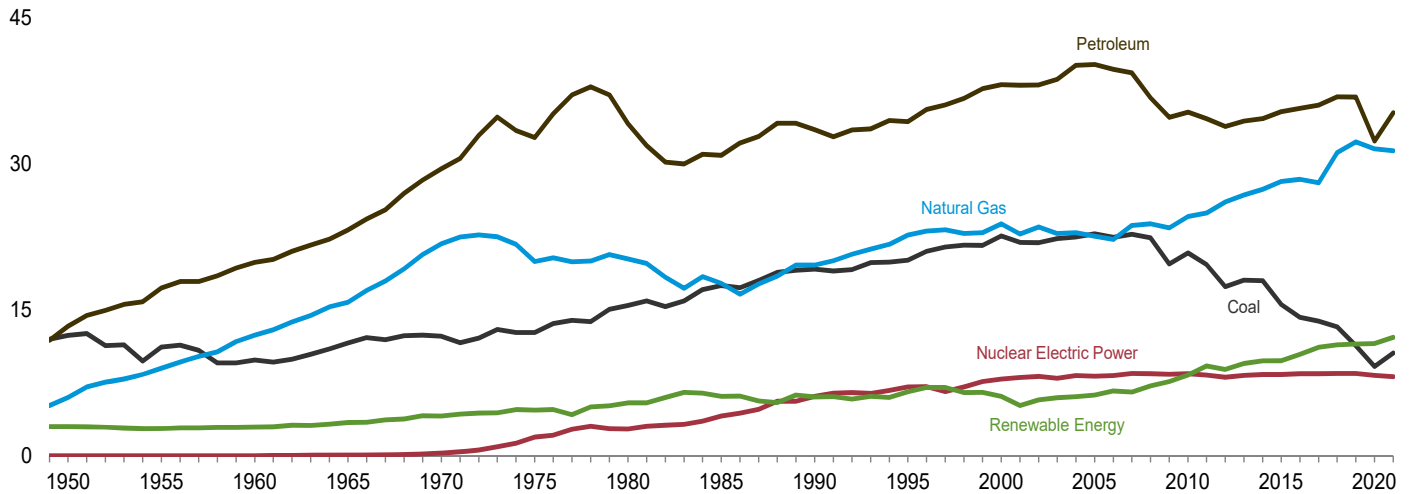
Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#summary> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

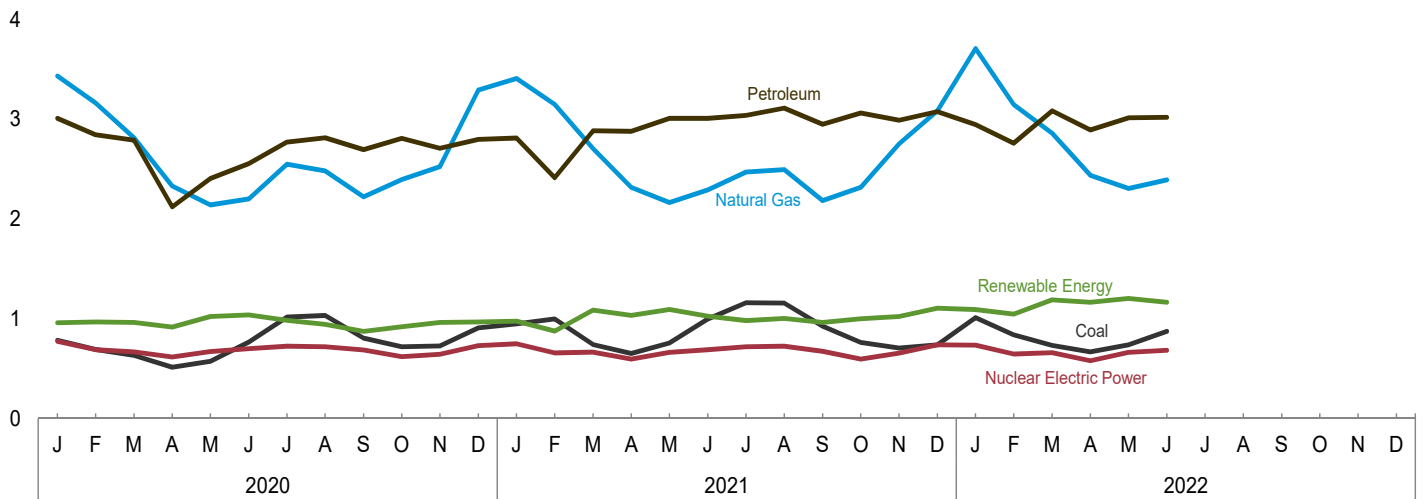
Figure 1.3 Primary Energy Consumption

(Quadrillion Btu)

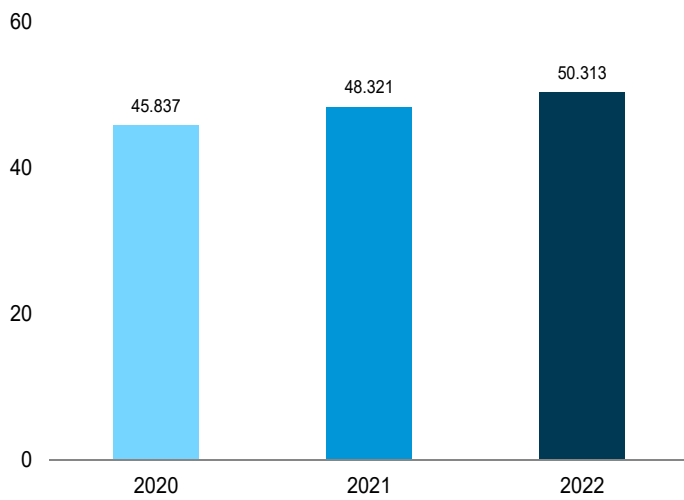
By Source, [a] 1949–2021



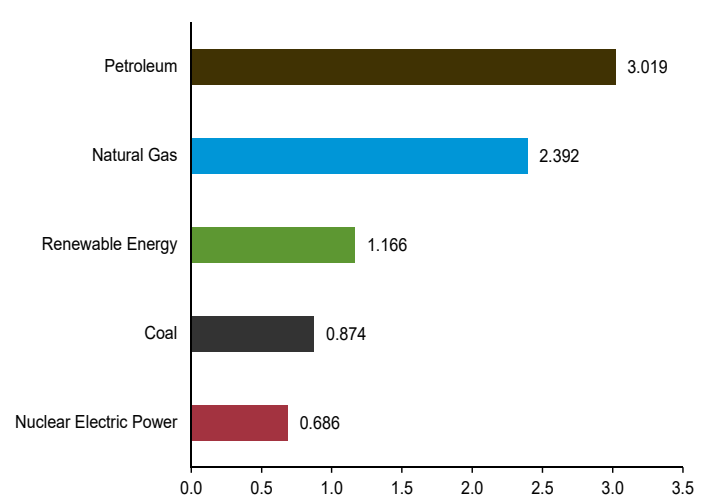
By Source, [a] Monthly



Total, January–June



By Source, [a] June 2022



[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	Petro-leum ^d	Total ^e		Hydro-electric Power ^f	Geo-thermal	Solar	Wind	Bio-mass	Total	
1950 Total	12.347	5.968	13.298	31.615	0.000	1.415	NA	NA	NA	1.562	2.978	34.599
1955 Total	11.167	8.998	17.225	37.380	.000	1.360	NA	NA	NA	1.424	2.784	40.178
1960 Total	9.838	12.385	19.874	42.091	.006	1.608	(s)	NA	NA	1.320	2.928	45.041
1965 Total	11.581	15.769	23.184	50.515	.043	2.059	.002	NA	NA	1.335	3.396	53.953
1970 Total	12.265	21.795	29.499	63.501	.239	2.634	.006	NA	NA	1.431	4.070	67.817
1975 Total	12.663	19.948	32.699	65.323	1.900	3.155	.034	NA	NA	1.499	4.687	71.931
1980 Total	15.423	20.235	34.159	69.782	2.739	2.900	.053	NA	NA	2.475	5.428	78.021
1985 Total	17.478	17.703	30.866	66.035	4.076	2.970	.097	(s)	(s)	3.016	6.084	76.334
1990 Total	19.173	19.603	33.500	72.281	6.104	3.046	.171	.059	.029	2.735	6.040	84.433
1995 Total	20.089	22.671	34.341	77.162	7.075	3.205	.152	.068	.033	3.101	6.559	90.931
2000 Total	22.580	23.824	38.152	84.620	7.862	2.811	.164	.064	.057	3.008	6.104	98.702
2005 Total	22.797	22.565	40.217	85.623	8.161	2.703	.181	.058	.178	3.114	6.234	100.102
2006 Total	22.447	22.239	39.731	84.477	8.215	2.869	.181	.061	.264	3.262	6.637	99.392
2007 Total	22.749	23.663	39.368	85.805	8.459	2.446	.186	.066	.341	3.485	6.523	100.894
2008 Total	22.387	23.843	36.769	83.041	8.426	2.511	.192	.075	.546	3.851	7.175	98.754
2009 Total	19.691	23.416	34.779	77.862	8.355	2.669	.200	.079	.721	3.940	7.609	93.943
2010 Total	20.834	24.575	35.321	80.723	8.434	2.539	.208	.093	.923	4.506	8.268	97.514
2011 Total	19.658	24.955	34.639	79.263	8.269	3.103	.212	.114	1.168	4.616	9.214	96.872
2012 Total	17.378	26.089	33.833	77.304	8.062	2.629	.212	.162	1.340	4.517	8.860	94.387
2013 Total	18.039	26.805	34.398	79.224	8.244	2.562	.214	.225	1.601	4.861	9.464	97.130
2014 Total	17.998	27.383	34.658	80.017	8.338	2.467	.214	.337	1.728	5.016	9.762	98.297
2015 Total	15.549	28.191	35.368	79.090	8.337	2.321	.212	.427	1.777	5.015	9.752	97.407
2016 Total	14.226	28.400	35.712	78.319	8.427	2.472	.210	.570	2.096	5.063	10.411	97.384
2017 Total	13.837	28.055	36.043	77.907	8.419	2.767	.210	.777	2.343	5.045	11.142	97.660
2018 Total	13.252	R 31.163	36.892	R 81.281	8.438	2.663	.209	.915	2.482	5.105	11.374	R 101.244
2019 Total	11.316	R 32.264	36.866	R 80.425	8.452	2.564	.201	1.017	2.635	5.056	11.473	R 100.482
2020 January	.785	3.434	3.009	R 7.227	.775	.215	.015	.063	.247	R .420	.960	R 8.972
February	.694	3.163	2.844	6.699	.689	.227	.016	.076	.255	.394	.968	R 8.366
March	.633	R 2.814	2.791	R 6.237	.669	.209	.018	.091	.257	.389	.964	R 7.883
April	.515	R 2.332	2.123	R 4.969	.618	.203	.017	.109	.261	.325	.916	R 6.514
May	.574	R 2.142	2.406	R 5.121	.672	.263	.017	.129	.249	.365	1.023	R 6.828
June	.767	R 2.200	2.556	5.521	.702	.246	.016	.129	.265	.382	1.038	R 7.275
July	1.018	R 2.549	2.771	R 6.338	.725	.235	.017	.139	.201	.395	.986	R 8.067
August	1.033	R 2.481	2.815	R 6.328	.721	.204	.017	.125	.202	.395	.944	R 8.013
September	.806	R 2.224	2.697	R 5.727	.687	.164	.017	.106	.203	.384	.874	R 7.300
October	.720	R 2.395	2.810	R 5.924	.620	.165	.017	.096	.253	.388	.919	R 7.476
November	.729	R 2.525	2.710	5.961	.645	.183	.017	.078	.291	.393	.963	R 7.581
December	.909	R 3.292	2.799	6.998	.730	.189	.018	.070	.281	.411	.969	R 8.712
Total	9.181	R 31.551	32.331	R 73.050	8.251	2.503	.203	1.212	2.965	R 4.641	11.523	R 92.986
2021 January	.950	3.409	R 2.813	R 7.169	.749	.226	.017	.078	.267	.388	.977	R 8.909
February	.998	3.149	R 2.415	R 6.560	.658	.190	.016	.086	.236	R .350	R .877	R 8.105
March	.742	2.707	R 2.886	R 6.334	.665	.189	.016	.123	.350	.408	1.087	R 8.099
April	.651	2.316	R 2.880	R 5.843	.596	.168	.017	.141	.317	R .389	R 1.033	R 7.484
May	.759	2.166	R 3.010	R 5.931	.662	.200	.017	.159	.294	R .423	1.093	R 7.699
June	.998	2.293	R 3.009	R 6.294	.690	.211	.018	.156	.233	R .408	R 1.026	R 8.025
July	1.161	2.471	R 3.040	R 6.669	.719	.194	.018	.157	.189	R .423	R .981	R 8.384
August	1.158	2.495	R 3.111	R 6.759	.726	.184	.017	.154	.235	R .414	R 1.004	R 8.500
September	.926	2.184	R 2.950	R 6.054	.674	.158	.017	.142	.252	R .394	R .962	R 7.699
October	.762	2.316	R 3.063	R 6.137	.595	.158	.017	.120	.285	R .423	1.002	R 7.744
November	.705	2.752	R 2.991	R 6.444	.655	.179	.017	.102	.316	R .408	R 1.023	R 8.126
December	.738	3.084	R 3.076	R 6.891	.739	.225	.018	.085	.357	.422	1.106	R 8.744
Total	10.547	31.343	R 35.243	R 77.084	8.129	2.283	.206	1.501	3.332	R 4.850	R 12.172	R 97.518
2022 January	1.012	3.710	2.948	7.664	.737	.237	.019	.103	.335	.400	1.093	9.505
February	.839	3.147	2.761	6.745	.646	.208	.016	.117	.335	.372	1.047	8.444
March	.733	2.861	3.086	6.675	.660	.229	.017	.154	.379	.412	1.191	8.533
April	.668	2.440	2.893	R 5.996	.578	.177	.016	.173	.405	.394	1.165	7.750
May	.740	2.306	3.014	6.050	.662	.210	.017	.193	.368	.415	1.203	7.930
June	.874	2.392	3.019	6.282	.686	.237	.017	.200	.296	.418	1.166	8.151
6-Month Total	4.867	16.855	17.721	39.412	3.969	1.298	.102	.939	2.118	2.410	6.866	50.313
2021 6-Month Total	5.098	16.040	17.013	38.131	4.021	1.185	.102	.742	1.699	2.366	6.093	48.321
2020 6-Month Total	3.967	16.086	15.729	35.774	4.124	1.363	.101	.597	1.534	2.274	5.869	45.837

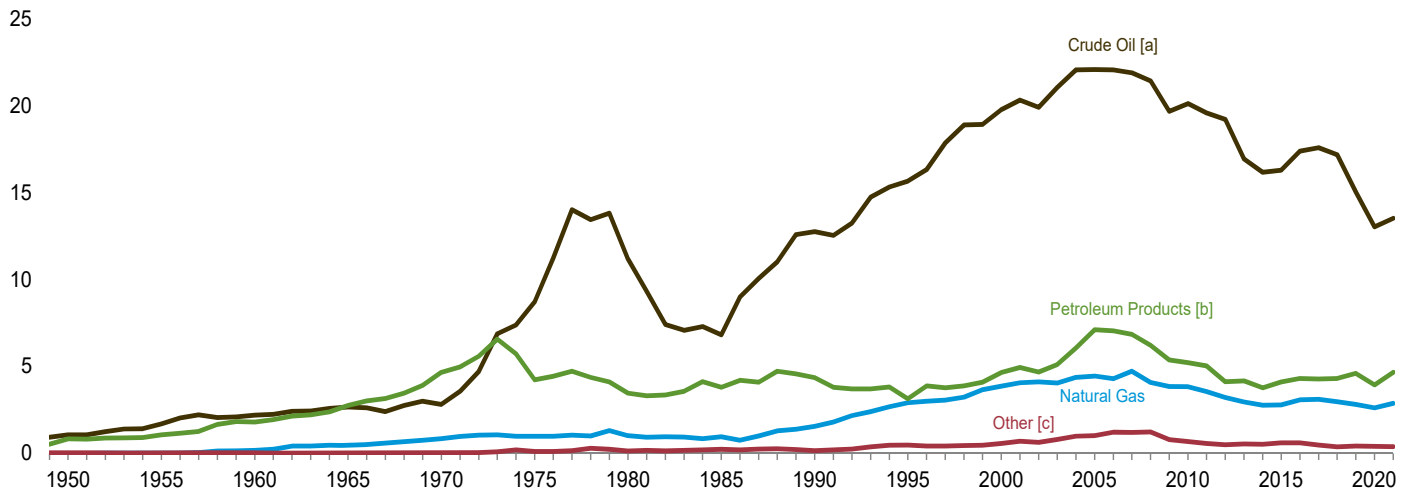
^a Includes non-combustion use of fossil fuels.
^b Most data are estimates. See Tables 10.1–10.2c for notes on series components and estimation; and see Note, "Renewable Energy Production and Consumption," at end of Section 10.
^c Natural gas only; excludes supplemental gaseous fuels. See Note 3, "Supplemental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

separately displayed. See Tables 1.4c.
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.

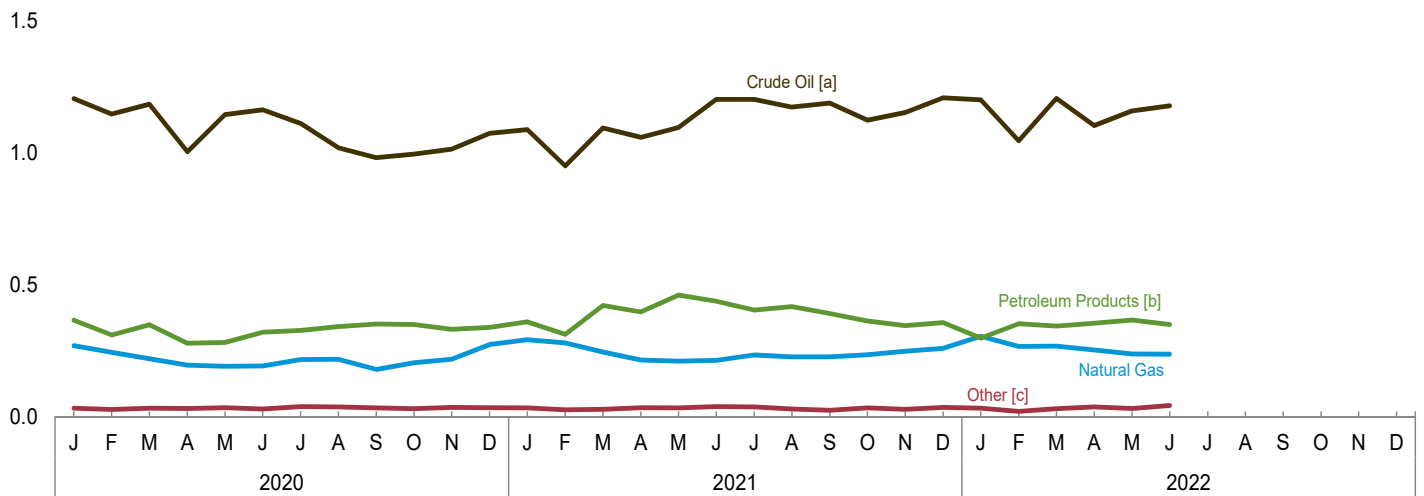
Figure 1.4a Primary Energy Imports

(Quadrillion Btu)

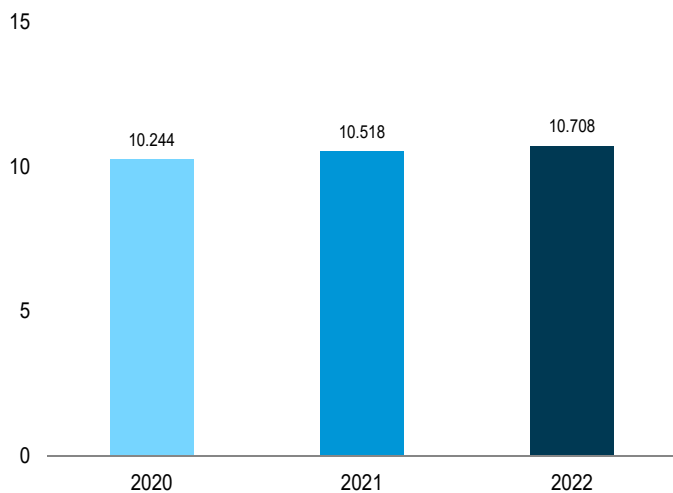
By Source, 1949–2021



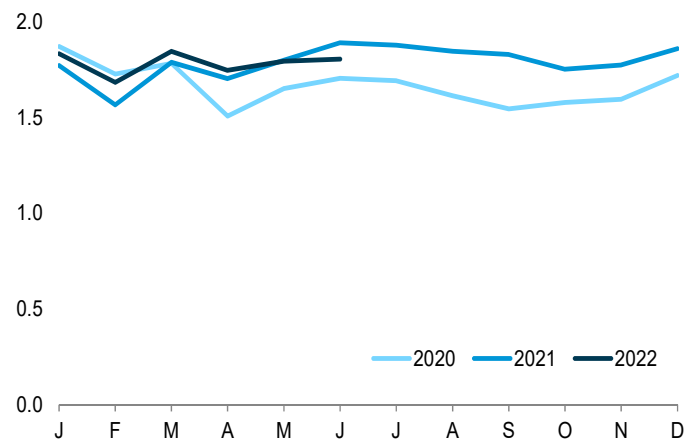
By Source, Monthly



Total, January–June



Total, 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.

[c] Coal, coal coke, biomass, and electricity.

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

Source: Table 1.4a.

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
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	29.866
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 Total .....	.168	.001	3.109	17.597	4.277	21.874	.081	.224	25.458
2018 Total .....	.122	.003	2.961	17.192	4.309	21.501	.048	.199	24.833
2019 Total .....	.138	.003	2.810	15.045	4.596	19.641	.072	.201	22.865
2020 January .....	.011	(s)	.269	1.206	.365	1.570	.006	.016	1.871
February .....	.007	(s)	.244	1.147	.309	1.456	.005	.015	1.727
March .....	.009	(s)	.219	1.184	.348	1.532	.005	.017	1.782
April .....	.007	(s)	.195	1.004	.278	1.282	.007	.016	1.507
May .....	.011	.001	.191	1.145	.281	1.426	.005	.018	1.651
June .....	.005	(s)	.192	1.163	.320	1.483	.007	.018	1.705
July .....	.011	(s)	.216	1.111	.327	1.438	.005	.023	1.692
August .....	.006	(s)	.217	1.019	.341	1.359	.007	.023	1.613
September .....	.010	.001	.179	.982	.351	1.333	.006	.016	1.545
October .....	.005	.002	.204	.995	.349	1.344	.007	.016	1.578
November .....	.013	(s)	.217	1.014	.331	1.344	.007	.014	1.596
December .....	.009	(s)	.273	1.074	.338	1.413	.008	.018	1.720
Total .....	.105	.004	2.615	13.044	3.937	16.980	.074	.210	19.988
2021 January .....	.011	(s)	.291	^R 1.088	.359	^R 1.447	.005	.017	^R 1.772
February .....	.006	(s)	.279	^R .950	.312	^R 1.262	.005	.014	^R 1.566
March .....	.005	(s)	.245	^R 1.094	^R .421	^R 1.516	.007	.016	^R 1.788
April .....	.010	(s)	.214	^R 1.059	^R .397	^R 1.456	.008	.015	^R 1.703
May .....	.010	(s)	.210	^R 1.096	^R .460	^R 1.556	.006	.016	^R 1.799
June .....	.010	(s)	.213	^R 1.203	^R .437	^R 1.639	.009	.018	^R 1.890
July .....	.011	(s)	.233	^R 1.203	.404	^R 1.607	.006	.019	^R 1.878
August .....	.007	(s)	.226	^R 1.173	.417	^R 1.590	.006	.016	^R 1.846
September .....	.004	(s)	.226	^R 1.188	.391	^R 1.579	.007	.013	^R 1.829
October .....	.011	(s)	.234	^R 1.123	^R .362	^R 1.485	.008	.014	^R 1.752
November .....	.009	(s)	.248	^R 1.153	.345	^R 1.498	.008	.010	^R 1.774
December .....	.014	.001	.259	^R 1.209	^R .356	^R 1.565	.006	.014	1.859
Total .....	.109	.003	2.878	^R 13.539	^R 4.661	^R 18.200	^R .083	.181	^R 21.455
2022 January .....	.010	(s)	.304	1.200	.297	^R 1.497	.006	.015	^R 1.833
February .....	.006	(s)	.266	1.045	.352	^R 1.397	.003	.011	^R 1.683
March .....	.011	(s)	.267	^R 1.207	.343	1.549	.006	.013	1.846
April .....	.014	(s)	.253	^R 1.103	.354	^R 1.457	.006	.017	^R 1.747
May .....	.007	(s)	.238	^R 1.159	.366	^R 1.525	.006	.019	1.794
June .....	.013	(s)	.236	1.178	.349	1.527	.005	.024	1.805
6-Month Total .....	.060	.001	1.564	6.893	2.060	8.953	.032	.098	10.708
2021 6-Month Total .....	.053	.001	1.451	6.490	2.385	8.875	.042	.095	10.518
2020 6-Month Total .....	.050	.001	1.310	6.849	1.900	8.749	.035	.100	10.244

^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 Beginning in 1993, includes fuel ethanol (minus denaturant). Beginning in 2001, also includes biodiesel. Beginning in 2011, also includes renewable diesel fuel. Beginning in 2021, also includes other biofuels.

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.

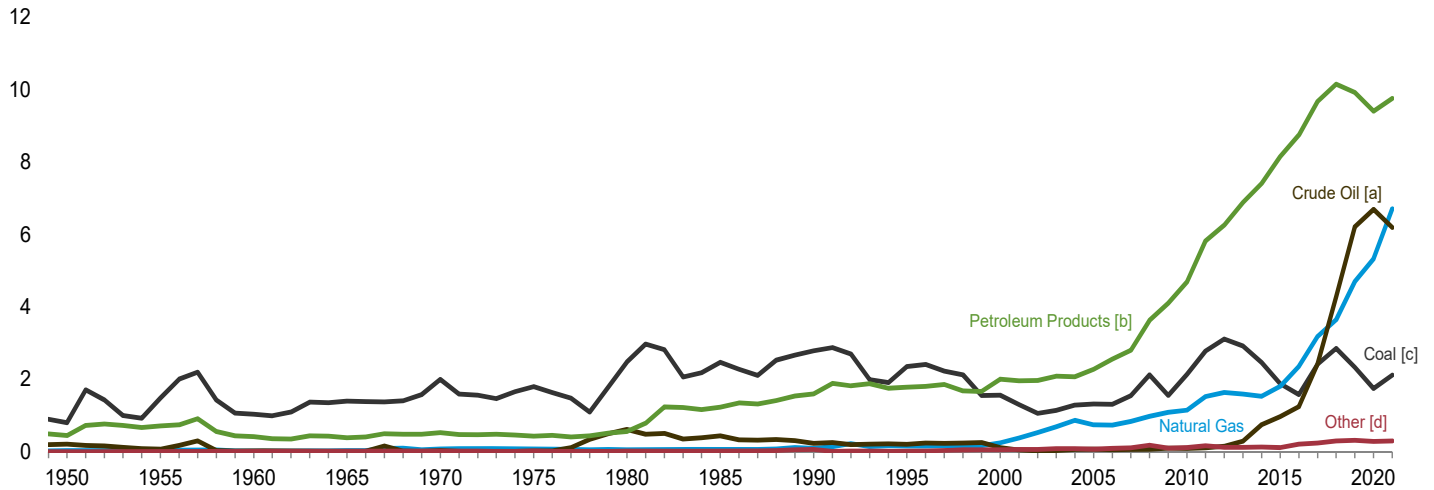
Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#summary> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

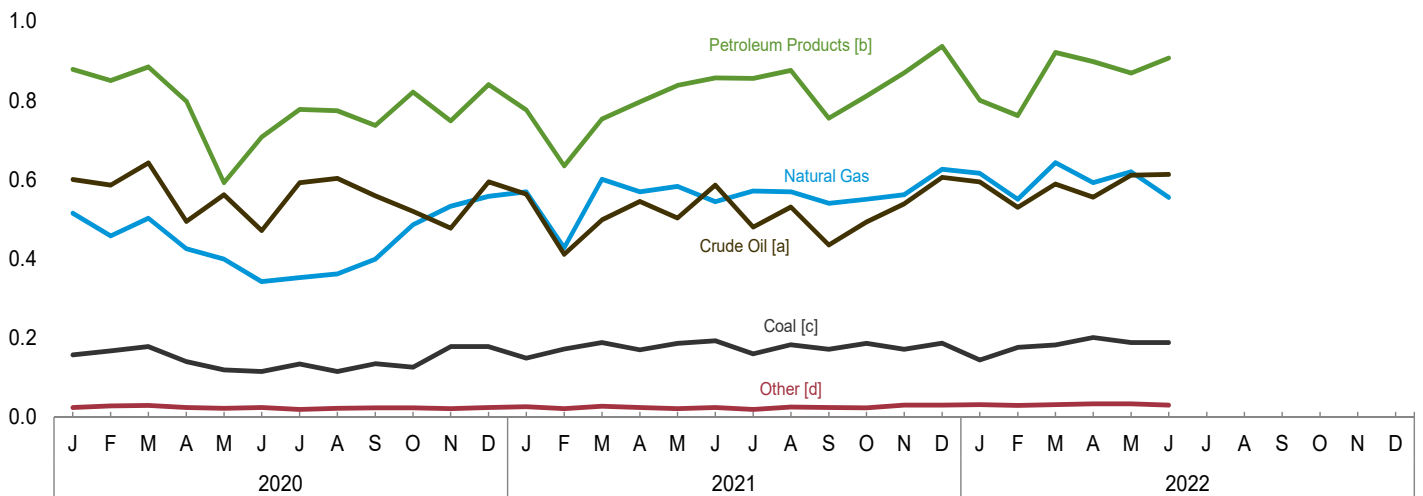
Figure 1.4b Primary Energy Exports

(Quadrillion Btu)

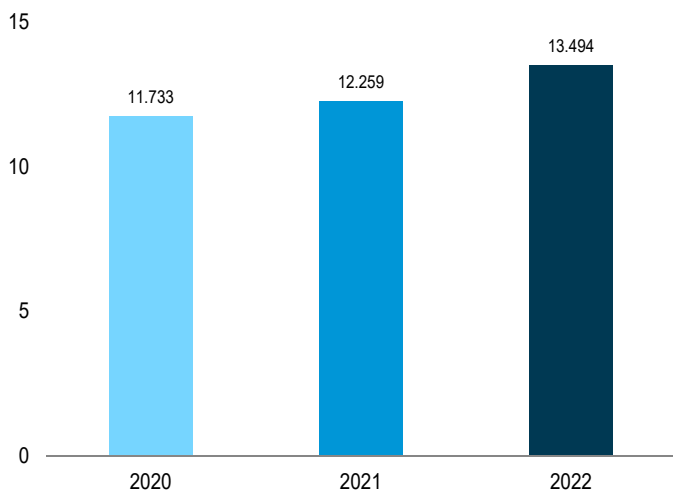
By Source, 1949-2021



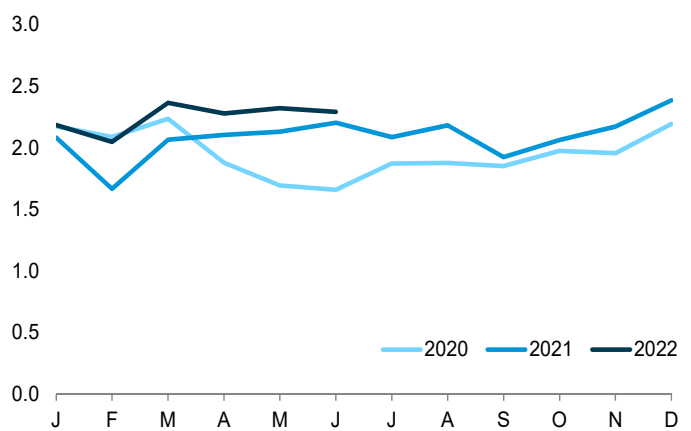
By Source, Monthly



Total, January–June



Total, Monthly



[a] Crude oil and lease condensate.

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

[c] Includes coal coke.

[d] Biomass and electricity

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

Source: Table 1.4b.

Table 1.4b Primary Energy Exports by Source
(Quadrillion Btu)

	Exports								
	Coal	Coal Coke	Natural Gas	Petroleum			Biomass ^C	Electricity	Total
				Crude Oil ^a	Petroleum Products ^b	Total			
1950 Total	0.786	0.010	0.027	0.202	0.440	0.642	NA	0.001	1.465
1955 Total	1.465	.013	.032	.067	.707	.774	NA	.002	2.286
1960 Total	1.023	.009	.012	.018	.413	.431	NA	.003	1.477
1965 Total	1.376	.021	.027	.006	.386	.392	NA	.013	1.829
1970 Total	1.936	.061	.072	.029	.520	.549	NA	.014	2.632
1975 Total	1.761	.032	.074	.012	.427	.439	NA	.017	2.323
1980 Total	2.421	.051	.049	.609	.551	1.160	NA	.014	3.695
1985 Total	2.438	.028	.056	.432	1.225	1.657	NA	.017	4.196
1990 Total	2.772	.014	.087	.230	1.594	1.824	NA	.055	4.752
1995 Total	2.318	.034	.156	.200	1.776	1.976	NA	.012	4.496
2000 Total	1.528	.028	.245	.106	2.003	2.110	NA	.051	3.962
2005 Total	1.273	.043	.735	.067	2.276	2.344	(s)	.065	4.462
2006 Total	1.264	.040	.730	.052	2.554	2.606	(s)	.083	4.727
2007 Total	1.507	.036	.830	.058	2.803	2.861	.036	.069	5.338
2008 Total	2.071	.049	.972	.061	3.626	3.686	.089	.083	6.949
2009 Total	1.515	.032	1.082	.093	4.101	4.194	.035	.062	6.920
2010 Total	2.101	.036	1.147	.088	4.691	4.780	.047	.065	8.176
2011 Total	2.751	.024	1.519	.100	5.820	5.919	.108	.051	10.373
2012 Total	3.087	.024	1.633	.143	6.261	6.404	.078	.041	11.267
2013 Total	2.895	.021	1.587	.284	6.886	7.170	.076	.039	11.788
2014 Total	2.435	.023	1.528	.744	7.414	8.158	.081	.045	12.270
2015 Total	1.852	.021	1.800	.964	8.153	9.118	.080	.031	12.902
2016 Total	1.546	.025	2.356	1.238	8.752	9.990	.181	.021	14.119
2017 Total	2.388	.030	3.182	2.424	9.684	12.108	.206	.032	17.946
2018 Total	2.824	.029	3.640	4.277	10.158	14.434	.249	.047	21.224
2019 Total	2.305	.024	4.700	6.212	9.926	16.139	.240	.068	23.476
2020									
January .....	.156	.002	.515	.600	.879	1.479	.019	.005	2.175
February .....	.165	.002	.458	.586	.850	1.436	.022	.006	2.089
March .....	.177	.001	.502	.642	.885	1.527	.025	.004	2.236
April .....	.139	.001	.425	.494	.798	1.291	.019	.005	1.880
May .....	.118	.001	.399	.562	.592	1.154	.017	.005	1.694
June .....	.114	(s)	.342	.471	.708	1.179	.019	.004	1.659
July .....	.133	.001	.352	.592	.777	1.368	.015	.004	1.874
August .....	.113	.001	.362	.603	.774	1.377	.019	.003	1.877
September .....	.134	.001	.399	.559	.737	1.296	.019	.003	1.853
October .....	.123	.003	.486	.520	.821	1.341	.020	.003	1.975
November .....	.176	.002	.533	.477	.748	1.225	.018	.003	1.957
December .....	.177	.001	.558	.594	.840	1.434	.021	.003	2.194
Total	1.725	.017	5.331	6.699	9.410	16.108	.234	.048	23.463
2021									
January .....	.146	.003	.569	R .563	R .776	R 1.339	.023	.003	R 2.083
February .....	.170	.003	.428	R .411	R .635	R 1.046	R .017	.004	R 1.667
March .....	.187	(s)	.601	R .498	R .753	R 1.252	.024	.003	R 2.067
April .....	.166	.004	.569	R .545	R .796	R 1.341	.021	.004	R 2.105
May .....	.181	.004	.583	R .503	R .838	R 1.341	R .018	.003	R 2.131
June .....	.187	.006	.544	R .586	R .857	R 1.444	.021	.003	R 2.205
July .....	.156	.003	.571	R .480	R .856	R 1.336	.015	.004	R 2.086
August .....	.178	.005	.569	R .531	R .876	R 1.407	.021	.004	R 2.184
September .....	.165	.006	.540	R .435	R .755	R 1.190	R .020	.004	R 1.925
October .....	.182	.004	.550	R .493	R .811	R 1.304	.018	.004	R 2.063
November .....	.166	.005	.562	R .539	R .870	R 1.409	R .024	.006	R 2.172
December .....	.180	.008	.626	R .606	R .937	R 1.543	R .024	.005	R 2.387
Total	2.065	.052	6.712	R 6.191	R 9.761	R 15.952	.247	.047	R 25.075
2022									
January .....	.139	.006	.616	.594	.800	R 1.394	.026	.005	2.185
February .....	.174	.002	.550	.530	.762	R 1.293	.024	.005	R 2.049
March .....	.177	.005	.643	.589	.921	R 1.510	.025	.006	2.366
April .....	.195	.005	.592	.556	.898	R 1.455	.028	.005	R 2.280
May .....	.179	.010	.620	.611	.869	1.480	R .028	.004	R 2.321
June .....	.184	.004	.555	.613	.907	1.521	.023	.006	2.293
6-Month Total	1.048	.032	3.576	3.494	5.158	8.652	.155	.031	13.494
2021 6-Month Total	1.037	.021	3.294	3.107	4.656	7.763	.125	.019	12.259
2020 6-Month Total .....	.868	.008	2.640	3.353	4.713	8.066	.121	.030	11.733

^a Crude oil and lease condensate.
^b Petroleum products, unfinished oils, natural gasoline, and gasoline blending components. Does not include biofuels.

^c 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.

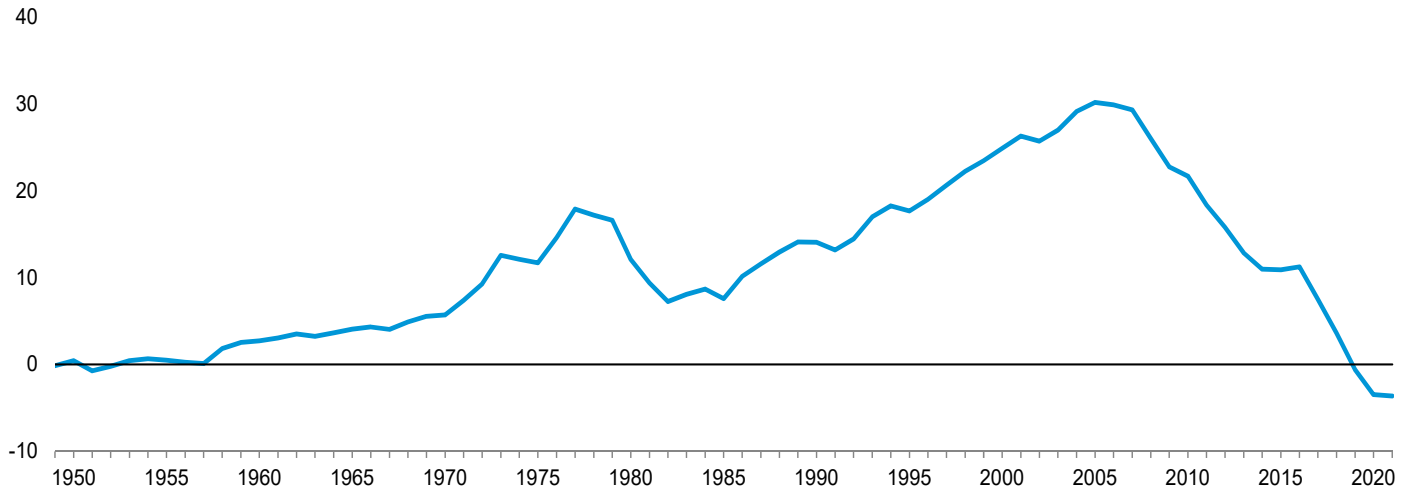
Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#summary> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

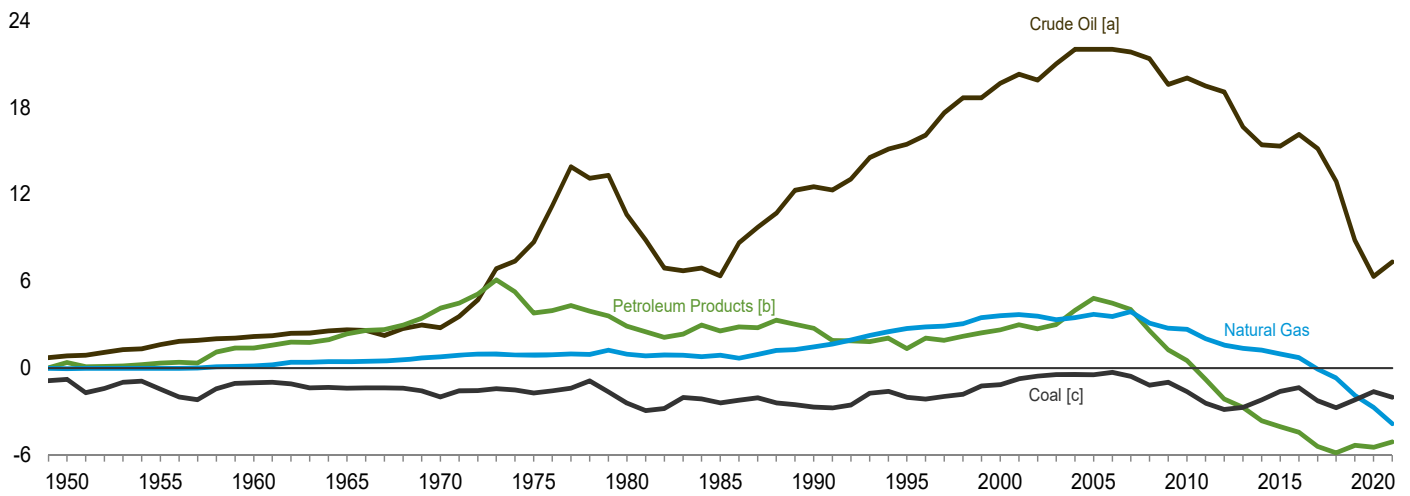
Figure 1.4c Primary Energy Net Imports

(Quadrillion Btu)

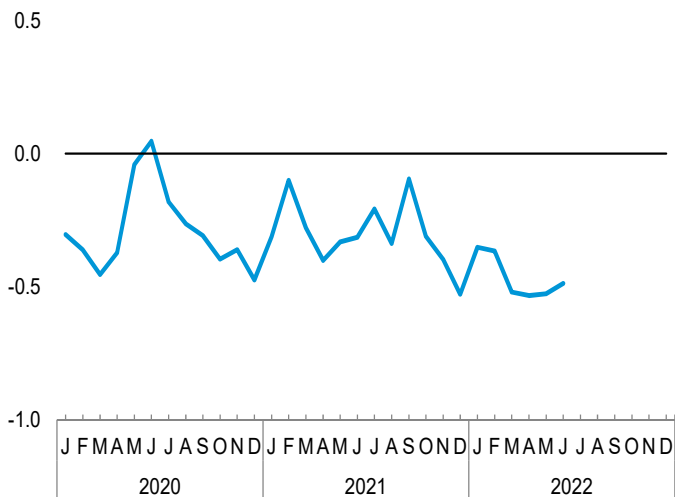
Total, 1949–2021



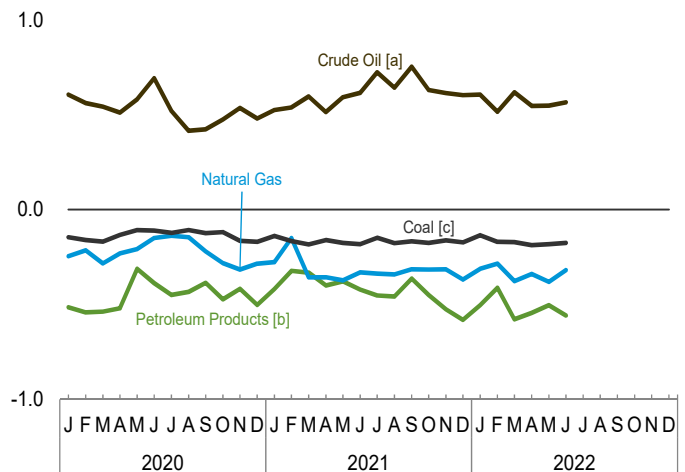
By Major Source, 1949–2021



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.

[c] Includes coal coke.

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

Source: Table 1.4c.

Table 1.4c Primary Energy Net Imports by Source
(Quadrillion Btu)

	Net Imports ^a								
	Coal	Coal Coke	Natural Gas	Petroleum			Biomass ^d	Electricity	Total
				Crude Oil ^b	Petroleum Products ^c	Total			
1950 Total	-0.777	0.001	-0.027	0.854	0.390	1.244	NA	0.006	0.448
1955 Total	-1.456	-0.10	-0.021	1.624	.354	1.978	NA	.014	.504
1960 Total	-1.017	-0.006	.149	2.178	1.389	3.568	NA	.015	2.710
1965 Total	-1.372	-0.018	.444	2.648	2.362	5.010	NA	(s)	4.063
1970 Total	-1.935	-0.058	.774	2.785	4.136	6.921	NA	.007	5.709
1975 Total	-1.738	.014	.904	8.708	3.800	12.508	NA	.021	11.709
1980 Total	-2.391	-0.035	.957	10.586	2.912	13.499	NA	.071	12.101
1985 Total	-2.389	-0.013	.896	6.381	2.570	8.952	NA	.140	7.584
1990 Total	-2.705	.005	1.464	12.536	2.757	15.293	NA	.008	14.065
1995 Total	-2.081	.061	2.745	15.469	1.355	16.824	NA	.134	17.684
2000 Total	-1.215	.065	3.623	19.676	2.638	22.314	NA	.115	24.904
2005 Total	-.512	.044	3.714	22.023	4.831	26.855	.011	.085	30.197
2006 Total	-.358	.061	3.560	22.032	4.501	26.533	.062	.063	29.921
2007 Total	-.598	.025	3.893	21.855	4.040	25.895	.019	.107	29.341
2008 Total	-1.215	.041	3.112	21.388	2.588	23.976	-.004	.112	26.021
2009 Total	-.949	-.024	2.763	19.606	1.266	20.872	-.009	.116	22.770
2010 Total	-1.617	-.006	2.687	20.052	.528	20.580	-.042	.089	21.690
2011 Total	-2.423	.011	2.036	19.495	-.781	18.714	-.089	.127	18.375
2012 Total	-2.875	.004	1.583	19.096	-2.139	16.957	-.029	.161	15.801
2013 Total	-2.696	-.017	1.369	16.673	-2.717	13.956	.026	.197	12.835
2014 Total	-2.183	-.022	1.235	15.434	-3.641	11.793	-.034	.182	10.971
2015 Total	-1.596	-.018	.986	15.335	-4.042	11.292	-.001	.227	10.892
2016 Total	-1.326	-.019	.725	16.154	-4.443	11.710	-.058	.227	11.259
2017 Total	-2.220	-.029	-.073	15.173	-5.407	9.766	-.124	.192	7.512
2018 Total	-2.702	-.026	-.679	12.915	-5.849	7.066	-.201	.152	3.610
2019 Total	-2.167	-.021	-1.889	8.833	-5.331	3.502	-.168	.133	-.610
2020 January	-.145	-.001	-.246	.606	-.514	.092	-.014	.011	-.304
February	-.158	-.002	-.214	.561	-.541	.020	-.017	.010	-.362
March	-.167	-.001	-.283	.542	-.538	.005	-.020	.013	-.454
April	-.131	-.001	-.230	.511	-.520	-.009	-.012	.011	-.372
May	-.107	(s)	-.208	.582	-.311	.271	-.011	.013	-.042
June	-.110	(s)	-.149	.693	-.388	.304	-.013	.013	.046
July	-.123	(s)	-.137	.519	-.450	.069	-.011	.019	-.182
August	-.107	-.001	-.146	.415	-.433	-.018	-.013	.020	-.264
September	-.124	-.001	-.220	.423	-.386	.037	-.013	.013	-.308
October	-.118	-.001	-.282	.475	-.472	.003	-.013	.013	-.397
November	-.163	-.002	-.316	.536	-.417	.119	-.011	.012	-.361
December	-.169	-.001	-.285	.480	-.502	-.021	-.013	.015	-.475
Total	-1.620	-.013	-2.716	6.345	-5.473	.872	-.159	.161	-3.475
2021 January	-.135	-.003	-.277	R .525	R -.418	R .108	R -.017	.014	R -.312
February	-.163	-.003	-.149	R .538	R -.323	R .215	R -.012	.010	R -.101
March	-.183	(s)	-.356	R .596	R -.332	R .264	R -.018	.013	R -.279
April	-.156	-.004	-.356	R .514	R -.399	R .115	R -.012	.011	R -.402
May	-.171	-.004	-.373	R .593	R -.378	R .215	R -.012	.013	R -.332
June	-.176	-.006	-.331	R .616	R -.421	R .196	-.012	.015	R -.314
July	-.145	-.003	-.338	R .723	R -.452	R .271	-.009	.015	R -.208
August	-.171	-.005	-.342	R .642	R -.458	R .184	-.015	.012	R -.338
September	-.161	-.006	-.315	R .753	R -.363	R .389	-.013	.009	R -.096
October	-.172	-.004	-.316	R .630	R -.449	R .181	R -.010	.010	R -.311
November	-.157	-.005	-.314	R .614	R -.525	R .089	R -.016	.004	R -.398
December	-.166	-.007	-.368	R .603	R -.581	R .022	-.018	.008	R -.528
Total	-1.955	-.049	-3.834	R 7.348	R -5.100	R 2.248	R -.163	.134	R -3.620
2022 January	-.128	-.006	-.312	.606	-.503	.103	-.020	.010	R -.352
February	-.168	-.002	-.285	.515	-.411	.104	-.022	.006	-.366
March	-.167	-.005	-.376	R .618	-.578	.039	-.019	.007	-.520
April	-.181	-.005	-.339	.546	-.544	.002	-.022	.012	R -.533
May	-.172	-.010	-.381	.548	R -.504	R .045	R -.022	.014	R -.526
June	-.171	-.004	-.319	.565	-.558	.006	-.019	.017	-.488
6-Month Total	-.988	-.031	-2.012	3.399	-3.098	.300	-.123	.067	-2.786
2021 6-Month Total	-.984	-.020	-1.843	3.383	-2.271	1.112	-.083	.076	-1.741
2020 6-Month Total	-.818	-.007	-1.331	3.495	-2.813	.683	-.086	.070	-1.488

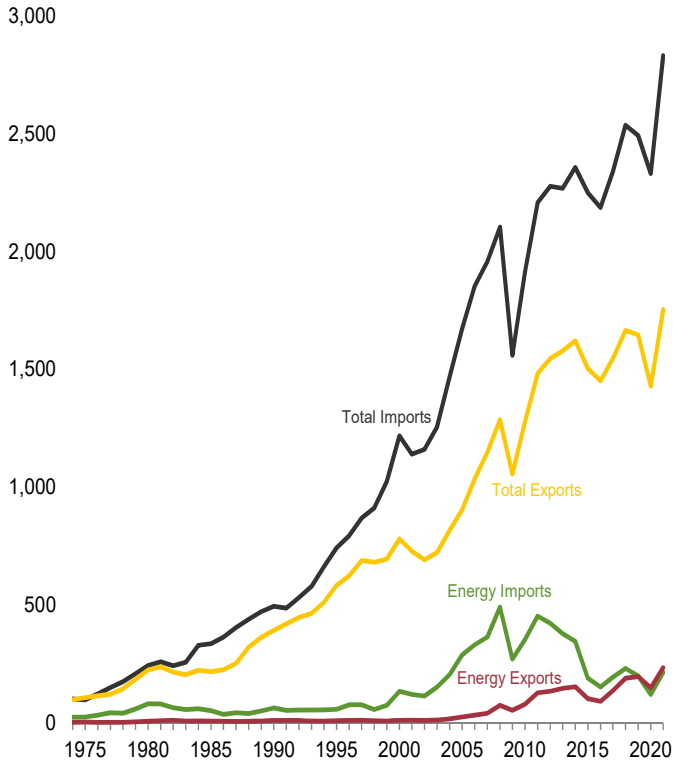
^a Net imports equal imports minus exports.
^b Crude oil and lease condensate. Includes imports into the Strategic Petroleum Reserve, which began in 1977.
^c Petroleum products, unfinished oils, natural gasoline, and gasoline blending components. Does not include biofuels.
^d Beginning in 1993, includes fuel ethanol (minus denaturant) imports. Beginning in 2001, also includes biodiesel imports and exports. Beginning in 2010, also includes fuel ethanol (minus denaturant) exports. Beginning in 2011, also includes renewable diesel fuel imports. Beginning in 2021, also includes other

biofuels imports.
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: Tables 1.4a and 1.4b.

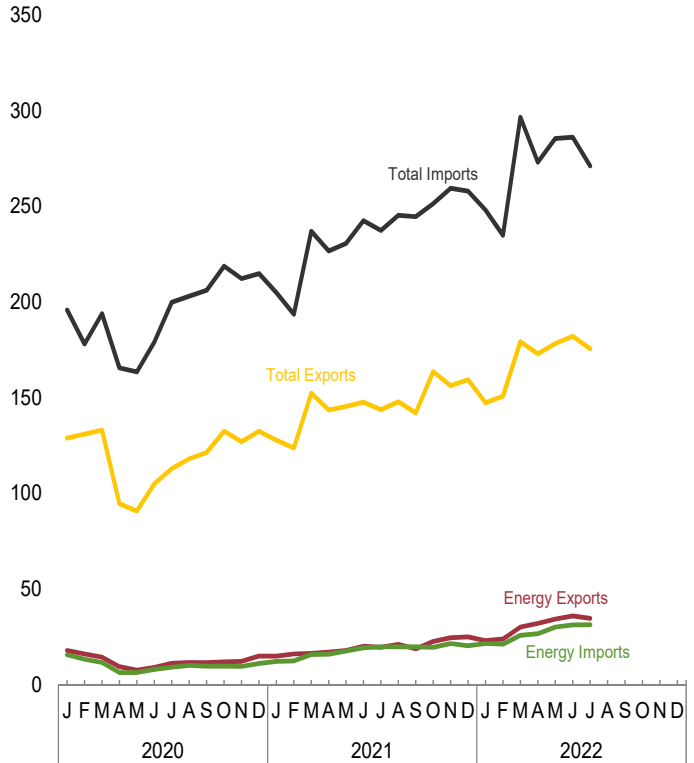
Figure 1.5 Merchandise Trade Value

(Billion Dollars[a])

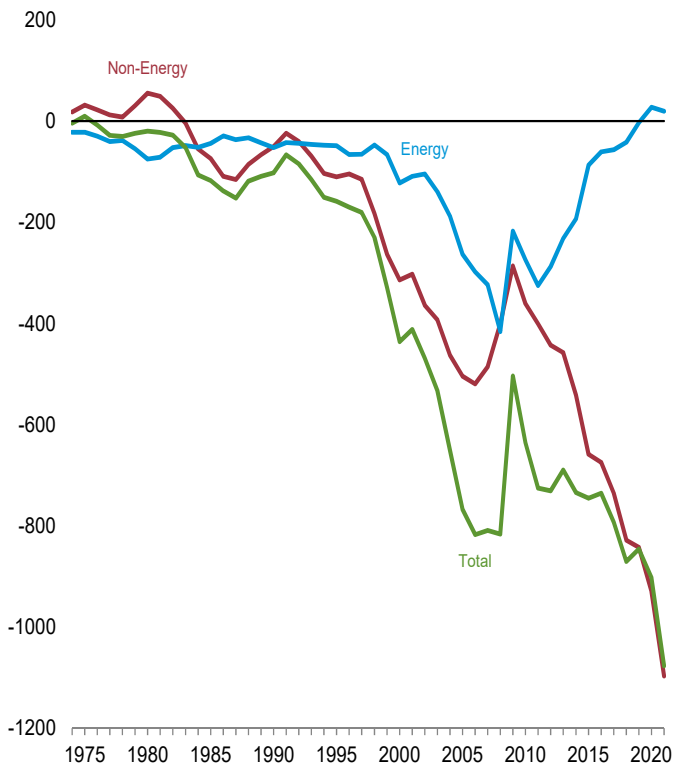
Imports and Exports, 1974–2021



Imports and Exports, Monthly



Trade Balance, 1974–2021



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)

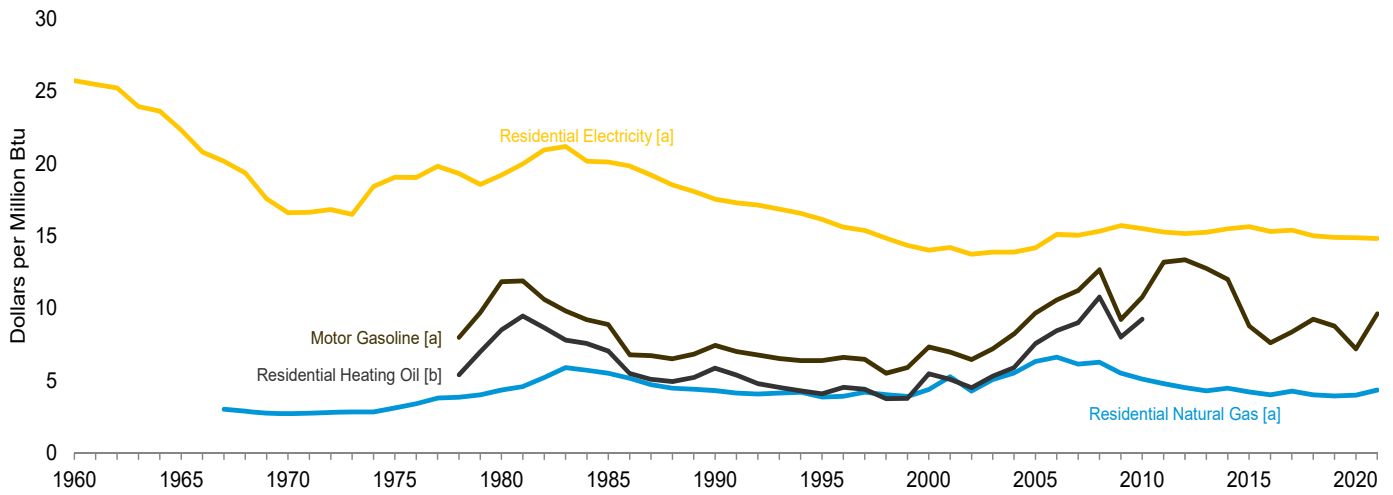
	Petroleum ^b			Energy ^c			Non-Energy Balance	Total Merchandise		
	Exports	Imports	Balance	Exports	Imports	Balance		Exports	Imports	Balance
1974 Total	792	24,668	-23,876	3,444	25,454	-22,010	18,126	99,437	103,321	-3,884
1975 Total	907	25,197	-24,289	4,470	26,476	-22,006	31,557	108,856	99,305	9,551
1980 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	8,569	102,663	-94,094	11,541	115,748	-104,207	-364,056	693,103	1,161,366	-468,263
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	111,949	408,509	-296,560	136,054	423,860	-287,806	-442,640	1,545,821	2,276,267	-730,446
2013 Total	123,244	363,141	-239,897	147,572	379,758	-232,186	-457,284	1,578,517	2,267,987	-689,470
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	74,921	142,920	-67,999	92,971	153,800	-60,829	-674,497	1,451,460	2,186,786	-735,326
2017 Total	104,975	181,672	-76,697	137,920	194,790	-56,870	-735,526	1,547,195	2,339,591	-792,396
2018 Total	149,715	219,493	-69,778	190,888	232,746	-41,858	-828,500	1,665,787	2,536,145	-870,358
2019 Total	156,390	189,040	-32,650	197,740	200,829	-3,089	-842,670	1,645,940	2,491,700	-845,759
2020 January	14,059	14,862	-803	17,979	15,869	2,110	-68,910	129,010	195,810	-66,800
February	12,797	12,645	152	16,181	13,413	2,768	-49,910	130,977	178,119	-47,142
March	11,230	11,128	102	14,579	11,789	2,790	-63,501	133,174	193,885	-60,711
April	6,715	5,989	726	9,590	6,494	3,096	-74,019	94,691	165,614	-70,923
May	5,191	5,909	-718	7,835	6,496	1,339	-73,868	90,954	163,483	-72,529
June	6,741	7,565	-824	9,181	8,122	1,059	-75,105	105,015	179,060	-74,046
July	8,668	8,627	41	11,375	9,332	2,043	-88,921	112,991	199,869	-86,878
August	9,019	9,447	-428	11,791	10,255	1,536	-86,438	118,127	203,029	-84,902
September	8,815	9,156	-341	11,714	9,883	1,831	-86,466	121,444	206,079	-84,635
October	8,464	9,051	-587	12,089	9,920	2,169	-88,361	132,593	218,784	-86,192
November	8,075	8,748	-673	12,408	9,731	2,677	-87,996	126,975	212,293	-85,319
December	10,374	9,952	422	15,109	11,182	3,927	-86,169	132,567	214,809	-82,242
Total	110,149	113,077	-2,928	149,832	122,486	27,346	-929,664	1,428,518	2,330,836	-902,318
2021 January	10,188	11,035	-847	15,085	12,368	2,717	-79,811	127,851	204,945	-77,094
February	8,868	10,724	-1,856	16,268	12,681	3,587	-73,294	123,861	193,568	-69,707
March	10,826	14,708	-3,882	16,478	15,943	535	-85,101	152,434	237,001	-84,566
April	11,968	15,133	-3,165	17,247	16,059	1,188	-84,204	143,701	226,718	-83,016
May	12,672	16,813	-4,141	18,103	17,803	300	-85,379	145,477	230,556	-85,079
June	14,686	18,254	-3,568	20,293	19,390	903	-95,639	147,741	242,477	-94,736
July	13,684	18,564	-4,880	19,642	19,936	-294	-93,296	143,771	237,361	-93,590
August	14,495	18,644	-4,149	21,192	19,996	1,196	-98,567	147,906	245,277	-97,371
September	12,119	18,619	-6,500	18,917	20,025	-1,108	-101,371	142,079	244,558	-102,479
October	14,619	17,997	-3,378	22,712	19,669	3,043	-90,684	163,682	251,324	-87,641
November	16,103	19,806	-3,703	24,660	21,657	3,003	-106,158	156,286	259,441	-103,155
December	16,911	18,367	-1,456	25,185	20,486	4,699	-103,075	159,510	257,886	-98,376
Total	157,139	198,665	-41,526	235,781	216,013	19,768	-1,096,578	1,754,300	2,831,111	-1,076,810
2022 January	15,560	18,515	-2,955	23,206	21,665	1,541	-102,102	147,431	247,992	-100,561
February	15,982	19,107	-3,125	24,071	21,359	2,712	-86,741	150,893	234,921	-84,029
March	21,019	24,003	-2,984	30,325	26,020	4,305	-121,525	179,298	296,518	-117,220
April	22,374	24,912	-2,538	32,167	26,844	5,323	-105,414	173,006	273,097	-100,091
May	23,607	28,144	-4,537	34,377	30,292	4,085	-111,005	178,421	285,340	-106,920
June	24,772	29,561	-4,789	36,017	31,417	4,600	^R -108,600	^R 182,097	^R 286,097	^R -104,000
July	25,292	29,108	-3,816	34,861	31,448	3,413	-98,905	175,624	271,116	-95,492
7-Month Total	148,606	173,350	-24,744	215,024	189,045	25,979	-734,292	1,186,769	1,895,082	-708,313
2021 7-Month Total	82,892	105,232	-22,339	123,116	114,180	8,936	-596,724	984,836	1,572,625	-587,788
2020 7-Month Total	65,401	66,725	-1,324	86,720	71,515	15,205	-494,234	796,813	1,275,842	-479,029

^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

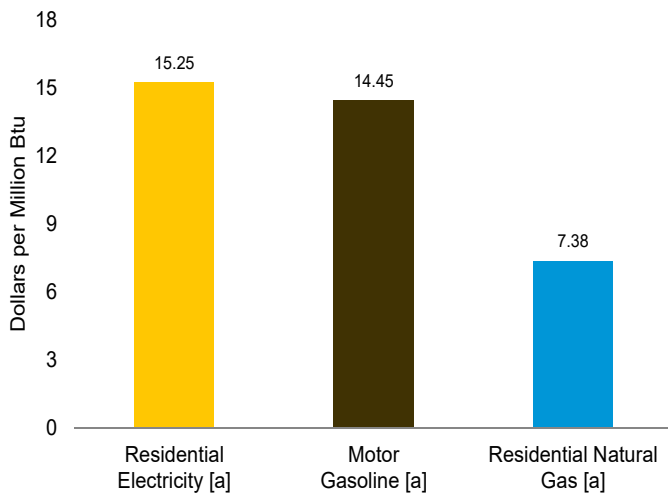
components due to independent rounding. • The U.S. import statistics reflect both government and nongovernment imports of merchandise from foreign countries into the U.S. customs territory, which comprises the 50 states, the District of Columbia, Puerto Rico, and the Virgin Islands.
Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#summary> (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

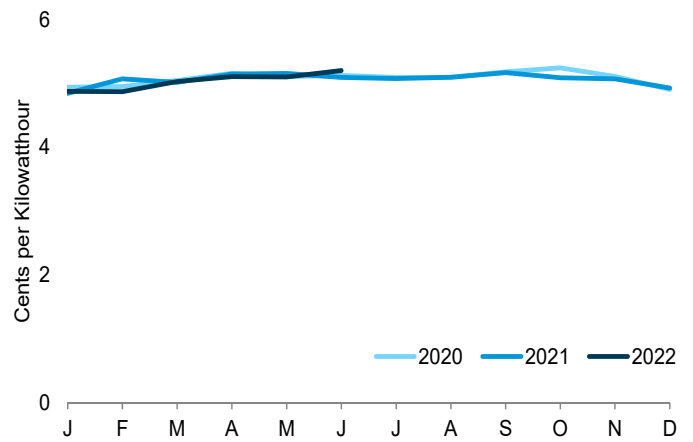
Costs, 1960–2021



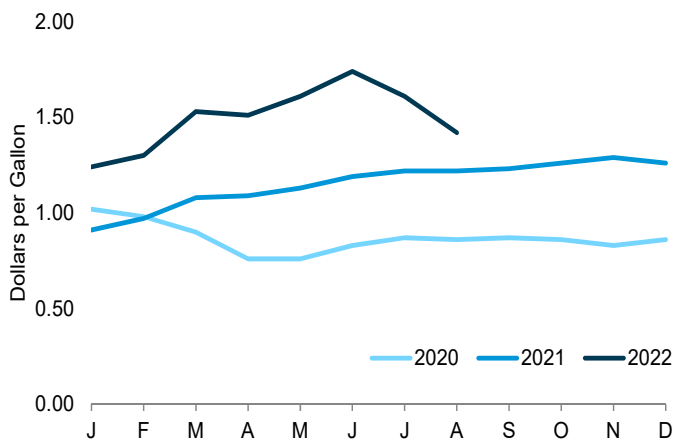
Costs, June 2022



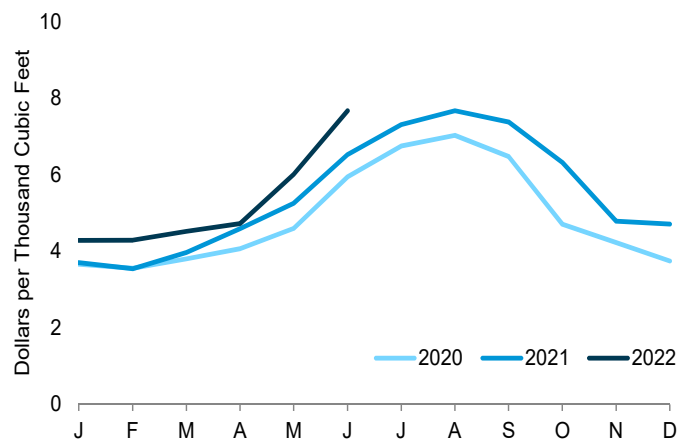
Residential Electricity, [a] Monthly



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>.

Source: 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	9.23	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 Average	245.120	1.007	8.37	NA	NA	4.45	4.29	5.26	15.41
2018 Average	251.107	1.113	9.25	NA	NA	4.18	4.03	5.13	15.02
2019 Average	255.657	1.055	8.77	NA	NA	4.11	3.95	5.09	14.91
2020 January	257.971	1.020	8.48	NA	NA	3.66	3.52	4.95	14.50
February	258.678	0.978	8.13	NA	NA	3.55	3.42	4.96	14.53
March	258.115	0.904	7.52	NA	NA	3.80	3.65	5.05	14.81
April	256.389	0.759	6.31	NA	NA	4.06	3.91	5.16	15.13
May	256.394	0.759	6.31	NA	NA	4.60	4.43	5.11	14.97
June	257.797	0.830	6.90	NA	NA	5.95	5.72	5.13	15.03
July	259.101	0.866	7.20	NA	NA	6.75	6.50	5.10	14.94
August	259.918	0.864	7.18	NA	NA	7.03	6.77	5.10	14.95
September	260.280	0.868	7.22	NA	NA	6.47	6.23	5.18	15.19
October	260.388	0.856	7.11	NA	NA	4.71	4.53	5.25	15.38
November	260.229	0.830	6.90	NA	NA	4.22	4.06	5.11	14.99
December	260.474	0.858	7.13	NA	NA	3.74	3.60	4.91	14.38
Average	258.811	0.866	7.20	NA	NA	4.17	4.01	5.08	14.89
2021 January	261.582	0.914	7.60	NA	NA	3.70	3.56	4.85	14.22
February	263.014	0.973	8.09	NA	NA	3.54	3.41	5.08	14.88
March	264.877	1.078	8.97	NA	NA	3.97	3.82	5.02	14.72
April	267.054	1.089	9.05	NA	NA	4.59	4.41	5.15	15.10
May	269.195	1.130	9.40	NA	NA	5.25	5.05	5.16	15.12
June	271.696	1.194	9.93	NA	NA	6.53	6.28	5.10	14.94
July	273.003	1.218	10.13	NA	NA	7.30	7.03	5.08	14.89
August	273.567	1.225	10.19	NA	NA	7.67	7.38	5.10	14.95
September	274.310	1.225	10.19	NA	NA	7.38	7.10	5.17	15.16
October	276.589	1.257	10.46	NA	NA	6.32	6.09	5.09	14.93
November	277.948	1.287	10.70	NA	NA	4.79	4.61	5.08	14.88
December	278.802	1.257	10.46	NA	NA	4.71	4.53	4.93	14.45
Average	270.970	1.156	9.62	NA	NA	4.52	4.35	5.06	14.84
2022 January	281.148	1.245	10.35	NA	NA	4.28	4.12	4.88	14.30
February	283.716	1.295	10.77	NA	NA	4.29	4.13	4.87	14.29
March	287.504	1.531	12.73	NA	NA	4.52	4.35	5.03	14.75
April	289.109	1.511	12.57	NA	NA	4.72	4.54	5.11	14.97
May	292.296	1.606	13.36	NA	NA	6.00	5.78	5.10	14.96
June	296.311	1.738	14.45	NA	NA	^R 7.67	^R 7.38	^R 5.20	^R 15.25
July	296.276	1.609	13.38	NA	NA	NA	NA	NA	NA
August	296.171	1.420	11.81	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.

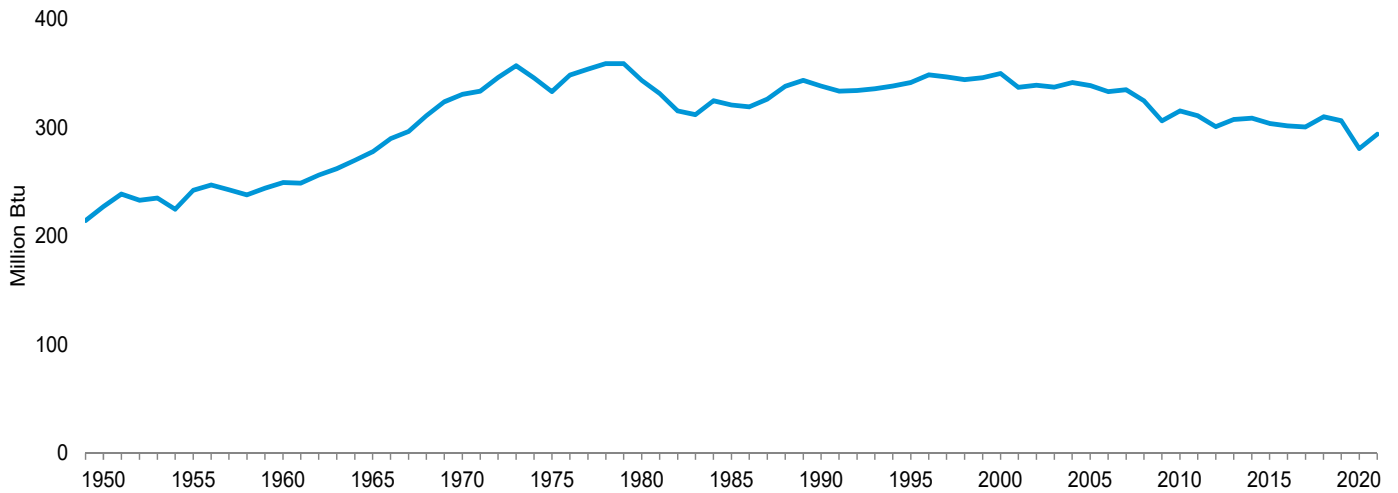
Notes: • See "Real Dollars" in Glossary. • Fuel costs are calculated by using the Urban Consumer Price Index (CPI) developed by the Bureau of Labor Statistics. • Annual averages may not equal average of months due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

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.

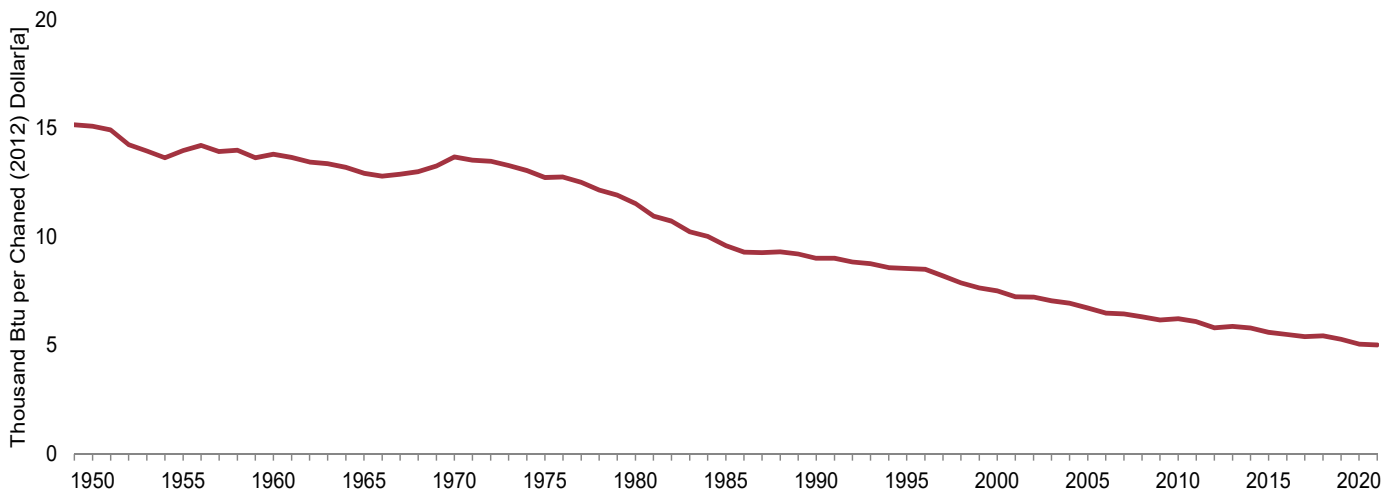
Sources: • **Fuel Prices:** Tables 9.4 (All Grades), 9.8, and 9.10, adjusted by the CPI; and *Monthly Energy Review*, September 2012, Table 9.8c. • **Consumer Price Index, All Urban Consumers:** U.S. Department of Labor, Bureau of Labor Statistics, series ID CUUR0000SA0. • **Conversion Factors:** Tables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

Figure 1.7 Primary Energy Consumption and Energy Expenditures Indicators

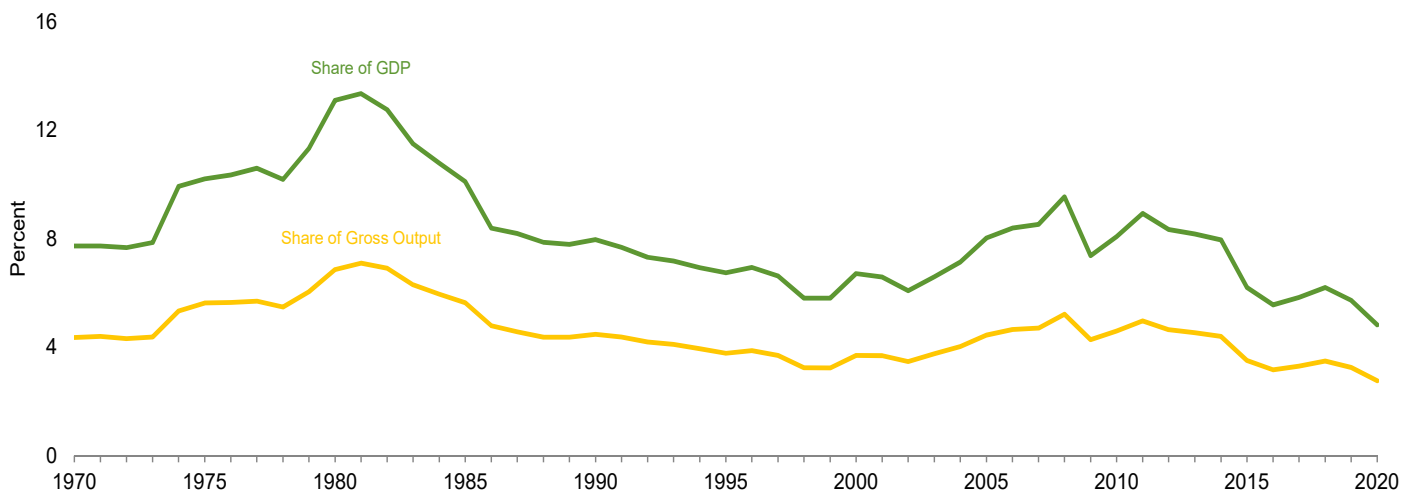
Energy Consumption per Capita, 1949–2021



Primary Energy Consumption per Real Dollar [a] of Gross Domestic Product, 1949–2021



Energy Expenditures as Share of Gross Domestic Product and Gross Output,[b] 1970–2020



[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.

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

Source: Table 1.7.

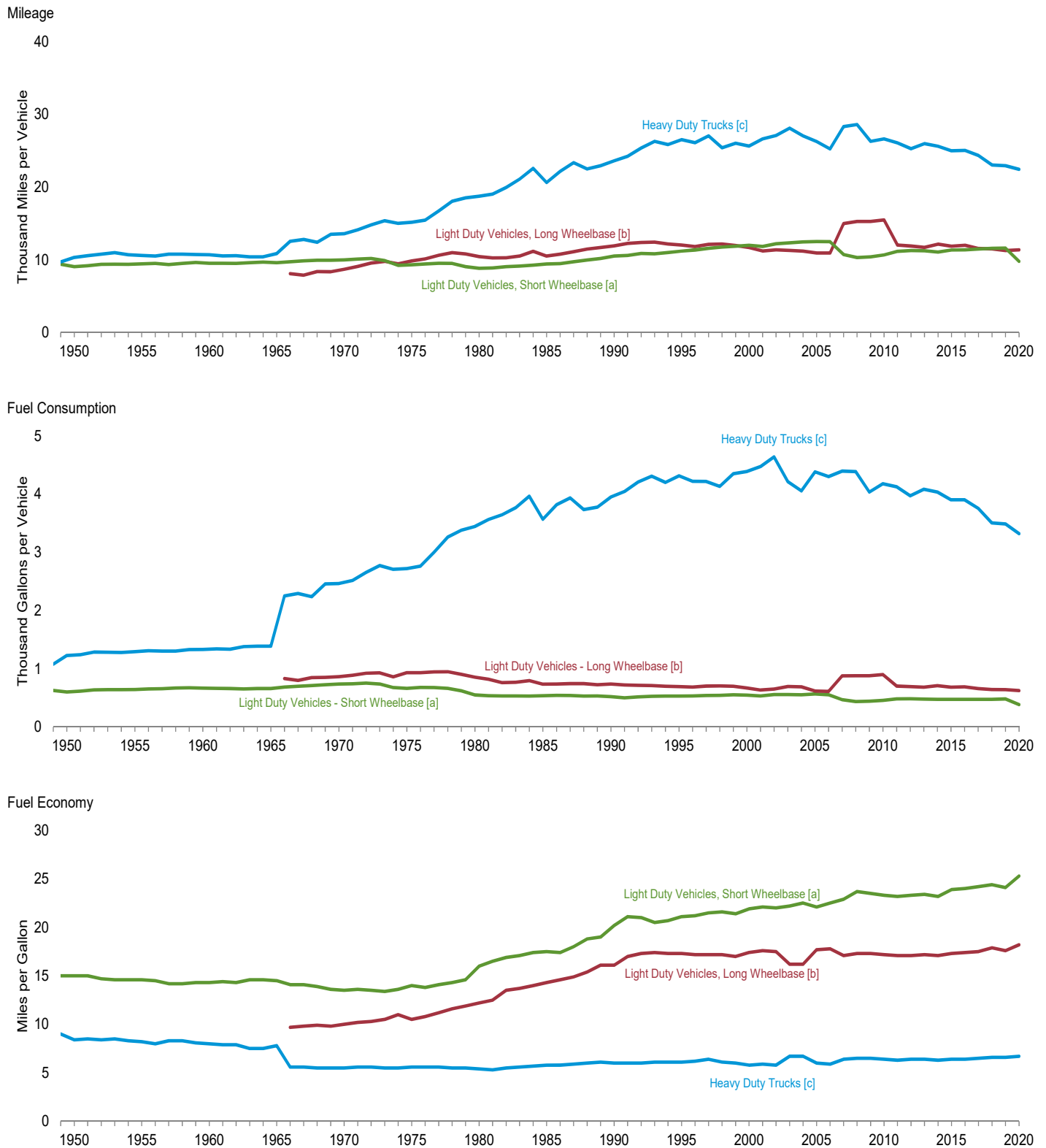
Table 1.7 Primary Energy Consumption, Energy Expenditures, and Carbon Dioxide Emissions Indicators

	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	34.599	227	15.10	NA	NA	NA	NA	2,382	15.6	1,040
1955	40.178	242	13.98	NA	NA	NA	NA	2,685	16.2	934
1960	45.041	249	13.81	NA	NA	NA	NA	2,914	16.1	893
1965	53.953	278	12.93	NA	NA	NA	NA	3,462	17.8	829
1970	67.817	331	13.69	82,875	404	7.7	4.4	4,261	20.8	860
1975	71.931	333	12.73	171,854	796	10.2	5.6	4,428	20.5	784
1980	78.021	343	11.54	374,350	1,647	13.1	6.9	4,756	20.9	703
1981	76.057	331	10.97	427,901	1,865	13.3	7.1	4,637	20.2	669
1982	73.046	315	10.73	426,482	1,841	12.8	6.9	4,404	19.0	647
1983	72.915	312	10.24	417,622	1,786	11.5	6.3	4,384	18.8	616
1984	76.571	325	10.03	435,313	1,846	10.8	6.0	4,613	19.6	604
1985	76.334	321	9.59	438,343	1,842	10.1	5.6	4,605	19.4	579
1986	76.599	319	9.31	384,091	1,599	8.4	4.8	4,616	19.2	561
1987	79.008	326	9.28	397,627	1,641	8.2	4.6	4,776	19.7	561
1988	82.659	338	9.32	411,568	1,683	7.9	4.4	4,998	20.4	563
1989	84.740	343	9.21	439,051	1,779	7.8	4.4	5,085	20.6	553
1990	84.433	338	9.01	474,652	1,901	8.0	4.5	5,038	20.2	538
1991	84.380	334	9.01	472,440	1,867	7.7	4.4	4,993	19.7	533
1992	85.725	334	8.85	476,845	1,859	7.3	4.2	5,094	19.9	526
1993	87.266	336	8.76	492,275	1,894	7.2	4.1	5,186	20.0	521
1994	88.983	338	8.59	504,856	1,919	6.9	3.9	5,263	20.0	508
1995	90.931	341	8.55	514,624	1,933	6.7	3.8	5,324	20.0	501
1996	93.935	349	8.51	560,293	2,080	6.9	3.9	5,518	20.5	500
1997	94.507	347	8.20	567,962	2,083	6.6	3.7	5,589	20.5	485
1998	94.920	344	7.88	526,283	1,908	5.8	3.2	5,637	20.4	468
1999	96.545	346	7.65	558,627	2,002	5.8	3.2	5,700	20.4	452
2000	98.702	350	7.51	687,711	2,437	6.7	3.7	5,889	20.9	448
2001	96.064	337	7.24	696,242	2,443	6.6	3.7	5,778	20.3	436
2002	97.535	339	7.23	663,964	2,308	6.1	3.5	5,820	20.2	431
2003	97.835	337	7.06	755,070	2,603	6.6	3.7	5,886	20.3	425
2004	100.002	342	6.94	871,210	2,975	7.1	4.0	5,994	20.5	416
2005	100.102	339	6.72	1,045,730	3,539	8.0	4.4	6,007	20.3	403
2006	99.392	333	6.49	1,158,821	3,884	8.4	4.6	5,929	19.9	387
2007	100.894	335	6.46	1,233,869	4,096	8.5	4.7	6,016	20.0	385
2008	98.754	325	6.31	1,408,759	4,633	9.5	5.2	5,823	19.1	372
2009	93.943	306	6.17	1,066,528	3,477	7.4	4.3	5,404	17.6	355
2010	97.514	315	6.23	1,214,277	3,926	8.1	4.6	5,594	18.1	357
2011	96.872	311	6.10	1,392,467	4,469	8.9	5.0	5,455	17.5	343
2012	94.387	301	5.81	1,355,174	4,318	8.3	4.6	5,236	16.7	322
2013	97.130	307	5.87	1,376,398	4,356	8.2	4.5	5,359	17.0	324
2014	98.297	309	5.81	1,395,422	4,384	8.0	4.4	5,414	17.0	320
2015	97.407	304	5.60	1,128,437	3,519	6.2	3.5	5,262	16.4	303
2016	97.384	302	5.51	1,038,870	3,217	5.6	3.2	^R 5,169	16.0	292
2017	97.660	301	5.40	1,136,365	3,497	5.8	3.3	5,131	15.8	284
2018	^R 101.244	310	5.44	1,271,812	3,893	6.2	3.5	^R 5,278	16.2	284
2019	^R 100.482	306	5.28	1,223,862	3,729	5.7	3.3	^R 5,147	15.7	270
2020	^R 92.986	280	5.06	1,007,433	3,039	4.8	2.8	^R 4,579	13.8	249
2021	^R 97.518	^R 294	^R 5.02	NA	NA	NA	NA	^R 4,885	14.7	251

^a See "Primary Energy Consumption" in Glossary.
^b Expenditures include taxes where data are available.
^c Carbon dioxide emissions from energy consumption. See Table 11.1.
^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.
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 (2012) dollars (see Table C1).
• **Expenditures:** U.S. Energy Information Administration, "State Energy Price and Expenditure Estimates, 1970 Through 2018" (June 2020), 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 11.1. • **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 (2012) dollars (see Table C1).

Figure 1.8 Motor Vehicle Mileage, Fuel Consumption, and Fuel Economy, 1949-2020



[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
2018	11,576	475	24.4	11,486	643	17.9	23,037	3,507	6.6	11,843	651	18.2
2019	11,599	481	24.1	11,263	640	17.6	22,930	3,488	6.6	11,797	651	18.1
2020	9,780	386	25.3	11,355	625	18.2	22,415	3,324	6.7	10,523	577	18.2

^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	6,326	7,029	7,457	3,490	3,548	2,277	6,342	3,909	5,364
1955 Total	6,874	6,234	6,488	6,914	3,483	3,515	2,295	6,706	4,328	5,245
1960 Total	6,828	6,391	6,909	7,186	3,760	4,136	2,767	6,282	3,801	5,402
1965 Total	7,030	6,395	6,589	6,934	3,354	3,502	2,237	6,088	3,818	5,145
1970 Total	7,023	6,390	6,721	7,092	3,433	3,824	2,561	6,120	3,733	5,217
1975 Total	6,548	5,895	6,408	6,881	2,948	3,439	2,313	6,261	4,117	4,903
1980 Total	7,071	6,480	6,976	6,837	3,357	3,966	2,495	5,556	3,534	5,077
1985 Total	6,751	5,972	6,668	7,264	2,890	3,662	2,536	6,060	3,935	4,888
1990 Total	5,988	5,254	5,780	6,138	2,299	2,943	1,968	5,392	3,598	4,179
1995 Total	6,688	6,094	6,741	6,911	2,980	3,650	2,149	5,102	3,279	4,641
2000 Total	6,626	5,999	6,316	6,502	2,898	3,552	2,154	4,972	3,463	4,493
2005 Total	6,646	5,951	6,223	6,214	2,769	3,381	1,986	4,896	3,380	4,348
2006 Total	5,886	5,213	5,706	5,822	2,470	3,212	1,802	4,916	3,558	4,040
2007 Total	6,539	5,757	6,075	6,385	2,519	3,188	2,105	4,941	3,507	4,268
2008 Total	6,436	5,784	6,679	7,120	2,704	3,601	2,126	5,233	3,567	4,494
2009 Total	6,645	5,924	6,513	6,842	2,806	3,538	2,154	5,140	3,539	4,480
2010 Total	5,935	5,555	6,187	6,566	3,161	3,949	2,450	5,085	3,625	4,463
2011 Total	6,115	5,485	6,174	6,566	2,561	3,344	2,115	5,327	3,821	4,314
2012 Total	5,564	4,973	5,357	5,517	2,302	2,876	1,651	4,583	3,414	3,773
2013 Total	6,427	5,842	6,622	7,136	2,732	3,649	2,326	5,285	3,365	4,472
2014 Total	6,677	6,206	7,196	7,305	2,957	3,933	2,423	4,758	2,775	4,560
2015 Total	6,521	5,777	6,166	6,090	2,493	3,221	2,087	4,616	2,899	4,096
2016 Total	5,929	5,353	5,701	5,788	2,461	3,093	1,752	4,640	3,030	3,889
2017 Total	6,037	5,333	5,684	6,000	2,237	2,834	1,582	4,593	3,186	3,840
2018 Total	6,325	5,784	6,434	6,971	2,634	3,477	2,252	4,830	3,168	4,293
2019 Total	6,538	5,753	6,428	7,078	2,390	3,180	2,145	5,333	3,545	4,320
2020 Total	5,822	5,214	5,854	6,322	2,260	3,063	1,815	4,807	3,215	3,917
2020 January	1,032	956	1,051	1,224	482	635	430	854	563	741
February	924	840	1,001	1,070	397	554	402	767	447	654
March	779	670	733	745	232	293	139	602	526	485
April	655	566	566	532	178	248	89	415	309	360
May	289	250	256	246	74	86	13	186	148	157
June	28	18	22	21	2	3	0	74	71	26
July	1	0	1	6	0	0	0	14	19	5
August	9	4	13	18	0	0	0	9	16	7
September	103	81	111	143	17	20	7	104	31	58
October	399	337	464	556	96	154	83	327	133	248
November	616	547	599	663	227	345	175	567	412	423
December	987	944	1,035	1,097	556	726	477	888	542	752
Total	5,822	5,214	5,854	6,322	2,260	3,063	1,815	4,807	3,215	3,917
2021 Total	5,798	5,271	5,749	6,061	2,366	3,157	1,913	4,717	3,326	3,936
2021 January	R 1,123	1,067	1,147	1,180	578	R 735	R 515	879	R 549	805
February	R 1,053	1,018	R 1,249	1,375	484	715	R 581	R 785	492	794
March	837	737	690	R 672	283	338	200	645	R 521	508
April	519	441	R 450	R 479	154	R 230	103	406	R 282	R 308
May	R 244	R 216	244	226	57	83	18	222	171	151
June	R 14	10	14	14	1	1	0	35	28	12
July	R 14	4	7	8	0	0	0	5	10	5
August	3	2	5	8	0	0	0	23	14	6
September	68	R 50	R 57	R 68	10	19	1	82	52	40
October	281	R 207	R 295	R 226	70	R 102	32	346	R 247	181
November	727	708	780	R 739	377	R 520	257	493	R 325	R 510
December	914	810	880	R 993	R 351	413	206	795	633	R 616
Total	R 5,798	R 5,271	5,749	R 6,061	R 2,366	R 3,157	R 1,913	R 4,717	3,326	3,936
2022 Total	3,791	3,489	3,794	3,947	1,558	2,102	1,417	2,972	2,044	2,579
2022 January	1,303	R 1,244	1,392	R 1,442	R 643	845	580	884	R 538	913
February	994	R 934	1,085	1,195	R 411	589	499	R 804	R 465	710
March	842	R 760	R 792	R 848	R 286	R 387	265	R 609	R 397	525
April	544	R 495	R 567	578	157	R 215	53	R 423	R 337	342
May	R 187	147	R 160	R 186	31	31	4	245	R 215	123
June	54	27	27	30	1	1	0	70	57	26
6-Month Total	3,924	3,607	4,023	4,279	1,529	2,069	1,400	3,035	2,008	2,640
2021 6-Month Total	3,791	3,489	3,794	3,947	1,558	2,102	1,417	2,972	2,044	2,579
2020 6-Month Total	3,706	3,300	3,631	3,839	1,364	1,818	1,072	2,898	2,063	2,423

^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.

Sources: 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	296	401	505	646	1,429	1,420	2,281	681	626	872
1955 Total	531	761	922	1,138	1,647	1,673	2,506	779	562	1,145
1960 Total	318	486	626	870	1,599	1,531	2,366	973	799	1,003
1965 Total	310	498	617	831	1,626	1,551	2,460	779	581	981
1970 Total	423	615	746	979	1,760	1,571	2,282	970	729	1,081
1975 Total	422	583	720	937	1,805	1,440	2,161	903	598	1,051
1980 Total	439	679	769	1,158	1,925	1,753	2,651	1,071	655	1,216
1985 Total	324	509	601	780	1,885	1,521	2,519	1,095	762	1,122
1990 Total	429	561	602	912	2,061	1,562	2,526	1,211	835	1,200
1995 Total	471	703	877	927	2,034	1,613	2,398	1,213	793	1,261
2000 Total	278	458	630	983	1,928	1,673	2,773	1,479	772	1,232
2005 Total	598	892	944	1,063	2,102	1,675	2,646	1,372	777	1,389
2006 Total	484	693	733	1,033	2,056	1,647	2,786	1,465	920	1,360
2007 Total	445	693	881	1,102	2,222	1,892	2,477	1,562	828	1,392
2008 Total	462	666	683	818	1,998	1,537	2,500	1,385	917	1,283
2009 Total	349	523	534	698	2,032	1,479	2,588	1,392	894	1,241
2010 Total	634	908	963	1,095	2,274	1,975	2,756	1,356	674	1,456
2011 Total	553	835	858	1,074	2,263	1,727	3,112	1,447	734	1,469
2012 Total	563	815	974	1,221	2,166	1,761	2,914	1,567	918	1,493
2013 Total	540	681	689	891	2,005	1,440	2,535	1,456	891	1,304
2014 Total	419	596	610	812	2,005	1,493	2,474	1,423	1,070	1,295
2015 Total	555	804	729	941	2,401	1,718	2,740	1,469	1,069	1,484
2016 Total	626	887	958	1,072	2,409	1,957	2,882	1,485	930	1,553
2017 Total	450	661	709	910	2,250	1,585	2,718	1,534	1,055	1,422
2018 Total	667	885	972	1,133	2,414	1,929	2,856	1,558	1,005	1,579
2019 Total	535	783	831	951	2,508	1,886	2,758	1,383	843	1,495
2020 January	0	0	0	0	47	13	29	0	9	15
February	0	0	0	0	46	4	13	2	8	12
March	0	0	2	6	102	56	132	8	8	42
April	0	0	0	1	109	20	106	43	19	42
May	3	11	32	37	166	106	279	158	66	105
June	99	145	187	256	342	296	457	262	111	246
July	292	363	335	343	501	463	603	412	213	397
August	215	261	218	246	454	389	578	439	295	356
September	34	59	55	72	272	210	326	226	214	180
October	0	4	2	3	184	66	133	101	101	82
November	0	0	0	0	93	13	71	15	15	32
December	0	0	0	0	21	1	8	0	10	7
Total	644	844	831	964	2,338	1,636	2,735	1,665	1,071	1,518
2021 January	0	0	0	0	30	5	15	0	10	10
February	0	0	0	0	50	1	4	3	7	12
March	0	0	2	8	R 73	R 34	70	7	8	28
April	0	0	0	3	81	18	R 85	59	24	36
May	8	18	35	43	R 188	R 109	228	124	53	101
June	R 136	165	215	R 266	347	R 308	455	345	R 178	274
July	159	R 249	238	R 300	436	R 397	R 513	415	R 299	346
August	R 238	R 285	286	299	455	412	R 555	330	R 255	R 358
September	60	R 94	105	146	279	R 208	402	221	R 162	200
October	6	23	29	22	177	R 100	208	45	R 27	84
November	0	0	0	0	R 41	2	32	24	24	18
December	0	0	0	1	R 67	25	74	0	8	R 26
Total	R 607	R 834	911	1,089	R 2,224	R 1,621	R 2,644	R 1,573	R 1,053	R 1,493
2022 January	0	0	0	0	R 29	3	10	1	9	9
February	0	0	0	0	R 45	3	5	2	7	11
March	0	0	1	3	R 83	22	R 40	14	14	27
April	0	0	0	2	96	25	R 157	56	23	R 49
May	18	R 40	79	R 71	R 241	R 207	R 387	R 129	43	147
June	62	115	177	231	376	370	552	286	151	270
6-Month Total	80	154	257	307	869	630	1,151	488	248	512
2021 6-Month Total	144	183	253	320	769	476	858	538	279	461
2020 6-Month Total	102	157	221	300	812	496	1,016	473	222	464

^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.

Sources: 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	3,523	898	522	684	162	356	45	88	88	1,945
1975 Total	3,105	761	419	654	137	320	43	75	122	1,770
1980 Total	2,612	759	396	890	159	692	41	100	143	2,422
1985 Total	1,536	642	425	982	145	395	46	83	95	2,173
1990 Total	758	675	483	1,071	164	546	57	56	85	2,462
1995 Total	921	868	486	1,357	156	590	58	37	70	2,754
1996 Total	884	896	484	1,413	151	592	60	39	70	2,809
1997 Total	842	909	505	1,447	160	686	58	38	72	2,966
1998 Total	656	938	521	1,441	168	690	84	56	83	3,043
1999 Total	654	906	547	1,578	169	651	92	76	77	3,190
2000 Total	937	836	512	1,474	151	628	100	53	85	3,003
2005 Total	929	761	546	1,369	141	729	106	33	75	2,997
2006 Total	562	573	521	1,424	137	726	111	37	86	3,041
2007 Total	556	587	494	1,444	142	664	108	41	82	2,974
2008 Total	541	597	417	1,279	131	574	103	44	85	2,634
2009 Total	375	513	360	1,401	118	507	95	24	85	2,591
2010 Total	719	654	362	1,598	131	539	42	14	89	2,775
2011 Total	730	680	355	1,641	125	520	40	12	91	2,782
2012 Total	707	706	340	1,748	114	444	43	8	88	2,786
2013 Total	732	721	323	1,871	121	448	40	52	93	2,949
2014 Total	562	725	327	1,781	126	410	20	55	97	2,818
2015 Total	520	703	343	1,918	138	378	21	52	99	2,948
2016 Total	435	727	351	1,943	130	371	20	49	100	2,965
2017 Total	463	746	351	2,022	121	394	19	52	103	3,061
2018 Total	531	1,118	327	2,308	117	393	22	48	103	3,318
2019 Total	520	1,114	348	2,342	113	349	21	50	94	3,317
2020 January	42	99	190	2,409	126	381	17	46	101	3,269
February	42	92	190	2,333	109	307	17	53	98	3,108
March	41	90	209	2,484	80	339	16	48	95	3,272
April	35	79	300	2,113	85	327	12	56	87	2,979
May	31	79	364	2,401	83	312	14	37	81	3,291
June	35	76	508	2,449	102	305	14	47	83	3,507
July	30	80	488	2,584	112	320	17	42	93	3,656
August	31	82	480	2,474	95	333	25	41	82	3,530
September	31	83	421	2,417	105	316	22	40	84	3,405
October	33	89	402	2,564	111	322	15	52	84	3,551
November	34	92	321	2,824	104	325	22	41	83	3,720
December	35	101	234	2,773	114	359	16	39	86	3,622
Total	418	1,041	343	2,487	102	329	17	45	88	3,411
2021 January	43	R 101	239	R 2,787	R 114	R 325	R 18	44	R 80	R 3,606
February	39	R 87	R 206	R 1,873	R 110	R 256	R 8	29	R 80	R 2,562
March	44	R 90	R 275	R 2,294	R 97	301	R 17	38	R 81	R 3,103
April	43	R 87	R 345	R 2,545	R 108	R 349	R 14	51	R 91	R 3,503
May	44	R 84	R 388	R 2,800	R 107	R 380	R 25	51	90	R 3,841
June	43	R 80	R 512	R 2,836	R 113	R 371	R 22	R 41	R 88	R 3,984
July	43	R 83	R 473	R 2,780	R 109	R 361	14	R 43	R 96	R 3,877
August	43	R 84	R 492	R 2,830	R 97	R 356	R 23	39	R 90	R 3,928
September	41	R 79	R 473	R 2,747	R 94	R 348	18	46	R 94	R 3,820
October	43	R 86	R 453	R 2,757	R 104	R 298	16	46	R 90	R 3,763
November	42	R 93	R 364	R 2,658	R 112	R 320	R 17	R 38	R 99	R 3,608
December	42	R 99	R 221	R 3,000	R 96	R 362	R 24	42	R 102	R 3,848
Total	509	R 1,053	R 371	R 2,665	R 105	R 336	18	42	R 90	R 3,628
2022 January	41	R 105	244	2,839	115	R 299	18	40	96	R 3,650
February	38	R 93	263	2,805	112	R 250	12	48	105	R 3,595
March	41	R 97	279	2,689	132	R 294	18	53	96	R 3,560
April	40	R 90	324	R 2,758	124	R 309	18	44	92	R 3,668
May	33	R 87	398	2,781	96	R 304	13	37	93	R 3,722
June	40	83	481	2,968	136	289	15	48	101	4,036
6-Month Total	234	556	332	2,806	119	291	15	45	97	3,706
2021 6-Month Total	256	529	328	2,531	108	331	17	42	85	3,444
2020 6-Month Total	224	515	293	2,366	97	329	15	48	91	3,239

^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	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 Napthas	Other ^c			
1973 Total	0.113	0.916	1.264	0.872	0.359	0.726	0.093	0.169	0.185	3.668	4.696	6.2
1975 Total	.099	.777	1.014	.822	.304	.652	.090	.144	.256	3.283	4.159	5.8
1980 Total	.084	.777	.962	1.128	.354	1.426	.086	.193	.303	4.451	5.312	6.8
1985 Total	.049	.662	1.029	1.194	.322	.817	.096	.159	.201	3.818	4.529	5.9
1990 Total	.024	.695	1.170	1.345	.362	1.123	.119	.107	.179	4.406	5.125	6.1
1995 Total	.029	.892	1.178	1.716	.346	1.214	.120	.071	.145	4.790	5.711	6.3
1996 Total	.028	.921	1.176	1.779	.335	1.209	.126	.075	.146	4.846	5.795	6.2
1997 Total	.027	.933	1.224	1.821	.354	1.400	.121	.072	.150	5.142	6.102	6.5
1998 Total	.021	.969	1.263	1.819	.371	1.403	.176	.107	.174	5.312	6.302	6.6
1999 Total	.021	.932	1.324	1.989	.375	1.329	.192	.145	.161	5.516	6.469	6.7
2000 Total	.030	.856	1.240	1.831	.334	1.272	.209	.102	.178	5.167	6.054	6.2
2005 Total	.030	.782	1.323	1.701	.312	1.474	.221	.063	.157	5.250	6.062	6.1
2006 Total	.018	.589	1.261	1.754	.303	1.477	.232	.070	.180	5.278	5.885	5.9
2007 Total	.018	.603	1.197	1.768	.313	1.351	.225	.078	.173	5.106	5.726	5.7
2008 Total	.017	.613	1.012	1.564	.291	1.172	.216	.085	.180	4.520	5.150	5.2
2009 Total	.012	.526	.873	1.676	.262	1.031	.199	.046	.179	4.265	4.804	5.1
2010 Total	.023	.669	.878	1.933	.291	1.096	.087	.026	.188	4.498	5.189	5.3
2011 Total	.023	.695	.859	1.949	.276	1.057	.083	.023	.193	4.439	5.158	5.3
2012 Total	.023	.724	.827	2.111	.254	.901	.090	.015	.187	4.384	5.130	5.4
2013 Total	.023	.741	.783	2.271	.268	.901	.083	.100	.197	4.603	5.368	5.5
2014 Total	.018	.749	.793	2.126	.280	.827	.043	.106	.205	4.380	5.147	5.2
2015 Total	.017	.730	.832	2.316	.305	.760	.043	.099	.208	4.563	5.310	5.5
2016 Total	.014	.755	.853	2.329	.289	.754	.043	.094	.212	4.574	5.343	5.5
2017 Total	.015	.774	.849	2.392	.267	.797	.040	.100	.217	4.662	5.450	5.6
2018 Total	.017	1.160	.793	2.707	.259	.794	.046	.092	.218	4.908	6.086	6.0
2019 Total	.017	1.159	.844	2.745	.250	.704	.044	.096	.198	4.881	6.056	6.0
2020 January	.001	.103	.039	.233	.024	.066	.003	.008	.018	.390	.494	5.5
February	.001	.096	.037	.208	.019	.050	.003	.008	.016	.340	.437	5.2
March	.001	.093	.043	.244	.015	.058	.003	.008	.017	.388	.483	6.1
April	.001	.082	.060	.194	.015	.055	.002	.009	.015	.350	.434	6.7
May	.001	.082	.075	.234	.016	.054	.003	.006	.014	.402	.485	7.1
June	.001	.079	.101	.231	.019	.051	.002	.007	.014	.425	.505	6.9
July	.001	.083	.100	.251	.021	.055	.003	.007	.017	.454	.537	6.7
August	.001	.085	.099	.246	.018	.057	.004	.007	.015	.445	.531	6.6
September	.001	.086	.084	.236	.019	.053	.004	.006	.015	.417	.504	6.9
October	.001	.092	.083	.257	.021	.055	.003	.008	.015	.442	.536	7.2
November	.001	.095	.064	.271	.019	.054	.004	.006	.014	.432	.529	7.0
December	.001	.105	.048	.276	.021	.062	.003	.006	.015	.432	.539	6.2
Total	.013	1.082	.832	2.881	.227	.669	.036	.087	.186	4.918	6.014	6.5
2021 January	.001	R .105	.049	R .278	R .022	R .056	.003	.007	R .014	R .430	R .536	6.0
February	.001	R .090	R .038	R .167	.019	R .040	.001	.004	R .013	R .282	R .374	R 4.6
March	.001	R .094	R .057	R .228	.018	.052	.003	.006	.015	R .379	R .474	5.9
April	.001	R .090	R .069	R .240	.020	R .058	R .002	.008	R .016	R .412	R .504	6.7
May	.001	R .087	R .080	R .277	.020	R .066	.004	.008	R .016	R .471	R .560	7.3
June	.001	R .083	R .102	R .275	R .021	R .062	.004	R .007	R .015	R .485	R .569	7.1
July	.001	R .086	R .097	R .277	.021	R .062	R .003	.007	R .017	R .484	R .572	R 6.8
August	.001	R .087	.101	R .282	.018	R .062	.004	.006	R .016	R .490	R .579	R 6.8
September	.001	R .082	R .094	R .265	.017	R .058	.003	.007	R .016	R .461	R .545	7.1
October	.001	R .089	R .093	R .270	.019	R .052	.003	.007	R .016	R .461	R .551	R 7.1
November	.001	R .097	R .072	R .249	.020	.053	.003	.006	.017	R .422	R .520	R 6.4
December	.001	R .103	R .046	R .293	.018	.062	.004	.007	R .018	R .448	R .552	R 6.3
Total	.016	R 1.094	R .898	R 3.101	R .233	R .684	.038	.081	R .190	R 5.225	R 6.336	6.5
2022 January	.001	R .110	.050	.277	.022	R .052	.003	.006	.017	.427	R .538	5.7
February	.001	R .097	.049	.247	.019	R .039	.002	.007	.017	R .380	.478	5.7
March	.001	R .101	.057	.261	.025	R .051	.003	.009	.017	R .423	.525	6.2
April	.001	R .093	.064	.260	.022	R .052	.003	.007	.016	R .425	.520	6.7
May	.001	R .091	.082	.269	.018	R .053	.002	.006	.017	R .447	.539	6.8
June	.001	.087	.096	.282	.025	.049	.002	.007	.018	.479	.567	7.0
6-Month Total	.007	.578	.398	1.596	.131	.296	.016	.043	1.102	2.582	3.167	6.3
2021 6-Month Total	.008	.549	.394	1.465	.119	.334	.018	.040	.089	2.459	3.017	6.2
2020 6-Month Total	.007	.535	.354	1.344	.108	.333	.016	.046	.096	2.296	2.838	6.2

^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 in the industrial sector. 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 estimates non-combustion use ratios of coal tar for 1973 forward. Prior to 1998, estimate ratios are based on coal tar production data from the United States International Trade Commission's *Synthetic Organic Chemicals*. For 1998 forward, coal tar production is estimated using chemicals industry coal, coke, and breeze nonfuel use data from EIA, Form EIA-846, “Manufacturing Energy Consumption Survey” (MECS). 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. EIA estimates non-combustion ratios of natural gas using total natural gas nonfuel use data from MECS, and natural gas used as feedstock for hydrogen production data from EIA, Form EIA-820, “Annual Refinery Report.” For Table 1.11b, natural gas values in Table 1.11a are multiplied by the heat content factors for natural gas end-use sectors consumption shown in Table A4.

Asphalt and 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 Fuel Oil

EIA assumes that all non-combustion use of distillate fuel oil occurs in the industrial sector. EIA estimates non-combustion ratios of distillate fuel oil using total distillate fuel oil nonfuel use data from MECS. Ratios prior to 1985 are assumed to be equal to the 1985 ratio. For Table 1.11b, distillate fuel oil values in Table 1.11a are multiplied by the heat content factors for distillate fuel oil consumption shown in Table A3 and the number of days in the period. Distillate fuel oil is included in "other" petroleum products.

Hydrocarbon Gas Liquids (HGL)

EIA estimates non-combustion ratios of hydrocarbon gas liquids (HGL), which include ethane, propane, normal butane, isobutane, natural gasoline (pentanes plus), and refinery olefins (ethylene, propylene, butylene, and isobutylene). EIA assumes that 100% of ethane, ethylene, and propylene consumption is for non-combustion use; 85% of normal butane, butylene, isobutane, and isobutylene consumption is for non-combustion use; and 50% of natural gasoline consumption is for non-combustion use. Non-combustion use of propane in the industrial sector is estimated using data from the American Petroleum Institute (API), the Propane Education & Research Council (PERC), and EIA's *Petroleum Supply Annual* (PSA). For 1984 through 2009, propane non-combustion ratios are estimated using API propane and propylene chemical industry sales data. Propane non-combustion ratios prior to 1984 are assumed to be equal to the 1984 ratio. For 2010 through 2016, propane non-combustion ratios are estimated by subtracting API data for total odorized propane sales from PSA data for total propane product supplied. Beginning in 2017, propane non-combustion ratios are estimated by subtracting PERC data for total odorized propane sales from PSA data for total propane product supplied. For Table 1.11b, HGL component values 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 is for non-combustion use. For Table 1.11b, lubricants values in Table 1.11a are multiplied by 6.065 million Btu/barrel (the approximate heat content of lubricants) and the number of days in the period.

Petrochemical Feedstocks, Naphtha

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

Petrochemical Feedstocks, Other Oils

EIA assumes all other oils for petrochemical feedstocks are for non-combustion use. For Table 1.11b, other oils petrochemical feedstock values in 1.11a are multiplied by 5.825 million Btu/barrel (the approximate heat content of other oils for petrochemical feedstocks) and the number of days in the period.

Petrochemical Feedstocks, Still Gas

EIA assumes all still gas not burned as refinery fuel or for pipeline gas supplies is for non-combustion use. EIA estimates non-combustion ratios of still gas by subtracting data for all known fuel uses (refinery fuel use from the PSA, and pipeline gas supplies from EIA's *Natural Gas Annual*) from the products supplied values in the PSA. The remainder is assumed to be dispatched to chemical plants as a feedstock for non-combustion use. For Table 1.11b, still gas for petrochemical feedstock values in 1.11a are multiplied by the still gas heat content factors (through 2015, the still gas heat content factor is 6.000 million Btu per fuel oil equivalent barrel; beginning in 2016, the still gas heat content factor is 6.287 million Btu per residual fuel oil equivalent barrel) 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 by first subtracting data for petroleum coke consumed at refineries (from EIA, Form EIA-820, "Annual Refinery Report") from industrial sector petroleum coke consumption (from MER Table 3.7b), and then multiplying that amount by the nonfuel share of non-refinery petroleum coke consumption (from MECS). Non-combustion ratios prior to 1994 are assumed to

be equal to the 1994 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.

Residual Fuel Oil

EIA assumes that all non-combustion use of residual fuel oil occurs in the industrial sector. EIA estimates non-combustion ratios of residual fuel oil using total minus chemicals industry residual fuel oil nonfuel use data from MECS. Ratios prior to 1994 are assumed to be equal to the 1994 ratio. For Table 1.11b, residual fuel oil 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. Residual fuel oil is included in "other" petroleum products.

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. 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. Waxes are included in "other" petroleum products.

Miscellaneous Petroleum Products

Miscellaneous products include all finished petroleum products not classified elsewhere. EIA assumes all miscellaneous petroleum products consumption is for non-combustion use. For Table 1.11b, miscellaneous petroleum products 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. Miscellaneous petroleum products are included in "other" petroleum products.

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 renewable diesel fuel and other biofuels refinery and blender net inputs, calculated using “other renewable diesel fuel” and “other renewable fuels” data from EIA-810, “Monthly Refinery Report,” and EIA-815, “Monthly Bulk Terminal and Blender Report” (the data are converted to Btu by multiplying by the heat content factors for renewable diesel fuel and other biofuels in Table A1).

2012–2020: 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 10.4a; minus renewable diesel fuel and other biofuels refinery and blender net inputs, calculated using “other renewable diesel fuel” and “other renewable fuels” data from EIA-810, “Monthly Refinery Report,” and EIA-815, “Monthly Bulk Terminal and Blender Report” (the data are converted to Btu by multiplying by the heat content factors for renewable diesel fuel and other biofuels in Table A1).

2021 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, renewable diesel fuel, and other biofuels refinery and blender net inputs and products supplied calculated using “biofuels except fuel ethanol” refinery and blender net inputs and products supplied from U.S. Energy Information Administration (EIA), *Petroleum Supply Monthly* (data are converted to Btu by multiplying by the appropriate heat content factors in Table A1).

Coal Coke Net Imports
1949 forward: Table 1.4c.

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: Table 1.4c.

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).

2009–2011: Biomass-based diesel fuel 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 (the data are converted to Btu by multiplying by the biodiesel 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 biomass-based diesel fuel imports.

2012–2020: 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 biodiesel imports (see “Biomass—Biodiesel”) minus renewable diesel fuel imports (see “Biomass—Renewable Diesel Fuel”).

2021 forward: 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 biodiesel imports (see “Biomass—Biodiesel”) minus renewable diesel fuel imports (see “Biomass—Renewable Diesel Fuel”) minus other biofuels imports (see “Biomass—Other Biofuels”).

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 10.4a, and are converted to Btu by multiplying by the biodiesel heat content factor in Table A1.

Biomass—Renewable Diesel Fuel

2012 forward: Renewable diesel fuel imports data are from Table 10.4b, and are converted to Btu by multiplying by the renewable diesel fuel heat content factor in Table A1.

Biomass—Other Biofuels

2021 forward: Other biofuels imports data are from Table 10.4c, and are converted to Btu by multiplying by the other biofuels heat content factor in Table A1.

Total Biomass

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

2001–2011: Total biomass imports are equal to fuel ethanol (minus denaturant) imports plus biodiesel imports.

2012–2020: Total biomass imports are the sum of imports values for fuel ethanol (minus denaturant), biodiesel, and renewable diesel fuel.

2021 forward: Total biomass imports are the sum of imports values for fuel ethanol (minus denaturant), biodiesel, renewable diesel fuel, and other biofuels.

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).

2011–2018: Biomass-based diesel fuel exports data are from U.S. Energy Information Administration (EIA), Petroleum Supply Annual (PSA), Table 31, 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.

2019 forward: Biodiesel exports data are from EIA, 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 biodiesel 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 10.4a, 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.

2010–2015: 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.

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.

1993–2017: “U.S. International Trade in Goods and Services,” Annual Revisions.

2018–2020: “U.S. International Trade in Goods and Services,” 2020 Annual Revisions.

2021 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.

1994–2017: “U.S. International Trade in Goods and Services,” Annual Revisions.

2018–2020: “U.S. International Trade in Goods and Services,” 2020 Annual Revisions.

2021 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.

1993–2017: “U.S. International Trade in Goods and Services,” Annual Revisions.

2018–2020: “U.S. International Trade in Goods and Services,” 2020 Annual Revisions.

2021 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.

1992–2017: “U.S. International Trade in Goods and Services,” Annual Revisions.

2018–2020: “U.S. International Trade in Goods and Services,” 2020 Annual Revisions.

2021 forward: “U.S. International Trade in Goods and Services,” FT-900, monthly.