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Monthly Energy Review

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Monthly Energy Review

The *Monthly Energy Review* (MER) is the U.S. Energy Information Administration's (EIA) primary report of recent and historical U.S. energy statistics. Included are statistics on total energy production, consumption, stocks, trade, and energy prices; overviews of petroleum, natural gas, coal, electricity, nuclear energy, and renewable energy; carbon dioxide emissions; and data unit conversions.

Release of the MER is in keeping with responsibilities given to EIA in Public Law 95–91 (Department of Energy Organization Act), which states, in part, in Section 205(a)(2):

"The Administrator shall be responsible for carrying out a central, comprehensive, and unified energy data and information program which will collect, evaluate, assemble, analyze, and disseminate data and information…"

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Related monthly publications: Other monthly EIA reports are Petroleum Supply Monthly, Petroleum Marketing Monthly, Natural Gas Monthly, and Electric Power Monthly. For more information, contact EIA's Office of Communications via email at infoctr@eia.gov.

Important notes about the data

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Comprehensive changes: Each month, most MER tables and figures present data for a new month. These data are usually preliminary (and sometimes estimated or forecasted) and likely to be revised the following month. The first dissemination of most annual data is also preliminary. It is often based on monthly estimates and is likely to be revised later that year after final data are published from sources, according to source data revision policies and publication schedules. In addition, EIA may revise historical data when a major revision in a source publication is needed, when new data sources become available, or when estimation methodologies are improved. A record of current and historical changes to MER data is available at https://www.eia.gov/totalenergy/data/monthly/whatsnew.php.

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- Full report and report tables: PDF files
- Table data (unrounded): Excel files, CSV files, API files, and data browser
- Graphs: PDF files and data browser

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Timing of release: The MER is posted at http://www.eia.gov/totalenergy/data/monthly no later than the last workday of the month.

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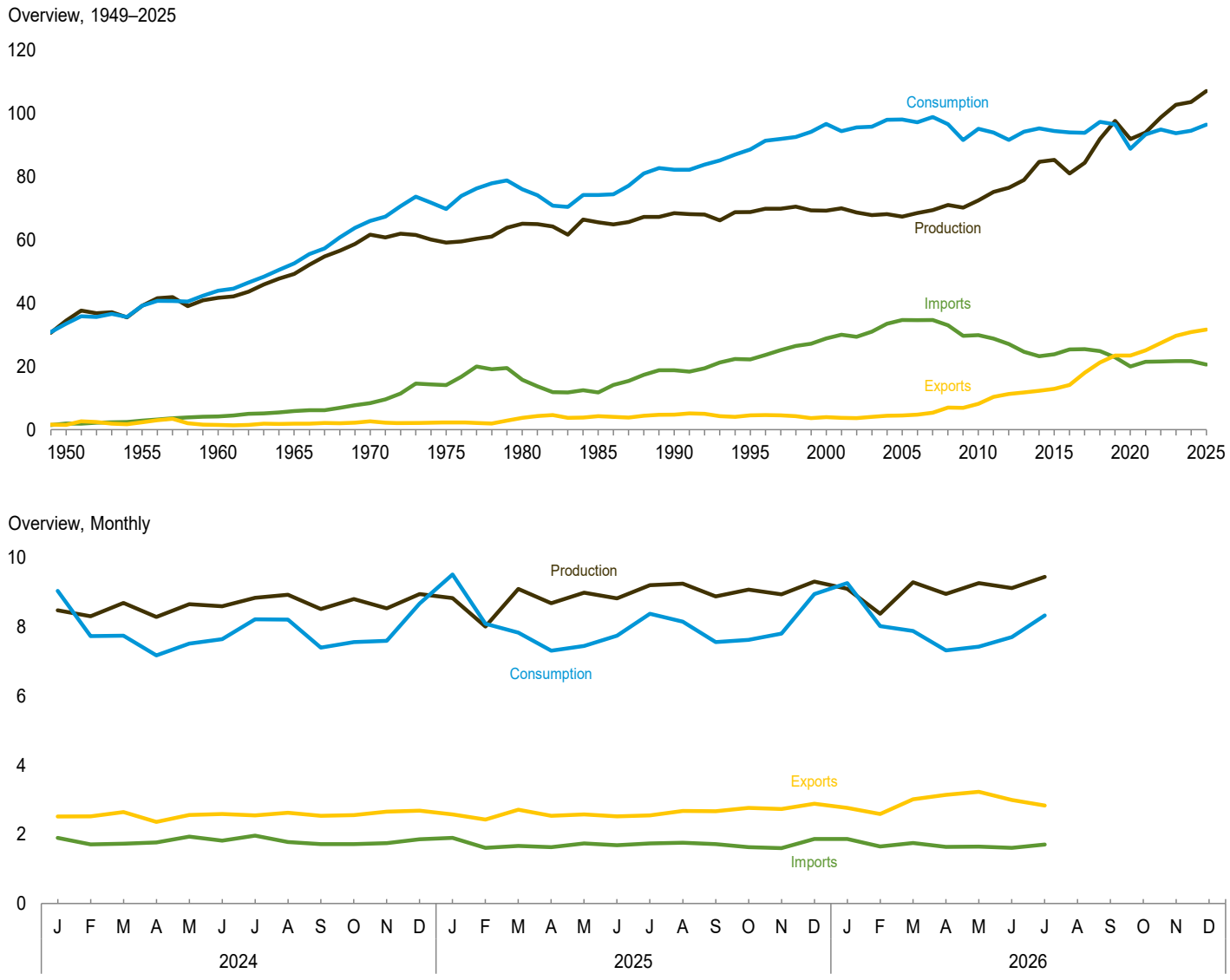
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1. Energy Overview

Figure 1.1 Primary Energy Overview

(Quadrillion Btu)



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**	**1.907**	**34.460**	**1.913**	**1.465**	**0.448**	**-1.380**	**31.615**	**0.000**	**1.907**	**33.527**
1955 Total	**37.347**	**.000**	**1.821**	**39.168**	**2.790**	**2.286**	**.504**	**-.457**	**37.380**	**.000**	**1.821**	**39.215**
1960 Total	**39.855**	**.006**	**1.830**	**41.691**	**4.188**	**1.477**	**2.710**	**-.458**	**42.091**	**.006**	**1.830**	**43.942**
1965 Total	**47.205**	**.043**	**2.008**	**49.256**	**5.892**	**1.829**	**4.063**	**-.754**	**50.515**	**.043**	**2.008**	**52.565**
1970 Total	**59.152**	**.239**	**2.289**	**61.681**	**8.342**	**2.632**	**5.709**	**-1.354**	**63.501**	**.239**	**2.289**	**66.036**
1975 Total	**54.697**	**1.900**	**2.544**	**59.141**	**14.032**	**2.323**	**11.709**	**-1.062**	**65.323**	**1.900**	**2.544**	**69.788**
1980 Total	**58.979**	**2.739**	**3.445**	**65.164**	**15.796**	**3.695**	**12.101**	**-1.227**	**69.782**	**2.739**	**3.445**	**76.038**
1985 Total	**57.502**	**4.076**	**4.018**	**65.595**	**11.781**	**4.196**	**7.584**	**1.088**	**66.035**	**4.076**	**4.018**	**74.268**
1990 Total	**58.523**	**6.104**	**3.863**	**68.490**	**18.817**	**4.752**	**14.065**	**-.299**	**72.281**	**6.104**	**3.863**	**82.256**
1995 Total	**57.496**	**7.075**	**4.295**	**68.866**	**22.180**	**4.496**	**17.684**	**2.118**	**77.162**	**7.075**	**4.297**	**88.668**
2000 Total	**57.307**	**7.862**	**4.093**	**69.262**	**28.865**	**3.962**	**24.904**	**2.528**	**84.620**	**7.862**	**4.096**	**96.694**
2005 Total	**54.995**	**8.161**	**4.220**	**67.376**	**34.659**	**4.462**	**30.197**	**.527**	**85.623**	**8.161**	**4.233**	**98.101**
2010 Total	**58.159**	**8.434**	**5.943**	**72.536**	**29.866**	**8.176**	**21.690**	**.916**	**80.723**	**8.434**	**5.896**	**95.142**
2011 Total	**60.529**	**8.269**	**6.404**	**75.202**	**28.748**	**10.373**	**18.375**	**.389**	**79.263**	**8.269**	**6.308**	**93.967**
2012 Total	**62.298**	**8.062**	**6.187**	**76.547**	**27.068**	**11.267**	**15.801**	**-.670**	**77.304**	**8.062**	**6.151**	**91.678**
2013 Total	**64.180**	**8.244**	**6.561**	**78.985**	**24.623**	**11.788**	**12.835**	**2.433**	**79.224**	**8.244**	**6.587**	**94.253**
2014 Total	**69.599**	**8.338**	**6.833**	**84.770**	**23.241**	**12.270**	**10.971**	**-.409**	**80.017**	**8.338**	**6.796**	**95.332**
2015 Total	**70.174**	**8.337**	**6.840**	**85.351**	**23.794**	**12.902**	**10.892**	**-1.764**	**79.090**	**8.337**	**6.823**	**94.478**
2016 Total	**65.460**	**8.427**	**7.180**	**81.067**	**25.378**	**14.119**	**11.259**	**1.758**	**78.319**	**8.427**	**7.112**	**94.084**
2017 Total	**68.519**	**8.419**	**7.498**	**84.436**	**25.458**	**17.946**	**7.512**	**1.940**	**77.901**	**8.419**	**7.377**	**93.889**
2018 Total	**75.824**	**8.438**	**7.740**	**92.002**	**24.833**	**21.224**	**3.610**	**1.789**	**81.281**	**8.438**	**7.530**	**97.400**
2019 Total	**81.449**	**8.452**	**7.750**	**97.651**	**22.865**	**23.476**	**-.610**	**-.440**	**80.425**	**8.452**	**7.591**	**96.600**
2020 Total	**76.209**	**8.251**	**7.460**	**91.920**	**19.988**	**23.464**	**-3.476**	**.433**	**73.169**	**8.251**	**7.296**	**88.877**
2021 Total	**78.019**	**8.131**	**7.819**	**93.969**	**21.455**	**25.071**	**-3.616**	**3.022**	**77.454**	**8.131**	**7.656**	**93.375**
2022 Total	**82.296**	**8.061**	**8.450**	**98.807**	**21.507**	**27.335**	**-5.828**	**1.986**	**78.529**	**8.061**	**8.233**	**94.964**
2023 Total	**86.174**	**8.099**	**8.501**	**102.774**	**21.657**	**29.656**	**-7.999**	**-1.029**	**77.262**	**8.099**	**8.320**	**93.746**
2024 January	7.077	.721	.691	8.489	1.904	2.521	-.617	1.175	7.652	.721	.668	9.047
February	6.923	.674	.713	8.310	1.714	2.526	-.811	.237	6.363	.674	.698	7.736
March	7.254	.662	.779	8.695	1.736	2.650	-.914	-.033	6.330	.662	.758	7.748
April	6.926	.601	.764	8.291	1.770	2.362	-.591	-.517	5.832	.601	.752	7.182
May	7.206	.679	.778	8.663	1.939	2.564	-.625	-.516	6.067	.679	.776	7.522
June	7.110	.712	.778	8.600	1.824	2.595	-.771	-.177	6.171	.712	.763	7.651
July	7.352	.729	.760	8.842	1.967	2.551	-.583	-.034	6.738	.729	.749	8.224
August	7.443	.729	.759	8.930	1.785	2.625	-.840	.125	6.741	.729	.738	8.215
September	7.160	.654	.703	8.517	1.724	2.539	-.815	-.300	6.054	.654	.686	7.402
October	7.461	.614	.737	8.813	1.725	2.563	-.839	-.406	6.224	.614	.724	7.568
November	7.168	.646	.727	8.541	1.746	2.661	-.914	-.024	6.253	.646	.701	7.603
December	7.465	.744	.743	8.951	1.861	2.687	-.826	.558	7.220	.744	.713	8.683
Total	**86.544**	**8.165**	**8.933**	**103.642**	**21.696**	**30.844**	**-9.147**	**.088**	**77.644**	**8.165**	**8.726**	**94.582**
2025 January	7.338	.749	.753	8.841	1.901	2.578	-.678	R 1.359	8.050	.749	.713	9.522
February	6.671	.646	.695	8.012	1.613	2.431	-.818	.899	6.771	.646	.670	8.093
March	7.632	.652	.817	9.101	1.669	2.712	-1.043	R -.221	R 6.398	.652	.784	R 7.837
April	7.294	.605	.789	8.687	1.633	2.540	-.908	R -.463	5.935	.605	.772	7.317
May	7.547	.649	.799	8.994	1.740	2.583	-.843	R -.702	R 6.026	.649	.767	R 7.449
June	7.343	.692	.795	8.830	1.686	2.528	-.842	R -.242	R 6.291	.692	.758	R 7.747
July	7.670	.739	.799	9.208	1.745	2.552	-.807	R -.017	R 6.880	.739	.762	R 8.383
August	7.752	.738	.768	9.259	1.761	2.680	-.918	R -.183	R 6.679	.738	.736	R 8.157
September	7.486	.684	.717	8.887	1.724	2.678	-.954	R -.364	R 6.199	.684	.682	R 7.569
October	7.694	.618	.770	9.082	1.633	2.769	-1.136	-.315	6.278	.618	.737	7.631
November	7.535	.666	.746	8.947	1.605	2.735	-1.130	R -.007	R 6.444	.666	.702	R 7.809
December	7.771	.757	.787	9.315	1.870	2.893	-1.023	R .659	R 7.443	.757	.753	8.952
Total	**89.732**	**8.195**	**9.236**	**107.163**	**20.580**	**31.679**	**-11.099**	R **.402**	R **79.393**	**8.195**	**8.835**	R **96.466**
2026 January	7.565	.765	.781	9.111	1.869	2.766	-.897	1.058	7.775	.765	.735	R 9.272
February	7.007	.651	.726	8.384	1.652	R 2.594	-.941	.585	6.685	.651	.690	R 8.028
March	7.785	.648	.865	9.298	1.756	3.021	R -1.265	R -.146	R 6.409	.648	.831	R 7.888
April	7.542	.599	.820	8.961	1.644	3.151	-1.508	R -.129	R 5.932	.599	.790	R 7.325
May	R 7.737	.679	.856	R 9.272	1.647	3.233	-1.586	R -.251	R 5.926	.679	.820	R 7.434
June	R 7.545	.718	.862	R 9.126	1.617	R 2.999	R -1.383	R -.036	R 6.148	.718	.830	R 7.707
July	7.868	.743	.844	9.455	1.707	2.838	-1.131	.011	6.771	.743	.809	8.335
7-Month Total	**53.050**	**4.804**	**5.753**	**63.607**	**11.891**	**20.601**	**-8.710**	**1.092**	**45.646**	**4.804**	**5.505**	**55.989**
2025 7-Month Total	**51.494**	**4.731**	**5.447**	**61.673**	**11.986**	**17.925**	**-5.938**	**.613**	**46.350**	**4.731**	**5.225**	**56.348**
2024 7-Month Total	**49.848**	**4.778**	**5.263**	**59.889**	**12.856**	**17.769**	**-4.913**	**.135**	**45.152**	**4.778**	**5.163**	**55.111**

[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.

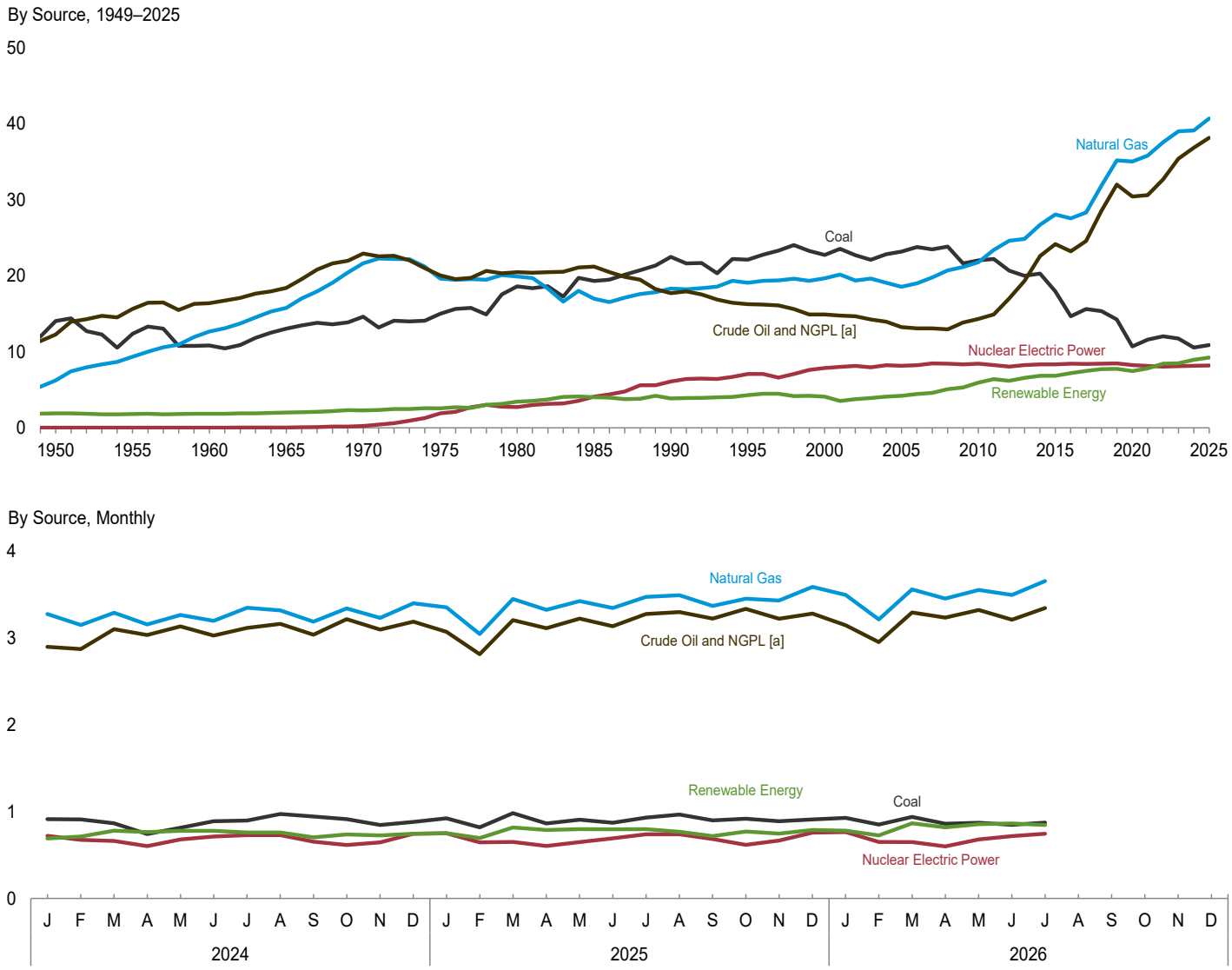
Notes: • See "Primary Energy," "Primary Energy Production," and "Primary Energy Consumption," in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

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)



[a] Natural 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**	**0.344**	**NA**	**NA**	**NA**	**1.562**	**1.907**	**34.460**
1955 Total	**12.370**	**9.345**	**14.410**	**1.223**	**37.347**	**.000**	**.397**	**NA**	**NA**	**NA**	**1.424**	**1.821**	**39.168**
1960 Total	**10.817**	**12.656**	**14.935**	**1.447**	**39.855**	**.006**	**.510**	**(s)**	**NA**	**NA**	**1.320**	**1.830**	**41.691**
1965 Total	**13.055**	**15.775**	**16.521**	**1.853**	**47.205**	**.043**	**.672**	**.001**	**NA**	**NA**	**1.335**	**2.008**	**49.256**
1970 Total	**14.607**	**21.666**	**20.401**	**2.478**	**59.152**	**.239**	**.856**	**.002**	**NA**	**NA**	**1.431**	**2.289**	**61.681**
1975 Total	**14.989**	**19.640**	**17.729**	**2.338**	**54.697**	**1.900**	**1.034**	**.011**	**NA**	**NA**	**1.499**	**2.544**	**59.141**
1980 Total	**18.598**	**19.908**	**18.249**	**2.225**	**58.979**	**2.739**	**.953**	**.017**	**NA**	**NA**	**2.475**	**3.445**	**65.164**
1985 Total	**19.325**	**16.980**	**18.992**	**2.204**	**57.502**	**4.076**	**.970**	**.032**	**(s)**	**(s)**	**3.016**	**4.018**	**65.595**
1990 Total	**22.488**	**18.326**	**15.571**	**2.138**	**58.523**	**6.104**	**.999**	**.063**	**.056**	**.010**	**2.735**	**3.863**	**68.490**
1995 Total	**22.130**	**19.082**	**13.887**	**2.398**	**57.496**	**7.075**	**1.061**	**.060**	**.064**	**.011**	**3.099**	**4.295**	**68.866**
2000 Total	**22.735**	**19.662**	**12.358**	**2.551**	**57.307**	**7.862**	**.940**	**.069**	**.059**	**.019**	**3.006**	**4.093**	**69.262**
2005 Total	**23.185**	**18.556**	**10.974**	**2.280**	**54.995**	**8.161**	**.922**	**.084**	**.052**	**.061**	**3.101**	**4.220**	**67.376**
2010 Total	**22.038**	**21.806**	**11.610**	**2.705**	**58.159**	**8.434**	**.888**	**.111**	**.068**	**.323**	**4.553**	**5.943**	**72.536**
2011 Total	**22.221**	**23.406**	**12.012**	**2.890**	**60.529**	**8.269**	**1.090**	**.116**	**.076**	**.410**	**4.712**	**6.404**	**75.202**
2012 Total	**20.677**	**24.610**	**13.849**	**3.162**	**62.298**	**8.062**	**.943**	**.117**	**.094**	**.480**	**4.554**	**6.187**	**76.547**
2013 Total	**20.001**	**24.859**	**15.868**	**3.451**	**64.180**	**8.244**	**.916**	**.117**	**.120**	**.573**	**4.835**	**6.561**	**78.985**
2014 Total	**20.286**	**26.718**	**18.590**	**4.005**	**69.599**	**8.338**	**.885**	**.118**	**.161**	**.620**	**5.049**	**6.833**	**84.770**
2015 Total	**17.946**	**28.067**	**19.685**	**4.476**	**70.174**	**8.337**	**.850**	**.118**	**.197**	**.651**	**5.025**	**6.840**	**85.351**
2016 Total	**14.667**	**27.576**	**18.552**	**4.665**	**65.460**	**8.427**	**.914**	**.117**	**.252**	**.774**	**5.122**	**7.180**	**81.067**
2017 Total	**15.625**	**28.325**	**19.582**	**4.987**	**68.519**	**8.419**	**1.025**	**.118**	**.331**	**.868**	**5.156**	**7.498**	**84.436**
2018 Total	**15.363**	**31.882**	**22.852**	**5.727**	**75.824**	**8.438**	**.998**	**.118**	**.388**	**.930**	**5.306**	**7.740**	**92.002**
2019 Total	**14.256**	**35.187**	**25.655**	**6.352**	**81.449**	**8.452**	**.982**	**.116**	**.435**	**1.010**	**5.207**	**7.750**	**97.651**
2020 Total	**10.703**	**35.062**	**23.639**	**6.805**	**76.209**	**8.251**	**.973**	**.118**	**.516**	**1.153**	**4.700**	**7.460**	**91.920**
2021 Total	**11.596**	**35.807**	**23.517**	**7.099**	**78.019**	**8.131**	**.858**	**.118**	**.636**	**1.290**	**4.916**	**7.819**	**93.969**
2022 Total	**12.043**	**37.560**	**24.951**	**7.742**	**82.296**	**8.061**	**.869**	**.118**	**.784**	**1.482**	**5.196**	**8.450**	**98.807**
2023 Total	**11.750**	**39.008**	**26.936**	**8.480**	**86.174**	**8.099**	**.836**	**.119**	**.907**	**1.437**	**5.202**	**8.501**	**102.774**
2024 January	.911	3.271	2.213	.681	7.077	.721	.074	.010	.055	.119	.434	.691	8.489
February	.910	3.145	2.172	.696	6.923	.674	.071	.009	.067	.140	.425	.713	8.310
March	.866	3.289	2.327	.772	7.254	.662	.080	.010	.088	.154	.448	.779	8.695
April	.741	3.153	2.273	.760	6.926	.601	.071	.010	.102	.161	.420	.764	8.291
May	.814	3.263	2.337	.792	7.206	.679	.084	.010	.116	.134	.435	.778	8.663
June	.890	3.196	2.260	.764	7.110	.712	.076	.009	.123	.132	.437	.778	8.600
July	.897	3.344	2.333	.777	7.352	.729	.073	.010	.124	.097	.457	.760	8.842
August	.972	3.313	2.366	.792	7.443	.729	.070	.010	.122	.100	.458	.759	8.930
September	.942	3.184	2.258	.777	7.160	.654	.054	.009	.105	.100	.435	.703	8.517
October	.912	3.336	2.395	.818	7.461	.614	.052	.010	.099	.135	.441	.737	8.813
November	.844	3.229	2.302	.793	7.168	.646	.057	.010	.072	.137	.452	.727	8.541
December	.882	3.397	2.386	.799	7.465	.744	.067	.010	.066	.135	.465	.743	8.951
Total	**10.579**	**39.121**	**27.624**	**9.221**	**86.544**	**8.165**	**.829**	**.116**	**1.138**	**1.542**	**5.308**	**8.933**	**103.642**
2025 January	.922	E 3.349	2.322	.745	7.338	.749	.073	.010	.078	.149	.444	.753	8.841
February	.819	E 3.042	2.114	.696	6.671	.646	.067	.009	.083	.134	.402	.695	8.012
March	.983	E 3.446	2.386	.817	7.632	.652	.077	.010	.116	.173	.442	.817	9.101
April	.863	E 3.321	2.314	.796	7.294	.605	.078	.010	.132	.157	.413	.789	8.687
May	.907	E 3.421	2.387	.833	7.547	.649	.083	.010	.144	.126	.436	.799	8.994
June	.871	E 3.341	2.331	.801	7.343	.692	.076	.010	.153	.122	.435	.795	8.830
July	.930	E 3.468	2.420	.850	7.670	.739	.068	.010	.159	.109	.453	.799	9.208
August	.967	E 3.489	2.440	.856	7.752	.738	.069	.010	.151	.093	.445	.768	9.259
September	.900	E 3.365	2.375	.846	7.486	.684	.052	.010	.134	.088	.434	.717	8.887
October	.916	E 3.447	2.468	.863	7.694	.618	.056	.010	.119	.135	.450	.770	9.082
November	.890	E 3.427	2.377	.840	7.535	.666	.063	.010	.091	.140	.443	.746	8.947
December	.909	E 3.585	2.435	.841	7.771	.757	.082	.010	.078	.161	.457	.787	9.315
Total	**10.876**	**E 40.702**	**28.369**	**9.785**	**89.732**	**8.195**	**.843**	**.117**	**1.438**	**1.585**	**5.254**	**9.236**	**107.163**
2026 January	.928	E 3.493	E 2.346	.798	7.565	.765	.095	.010	.088	.152	.436	.781	9.111
February	.849	E 3.210	E 2.184	.764	7.007	.651	.077	.009	.101	.135	.403	.726	8.384
March	.938	E 3.556	E 2.421	.870	7.785	.648	.092	.010	.139	.178	.446	.865	9.298
April	R .860	E 3.451	E 2.386	.846	7.542	.599	.077	.009	.150	.168	.416	.820	8.961
May	R .871	RE 3.548	RE 2.436	.883	R 7.737	.679	.078	.010	.172	.140	.456	.856	R 9.272
June	R .848	E 3.491	RE 2.363	.844	R 7.545	.718	.081	.010	.180	.143	.448	.862	R 9.126
July	.873	E 3.652	E 2.460	.883	7.868	.743	.069	.010	.190	.110	.465	.844	9.455
7-Month Total	**6.167**	**E 24.401**	**E 16.595**	**5.887**	**53.050**	**4.804**	**.568**	**.068**	**1.020**	**1.026**	**3.071**	**5.753**	**63.607**
2025 7-Month Total	**6.294**	**E 23.388**	**16.273**	**5.539**	**51.494**	**4.731**	**.521**	**.068**	**.864**	**.969**	**3.025**	**5.447**	**61.673**
2024 7-Month Total	**6.027**	**22.662**	**15.916**	**5.243**	**49.848**	**4.778**	**.528**	**.068**	**.674**	**.936**	**3.057**	**5.263**	**59.889**

[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.

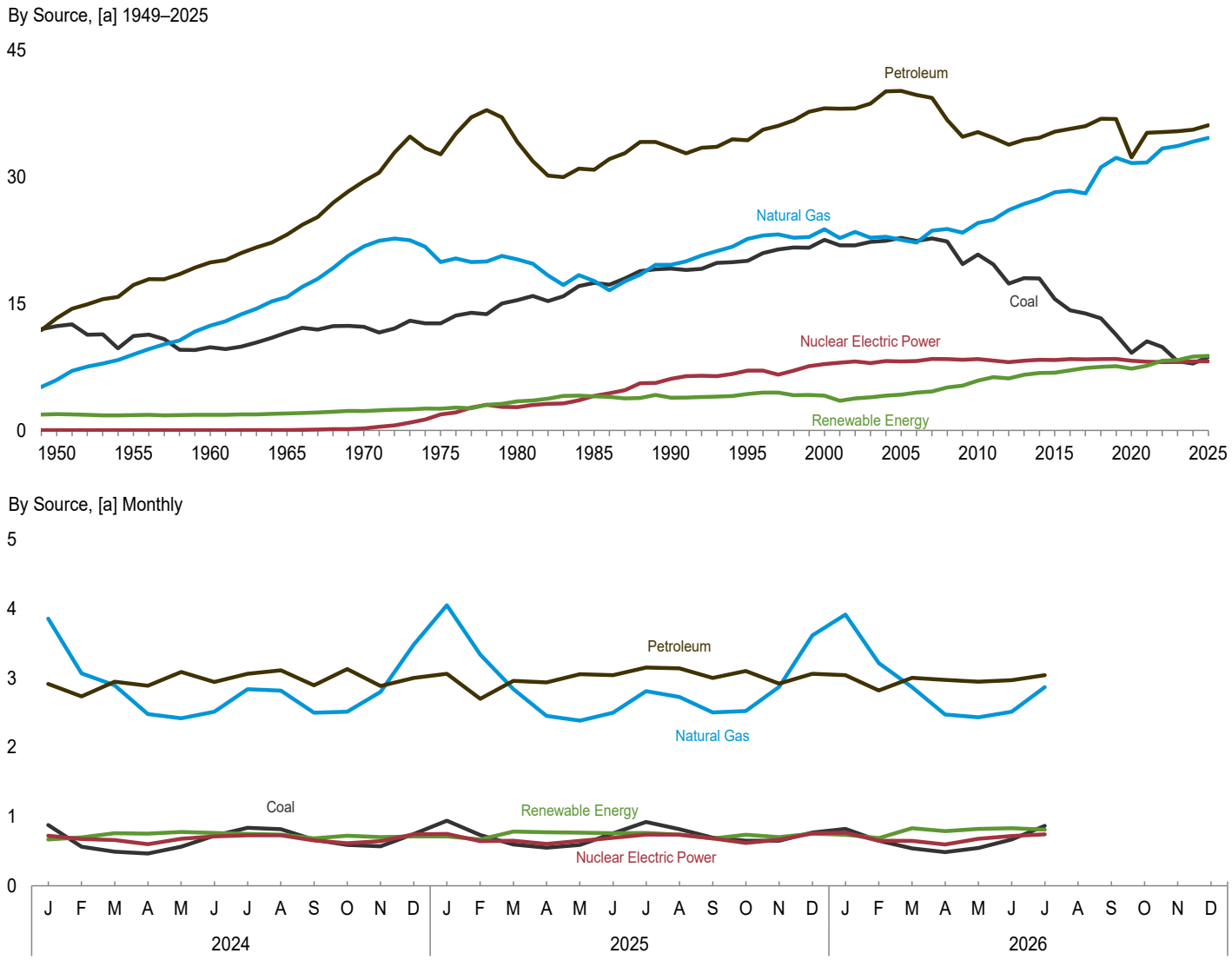
Notes: • See "Primary Energy Production" in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

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)



[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]					Renewable Energy[b]						
	Coal	Natural Gas[c]	Petroleum[d]	Total[e]	Nuclear Electric Power	Hydroelectric Power[f]	Geothermal	Solar	Wind	Biomass	Total	Total[g]
1950 Total	**12.347**	**5.968**	**13.298**	**31.615**	**0.000**	**0.344**	**NA**	**NA**	**NA**	**1.562**	**1.907**	**33.527**
1955 Total	**11.167**	**8.998**	**17.225**	**37.380**	**.000**	**.397**	**NA**	**NA**	**NA**	**1.424**	**1.821**	**39.215**
1960 Total	**9.838**	**12.385**	**19.874**	**42.091**	**.006**	**.510**	**(s)**	**NA**	**NA**	**1.320**	**1.830**	**43.942**
1965 Total	**11.581**	**15.769**	**23.184**	**50.515**	**.043**	**.672**	**.001**	**NA**	**NA**	**1.335**	**2.008**	**52.565**
1970 Total	**12.265**	**21.795**	**29.499**	**63.501**	**.239**	**.856**	**.002**	**NA**	**NA**	**1.431**	**2.289**	**66.036**
1975 Total	**12.663**	**19.948**	**32.699**	**65.323**	**1.900**	**1.034**	**.011**	**NA**	**NA**	**1.499**	**2.544**	**69.788**
1980 Total	**15.423**	**20.235**	**34.159**	**69.782**	**2.739**	**.953**	**.017**	**NA**	**NA**	**2.475**	**3.445**	**76.038**
1985 Total	**17.478**	**17.703**	**30.866**	**66.035**	**4.076**	**.970**	**.032**	**(s)**	**(s)**	**3.016**	**4.018**	**74.268**
1990 Total	**19.173**	**19.603**	**33.500**	**72.281**	**6.104**	**.999**	**.063**	**.056**	**.010**	**2.735**	**3.863**	**82.256**
1995 Total	**20.089**	**22.671**	**34.341**	**77.162**	**7.075**	**1.061**	**.060**	**.064**	**.011**	**3.101**	**4.297**	**88.668**
2000 Total	**22.580**	**23.824**	**38.152**	**84.620**	**7.862**	**.940**	**.069**	**.059**	**.019**	**3.008**	**4.096**	**96.694**
2005 Total	**22.797**	**22.565**	**40.217**	**85.623**	**8.161**	**.922**	**.084**	**.052**	**.061**	**3.114**	**4.233**	**98.101**
2010 Total	**20.834**	**24.575**	**35.321**	**80.723**	**8.434**	**.888**	**.111**	**.068**	**.323**	**4.506**	**5.896**	**95.142**
2011 Total	**19.658**	**24.955**	**34.639**	**79.263**	**8.269**	**1.090**	**.116**	**.076**	**.410**	**4.616**	**6.308**	**93.967**
2012 Total	**17.378**	**26.089**	**33.833**	**77.304**	**8.062**	**.943**	**.117**	**.094**	**.480**	**4.517**	**6.151**	**91.678**
2013 Total	**18.039**	**26.805**	**34.398**	**79.224**	**8.244**	**.916**	**.117**	**.120**	**.573**	**4.861**	**6.587**	**94.253**
2014 Total	**17.998**	**27.383**	**34.658**	**80.017**	**8.338**	**.885**	**.118**	**.161**	**.620**	**5.013**	**6.796**	**95.332**
2015 Total	**15.549**	**28.191**	**35.368**	**79.090**	**8.337**	**.850**	**.118**	**.197**	**.651**	**5.008**	**6.823**	**94.478**
2016 Total	**14.226**	**28.400**	**35.712**	**78.319**	**8.427**	**.914**	**.117**	**.252**	**.774**	**5.053**	**7.112**	**94.084**
2017 Total	**13.837**	**28.049**	**36.043**	**77.901**	**8.419**	**1.025**	**.118**	**.331**	**.868**	**5.035**	**7.377**	**93.889**
2018 Total	**13.252**	**31.163**	**36.892**	**81.281**	**8.438**	**.998**	**.118**	**.388**	**.930**	**5.096**	**7.530**	**97.400**
2019 Total	**11.316**	**32.264**	**36.866**	**80.425**	**8.452**	**.982**	**.116**	**.435**	**1.010**	**5.048**	**7.591**	**96.600**
2020 Total	**9.181**	**31.669**	**32.331**	**73.169**	**8.251**	**.973**	**.118**	**.516**	**1.153**	**4.535**	**7.296**	**88.877**
2021 Total	**10.549**	**31.711**	**35.243**	**77.454**	**8.131**	**.858**	**.118**	**.636**	**1.290**	**4.753**	**7.656**	**93.375**
2022 Total	**9.888**	**33.379**	**35.319**	**78.529**	**8.061**	**.869**	**.118**	**.784**	**1.482**	**4.980**	**8.233**	**94.964**
2023 Total	**8.171**	**33.676**	**35.448**	**77.262**	**8.099**	**.836**	**.119**	**.907**	**1.437**	**5.021**	**8.320**	**93.746**
2024 January	.879	3.859	2.914	7.652	.721	.074	.010	.055	.119	.411	.668	9.047
February	.562	3.069	2.734	6.363	.674	.071	.009	.067	.140	.410	.698	7.736
March	.494	2.896	2.944	6.330	.662	.080	.010	.088	.154	.427	.758	7.748
April	.467	2.480	2.888	5.832	.601	.071	.010	.102	.161	.408	.752	7.182
May	.563	2.417	3.089	6.067	.679	.084	.010	.116	.134	.433	.776	7.522
June	.721	2.513	2.942	6.171	.712	.076	.009	.123	.132	.422	.763	7.651
July	.838	2.839	3.062	6.738	.729	.073	.010	.124	.097	.446	.749	8.224
August	.818	2.816	3.111	6.741	.729	.070	.010	.122	.100	.437	.738	8.215
September	.664	2.498	2.896	6.054	.654	.054	.009	.105	.100	.418	.686	7.402
October	.589	2.513	3.127	6.224	.614	.052	.010	.099	.135	.428	.724	7.568
November	.570	2.802	2.885	6.253	.646	.057	.010	.072	.137	.425	.701	7.603
December	.747	3.478	2.999	7.220	.744	.067	.010	.066	.135	.435	.713	8.683
Total	**7.912**	**34.179**	**35.590**	**77.644**	**8.165**	**.829**	**.116**	**1.138**	**1.542**	**5.101**	**8.726**	**94.582**
2025 January	.940	R 4.052	3.059	8.050	.749	.073	.010	.078	.149	.403	.713	9.522
February	.733	3.339	2.700	6.771	.646	.067	.009	.083	.134	.377	.670	8.093
March	.597	R 2.842	2.960	R 6.398	.652	.077	.010	.116	.173	.409	.784	R 7.837
April	.549	R 2.454	2.934	5.935	.605	.078	.010	.132	.157	.396	.772	7.317
May	.590	R 2.386	3.053	R 6.026	.649	.083	.010	.144	.126	.404	.767	R 7.449
June	.755	R 2.498	3.039	R 6.291	.692	.076	.010	.153	.122	.398	.758	R 7.747
July	.921	R 2.810	3.151	R 6.880	.739	.068	.010	.159	.109	.416	.762	R 8.383
August	.817	R 2.727	3.137	R 6.679	.738	.069	.010	.151	.093	.412	.736	R 8.157
September	.695	R 2.504	3.001	R 6.199	.684	.052	.010	.134	.088	.399	.682	R 7.569
October	.652	2.524	3.102	6.278	.618	.056	.010	.119	.135	.417	.737	7.631
November	.651	R 2.873	2.919	R 6.444	.666	.063	.010	.091	.140	.399	.702	R 7.809
December	.771	3.614	3.060	R 7.443	.757	.082	.010	.078	.161	.423	.753	8.952
Total	**8.671**	**R 34.624**	**36.115**	**R 79.393**	**8.195**	**.843**	**.117**	**1.438**	**1.585**	**4.853**	**8.835**	**R 96.466**
2026 January	.820	R 3.915	3.040	7.775	.765	.095	.010	.088	.152	.390	.735	R 9.272
February	.653	R 3.215	2.819	6.685	.651	.077	.009	.101	.135	.368	.690	R 8.028
March	.539	R 2.869	3.002	R 6.409	.648	.092	.010	.139	.178	.412	.831	R 7.888
April	R .486	R 2.474	2.974	R 5.932	.599	.077	.009	.150	.168	.386	.790	R 7.325
May	R .548	2.433	2.945	R 5.926	.679	.078	.010	.172	.140	.420	.820	R 7.434
June	R .668	2.513	2.969	R 6.148	.718	.081	.010	.180	.143	.416	.830	R 7.707
July	.863	2.868	3.039	6.771	.743	.069	.010	.190	.110	.430	.809	8.335
7-Month Total	**4.578**	**20.288**	**20.789**	**45.646**	**4.804**	**.568**	**.068**	**1.020**	**1.026**	**2.822**	**5.505**	**55.989**
2025 7-Month Total	**5.085**	**20.382**	**20.896**	**46.350**	**4.731**	**.521**	**.068**	**.864**	**.969**	**2.803**	**5.225**	**56.348**
2024 7-Month Total	**4.525**	**20.074**	**20.573**	**45.152**	**4.778**	**.528**	**.068**	**.674**	**.936**	**2.957**	**5.163**	**55.111**

[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 Table 1.4c.

[f] Conventional hydroelectric power.

[g] Includes coal coke net imports and electricity net imports, which are not separately displayed. See Table 1.4c.

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

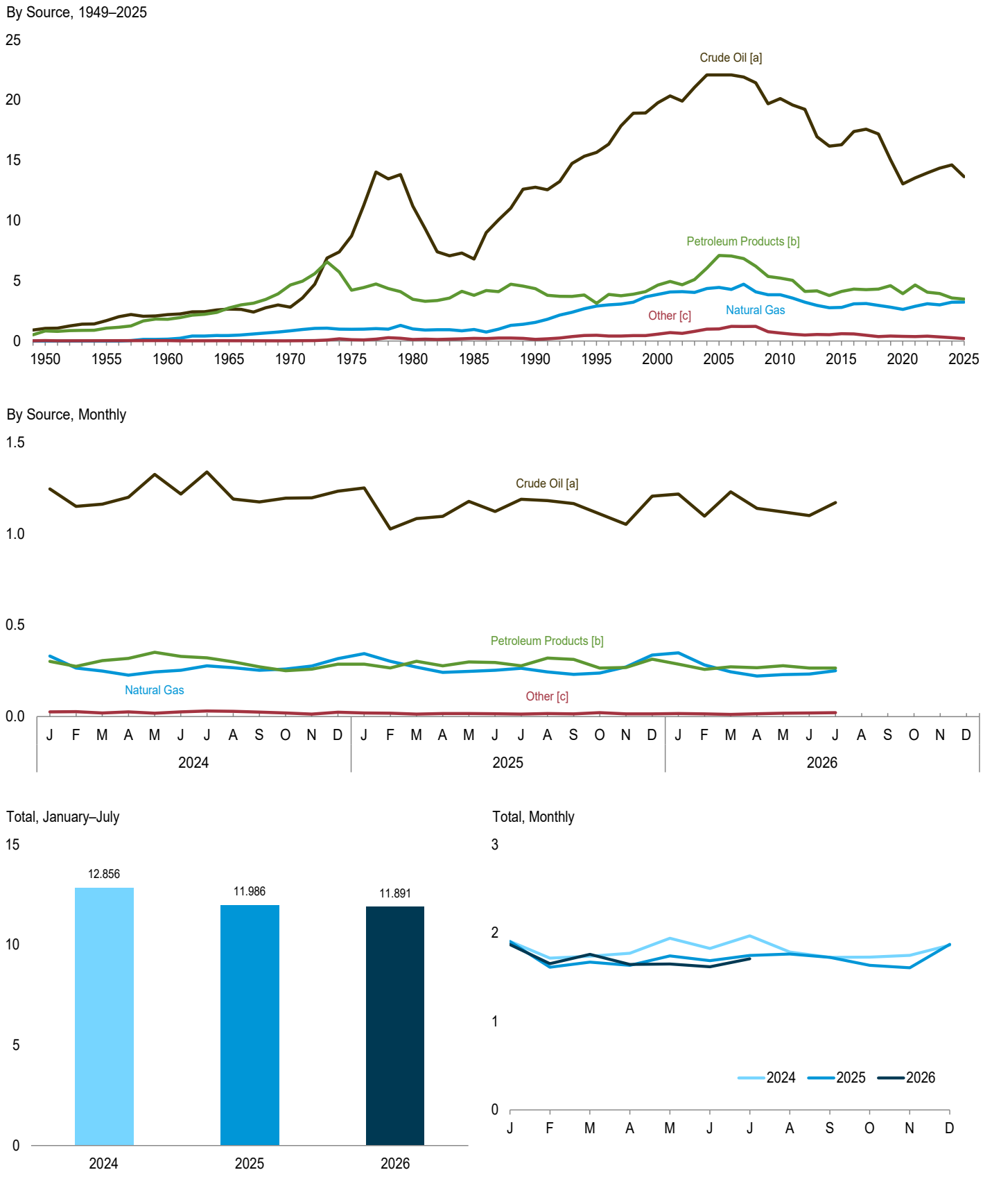
Notes: • See "Primary Energy Consumption" in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

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: See end of section.

Figure 1.4a Primary Energy Imports

(Quadrillion Btu)



[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								
				Petroleum					
	Coal	Coal Coke	Natural Gas	Crude Oil[a]	Petroleum Products[b]	Total	Biomass[c]	Electricity	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**
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 Total	**.105**	**.004**	**2.615**	**13.044**	**3.937**	**16.980**	**.074**	**.210**	**19.988**
2021 Total	**.109**	**.003**	**2.878**	**13.539**	**4.661**	**18.200**	**.083**	**.181**	**21.455**
2022 Total	**.135**	**.002**	**3.100**	**13.951**	**4.052**	**18.003**	**.073**	**.194**	**21.507**
2023 Total	**.088**	**.005**	**3.001**	**14.362**	**3.954**	**18.316**	**.114**	**.133**	**21.657**
2024 January	.002	(s)	.331	1.245	.302	1.547	.011	.012	1.904
February	.004	(s)	.265	1.149	.274	1.423	.015	.009	1.714
March	.002	(s)	.249	1.161	.306	1.467	.010	.008	1.736
April	.006	(s)	.227	1.199	.318	1.517	.013	.006	1.770
May	.002	(s)	.244	1.324	.352	1.676	.011	.006	1.939
June	.005	(s)	.253	1.216	.329	1.545	.012	.010	1.824
July	.004	.001	.278	1.337	.321	1.659	.012	.014	1.967
August	.007	.001	.267	1.189	.300	1.488	.010	.012	1.785
September	.006	(s)	.253	1.174	.272	1.446	.009	.011	1.724
October	.003	.001	.260	1.194	.251	1.444	.007	.010	1.725
November	.004	(s)	.277	1.196	.259	1.455	.004	.006	1.746
December	.003	(s)	.317	1.232	.287	1.519	.009	.012	1.861
Total	**.047**	**.003**	**3.223**	**14.616**	**3.570**	**18.186**	**.123**	**.113**	**21.696**
2025 January	.006	(s)	.344	1.250	.287	1.536	(s)	.014	1.901
February	.005	(s)	.303	1.026	.266	1.292	.003	.011	1.613
March	.004	(s)	.270	1.082	.303	1.385	.002	.008	1.669
April	.006	.001	.242	1.095	.278	1.374	(s)	.010	1.633
May	.005	.001	.247	1.177	.299	1.476	.001	.011	1.740
June	.006	(s)	.253	1.121	.296	1.417	.001	.009	1.686
July	.004	.001	.264	1.188	.278	1.466	.001	.007	1.745
August	.006	.001	.244	1.181	.320	1.500	.002	.008	1.761
September	.005	.001	.231	1.164	.313	1.477	.002	.008	1.724
October	.008	.002	.238	1.108	.265	1.373	.006	.005	1.633
November	.008	.002	.271	1.051	.268	1.320	.001	.004	1.605
December	.005	.001	.336	1.205	.314	1.519	.003	.006	1.870
Total	**.067**	**.009**	**3.243**	**13.648**	**3.488**	**17.135**	**.023**	**.103**	**20.580**
2026 January	.009	.001	.348	1.216	.287	1.503	(s)	.007	1.869
February	.006	(s)	.283	1.096	.258	1.354	.001	.008	1.652
March	.002	(s)	.245	1.228	.272	1.500	.001	.008	1.756
April	.007	.001	.222	1.138	.267	1.405	.000	.009	1.644
May	.006	.001	.230	1.119	.279	1.398	(s)	.012	1.647
June	.004	.001	.233	1.099	.265	1.364	.001	.014	1.617
July	.004	.001	.251	1.170	.265	1.435	.001	.015	1.707
7-Month Total	**.038**	**.004**	**1.811**	**8.065**	**1.893**	**9.959**	**.005**	**.074**	**11.891**
2025 7-Month Total	**.036**	**.003**	**1.922**	**7.939**	**2.008**	**9.947**	**.008**	**.071**	**11.986**
2024 7-Month Total	**.025**	**.001**	**1.848**	**8.631**	**2.202**	**10.834**	**.084**	**.064**	**12.856**

[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.

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

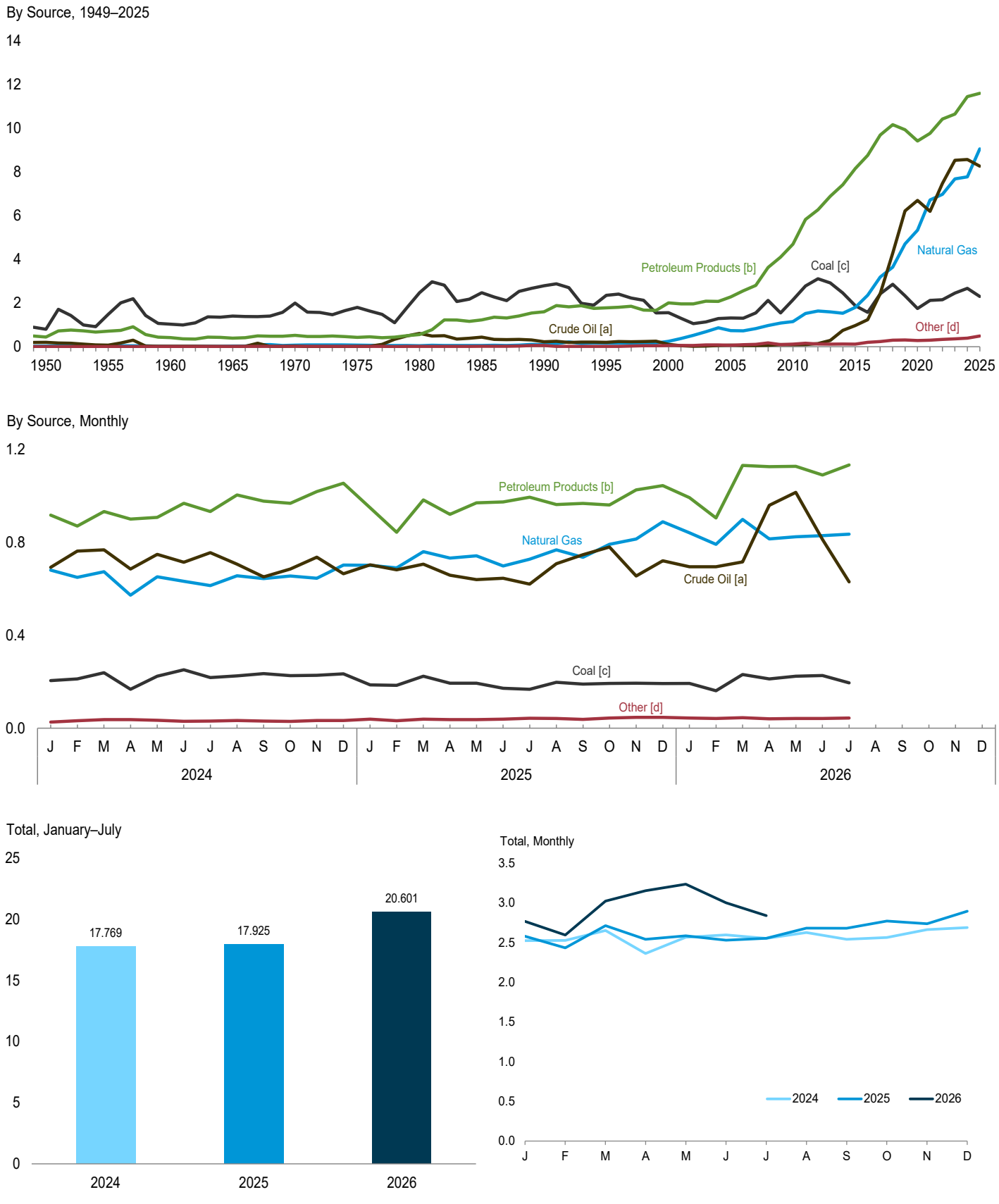
Notes: • See "Primary Energy" in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

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 1.4b Primary Energy Exports

(Quadrillion Btu)



[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								
				Petroleum					
	Coal	Coal Coke	Natural Gas	Crude Oil[a]	Petroleum Products[b]	Total	Biomass[c]	Electricity	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**
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 Total	**1.725**	**.017**	**5.332**	**6.699**	**9.410**	**16.108**	**.234**	**.048**	**23.464**
2021 Total	**2.061**	**.052**	**6.712**	**6.191**	**9.761**	**15.952**	**.247**	**.047**	**25.071**
2022 Total	**2.093**	**.057**	**6.969**	**7.468**	**10.417**	**17.885**	**.278**	**.054**	**27.335**
2023 Total	**2.411**	**.038**	**7.679**	**8.535**	**10.641**	**19.176**	**.285**	**.068**	**29.656**
2024 January	.204	.001	.680	.692	.917	1.609	.021	.006	2.521
February	.210	.002	.649	.762	.870	1.632	.024	.008	2.526
March	.234	.004	.674	.768	.932	1.700	.029	.009	2.650
April	.164	.004	.572	.685	.900	1.584	.029	.008	2.362
May	.221	.002	.652	.748	.907	1.654	.028	.006	2.564
June	.246	.005	.632	.714	.968	1.682	.025	.005	2.595
July	.216	.002	.614	.756	.932	1.688	.026	.005	2.551
August	.221	.005	.656	.706	1.004	1.711	.029	.004	2.625
September	.232	.003	.644	.651	.977	1.628	.028	.003	2.539
October	.221	.005	.655	.685	.968	1.653	.026	.003	2.563
November	.225	.003	.645	.736	1.018	1.754	.029	.004	2.661
December	.230	.004	.702	.665	1.054	1.719	.028	.004	2.687
Total	**2.624**	**.040**	**7.776**	**8.568**	**11.448**	**20.015**	**.322**	**.066**	**30.844**
2025 January	.185	.001	.701	.703	.949	1.652	.035	.004	2.578
February	.183	.001	.690	.682	.843	1.525	.027	.004	2.431
March	.223	.001	.760	.706	.983	1.689	.033	.005	2.712
April	.191	.003	.732	.658	.920	1.578	.033	.004	2.540
May	.191	.003	.742	.640	.970	1.610	.034	.003	2.583
June	.169	.003	.698	.645	.974	1.619	.036	.003	2.528
July	.165	.004	.727	.620	.994	1.614	.038	.004	2.552
August	.196	.003	.768	.708	.962	1.670	.038	.004	2.680
September	.189	.002	.735	.747	.967	1.714	.035	.004	2.678
October	.191	.002	.791	.780	.961	1.741	.037	.007	2.769
November	.193	.001	.814	.655	1.026	1.680	.039	.008	2.735
December	.191	.002	.889	.721	1.044	1.764	.039	.009	2.893
Total	**2.266**	**.026**	**9.046**	**8.265**	**11.592**	**19.857**	**.425**	**.060**	**31.679**
2026 January	.192	.001	.841	.695	.992	1.687	.034	.010	2.766
February	.159	.002	.791	.695	.905	1.601	.035	.007	R 2.594
March	.228	.002	.898	.716	1.131	1.847	.037	.008	3.021
April	.209	.003	.815	.959	1.125	2.084	.035	.005	3.151
May	.223	.001	.824	1.015	1.127	2.142	.039	.003	3.233
June	.224	.003	R .829	.812	1.090	1.902	.039	.003	R 2.999
July	.194	.001	.835	.630	1.133	1.764	.041	.003	2.838
7-Month Total	**1.429**	**.013**	**5.833**	**5.523**	**7.504**	**13.027**	**.259**	**.040**	**20.601**
2025 7-Month Total	**1.306**	**.017**	**5.049**	**4.654**	**6.633**	**11.287**	**.237**	**.029**	**17.925**
2024 7-Month Total	**1.495**	**.021**	**4.474**	**5.124**	**6.426**	**11.550**	**.182**	**.047**	**17.769**

[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. Beginning in 2025, also includes renewable diesel fuel and other biofuels.

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

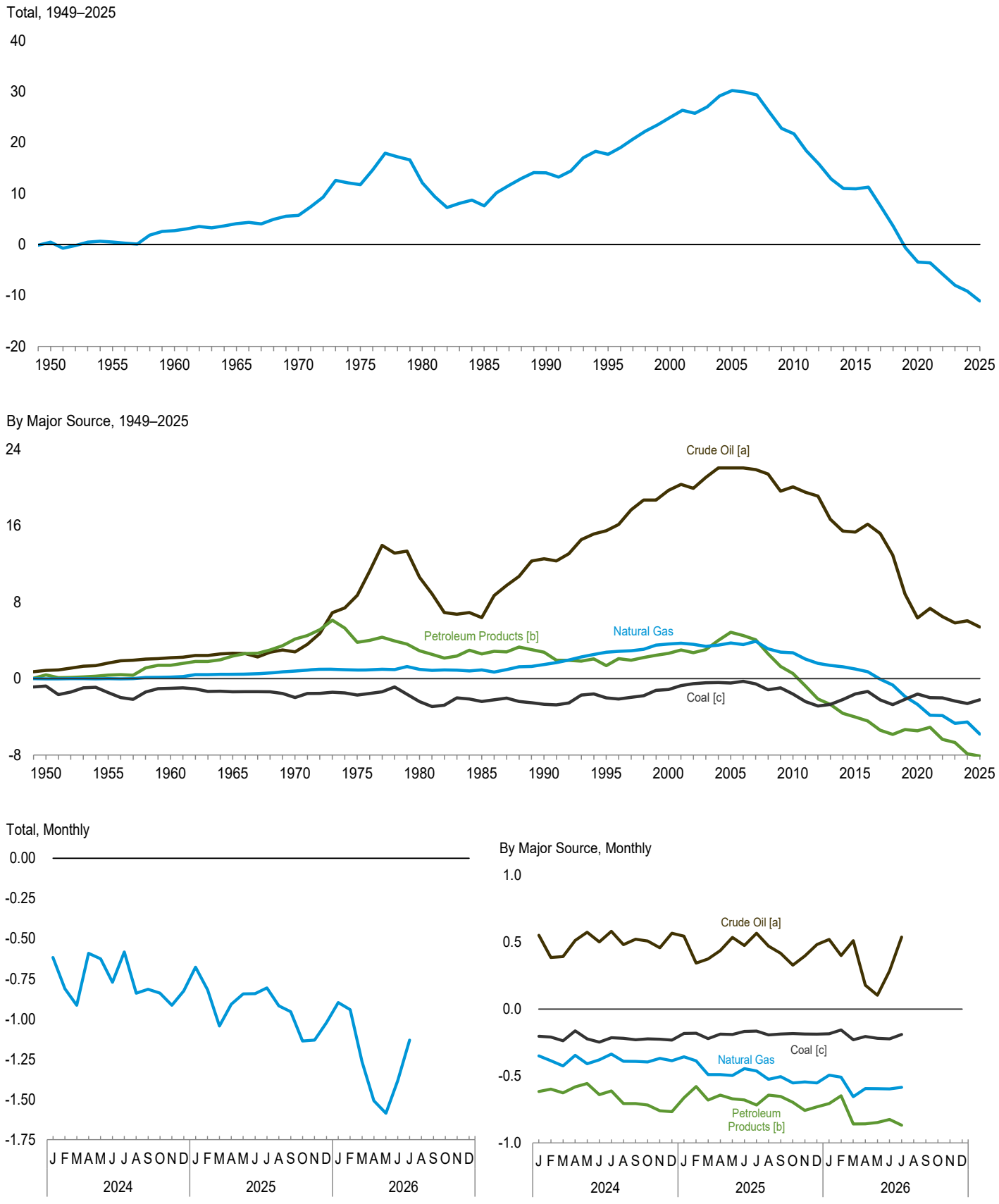
Notes: • See "Primary Energy" in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

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)



[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]								
				Petroleum					
	Coal	Coal Coke	Natural Gas	Crude Oil[b]	Petroleum Products[c]	Total	Biomass[d]	Electricity	Total
1950 Total	**-0.777**	**0.001**	**-0.027**	**0.854**	**0.390**	**1.244**	**NA**	**0.006**	**0.448**
1955 Total	**-1.456**	**-.010**	**-.021**	**1.624**	**.354**	**1.978**	**NA**	**.014**	**.504**
1960 Total	**-1.017**	**-.006**	**.149**	**2.178**	**1.389**	**3.568**	**NA**	**.015**	**2.710**
1965 Total	**-1.372**	**-.018**	**.444**	**2.648**	**2.362**	**5.010**	**NA**	**(s)**	**4.063**
1970 Total	**-1.935**	**-.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**	**-.035**	**.957**	**10.586**	**2.912**	**13.499**	**NA**	**.071**	**12.101**
1985 Total	**-2.389**	**-.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**
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 Total	**-1.620**	**-.013**	**-2.717**	**6.345**	**-5.473**	**.872**	**-.159**	**.161**	**-3.476**
2021 Total	**-1.952**	**-.049**	**-3.834**	**7.348**	**-5.100**	**2.248**	**-.163**	**.134**	**-3.616**
2022 Total	**-1.957**	**-.056**	**-3.869**	**6.483**	**-6.365**	**.118**	**-.205**	**.141**	**-5.828**
2023 Total	**-2.323**	**-.032**	**-4.677**	**5.827**	**-6.687**	**-.860**	**-.171**	**.065**	**-7.999**
2024 January	-.202	-.001	-.349	.553	-.615	-.061	-.010	.006	-.617
February	-.207	-.002	-.385	.387	-.597	-.209	-.010	.001	-.811
March	-.232	-.004	-.425	.393	-.626	-.233	-.019	-.001	-.914
April	-.158	-.004	-.345	.514	-.581	-.067	-.016	-.002	-.591
May	-.219	-.002	-.408	.576	-.555	.021	-.017	(s)	-.625
June	-.241	-.005	-.379	.502	-.639	-.137	-.013	.005	-.771
July	-.211	-.002	-.335	.582	-.611	-.030	-.014	.008	-.583
August	-.214	-.004	-.389	.482	-.705	-.222	-.018	.007	-.840
September	-.226	-.003	-.391	.523	-.705	-.182	-.019	.007	-.815
October	-.218	-.004	-.395	.509	-.717	-.209	-.020	.006	-.839
November	-.221	-.003	-.368	.460	-.760	-.299	-.025	.002	-.914
December	-.227	-.004	-.385	.567	-.767	-.199	-.019	.007	-.826
Total	**-2.577**	**-.037**	**-4.553**	**6.048**	**-7.877**	**-1.829**	**-.199**	**.047**	**-9.147**
2025 January	-.179	-.001	-.356	.546	-.662	-.116	-.034	.010	-.678
February	-.179	-.001	-.387	.344	-.578	-.234	-.024	.006	-.818
March	-.219	-.001	-.490	.375	-.680	-.304	-.032	.003	-1.043
April	-.185	-.002	-.490	.438	-.642	-.204	-.033	.006	-.908
May	-.186	-.003	-.496	.537	-.671	-.133	-.033	.008	-.843
June	-.163	-.003	-.445	.476	-.678	-.201	-.035	.006	-.842
July	-.160	-.003	-.463	.568	-.716	-.147	-.037	.003	-.807
August	-.190	-.002	-.525	.472	-.642	-.170	-.035	.004	-.918
September	-.184	-.001	-.504	.417	-.653	-.236	-.033	.004	-.954
October	-.182	(s)	-.552	.329	-.696	-.368	-.031	-.002	-1.136
November	-.186	.001	-.543	.397	-.757	-.361	-.038	-.004	-1.130
December	-.186	-.001	-.552	.484	-.730	-.246	-.036	-.002	-1.023
Total	**-2.199**	**-.017**	**-5.803**	**5.383**	**-8.104**	**-2.721**	**-.401**	**.042**	**-11.099**
2026 January	-.183	-.001	-.493	.521	-.705	-.185	-.034	-.002	-.897
February	-.153	-.002	-.508	.401	-.647	-.247	-.033	.001	-.941
March	-.226	-.002	R -.654	.512	-.859	-.347	-.035	(s)	R -1.265
April	-.202	-.002	-.593	.179	-.857	-.679	-.035	.004	-1.508
May	-.217	(s)	-.595	.104	-.848	-.744	-.039	.009	-1.586
June	-.220	-.002	R -.596	.287	-.825	-.538	-.038	.011	R -1.383
July	-.190	(s)	-.584	.539	-.868	-.329	-.040	.012	-1.131
7-Month Total	**-1.392**	**-.009**	**-4.022**	**2.542**	**-5.610**	**-3.068**	**-.254**	**.035**	**-8.710**
2025 7-Month Total	**-1.271**	**-.014**	**-3.127**	**3.285**	**-4.625**	**-1.340**	**-.229**	**.042**	**-5.938**
2024 7-Month Total	**-1.471**	**-.020**	**-2.626**	**3.507**	**-4.224**	**-.716**	**-.098**	**.017**	**-4.913**

[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. Beginning in 2025, also includes renewable diesel fuel and other biofuels exports.

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

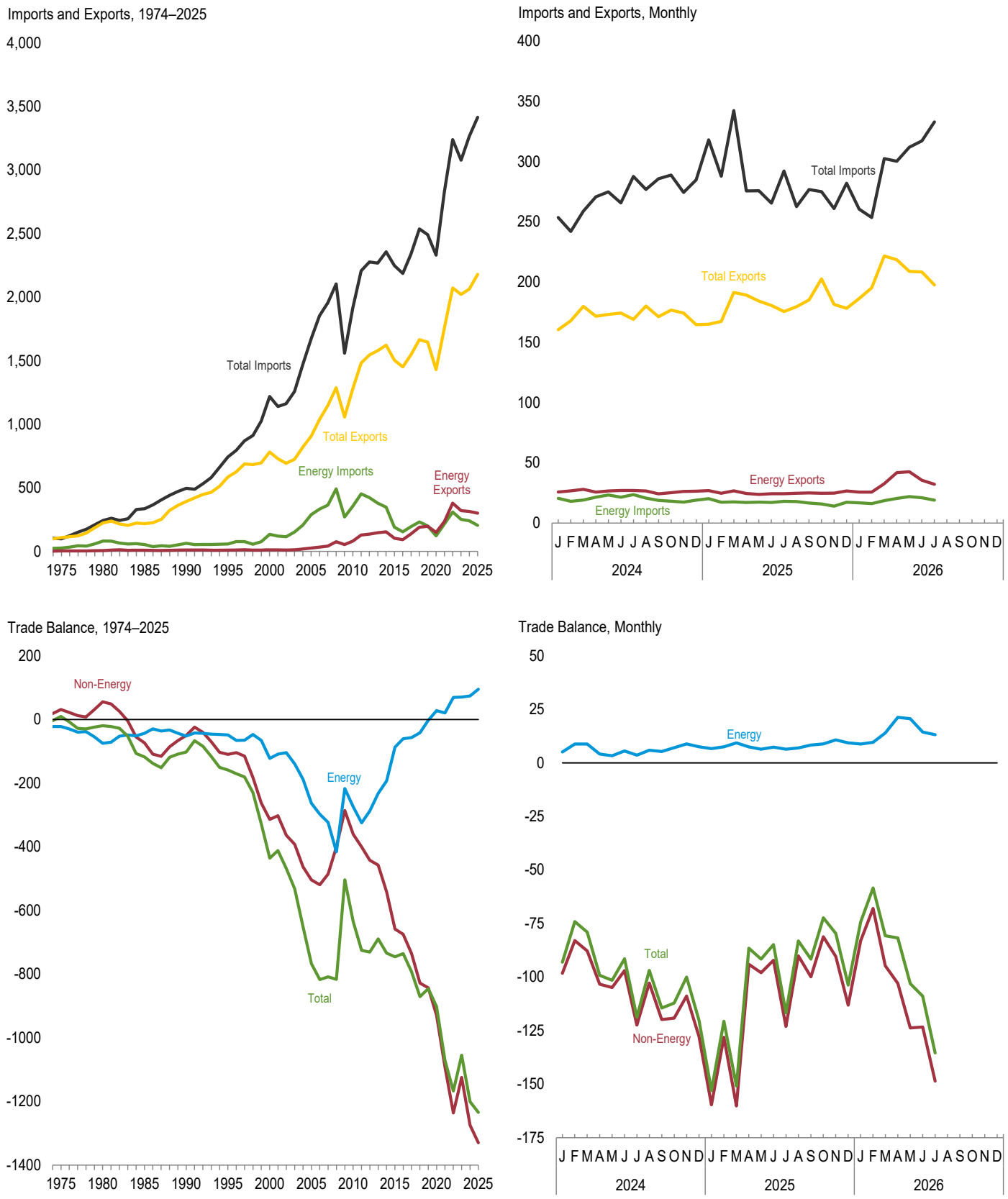
Notes: • See "Primary Energy" in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

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])



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

Table 1.5 Merchandise Trade Value

(Million Dollars[a])

	Petroleum[b]			Energy[c]			Non-Energy Balance	Total Merchandise		
	Exports	Imports	Balance	Exports	Imports	Balance		Exports	Imports	Balance
1974 Total	792	24,668	-23,876	3,444	25,454	-22,010	18,126	99,437	103,321	-3,884
1975 Total	907	25,197	-24,289	4,470	26,476	-22,006	31,557	108,856	99,305	9,551
1980 Total	2,833	78,637	-75,803	7,982	82,924	-74,942	55,246	225,566	245,262	-19,696
1985 Total	4,707	50,475	-45,768	9,971	53,917	-43,946	-73,765	218,815	336,526	-117,712
1990 Total	6,901	61,583	-54,682	12,233	64,661	-52,428	-50,068	393,592	496,088	-102,496
1995 Total	6,321	54,368	-48,047	10,358	59,109	-48,751	-110,050	584,742	743,543	-158,801
2000 Total	10,192	119,251	-109,059	13,179	135,367	-122,188	-313,916	781,918	1,218,022	-436,104
2005 Total	19,155	250,068	-230,913	26,488	289,723	-263,235	-504,242	905,978	1,673,455	-767,477
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 Total	110,373	113,077	-2,704	150,074	122,486	27,588	-929,070	1,429,995	2,331,477	-901,482
2021 Total	157,530	198,648	-41,118	236,233	215,734	20,499	-1,091,271	1,757,744	2,828,515	-1,070,772
2022 Total	263,210	283,230	-20,020	379,335	310,355	68,980	-1,236,065	2,072,648	3,239,733	-1,167,085
2023 Total	237,614	235,115	2,499	321,726	251,596	70,130	-1,124,743	2,021,939	3,076,552	-1,054,613
2024 January	18,736	18,504	232	25,713	20,555	5,158	-98,204	160,481	253,527	-93,046
February	19,586	16,685	2,901	26,746	17,956	8,790	-82,950	167,867	242,028	-74,160
March	21,336	18,258	3,078	27,932	19,163	8,769	-87,773	179,836	258,840	-79,004
April	20,102	20,871	-769	25,673	21,568	4,105	-103,346	171,524	270,765	-99,241
May	20,567	22,535	-1,968	26,594	23,226	3,368	-104,909	173,226	274,767	-101,541
June	20,639	20,615	24	26,985	21,414	5,571	-96,992	174,250	265,671	-91,421
July	20,924	22,588	-1,664	27,119	23,524	3,595	-122,376	168,947	287,728	-118,781
August	20,474	19,738	736	26,557	20,640	5,917	-102,790	180,055	276,927	-96,873
September	18,093	18,056	37	24,148	18,854	5,294	-119,782	171,227	285,715	-114,488
October	18,608	17,222	1,386	25,148	18,091	7,057	-119,181	176,726	288,850	-112,124
November	19,414	16,467	2,947	26,214	17,355	8,859	-108,819	174,327	274,286	-99,960
December	18,840	17,413	1,427	26,426	18,936	7,490	-127,720	164,559	284,789	-120,230
Total	237,317	228,949	8,368	315,256	241,283	73,973	-1,274,842	2,063,024	3,263,893	-1,200,869
2025 January	18,801	17,873	928	26,813	20,195	6,618	-159,620	165,002	318,004	-153,002
February	16,964	15,307	1,657	24,718	17,222	7,496	-128,102	167,208	287,815	-120,606
March	18,100	16,364	1,736	26,797	17,524	9,273	-160,112	191,447	342,286	-150,839
April	16,373	16,136	237	24,513	17,042	7,471	-94,023	189,131	275,683	-86,552
May	16,522	16,566	-44	23,764	17,382	6,382	-97,963	184,210	275,791	-91,581
June	17,371	16,130	1,241	24,283	16,978	7,305	-92,174	180,538	265,407	-84,869
July	17,053	17,038	15	24,419	18,039	6,380	-123,056	175,457	292,133	-116,676
August	17,447	16,914	533	24,715	17,765	6,950	-90,092	179,448	262,590	-83,142
September	17,758	15,780	1,978	24,920	16,602	8,318	-99,941	185,185	276,807	-91,623
October	17,337	14,953	2,384	24,617	15,751	8,866	-81,186	202,679	274,999	-72,320
November	17,126	12,932	4,194	24,803	14,053	10,750	-90,402	181,372	261,025	-79,652
December	17,763	15,542	2,221	26,500	17,153	9,347	-113,103	178,215	281,971	-103,756
Total	208,615	191,537	17,078	300,863	205,706	95,157	-1,329,776	2,179,891	3,414,511	-1,234,619
2026 January	16,794	14,110	2,684	25,567	16,775	8,792	-83,085	186,300	260,593	-74,293
February	16,400	13,844	2,556	25,667	16,134	9,533	-67,959	195,194	253,620	-58,426
March	23,515	17,071	6,444	32,640	18,678	13,962	-94,706	221,658	302,401	-80,744
April	32,145	19,275	12,870	41,738	20,438	21,300	-102,970	218,585	300,255	-81,670
May	33,673	21,083	12,590	42,540	21,903	20,637	-123,714	208,888	311,964	-103,077
June	26,644	20,035	6,609	35,513	21,091	14,422	-123,304	208,374	317,255	-108,882
July	23,464	18,113	5,351	32,129	18,992	13,137	[R]-148,557	[R]197,551	[R]332,971	[R]-135,420
August	27,003	20,445	6,558	35,763	21,448	14,315	-145,736	204,749	336,170	-131,421
8-Month Total	199,639	143,976	55,662	271,558	155,459	116,098	-890,031	1,641,298	2,415,231	-773,933
2025 8-Month Total	138,632	132,330	6,303	200,021	142,148	57,875	-945,142	1,432,441	2,319,708	-887,267
2024 8-Month Total	161,250	159,807	2,570	211,847	168,061	45,273	-799,340	1,376,186	2,130,253	-754,068

[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.

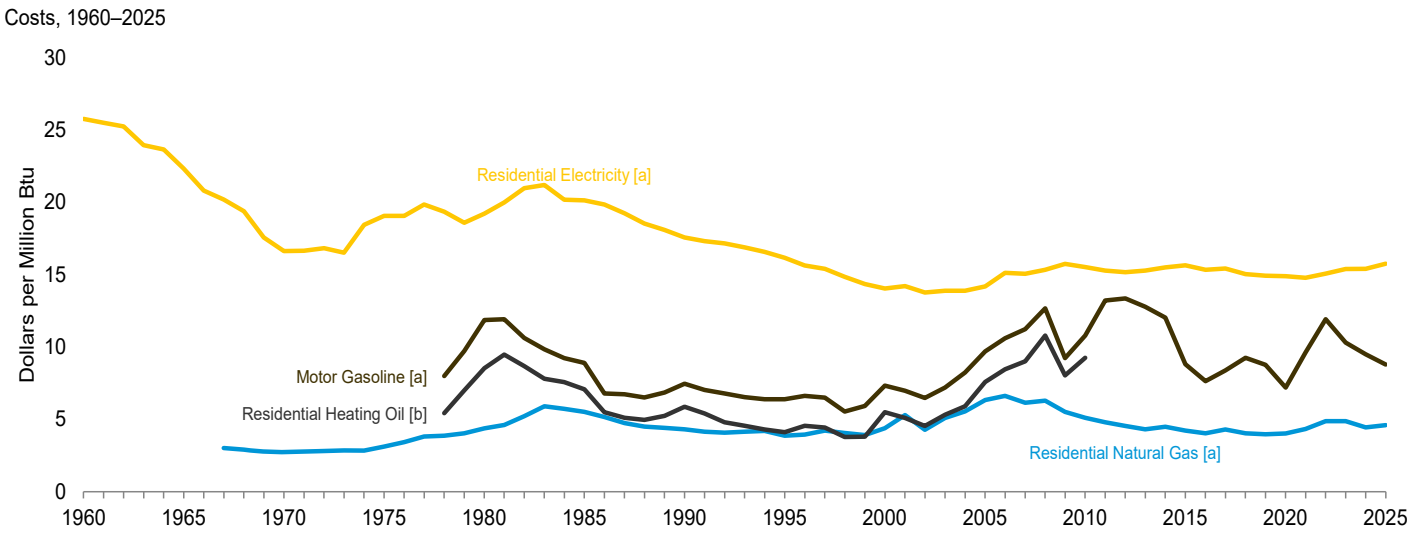
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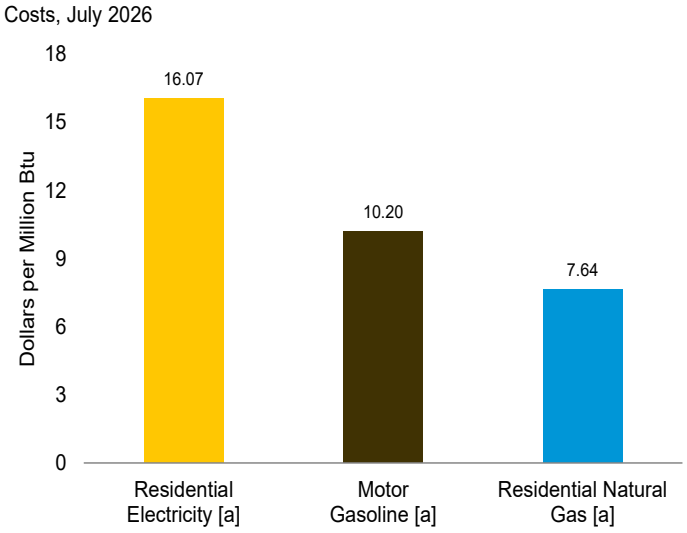
Notes: • Monthly data are not adjusted for seasonal variations. • See Note 1, "Merchandise Trade Value," at end of section. • Totals may not equal sum of components due to independent rounding. • The U.S. import statistics reflect both government and nongovernment imports of merchandise from foreign countries into the U.S. customs territory, which comprises the 50 states, the District of Columbia, Puerto Rico, and the Virgin Islands.

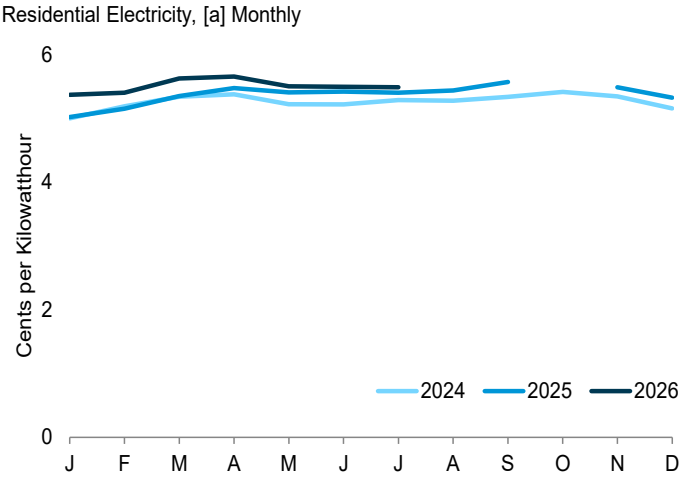
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary (Excel and CSV files) for all available annual and monthly data beginning in 1974.

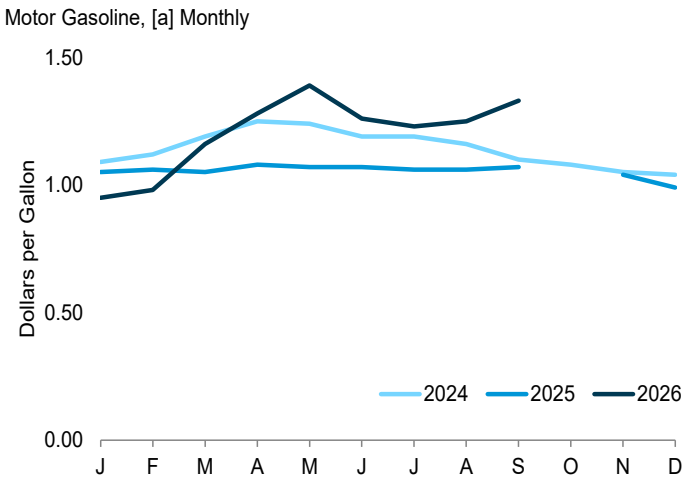
Sources: See end of section.

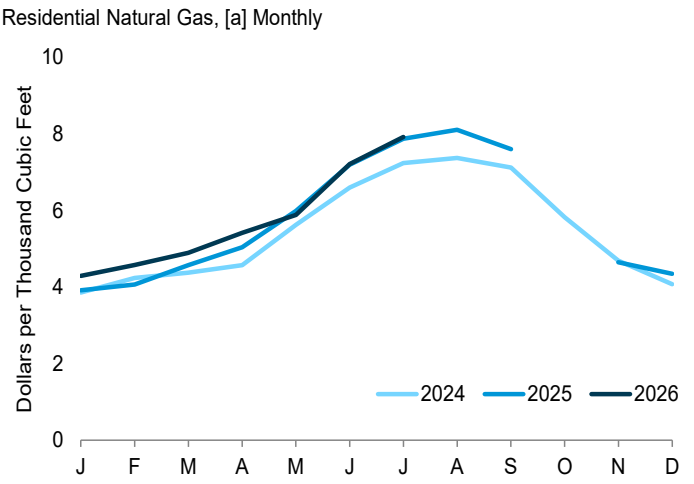
Figure 1.6 Cost of Fuels to End Users In Real (1982–1984) Dollars











[a] Includes Taxes.
[b] Excludes Taxes.
Note: See "Real Dollars" in Glossary.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary.
Source: Table 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**
2005 Average	**195.3**	**1.197**	**9.68**	**1.051**	**7.58**	**6.50**	**6.33**	**4.84**	**14.18**
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 Average	**258.811**	**0.866**	**7.20**	**NA**	**NA**	**4.17**	**4.01**	**5.08**	**14.89**
2021 Average	**270.970**	**1.156**	**9.62**	**NA**	**NA**	**4.50**	**4.33**	**5.04**	**14.77**
2022 Average	**292.655**	**1.432**	**11.92**	**NA**	**NA**	**5.04**	**4.86**	**5.14**	**15.06**
2023 Average	**304.702**	**1.238**	**10.29**	**NA**	**NA**	**5.05**	**4.87**	**5.25**	**15.39**
2024 January	308.417	1.087	9.04	NA	NA	3.86	3.71	5.00	14.64
February	310.326	1.123	9.34	NA	NA	4.23	4.08	5.19	15.21
March	312.332	1.187	9.87	NA	NA	4.37	4.21	5.34	15.64
April	313.548	1.246	10.36	NA	NA	4.57	4.40	5.38	15.76
May	314.069	1.237	10.29	NA	NA	5.63	5.41	5.22	15.30
June	314.175	1.187	9.87	NA	NA	6.60	6.35	5.21	15.28
July	314.540	1.191	9.91	NA	NA	7.24	6.97	5.28	15.49
August	314.796	1.159	9.64	NA	NA	7.38	7.10	5.27	15.46
September	315.301	1.103	9.17	NA	NA	7.12	6.86	5.33	15.63
October	315.664	1.081	8.99	NA	NA	5.82	5.60	5.41	15.87
November	315.493	1.051	8.74	NA	NA	4.69	4.51	5.34	15.65
December	315.605	1.038	8.64	NA	NA	4.07	3.92	5.16	15.11
Average	**313.689**	**1.141**	**9.49**	**NA**	**NA**	**4.62**	**4.45**	**5.25**	**15.40**
2025 January	317.671	1.052	8.75	NA	NA	3.92	3.78	5.02	14.71
February	319.082	1.064	8.86	NA	NA	4.07	3.92	5.15	15.09
March	319.799	1.053	8.76	NA	NA	4.57	4.41	5.34	15.66
April	320.795	1.080	8.99	NA	NA	5.04	4.86	5.47	16.03
May	321.465	1.071	8.91	NA	NA	[R]5.99	[R]5.78	5.40	15.84
June	322.561	1.067	8.88	NA	NA	[R]7.20	[R]6.94	5.42	15.87
July	323.048	1.059	8.81	NA	NA	[R]7.88	7.59	5.40	15.83
August	323.976	1.060	8.82	NA	NA	[R]8.11	[R]7.82	5.44	15.93
September	324.800	1.072	8.92	NA	NA	7.61	7.33	5.57	16.31
October[d]	NA	NA	NA	NA	NA	NA	NA	NA	NA
November	324.122	1.041	8.66	NA	NA	4.65	4.48	5.49	16.08
December	324.054	0.986	8.20	NA	NA	4.35	4.19	5.32	15.59
Average[e]	**321.943**	**1.055**	**8.78**	**NA**	**NA**	**4.77**	**4.59**	**5.37**	**15.75**
2026 January	325.252	0.954	7.94	NA	NA	4.29	4.14	5.37	15.72
February	326.785	0.983	8.18	NA	NA	4.58	4.41	5.40	15.83
March	330.213	1.164	9.68	NA	NA	4.89	4.72	5.62	16.47
April	333.020	1.280	10.65	NA	NA	5.42	5.22	5.65	16.57
May	335.123	1.388	11.55	NA	NA	5.89	5.68	5.50	16.13
June	333.952	1.256	10.45	NA	NA	7.21	6.96	5.49	16.10
July	333.918	1.226	10.20	NA	NA	[R]7.92	[R]7.64	[R]5.48	[R]16.07
August	334.980	1.254	10.43	NA	NA	NA	NA	NA	NA
September	336.940	1.330	11.07	NA	NA	NA	NA	NA	NA

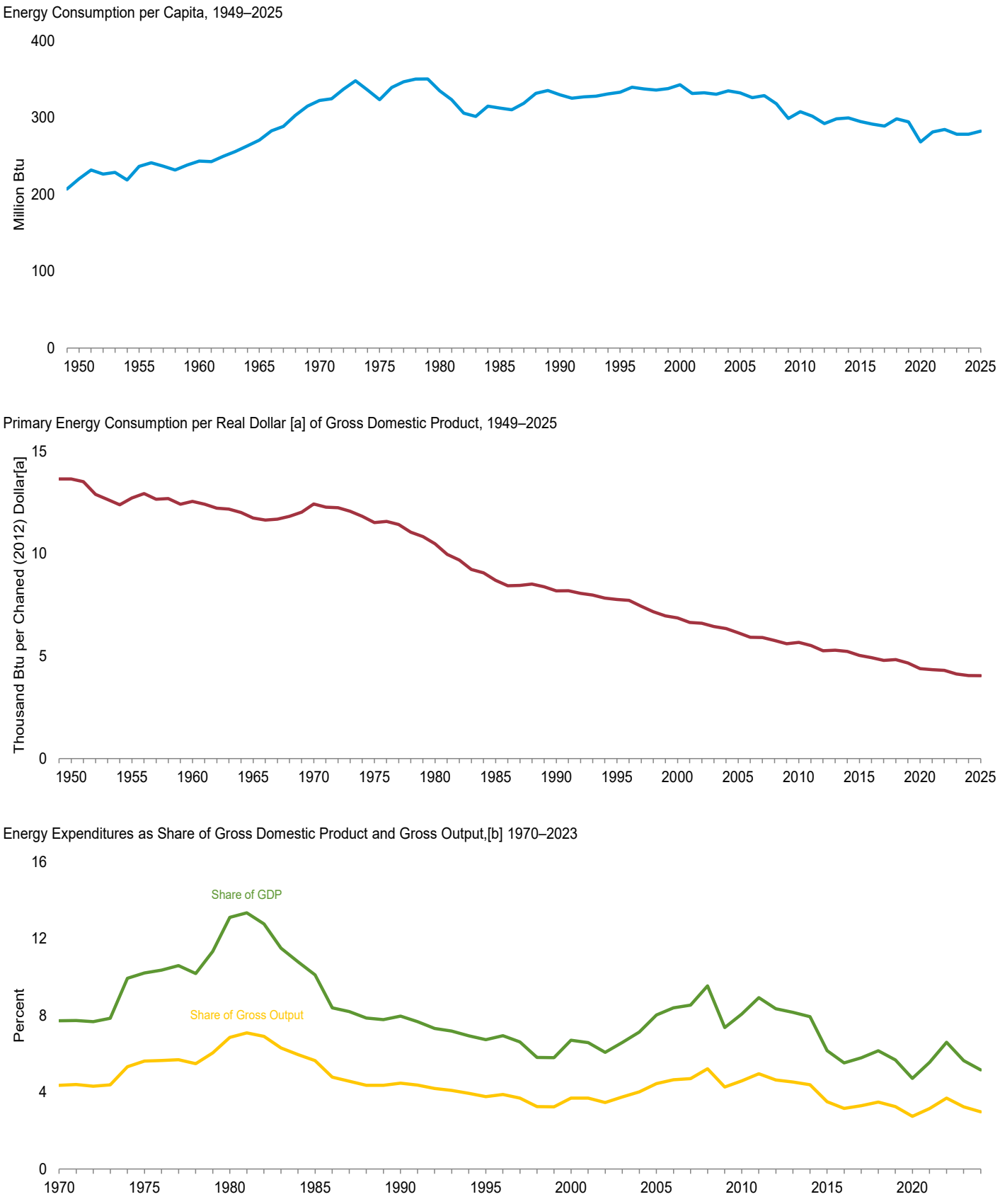
[a] Data are U.S. city averages for all items, and are not seasonally adjusted.
[b] Includes taxes.
[c] Excludes taxes.
[d] Data for October 2025 are not available due to the 2025 lapse in appropriations.
[e] Annual averages are based on 11 months of data (excluding October 2025).
R=Revised. NA=Not available.

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 *Monthy 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.

Figure 1.7 Primary Energy Consumption and Energy Expenditures Indicators



[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 (2017) 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 (2017) Dollars[d]
1950	33.527	220	13.64	NA	NA	NA	NA	2,382	15.6	969
1955	39.215	236	12.72	NA	NA	NA	NA	2,685	16.2	871
1960	43.942	243	12.55	NA	NA	NA	NA	2,914	16.1	833
1965	52.565	271	11.74	NA	NA	NA	NA	3,462	17.8	773
1970	66.036	322	12.42	82,875	404	7.7	4.4	4,261	20.8	802
1975	69.788	323	11.51	171,854	796	10.2	5.6	4,428	20.5	731
1980	76.038	335	10.48	374,350	1,647	13.1	6.9	4,757	20.9	655
1981	74.159	323	9.97	427,901	1,865	13.3	7.1	4,637	20.2	623
1982	70.812	306	9.69	426,482	1,841	12.8	6.9	4,405	19.0	603
1983	70.489	302	9.22	417,622	1,786	11.5	6.3	4,384	18.8	574
1984	74.237	315	9.06	435,313	1,846	10.8	6.0	4,613	19.6	563
1985	74.268	312	8.70	438,343	1,842	10.1	5.6	4,606	19.4	540
1986	74.458	310	8.43	384,091	1,599	8.4	4.8	4,616	19.2	523
1987	77.161	318	8.44	397,627	1,641	8.2	4.6	4,776	19.7	523
1988	81.025	331	8.51	411,568	1,683	7.9	4.4	4,999	20.4	525
1989	82.711	335	8.38	439,051	1,779	7.8	4.4	5,085	20.6	515
1990	82.256	330	8.18	474,652	1,901	8.0	4.5	5,038	20.2	501
1991	82.214	325	8.19	472,440	1,867	7.7	4.4	4,993	19.7	497
1992	83.836	327	8.06	476,845	1,859	7.3	4.2	5,094	19.9	490
1993	85.191	328	7.97	492,275	1,894	7.2	4.1	5,186	20.0	485
1994	87.053	331	7.83	504,856	1,919	6.9	3.9	5,263	20.0	473
1995	88.668	333	7.77	514,624	1,933	6.7	3.8	5,325	20.0	467
1996	91.404	339	7.72	560,293	2,080	6.9	3.9	5,518	20.5	466
1997	91.956	337	7.43	567,962	2,083	6.6	3.7	5,590	20.5	452
1998	92.602	336	7.16	526,283	1,908	5.8	3.2	5,637	20.4	436
1999	94.232	338	6.96	558,627	2,002	5.8	3.2	5,700	20.4	421
2000	96.694	343	6.86	687,711	2,437	6.7	3.7	5,889	20.9	418
2001	94.416	331	6.63	696,242	2,443	6.6	3.7	5,778	20.3	406
2002	95.575	332	6.60	663,964	2,308	6.1	3.5	5,820	20.2	402
2003	95.806	330	6.44	755,070	2,603	6.6	3.7	5,887	20.3	396
2004	98.033	335	6.35	871,210	2,975	7.1	4.0	5,994	20.5	388
2005	98.101	332	6.14	1,045,730	3,539	8.0	4.4	6,008	20.3	376
2006	97.235	326	5.92	1,158,821	3,884	8.4	4.6	5,930	19.9	361
2007	98.965	329	5.90	1,233,869	4,096	8.5	4.7	6,015	20.0	359
2008	96.647	318	5.76	1,408,759	4,633	9.5	5.2	5,823	19.1	347
2009	91.626	299	5.60	1,066,509	3,477	7.4	4.3	5,404	17.6	331
2010	95.142	308	5.67	1,214,267	3,926	8.1	4.6	5,594	18.1	333
2011	93.967	302	5.51	1,392,401	4,469	8.9	5.0	5,455	17.5	320
2012	91.678	292	5.26	1,355,104	4,318	8.3	4.6	5,236	16.7	300
2013	94.253	298	5.29	1,376,256	4,356	8.2	4.5	5,359	17.0	301
2014	95.332	300	5.22	1,395,260	4,383	7.9	4.4	5,414	17.0	296
2015	94.478	295	5.03	1,128,337	3,519	6.2	3.5	5,262	16.4	280
2016	94.084	291	4.92	1,038,805	3,217	5.5	3.2	5,169	16.0	270
2017	93.889	289	4.79	1,136,199	3,496	5.8	3.3	5,131	15.8	262
2018	97.400	298	4.82	1,271,889	3,893	6.2	3.5	5,278	16.2	261
2019	96.600	294	4.66	1,223,755	3,728	5.7	3.2	5,147	15.7	248
2020	88.877	268	4.38	1,007,574	3,039	4.7	2.7	4,585	13.8	226
2021	93.375	281	4.34	1,316,788	3,965	5.6	3.1	4,906	14.8	228
2022	94.964	284	4.30	1,719,511	5,148	6.6	3.7	4,945	14.8	224
2023	93.746	278	4.13	1,568,119	4,657	5.6	3.2	4,799	14.2	211
2024	94.582	278	4.05	1,509,652	4,440	5.2	3.0	4,789	14.1	205
2025	R 96.466	282	4.04	NA	NA	NA	NA	4,916	14.4	206

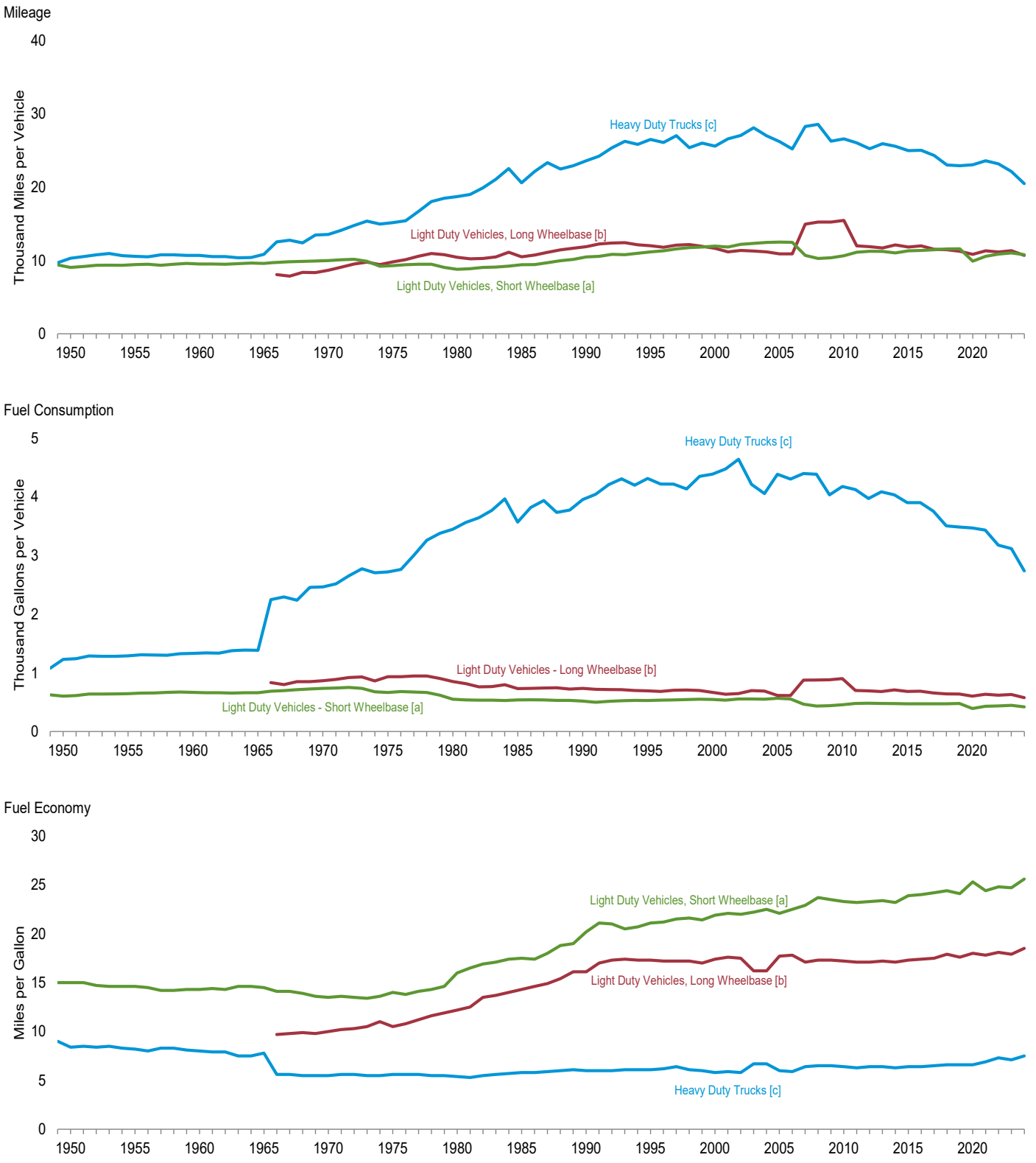
[a] See "Primary Energy Consumption" in Glossary.
[b] Expenditures include taxes where data are available.
[c] Carbon dioxide emissions from energy consumption. See Table 11.1.
[d] See "Chained Dollars" and "Real Dollars" in Glossary.
[e] See "Gross Domestic Product (GDP)" in Glossary.
[f] Gross output is the value of GDP plus the value of intermediate inputs used to produce GDP.
[g] See "Nominal Dollars" in Glossary.
R=Revised. NA=Not available.

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

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

Sources: • **Consumption:** Table 1.3. • **Consumption per Capita:** Calculated as energy consumption divided by U.S. population (see Table A1). • **Consumption per Real Dollar of GDP:** Calculated as energy consumption divided by U.S. gross domestic product in chained (2017) dollars (see Table A1). • **Expenditures:** U.S. Energy Information Administration, "State Energy Price and Expenditure Estimates, 1970 Through 2024" (June 2026), U.S. Table ET1. • **Expenditures per Capita:** Calculated as energy expenditures divided by U.S. population (see Table A1). • **Expenditures as Share of GDP:** Calculated as energy expenditures divided by U.S. gross domestic product in nominal dollars (see Table A1). • **Expenditures as Share of Gross Output:** Calculated as energy expenditures divided by U.S. gross output (see Table A1). • **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 A1). • **Emissions per Real Dollar of GDP:** Calculated as carbon dioxide emissions divided by U.S. gross domestic product in chained (2017) dollars (see Table A1).

Figure 1.8 Motor Vehicle Mileage, Fuel Consumption, and Fuel Economy, 1949–2024



[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	9,928	393	25.3	10,855	603	18.0	23,075	3,470	6.6	10,523	577	18.2
2021	10,573	433	24.4	11,318	636	17.8	23,601	3,436	6.9	11,099	617	18.0
2022	10,881	438	24.8	11,177	619	18.1	23,183	3,177	7.3	11,327	611	18.5
2023	11,026	447	24.7	11,360	633	17.9	22,151	3,120	7.1	11,408	621	18.4
2024	10,812	423	25.6	10,707	579	18.5	20,494	2,741	7.5	11,071	577	19.2

[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 Light-Duty Vehicle Average Miles Traveled by Technology Type

(Miles per Vehicle[a])

	Internal Combustion Engine Vehicles			Electric Vehicles	
	Motor Gasoline Vehicles[b]	Diesel Vehicles	Hybrid Electric Vehicles[c]	Battery Electric Vehicles[d]	Plug-in Hybrid Electric Vehicles[e]
2016	9,946	10,647	12,161	6,782	9,555
2017	E 10,070	E 10,220	E 12,031	E 6,055	E 9,188
2018	10,217	10,494	12,013	5,594	9,134
2019	9,883	9,789	11,486	6,028	8,842
2020	10,135	10,136	11,526	6,682	9,335
2021	9,892	10,264	10,753	6,570	8,673
2022	9,846	10,680	10,554	7,070	8,701
2023[f]	12,492	13,909	14,938	13,070	12,682
2024	12,451	13,905	14,469	12,839	11,368

[a] See Note 2, "Light-Duty Vehicle Average Annual Miles Traveled by Technology Type," at end of section.

[b] Does not include hybrid electric vehicles.

[c] See "Hybrid Electric Vehicle (HEV)" in Glossary.

[d] See "Battery Electric Vehicle (BEV)" in Glossary.

[e] See "Plug-in Hybrid Electric Vehicle (PHEV)" in Glossary.

[f] Through 2022, data are EIA estimates based on S&P Global Mobility Odometer data and Vehicles in Operation data. Beginning in 2023, data are EIA estimates based on S&P Global Mobility Vehicle Miles Traveled data and Vehicles in Operation data.

E=Estimate.

Note: • Data are for on-road vehicles less than or equal to 8,500 pounds (includes passenger cars and light trucks). • Data are derived from vehicle odometer reading data. • 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 2016.

Source: • **2016–2022:** Calculated by EIA using S&P Global Mobility Odometer data and Vehicles in Operation data. • **2023 forward:** Calculated by EIA using S&P Global Vehicle Miles Traveled data and Vehicles in Operations data.

Table 1.10 Electric and Fuel Cell Electric Light-Duty Vehicles Overview

	Electric Light-Duty Vehicles			Fuel Cell Electric Vehicles[c]	All Light-Duty Vehicles[d]	Electric Vehicle Share of All Light-Duty Vehicles
	Battery Electric Vehicles[a]	Plug-In Hybrid Electric Vehicles[b]	Total			
	Thousands of Registered Vehicles					Percent
2012	35.2	33.8	69.0	0.0	230,766.8	(s)
2013	E 82.9	E 79.4	E 162.3	0.0	E 235,945.8	E 0.1
2014	125.9	134.7	260.6	(s)	239,711.0	0.1
2015	E 195.4	E 175.4	E 370.8	E 0.1	E 248,327.1	E 0.2
2016	274.5	223.6	498.1	0.9	251,518.7	0.2
2017	E 358.9	E 345.1	E 703.9	E 4.4	E 256,928.0	E 0.3
2018	573.7	471.5	1,045.2	5.8	259,163.2	0.4
2019	756.3	560.6	1,316.9	7.5	261,539.9	0.5
2020	973.5	613.0	1,586.5	8.1	260,034.2	0.6
2021	1,405.8	766.3	2,172.1	11.5	262,402.9	0.8
2022	2,049.6	935.6	2,985.2	14.6	263,181.0	1.1
2023	3,403.7	1,151.2	4,554.9	16.8	264,733.3	1.7
2024	4,351.3	1,465.6	5,816.9	16.7	267,111.1	2.2

[a] See "Battery Electric Vehicle (BEV)" in Glossary.
[b] See "Plug-In Hybrid Electric Vehicle (PHEV)" in Glossary.
[c] See "Fuel Cell Electric Vehicle (FCEV)" in Glossary.
[d] Includes internal combustion engine vehicles, electric vehicles, and fuel cell electric vehicles.

E=Estimate. (s)=Less than 0.05 percent.

Notes: • Data are at end of year. • Data are for on-road vehicles less than or equal to 8,500 pounds (includes passenger cars and light trucks). • Data for 2013, 2015, and 2017 are estimates. • The federal government and some states self-register their state-owned vehicles. These vehicles are not included in number of registered vehicles. • 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 2012.

Sources: • **Electric Light-Duty Vehicles, Fuel Cell Electric Vehicles, and All Light-Duty Vehicles:** S&P Global Mobility Vehicles in Operation, as of calendar year end figures for each of the years shown. Data for 2013, 2015, and 2017 are estimates interpolated by EIA. • **Electric Vehicle Share of All Light Duty-Vehicles (defined by EIA as less than or equal to 8,500 lbs):** Calculated as battery electric and plug-in hybrid electric light-duty vehicles divided by all light-duty vehicles by EIA.

Table 1.11 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	**6,793**	**6,313**	**7,028**	**7,461**	**3,495**	**3,552**	**2,280**	**6,320**	**3,910**	**5,362**
1955 Total	**6,872**	**6,220**	**6,488**	**6,918**	**3,487**	**3,517**	**2,295**	**6,685**	**4,324**	**5,242**
1960 Total	**6,826**	**6,376**	**6,909**	**7,191**	**3,764**	**4,139**	**2,767**	**6,264**	**3,806**	**5,400**
1965 Total	**7,027**	**6,379**	**6,588**	**6,938**	**3,358**	**3,505**	**2,238**	**6,067**	**3,825**	**5,143**
1970 Total	**7,022**	**6,376**	**6,721**	**7,094**	**3,437**	**3,827**	**2,561**	**6,098**	**3,731**	**5,214**
1975 Total	**6,545**	**5,881**	**6,407**	**6,886**	**2,953**	**3,441**	**2,310**	**6,237**	**4,120**	**4,900**
1980 Total	**7,071**	**6,463**	**6,976**	**6,840**	**3,361**	**3,969**	**2,495**	**5,534**	**3,544**	**5,075**
1985 Total	**6,750**	**5,957**	**6,667**	**7,269**	**2,892**	**3,663**	**2,536**	**6,040**	**3,939**	**4,886**
1990 Total	**5,988**	**5,240**	**5,779**	**6,141**	**2,301**	**2,947**	**1,967**	**5,370**	**3,610**	**4,178**
1995 Total	**6,686**	**6,079**	**6,741**	**6,916**	**2,984**	**3,653**	**2,148**	**5,079**	**3,274**	**4,637**
2000 Total	**6,624**	**5,986**	**6,317**	**6,504**	**2,902**	**3,555**	**2,152**	**4,952**	**3,464**	**4,491**
2005 Total	**6,645**	**5,938**	**6,224**	**6,218**	**2,773**	**3,384**	**1,985**	**4,873**	**3,383**	**4,346**
2010 Total	**5,935**	**5,539**	**6,188**	**6,570**	**3,163**	**3,954**	**2,450**	**5,060**	**3,628**	**4,461**
2011 Total	**6,113**	**5,471**	**6,173**	**6,569**	**2,564**	**3,347**	**2,113**	**5,305**	**3,823**	**4,312**
2012 Total	**5,563**	**4,960**	**5,356**	**5,520**	**2,305**	**2,880**	**1,648**	**4,561**	**3,418**	**3,771**
2013 Total	**6,425**	**5,827**	**6,623**	**7,140**	**2,736**	**3,651**	**2,326**	**5,263**	**3,367**	**4,470**
2014 Total	**6,676**	**6,190**	**7,196**	**7,308**	**2,961**	**3,935**	**2,421**	**4,739**	**2,777**	**4,558**
2015 Total	**6,520**	**5,762**	**6,165**	**6,093**	**2,497**	**3,224**	**2,085**	**4,597**	**2,902**	**4,094**
2016 Total	**5,928**	**5,339**	**5,701**	**5,791**	**2,465**	**3,095**	**1,750**	**4,620**	**3,035**	**3,887**
2017 Total	**6,037**	**5,318**	**5,684**	**6,003**	**2,239**	**2,837**	**1,580**	**4,573**	**3,190**	**3,838**
2018 Total	**6,323**	**5,769**	**6,434**	**6,975**	**2,638**	**3,479**	**2,252**	**4,810**	**3,172**	**4,291**
2019 Total	**6,538**	**5,736**	**6,427**	**7,082**	**2,392**	**3,181**	**2,143**	**5,310**	**3,547**	**4,317**
2020 Total	**5,822**	**5,199**	**5,855**	**6,326**	**2,263**	**3,064**	**1,812**	**4,784**	**3,219**	**3,914**
2021 Total	**5,799**	**5,261**	**5,747**	**6,061**	**2,365**	**3,166**	**1,911**	**4,694**	**3,338**	**3,934**
2022 Total	**6,018**	**5,635**	**6,344**	**6,906**	**2,519**	**3,438**	**2,199**	**5,126**	**3,365**	**4,243**
2023 Total	**5,558**	**4,952**	**5,422**	**5,924**	**2,142**	**2,818**	**1,718**	**5,119**	**3,607**	**3,802**
2024 January	1,088	1,022	1,192	1,341	573	853	634	926	577	841
February	915	832	775	760	404	450	256	678	500	576
March	762	671	690	738	270	358	185	643	491	489
April	544	431	393	398	111	139	46	393	348	281
May	191	128	134	164	24	28	3	257	209	114
June	17	9	19	35	1	0	0	46	57	20
July	1	1	7	12	0	0	0	10	8	4
August	17	8	13	22	0	0	0	17	18	9
September	95	62	47	54	10	11	2	73	42	37
October	381	306	293	268	109	132	17	229	145	186
November	607	552	594	699	223	273	153	681	456	430
December	1,060	999	1,030	1,083	512	632	339	730	484	704
Total	**5,678**	**5,020**	**5,189**	**5,574**	**2,236**	**2,877**	**1,636**	**4,683**	**3,334**	**3,692**
2025 January	R 1,248	R 1,215	1,357	1,405	R 723	941	R 657	1,007	R 593	946
February	1,075	R 974	1,075	R 1,198	R 405	547	380	680	467	687
March	790	R 671	677	668	272	R 346	149	557	R 477	470
April	R 512	R 422	456	R 437	93	R 119	42	394	R 320	280
May	229	R 190	247	R 201	38	58	11	R 206	R 168	136
June	R 26	10	18	34	1	0	0	R 55	R 54	20
July	2	0	2	9	0	0	0	R 10	R 16	4
August	27	16	21	24	1	0	0	17	9	11
September	R 91	R 55	64	67	10	12	2	88	R 37	40
October	R 381	339	304	R 272	131	141	23	311	R 217	R 216
November	R 756	R 689	R 742	R 706	305	394	147	R 484	R 341	464
December	R 1,173	R 1,108	R 1,188	R 1,181	532	R 675	R 367	R 647	R 446	R 749
Total	**R 6,310**	**5,690**	**R 6,150**	**R 6,202**	**R 2,511**	**R 3,233**	**R 1,777**	**R 4,455**	**R 3,146**	**R 4,023**
2026 January	R 1,292	R 1,241	R 1,368	R 1,356	R 636	R 827	534	R 802	487	R 877
February	R 1,161	R 1,074	995	R 879	R 505	R 561	R 232	547	R 401	653
March	R 839	704	R 671	664	220	247	98	R 357	260	402
April	R 512	R 378	326	R 381	R 77	77	26	R 369	299	239
May	R 259	R 213	R 244	200	47	R 58	8	196	R 162	140
June	R 25	17	35	38	1	1	0	63	54	24
July	4	2	1	2	0	0	0	3	16	3
7-Month Total	**4,092**	**3,627**	**3,642**	**3,519**	**1,486**	**1,771**	**898**	**2,338**	**1,680**	**2,339**
2025 7-Month Total	**3,882**	**3,483**	**3,831**	**3,952**	**1,531**	**2,011**	**1,238**	**2,908**	**2,096**	**2,544**
2024 7-Month Total	**3,518**	**3,094**	**3,211**	**3,449**	**1,382**	**1,829**	**1,124**	**2,953**	**2,190**	**2,325**

[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 https://www.eia.gov/analysis/handbook/pdf/STEO%20Weather%20Model.pdf

Table 1.12 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**	**403**	**506**	**646**	**1,427**	**1,419**	**2,280**	**689**	**628**	**873**
1955 Total	**531**	**764**	**921**	**1,139**	**1,645**	**1,672**	**2,505**	**787**	**557**	**1,145**
1960 Total	**318**	**488**	**626**	**870**	**1,597**	**1,529**	**2,367**	**983**	**794**	**1,002**
1965 Total	**311**	**501**	**617**	**831**	**1,624**	**1,550**	**2,461**	**788**	**575**	**981**
1970 Total	**423**	**619**	**746**	**979**	**1,758**	**1,569**	**2,281**	**981**	**732**	**1,082**
1975 Total	**423**	**586**	**720**	**937**	**1,802**	**1,439**	**2,162**	**913**	**597**	**1,052**
1980 Total	**439**	**683**	**768**	**1,158**	**1,923**	**1,751**	**2,652**	**1,083**	**651**	**1,216**
1985 Total	**324**	**513**	**602**	**780**	**1,882**	**1,519**	**2,519**	**1,107**	**758**	**1,122**
1990 Total	**428**	**566**	**602**	**912**	**2,058**	**1,560**	**2,527**	**1,224**	**833**	**1,201**
1995 Total	**472**	**705**	**878**	**928**	**2,030**	**1,611**	**2,398**	**1,226**	**791**	**1,262**
2000 Total	**279**	**460**	**630**	**983**	**1,925**	**1,672**	**2,773**	**1,494**	**771**	**1,233**
2005 Total	**599**	**895**	**944**	**1,063**	**2,100**	**1,674**	**2,645**	**1,386**	**777**	**1,390**
2010 Total	**634**	**913**	**963**	**1,095**	**2,271**	**1,974**	**2,754**	**1,370**	**674**	**1,457**
2011 Total	**553**	**840**	**858**	**1,073**	**2,260**	**1,725**	**3,112**	**1,461**	**734**	**1,470**
2012 Total	**563**	**819**	**974**	**1,221**	**2,163**	**1,760**	**2,913**	**1,581**	**917**	**1,494**
2013 Total	**540**	**685**	**689**	**892**	**2,001**	**1,438**	**2,535**	**1,470**	**889**	**1,304**
2014 Total	**420**	**600**	**609**	**812**	**2,000**	**1,491**	**2,474**	**1,438**	**1,068**	**1,295**
2015 Total	**556**	**809**	**729**	**941**	**2,397**	**1,717**	**2,742**	**1,484**	**1,067**	**1,484**
2016 Total	**625**	**891**	**958**	**1,072**	**2,405**	**1,956**	**2,882**	**1,501**	**929**	**1,554**
2017 Total	**451**	**665**	**708**	**910**	**2,247**	**1,585**	**2,718**	**1,549**	**1,056**	**1,423**
2018 Total	**668**	**890**	**972**	**1,134**	**2,411**	**1,928**	**2,855**	**1,573**	**1,004**	**1,579**
2019 Total	**536**	**787**	**832**	**951**	**2,503**	**1,885**	**2,759**	**1,397**	**845**	**1,495**
2020 Total	**645**	**848**	**831**	**964**	**2,335**	**1,636**	**2,735**	**1,683**	**1,071**	**1,519**
2021 Total	**604**	**837**	**911**	**1,093**	**2,226**	**1,611**	**2,644**	**1,583**	**1,040**	**1,492**
2022 Total	**647**	**838**	**816**	**1,050**	**2,306**	**1,727**	**2,992**	**1,585**	**1,088**	**1,557**
2023 Total	**521**	**685**	**712**	**1,047**	**2,273**	**1,675**	**3,130**	**1,479**	**831**	**1,480**
2024 January	0	0	0	0	35	2	8	0	7	9
February	0	0	0	4	29	10	37	2	6	13
March	0	0	3	7	82	28	81	6	8	31
April	0	0	3	10	90	46	152	35	14	46
May	18	50	102	87	272	219	373	113	36	157
June	129	190	206	234	400	356	527	339	144	292
July	283	328	234	279	503	444	553	446	330	391
August	155	214	223	252	437	411	631	382	237	342
September	35	70	113	143	308	250	402	253	167	210
October	0	7	15	31	147	79	264	123	86	96
November	0	0	0	0	85	27	91	3	10	32
December	0	0	0	0	36	3	29	2	8	13
Total	**620**	**859**	**899**	**1,048**	**2,425**	**1,876**	**3,148**	**1,705**	**1,053**	**1,633**
2025 January	0	0	0	0	17	1	6	0	7	5
February	0	0	0	0	R 58	7	19	9	R 7	17
March	0	0	3	11	59	31	R 106	14	11	31
April	0	0	1	7	126	R 66	168	R 43	20	58
May	10	R 25	36	53	R 243	152	303	125	R 53	127
June	R 109	169	R 214	R 221	399	357	490	293	R 128	278
July	R 275	350	327	337	519	R 497	R 565	R 395	187	391
August	R 118	R 156	184	R 235	382	R 360	566	386	R 263	309
September	R 40	85	95	R 136	R 284	253	415	217	158	202
October	0	3	15	R 31	135	72	246	76	39	80
November	0	0	0	0	51	8	R 87	R 20	16	26
December	0	0	0	0	47	2	20	3	13	15
Total	**R 552**	**788**	**R 875**	**R 1,032**	**R 2,319**	**R 1,806**	**R 2,991**	**R 1,579**	**R 902**	**1,540**
2026 January	0	0	0	0	R 29	4	14	3	12	10
February	0	0	0	1	20	6	R 49	14	10	R 14
March	0	0	5	14	96	63	153	R 80	54	59
April	0	1	11	22	R 123	90	R 188	R 58	21	65
May	7	20	37	63	R 228	R 140	R 264	R 130	47	119
June	R 107	R 151	R 150	R 203	380	R 316	R 507	R 311	124	263
July	203	275	303	381	503	462	604	468	256	394
7-Month Total	**316**	**447**	**506**	**682**	**1,379**	**1,081**	**1,779**	**1,065**	**524**	**924**
2025 7-Month Total	**395**	**543**	**582**	**629**	**1,421**	**1,110**	**1,657**	**878**	**412**	**908**
2024 7-Month Total	**429**	**568**	**547**	**622**	**1,412**	**1,106**	**1,731**	**943**	**545**	**939**

[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 https://www.eia.gov/analysis/handbook/pdf/STEO%20Weather%20Model.pdf

Table 1.13a Non-Combustion Use of Fossil Fuels in Physical Units

	Coal	Natural Gas	Petroleum							
			Asphalt and Road Oil	Hydrocarbon Gas Liquids[a]	Lubricants	Petro-chemical Feedstocks[b]	Petroleum Coke	Special Naphthas	Other[c]	Total
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels per Day							
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**
2000 Total	**674**	**918**	**525**	**1,543**	**166**	**662**	**78**	**51**	**78**	**3,103**
2005 Total	**929**	**761**	**546**	**1,369**	**141**	**729**	**106**	**33**	**75**	**2,997**
2010 Total	**719**	**654**	**362**	**1,597**	**131**	**539**	**42**	**14**	**89**	**2,773**
2011 Total	**730**	**680**	**355**	**1,639**	**125**	**520**	**40**	**12**	**91**	**2,781**
2012 Total	**707**	**706**	**340**	**1,747**	**114**	**444**	**43**	**8**	**88**	**2,785**
2013 Total	**732**	**721**	**323**	**1,870**	**121**	**448**	**40**	**52**	**93**	**2,948**
2014 Total	**562**	**725**	**327**	**1,780**	**126**	**410**	**20**	**55**	**97**	**2,817**
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**	**2,966**
2017 Total	**463**	**746**	**351**	**2,023**	**121**	**394**	**19**	**52**	**103**	**3,062**
2018 Total	**531**	**1,118**	**327**	**2,309**	**117**	**393**	**22**	**48**	**103**	**3,320**
2019 Total	**520**	**1,114**	**348**	**2,342**	**113**	**349**	**21**	**50**	**94**	**3,318**
2020 Total	**418**	**1,049**	**343**	**2,479**	**102**	**329**	**17**	**45**	**88**	**3,403**
2021 Total	**509**	**1,072**	**371**	**2,652**	**105**	**336**	**18**	**42**	**90**	**3,615**
2022 Total	**784**	**922**	**378**	**2,681**	**111**	**246**	**7**	**47**	**97**	**3,566**
2023 Total	**777**	**924**	**368**	**2,872**	**83**	**248**	**7**	**47**	**91**	**3,716**
2024 January	62	86	233	2,961	86	274	6	40	91	3,690
February	62	78	230	2,975	72	286	4	46	73	3,686
March	65	81	258	2,951	77	278	4	44	88	3,699
April	60	76	296	2,921	103	229	10	47	93	3,699
May	62	74	405	3,126	79	247	9	57	94	4,017
June	60	70	477	3,091	92	254	6	42	91	4,053
July	65	73	465	2,878	82	271	9	34	95	3,833
August	66	74	511	3,228	99	275	6	41	94	4,254
September	61	72	446	3,346	82	237	6	35	92	4,243
October	64	75	472	3,456	74	229	6	40	91	4,368
November	63	79	352	3,240	51	258	6	33	88	4,028
December	67	87	239	3,424	50	253	4	29	94	4,092
Total	**756**	**924**	**366**	**3,134**	**79**	**258**	**6**	**41**	**90**	**3,973**
2025 January	61	89	228	3,276	68	246	9	37	92	3,956
February	55	79	234	R3,117	62	247	3	37	88	R3,788
March	61	80	253	2,968	73	268	5	34	86	3,688
April	58	75	328	3,009	92	293	7	39	86	3,855
May	61	74	395	3,128	91	295	10	34	82	4,037
June	62	69	475	R3,269	80	299	6	31	86	4,247
July	60	R71	490	3,428	110	290	8	38	89	4,453
August	60	73	493	3,623	102	305	7	36	90	4,656
September	59	71	497	3,361	113	284	5	37	94	4,391
October	59	74	439	3,335	100	241	5	36	79	4,234
November	57	79	344	3,331	101	255	3	33	86	4,152
December	59	86	224	3,265	88	283	6	31	91	3,988
Total	**712**	**919**	**367**	**3,261**	**90**	**276**	**6**	**35**	**87**	**4,123**
2026 January	56	87	206	3,437	114	302	8	46	88	4,201
February	53	77	261	3,396	118	301	9	35	92	R4,212
March	57	80	294	3,133	130	249	7	40	92	3,945
April	55	75	354	R3,192	91	278	4	32	R93	R4,045
May	R59	75	383	3,302	81	287	9	39	90	4,192
June	R57	72	491	3,213	93	277	7	31	93	4,204
July	61	72	465	3,295	111	287	6	37	91	4,291
7-Month Total	**398**	**538**	**351**	**3,280**	**105**	**283**	**7**	**37**	**91**	**4,155**
2025 7-Month Total	**418**	**536**	**344**	**3,172**	**83**	**277**	**7**	**36**	**87**	**4,006**
2024 7-Month Total	**436**	**538**	**338**	**2,986**	**84**	**263**	**7**	**44**	**89**	**3,811**

[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 3, "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 3, "Non-Combustion Use of Fossil Fuels," at end of section.

Table 1.13b Heat Content of Non-Combustion Use of Fossil Fuels

(Quadrillion Btu)

	Coal	Natural Gas	Petroleum								Total	Percent of Total Energy Consumption
			Asphalt and Road Oil	Hydrocarbon Gas Liquids[a]	Lubricants	Petrochemical Feedstocks[b]	Petroleum Coke	Special Naphthas	Other[c]	Total		
1973 Total	**0.113**	**0.916**	**1.264**	**0.872**	**0.359**	**0.726**	**0.093**	**0.169**	**0.185**	**3.668**	**4.696**	**6.4**
1975 Total	**.099**	**.777**	**1.014**	**.822**	**.304**	**.652**	**.090**	**.144**	**.256**	**3.283**	**4.159**	**6.0**
1980 Total	**.084**	**.777**	**.962**	**1.128**	**.354**	**1.426**	**.086**	**.193**	**.303**	**4.451**	**5.312**	**7.0**
1985 Total	**.049**	**.662**	**1.029**	**1.194**	**.322**	**.817**	**.096**	**.159**	**.201**	**3.818**	**4.529**	**6.1**
1990 Total	**.024**	**.695**	**1.170**	**1.345**	**.362**	**1.123**	**.119**	**.107**	**.179**	**4.406**	**5.125**	**6.2**
1995 Total	**.029**	**.892**	**1.178**	**1.716**	**.346**	**1.214**	**.120**	**.071**	**.145**	**4.790**	**5.711**	**6.4**
2000 Total	**.022**	**.942**	**1.276**	**1.928**	**.369**	**1.344**	**.163**	**.097**	**.164**	**5.342**	**6.306**	**6.5**
2005 Total	**.030**	**.782**	**1.323**	**1.701**	**.312**	**1.474**	**.221**	**.063**	**.157**	**5.250**	**6.062**	**6.2**
2010 Total	**.023**	**.669**	**.878**	**1.931**	**.291**	**1.096**	**.087**	**.026**	**.188**	**4.496**	**5.187**	**5.5**
2011 Total	**.023**	**.695**	**.859**	**1.947**	**.276**	**1.057**	**.083**	**.023**	**.193**	**4.437**	**5.156**	**5.5**
2012 Total	**.023**	**.724**	**.827**	**2.109**	**.254**	**.901**	**.090**	**.015**	**.187**	**4.382**	**5.128**	**5.6**
2013 Total	**.023**	**.741**	**.783**	**2.270**	**.268**	**.901**	**.083**	**.100**	**.197**	**4.601**	**5.366**	**5.7**
2014 Total	**.018**	**.749**	**.793**	**2.125**	**.280**	**.827**	**.043**	**.106**	**.205**	**4.379**	**5.146**	**5.4**
2015 Total	**.017**	**.730**	**.832**	**2.317**	**.305**	**.760**	**.043**	**.099**	**.208**	**4.564**	**5.310**	**5.6**
2016 Total	**.014**	**.755**	**.853**	**2.330**	**.289**	**.754**	**.043**	**.094**	**.212**	**4.575**	**5.344**	**5.7**
2017 Total	**.015**	**.773**	**.849**	**2.393**	**.267**	**.797**	**.040**	**.100**	**.217**	**4.663**	**5.451**	**5.8**
2018 Total	**.017**	**1.160**	**.793**	**2.708**	**.259**	**.794**	**.046**	**.092**	**.218**	**4.910**	**6.087**	**6.2**
2019 Total	**.017**	**1.159**	**.844**	**2.746**	**.250**	**.704**	**.044**	**.096**	**.198**	**4.882**	**6.057**	**6.3**
2020 Total	**.013**	**1.090**	**.832**	**2.870**	**.227**	**.669**	**.036**	**.087**	**.186**	**4.908**	**6.012**	**6.8**
2021 Total	**.016**	**1.114**	**.898**	**3.084**	**.233**	**.684**	**.038**	**.081**	**.190**	**5.208**	**6.338**	**6.8**
2022 Total	**.025**	**.957**	**.916**	**3.005**	**.245**	**.501**	**.014**	**.089**	**.204**	**4.975**	**5.957**	**6.3**
2023 Total	**.025**	**.959**	**.892**	**3.231**	**.184**	**.505**	**.015**	**.089**	**.193**	**5.109**	**6.092**	**6.5**
2024 January	.002	.090	.048	.284	.016	.047	.001	.006	.016	.419	.511	5.6
February	.002	.081	.044	.263	.013	.046	.001	.007	.012	.386	.468	6.1
March	.002	.085	.053	.281	.014	.048	.001	.007	.016	.420	.507	6.5
April	.002	.079	.059	.267	.019	.039	.002	.007	.016	.409	.490	6.8
May	.002	.077	.083	.299	.015	.043	.002	.009	.017	.468	.547	7.3
June	.002	.073	.095	.288	.017	.043	.001	.007	.016	.466	.541	7.1
July	.002	.076	.096	.278	.015	.047	.002	.005	.017	.461	.538	6.5
August	.002	.077	.105	.309	.019	.048	.001	.007	.017	.505	.584	7.1
September	.002	.074	.089	.313	.015	.040	.001	.005	.016	.479	.555	7.5
October	.002	.078	.097	.330	.014	.040	.001	.007	.016	.505	.585	7.7
November	.002	.082	.070	.297	.009	.043	.001	.005	.015	.441	.525	6.9
December	.002	.090	.049	.325	.009	.044	.001	.005	.017	.450	.542	6.2
Total	**.024**	**.960**	**.888**	**3.534**	**.175**	**.530**	**.013**	**.078**	**.191**	**5.409**	**6.394**	**6.8**
2025 January	.002	.092	.047	.311	.013	.043	.002	.006	.016	.437	.531	5.6
February	.002	.082	.043	.267	.011	.039	(s)	.005	.014	.380	.464	5.7
March	.002	.083	.052	.280	.014	.047	.001	.005	.016	.415	.499	6.4
April	.002	.077	.065	.276	.017	.049	.001	.006	.015	.429	R.509	R7.0
May	.002	R.077	.081	.297	.017	.051	.002	.006	.015	.468	.547	7.3
June	.002	.072	.095	.302	.015	.050	.001	.005	.015	.482	.556	7.2
July	.002	.074	.101	.327	.021	.050	.001	.006	.016	.522	R.598	7.1
August	.002	.076	.101	.346	.019	.053	.001	.006	.016	.543	.621	7.6
September	.002	R.073	.099	.310	.021	.048	.001	.006	.016	.501	.576	7.6
October	.002	.076	.090	.316	.019	.042	.001	.006	.014	.488	.566	7.4
November	.002	.082	.069	.307	.018	.043	.001	.005	.015	.457	.541	6.9
December	.002	.089	.046	.307	.016	.049	.001	.005	.016	.441	.532	5.9
Total	**.023**	**.953**	**.890**	**3.646**	**.200**	**.563**	**.013**	**.068**	**.185**	**5.564**	**R6.540**	**6.8**
2026 January	.002	.090	.042	.328	.021	.052	.001	.007	.016	.468	.560	6.0
February	.002	.080	.048	.292	.020	.047	.001	.005	.015	.429	.510	6.4
March	.002	.083	.060	.289	.024	.043	.001	.006	.017	.441	.525	6.7
April	.002	.078	.070	.288	.017	.047	.001	.005	.016	.443	.523	7.1
May	.002	.078	.079	.307	.015	.050	.002	.006	.016	.475	.555	7.5
June	.002	.075	.098	.292	.017	.046	.001	.005	.016	.475	.552	7.2
July	.002	.075	.096	.311	.021	.050	.001	.006	.016	.501	.578	6.9
7-Month Total	**.013**	**.558**	**.494**	**2.107**	**.135**	**.335**	**.009**	**.041**	**.112**	**3.233**	**3.804**	**6.8**
2025 7-Month Total	**.013**	**.556**	**.484**	**2.059**	**.106**	**.329**	**.008**	**.040**	**.107**	**3.135**	**3.704**	**6.6**
2024 7-Month Total	**.014**	**.559**	**.478**	**1.959**	**.109**	**.314**	**.008**	**.049**	**.110**	**3.028**	**3.601**	**6.5**

[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. (s)=Less than 0.5 trillion Btu.

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 3, "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 3, "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. Light-Duty Vehicle Average Annual Miles Traveled by Technology Type. The average annual light-duty vehicle miles traveled (VMT) by technology type is a stock-weighted estimate using the average VMT by vintage and the number of vehicles (stock) by vintage to determine the overall average VMT by technology type. The top-level model is defined as:

$$avg\ VMT_{tech} = \frac{\sum_{vint=1}^{25} VMT_{vint,tech} * stock_{vint,tech}}{\sum_{vint=1}^{25} stock_{vint,tech}}$$

where $avg\ VMT_{tech}$ is the average annual VMT by technology type; $VMT_{vint,tech}$ is the average annual VMT by vintage and technology type; $stock_{vint,tech}$ is the total number of on-road light-duty vehicles by vintage and technology type; $vint$ is the vintage of the vehicle, ranging from 1 to 25 years; and $tech$ is the vehicle technology type—motor gasoline vehicles, diesel vehicles, hybrid electric vehicles, battery electric vehicles (BEV), or plug-in hybrid electric vehicles (PHEV). The vintage of the vehicle relates the model year of the vehicle with the year being analyzed. For example, a model year 2024 vehicle in 2024 would have a vintage equal to one and a model year 2020 vehicle in 2024 would have a vintage equal to five. The maximum vintage EIA uses is 25, resulting in all vehicles 25 years or older be grouped in vintage 25, so a model year 1990 vehicle in 2024 would have a vintage equal to 25.

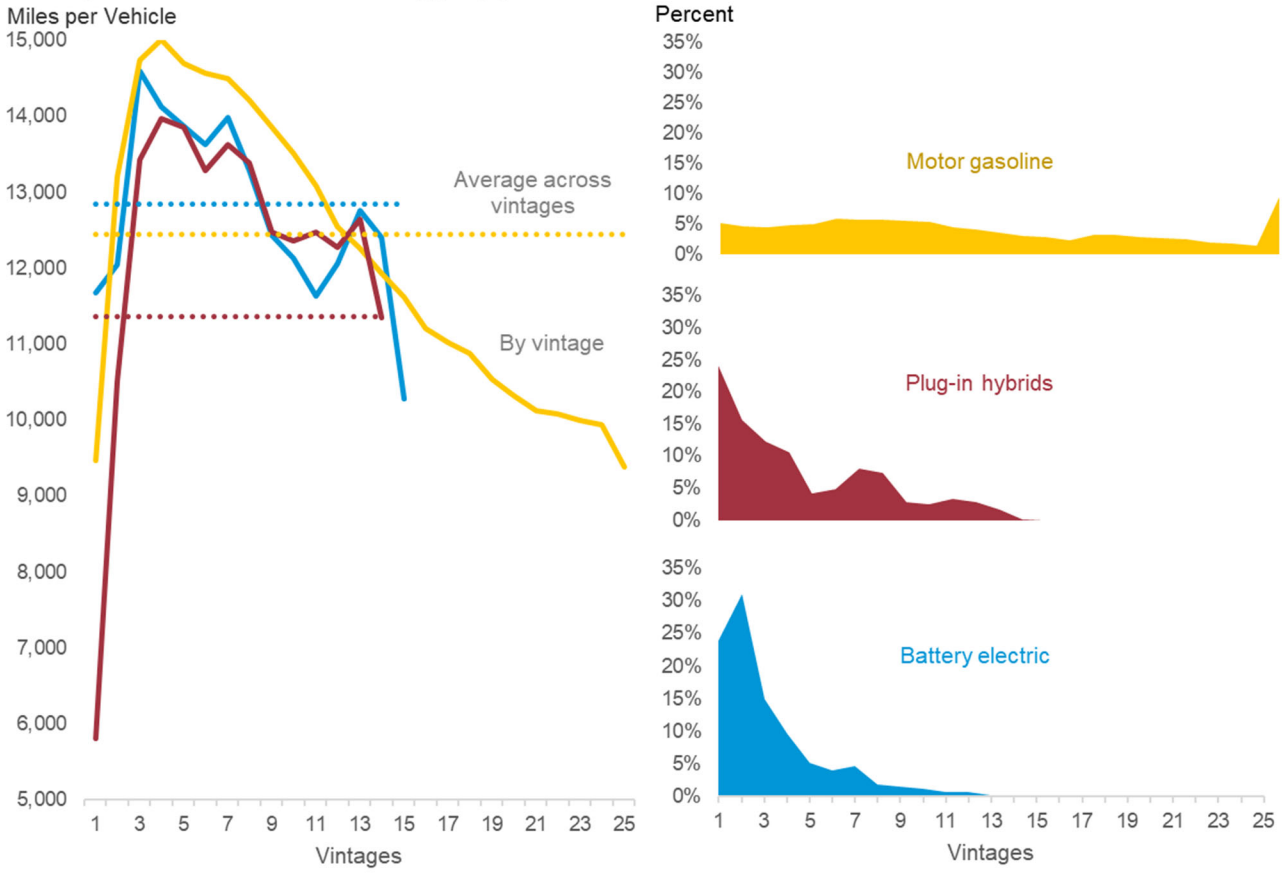
In general, newer vehicles are driven more than older vehicles. However, the average annual VMT for vintage one vehicles is typically the lowest newer vintage VMT because many of these vehicles are not owned for an entire year resulting in a lower average annual VMT for the first model year. The average annual VMT increases for the first few vintages until it reaches the highest VMT by vintage, which occurs around four years old. After the highest VMT by vintage is reached, the average annual VMT decreases as the vintage increases.

While the general pattern for travel by vintage is relatively consistent across technology types, the distribution of the stock by vintage is not consistent across technology types. For example, in 2024, nearly half of the motor gasoline vehicles were over 10 years old while only 8% of PHEVs and 2% of BEVs were over 10 years old. This implies that the average annual VMT for motor gasoline vehicles is more affected by older vehicles than the average annual VMT for BEVs and PHEVs. If the average annual VMT were calculated for 2024 using the first 10 vintages instead of all 25 vintages, the average annual VMT would increase by almost 11% for motor gasoline vehicles and change by 1% for PHEVs, and less than 1% for BEVs. When all vintages are included in the average annual VMT, BEV VMT is almost 400 miles per year more than motor gasoline vehicles in 2024.. However, when only the first 10 years are included in the

average annual VMT calculation BEV VMT is almost 1,000 miles per year less than motor gasoline vehicles. Conversely, when all vintages are included in the average annual VMT, PHEV VMT is over 1,300 miles per year less than motor gasoline. When only the first 10 years are included in the average annual VMT calculation PHEV VMT is over 2,800 miles per year less than gasoline.

Comparing the average annual VMT calculated using the first 10 vintages shows that BEVs and PHEVs have further to go to reach annual average VMT parity with motor gasoline vehicles than what is implied using all 25 vintages. When year-over-year growth in BEV and PHEV registrations slows down, their stock by vintage distribution will more closely resemble that of the motor gasoline stock by vintage distribution, the more consistent comparison can be made using all 25 vintages. However, if high growth in new vehicle registrations continues for BEVs and PHEVs resulting in most electric vehicles (EVs) being less than or equal to 10 years old, then a more consistent comparison can be made using a subset of vintages.

Figure 1.9 Annual Average Vehicle Miles Traveled and Vehicle Stock Distribution by Vintage for Select Technology Types, 2024



Source: U.S. Energy Information Administration *AEO2025 National Energy Modeling System run ref2025.d032025a*

Note 3. 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 1.13b, coal tar values in Table 1.13a 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 1.13b, natural gas values in Table 1.13a are multiplied by the heat content factors for natural gas end-use sectors consumption.

Asphalt and Road Oil

EIA assumes all asphalt and road oil consumption is for non-combustion use. For Table 1.13b, asphalt and road oil values in Table 1.13a 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 1.13b, distillate fuel oil values in Table 1.13a are multiplied by the heat content factors for distillate fuel oil consumption 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 1.13b, HGL component values are multiplied by the appropriate heat content factors and the number of days in the period.

Lubricants

EIA assumes all lubricants consumption is for non-combustion use. For Table 1.13b, lubricants values in Table 1.13a 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 1.13b, naphtha petrochemical feedstock values in 1.13a 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 1.13b, other oils petrochemical feedstock values in 1.13a 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 1.13b, still gas for petrochemical feedstock values in 1.13a 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 1.13b, petroleum coke values in 1.13a 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 1.13b, residual fuel oil values in Table 1.13a 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 1.13b, special naphthas values in Table 1.13a 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 1.13b, waxes values in Table 1.13a 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 1.13b, miscellaneous petroleum products values in Table 1.13a 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.

1989 forward: Coal production data from Table 6.1 are converted to Btu by multiplying by the coal production heat content factors. Waste coal supplied data from Table 6.1 are converted to Btu by multiplying by the waste coal supplied heat content factors. 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.

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.

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.

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.

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.

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.

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. 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); 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).

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).

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 Annual* and *Petroleum Supply Monthly* (data are converted to Btu by multiplying by the appropriate heat content factors).

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.

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.

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.

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.

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.

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.

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). 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. 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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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. 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. 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.

2019–2024: Biodiesel exports data are from EIA, PSA, and *Petroleum Supply Monthly* (PSM), and are converted to Btu by multiplying by the biodiesel heat content factor. 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.

2025 forward: Petroleum products (excluding biofuels) exports data 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 (see "Biomass—Biodiesel" sources below) minus renewable diesel fuel exports (see "Biomass—Renewable Diesel Fuel" sources below) minus other biofuels exports (see "Biomass—Other Biofuels" sources below).

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. 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.

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.

Biomass—Densified Biomass

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

Biomass—Renewable Diesel Fuel

2025 forward: Renewable diesel fuel exports data are from Table 10.4b, and are converted to Btu by multiplying by the renewable diesel fuel heat content factor.

Biomass—Other Biofuels

2025 forward: Other biofuels exports data are from Table 10.4c, and are converted to Btu by multiplying by the other biofuels heat content factor.

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.

2016–2024: Total biomass exports are the sum of the exports values for fuel ethanol (minus denaturant), biodiesel, and densified biomass.

2025 forward: Total biomass exports are the sum of the exports values for fuel ethanol (minus denaturant), biodiesel, densified biomass, renewable diesel fuel, and other biofuels.

Electricity

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

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.

1993–2020: "U.S. International Trade in Goods and Services," annual revisions.

2022–2024: "U.S. International Trade in Goods and Services," 2024 annual revisions.

2025 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.

1994–2020: "U.S. International Trade in Goods and Services," annual revisions.

2022–2024: "U.S. International Trade in Goods and Services," 2024 annual revisions.

2025 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.

1993–2020: "U.S. International Trade in Goods and Services," annual revisions.

2022–2024: "U.S. International Trade in Goods and Services," 2024 annual revisions.

2025 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.

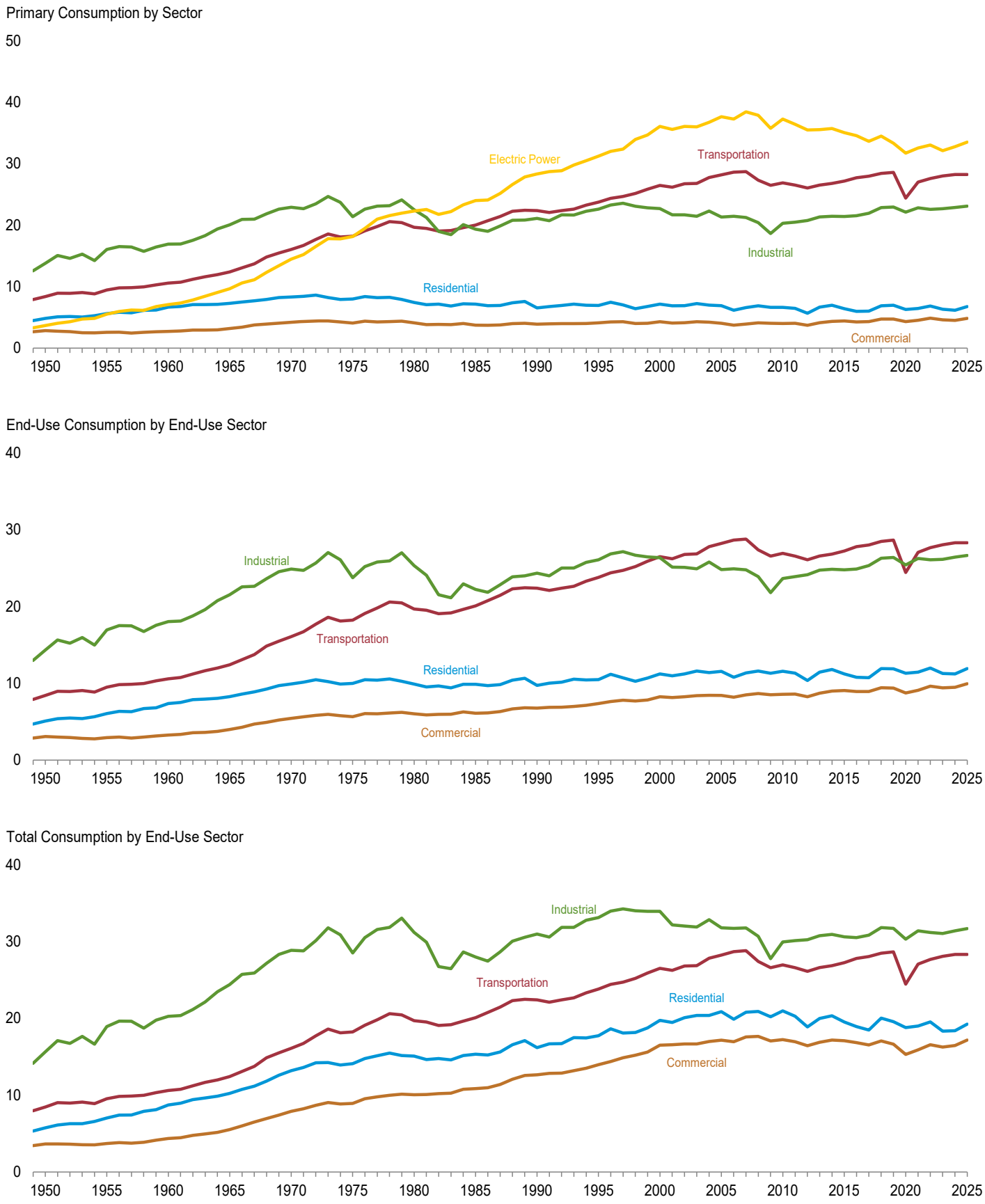
1992–2020: “U.S. International Trade in Goods and Services,” annual revisions.

2022–2024: “U.S. International Trade in Goods and Services,” 2024 annual revisions.

2025 forward: “U.S. International Trade in Goods and Services,” FT-900, monthly.

2. Energy Consumption By Sector

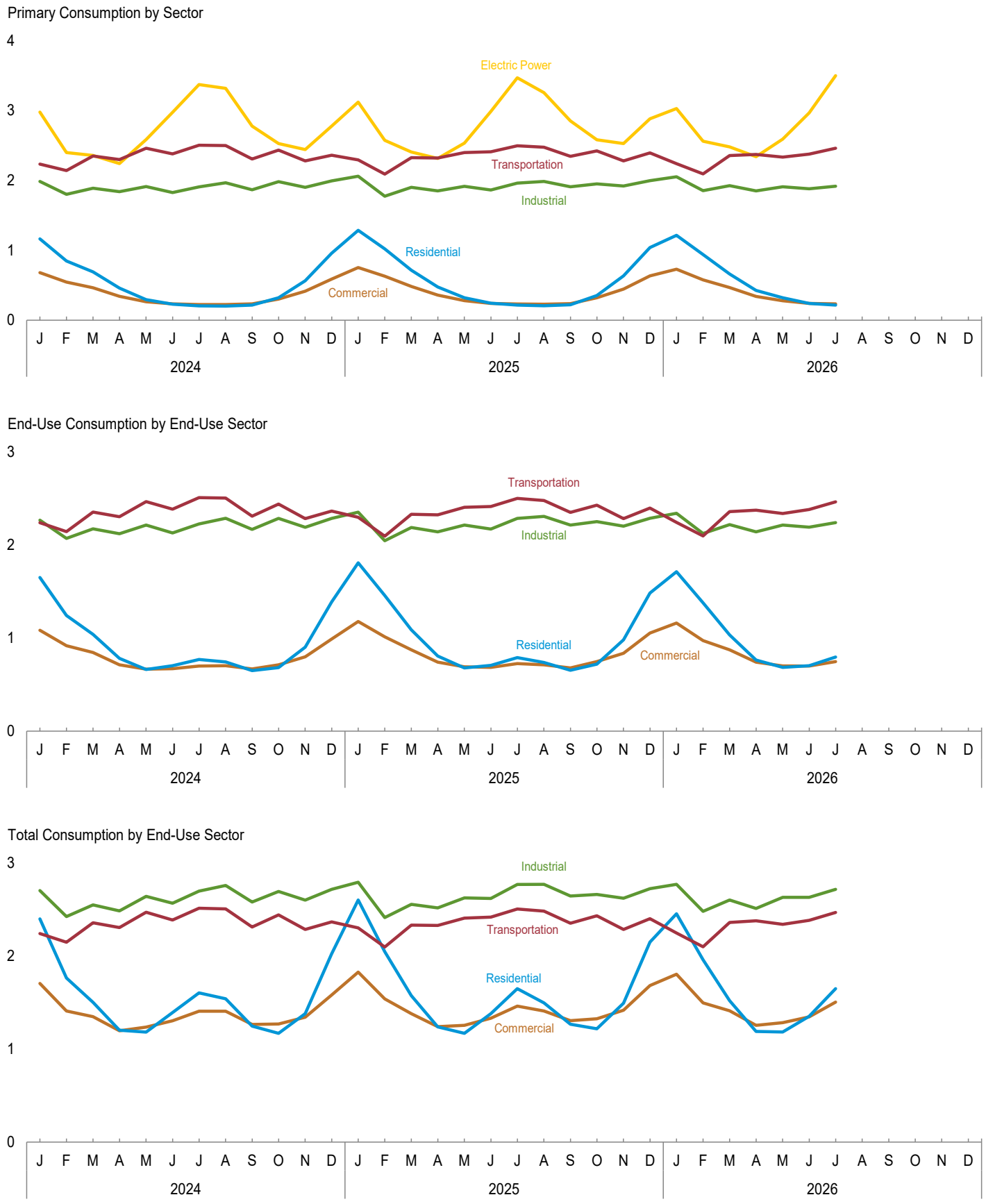
Figure 2.1a Energy Consumption by Sector, 1949–2025
(Quadrillion Btu)



Web Page: http://www.eia.gov/totalenergy/data/monthly/#consumption.
Sources: Tables 2.1a–2.1b.

Figure 2.1b Energy Consumption by Sector, Monthly

(Quadrillion Btu)



Web Page: http://www.eia.gov/totalenergy/data/monthly/#consumption.
Sources: Tables 2.1a–2.1b.

Table 2.1a Energy Consumption: Residential, Commercial, and Industrial Sectors

(Trillion Btu)

	End-Use Sectors														
	Residential					Commercial[a]					Industrial[a]				
	Primary[b]	Electricity[c]	End Use[d]	Electrical System Energy Losses[e]	Total[f]	Primary[b]	Electricity[c]	End Use[d]	Electrical System Energy Losses[e]	Total[f]	Primary[b]	Electricity[c]	End Use[d]	Electrical System Energy Losses[e]	Total[f]
1950 Total	**4,830**	**246**	**5,076**	**661**	**5,736**	**2,834**	**225**	**3,059**	**604**	**3,663**	**13,820**	**500**	**14,319**	**1,340**	**15,659**
1955 Total	**5,608**	**438**	**6,046**	**990**	**7,036**	**2,561**	**350**	**2,911**	**791**	**3,702**	**16,046**	**887**	**16,933**	**2,005**	**18,938**
1960 Total	**6,651**	**687**	**7,339**	**1,387**	**8,726**	**2,723**	**543**	**3,266**	**1,096**	**4,362**	**16,923**	**1,107**	**18,030**	**2,234**	**20,264**
1965 Total	**7,280**	**993**	**8,273**	**1,950**	**10,223**	**3,177**	**789**	**3,966**	**1,549**	**5,514**	**20,063**	**1,463**	**21,526**	**2,873**	**24,399**
1970 Total	**8,323**	**1,591**	**9,914**	**3,264**	**13,178**	**4,237**	**1,201**	**5,438**	**2,464**	**7,902**	**22,918**	**1,948**	**24,866**	**3,995**	**28,862**
1975 Total	**7,990**	**2,007**	**9,997**	**4,103**	**14,100**	**4,059**	**1,598**	**5,657**	**3,267**	**8,924**	**21,378**	**2,346**	**23,725**	**4,797**	**28,522**
1980 Total	**7,440**	**2,448**	**9,888**	**5,194**	**15,082**	**4,105**	**1,906**	**6,011**	**4,044**	**10,055**	**22,527**	**2,781**	**25,308**	**5,900**	**31,209**
1985 Total	**7,149**	**2,709**	**9,858**	**5,486**	**15,344**	**3,732**	**2,351**	**6,084**	**4,762**	**10,845**	**19,363**	**2,855**	**22,218**	**5,782**	**28,000**
1990 Total	**6,552**	**3,153**	**9,705**	**6,501**	**16,206**	**3,892**	**2,860**	**6,753**	**5,898**	**12,650**	**21,100**	**3,226**	**24,326**	**6,652**	**30,978**
1995 Total	**6,934**	**3,557**	**10,491**	**7,256**	**17,747**	**4,099**	**3,252**	**7,352**	**6,634**	**13,985**	**22,622**	**3,455**	**26,077**	**7,048**	**33,125**
2000 Total	**7,156**	**4,069**	**11,225**	**8,507**	**19,732**	**4,277**	**3,956**	**8,233**	**8,271**	**16,504**	**22,721**	**3,631**	**26,352**	**7,592**	**33,945**
2005 Total	**6,901**	**4,638**	**11,538**	**9,340**	**20,879**	**4,051**	**4,351**	**8,401**	**8,762**	**17,163**	**21,322**	**3,477**	**24,799**	**7,003**	**31,803**
2010 Total	**6,635**	**4,933**	**11,568**	**9,419**	**20,987**	**4,014**	**4,539**	**8,553**	**8,666**	**17,219**	**20,317**	**3,314**	**23,631**	**6,328**	**29,958**
2011 Total	**6,465**	**4,855**	**11,319**	**8,967**	**20,286**	**4,051**	**4,531**	**8,583**	**8,370**	**16,952**	**20,494**	**3,382**	**23,876**	**6,247**	**30,123**
2012 Total	**5,672**	**4,690**	**10,362**	**8,510**	**18,871**	**3,702**	**4,528**	**8,230**	**8,216**	**16,446**	**20,765**	**3,363**	**24,128**	**6,103**	**30,230**
2013 Total	**6,669**	**4,759**	**11,428**	**8,554**	**19,983**	**4,134**	**4,562**	**8,696**	**8,200**	**16,897**	**21,357**	**3,362**	**24,719**	**6,043**	**30,762**
2014 Total	**6,976**	**4,801**	**11,778**	**8,560**	**20,338**	**4,353**	**4,614**	**8,966**	**8,226**	**17,192**	**21,449**	**3,404**	**24,853**	**6,068**	**30,921**
2015 Total	**6,424**	**4,791**	**11,214**	**8,306**	**19,521**	**4,398**	**4,643**	**9,040**	**8,050**	**17,090**	**21,411**	**3,366**	**24,777**	**5,836**	**30,613**
2016 Total	**5,970**	**4,815**	**10,785**	**8,146**	**18,931**	**4,270**	**4,665**	**8,935**	**7,893**	**16,828**	**21,549**	**3,333**	**24,882**	**5,639**	**30,520**
2017 Total	**6,021**	**4,704**	**10,725**	**7,751**	**18,476**	**4,309**	**4,616**	**8,925**	**7,606**	**16,530**	**21,943**	**3,358**	**25,301**	**5,534**	**30,835**
2018 Total	**6,890**	**5,013**	**11,903**	**8,126**	**20,029**	**4,705**	**4,715**	**9,419**	**7,643**	**17,062**	**22,864**	**3,414**	**26,278**	**5,535**	**31,813**
2019 Total	**6,981**	**4,914**	**11,895**	**7,686**	**19,582**	**4,722**	**4,643**	**9,365**	**7,263**	**16,628**	**22,946**	**3,420**	**26,366**	**5,349**	**31,715**
2020 Total	**6,301**	**4,997**	**11,298**	**7,503**	**18,801**	**4,325**	**4,393**	**8,718**	**6,595**	**15,313**	**22,128**	**3,272**	**25,401**	**4,913**	**30,314**
2021 Total	**6,431**	**5,017**	**11,448**	**7,564**	**19,012**	**4,537**	**4,533**	**9,070**	**6,834**	**15,904**	**22,828**	**3,414**	**26,242**	**5,147**	**31,390**
2022 Total	**6,839**	**5,150**	**11,989**	**7,553**	**19,542**	**4,860**	**4,746**	**9,605**	**6,961**	**16,566**	**22,594**	**3,482**	**26,076**	**5,107**	**31,183**
2023 Total	**6,318**	**4,947**	**11,266**	**7,083**	**18,349**	**4,594**	**4,804**	**9,398**	**6,878**	**16,276**	**22,682**	**3,444**	**26,126**	**4,930**	**31,055**
2024 January	1,164	486	1,650	748	2,398	680	403	1,084	621	1,705	1,986	282	2,267	433	2,701
February	849	394	1,243	520	1,763	545	372	917	491	1,408	1,803	267	2,070	353	2,423
March	691	349	1,040	462	1,502	464	380	844	504	1,348	1,889	284	2,173	376	2,548
April	459	323	782	419	1,201	342	372	714	482	1,196	1,841	280	2,121	363	2,484
May	295	367	662	519	1,181	265	402	667	569	1,236	1,914	300	2,214	424	2,639
June	230	474	704	688	1,392	234	437	670	633	1,304	1,827	302	2,129	438	2,567
July	206	562	769	835	1,604	224	476	700	707	1,407	1,908	317	2,225	471	2,696
August	201	543	743	797	1,540	223	480	703	705	1,407	1,966	320	2,286	470	2,756
September	216	434	650	597	1,247	234	434	668	596	1,264	1,866	300	2,166	412	2,578
October	320	362	682	488	1,169	301	413	713	556	1,269	1,983	301	2,284	406	2,691
November	565	337	902	479	1,381	416	382	798	543	1,342	1,902	288	2,189	409	2,598
December	960	428	1,388	634	2,023	589	400	988	592	1,581	1,995	290	2,285	429	2,715
Total	**6,155**	**5,060**	**11,215**	**7,163**	**18,378**	**4,516**	**4,951**	**9,466**	**7,009**	**16,475**	**22,882**	**3,530**	**26,412**	**4,998**	**31,409**
2025 January	1,287	520	1,807	794	2,600	R753	425	1,178	648	R1,826	2,062	288	R2,351	440	R2,791
February	1,022	435	1,457	590	2,046	628	386	1,014	523	1,538	1,775	270	2,045	366	2,412
March	717	372	1,089	483	1,572	R484	390	874	507	1,381	R1,903	284	R2,187	369	2,555
April	474	332	806	432	1,238	R358	384	R742	499	R1,241	1,851	288	R2,140	375	R2,515
May	R320	358	R678	493	R1,170	281	409	R691	563	1,254	1,915	297	R2,213	409	R2,622
June	R244	463	707	673	1,380	239	446	R685	647	R1,332	1,864	307	2,171	446	2,617
July	R217	573	791	856	1,647	R232	493	R725	736	1,461	R1,961	323	R2,284	482	R2,767
August	207	530	737	758	1,495	R228	485	R714	695	R1,409	R1,985	323	R2,307	462	R2,769
September	222	433	654	612	1,267	R236	443	679	627	1,306	R1,910	304	R2,214	430	R2,644
October	353	366	719	499	1,218	R321	425	747	579	1,326	R1,950	300	R2,250	409	R2,659
November	R635	345	R981	511	R1,492	R445	392	837	579	R1,416	R1,921	281	R2,202	416	R2,618
December	R1,041	442	R1,483	664	2,148	636	418	1,054	628	1,682	R1,998	290	R2,287	435	2,722
Total	**R6,738**	**5,169**	**R11,907**	**7,344**	**R19,252**	**R4,842**	**5,096**	**R9,938**	**7,240**	**R17,178**	**R23,096**	**3,556**	**R26,652**	**5,052**	**R31,705**
2026 January	R1,216	495	R1,712	740	R2,452	730	430	R1,161	643	R1,804	R2,054	287	R2,340	429	R2,769
February	R941	437	R1,378	579	R1,957	R577	395	R972	523	R1,495	R1,855	268	R2,123	355	R2,478
March	R661	371	R1,033	488	R1,521	R466	408	R874	536	1,410	R1,927	291	R2,218	382	R2,600
April	R427	335	R763	426	R1,189	R339	403	R742	512	1,254	R1,850	290	R2,140	368	2,509
May	R320	364	R684	500	R1,184	278	423	R702	582	1,283	R1,910	303	R2,213	416	R2,630
June	241	463	R704	647	1,351	R240	461	700	645	1,345	1,881	311	R2,192	436	2,628
July	217	579	796	851	1,647	234	514	748	756	1,503	1,918	322	2,240	474	2,714
7-Month Total	**4,024**	**3,044**	**7,068**	**4,232**	**11,300**	**2,864**	**3,034**	**5,898**	**4,197**	**10,095**	**13,395**	**2,072**	**15,467**	**2,860**	**18,327**
2025 7-Month Total	**4,280**	**3,053**	**7,334**	**4,320**	**11,653**	**2,976**	**2,932**	**5,908**	**4,124**	**10,032**	**13,333**	**2,058**	**15,391**	**2,888**	**18,280**
2024 7-Month Total	**3,895**	**2,955**	**6,850**	**4,191**	**11,041**	**2,755**	**2,842**	**5,597**	**4,007**	**9,603**	**13,169**	**2,031**	**15,200**	**2,857**	**18,057**

[a] Includes energy consumed at combined-heat-and-power (CHP) and electricity-only plants within the sector.

[b] Energy consumed in the form that it is first accounted for, before any transformation to secondary or tertiary forms of energy. See "Primary Energy Consumption" in Glossary.

[c] Electricity sold to the sector. See "Electricity Sales to Ultimate Customers" in Glossary.

[d] Sum of "Primary" and "Electricity." See "End-Use Energy Consumption" in Glossary.

[e] Calculated as the difference between primary energy consumed by the electric power sector and the energy content of electricity sales to ultimate customers sent to the end-use sectors. Allocated proportionally to the electricity sales to ultimate customers in each end-use sector. See Note 1, "Electrical System Energy Losses," at end of section.

[f] Equal to end-use energy consumption plus electrical system energy losses.

R=Revised.

Notes: • Data are estimates. • See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • See Note 2, "Other Energy Losses," at end of section. • See Note 3, "Energy Consumption Data and Surveys," at end of section. • 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/#consumption (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: Tables 2.2–2.4.

Table 2.1b Energy Consumption: Transportation Sector, Total End-Use Sectors, and Electric Power Sector (Trillion Btu)

	End-Use Sectors										Electric Power Sector[a]	
	Transportation					Total						
	Primary[b]	Elec-tricity[c]	End Use[d]	Electrical System Energy Losses[e]	Total[f]	Primary[b]	Elec-tricity[c]	End Use[d]	Electrical System Energy Losses[e]	Total[g]	Primary[b]	Primary Total[h]
1950 Total	**8,383**	**23**	**8,407**	**62**	**8,469**	**29,867**	**994**	**30,861**	**2,666**	**33,527**	**3,661**	**33,527**
1955 Total	**9,474**	**20**	**9,494**	**45**	**9,539**	**33,690**	**1,695**	**35,385**	**3,830**	**39,215**	**5,525**	**39,215**
1960 Total	**10,560**	**10**	**10,570**	**21**	**10,591**	**36,856**	**2,348**	**39,204**	**4,738**	**43,942**	**7,086**	**43,942**
1965 Total	**12,399**	**10**	**12,409**	**20**	**12,428**	**42,919**	**3,254**	**46,173**	**6,392**	**52,565**	**9,646**	**52,565**
1970 Total	**16,062**	**11**	**16,073**	**22**	**16,094**	**51,540**	**4,751**	**56,291**	**9,745**	**66,036**	**14,495**	**66,036**
1975 Total	**18,211**	**10**	**18,221**	**21**	**18,241**	**51,638**	**5,961**	**57,599**	**12,188**	**69,787**	**18,149**	**69,788**
1980 Total	**19,659**	**11**	**19,670**	**23**	**19,694**	**53,731**	**7,146**	**60,878**	**15,162**	**76,040**	**22,309**	**76,038**
1985 Total	**20,042**	**14**	**20,056**	**29**	**20,084**	**50,285**	**7,929**	**58,214**	**16,059**	**74,273**	**23,988**	**74,268**
1990 Total	**22,366**	**16**	**22,382**	**33**	**22,415**	**53,910**	**9,255**	**63,165**	**19,084**	**82,250**	**28,340**	**82,256**
1995 Total	**23,757**	**17**	**23,774**	**35**	**23,808**	**57,412**	**10,281**	**67,694**	**20,973**	**88,666**	**31,254**	**88,668**
2000 Total	**26,456**	**18**	**26,474**	**38**	**26,512**	**60,610**	**11,674**	**72,284**	**24,409**	**96,693**	**36,083**	**96,694**
2005 Total	**28,179**	**26**	**28,205**	**52**	**28,257**	**60,452**	**12,491**	**72,944**	**25,158**	**98,101**	**37,649**	**98,101**
2010 Total	**26,894**	**26**	**26,920**	**50**	**26,970**	**57,860**	**12,812**	**70,672**	**24,463**	**95,135**	**37,275**	**95,142**
2011 Total	**26,523**	**26**	**26,549**	**48**	**26,598**	**57,533**	**12,794**	**70,327**	**23,632**	**93,959**	**36,426**	**93,967**
2012 Total	**26,057**	**25**	**26,082**	**45**	**26,127**	**56,195**	**12,606**	**68,802**	**22,874**	**91,675**	**35,480**	**91,678**
2013 Total	**26,541**	**26**	**26,567**	**47**	**26,614**	**58,701**	**12,709**	**71,410**	**22,845**	**94,255**	**35,554**	**94,253**
2014 Total	**26,802**	**26**	**26,828**	**47**	**26,875**	**59,580**	**12,845**	**72,425**	**22,902**	**95,327**	**35,747**	**95,332**
2015 Total	**27,182**	**26**	**27,208**	**45**	**27,253**	**59,414**	**12,826**	**72,240**	**22,237**	**94,477**	**35,063**	**94,478**
2016 Total	**27,741**	**26**	**27,767**	**43**	**27,810**	**59,531**	**12,838**	**72,368**	**21,720**	**94,089**	**34,558**	**94,084**
2017 Total	**27,980**	**26**	**28,005**	**42**	**28,048**	**60,252**	**12,704**	**72,956**	**20,932**	**93,888**	**33,636**	**93,889**
2018 Total	**28,435**	**26**	**28,461**	**42**	**28,504**	**62,894**	**13,168**	**76,061**	**21,346**	**97,407**	**34,514**	**97,400**
2019 Total	**28,603**	**26**	**28,629**	**41**	**28,670**	**63,252**	**13,004**	**76,255**	**20,339**	**96,594**	**33,343**	**96,600**
2020 Total	**24,397**	**22**	**24,419**	**34**	**24,453**	**57,151**	**12,685**	**69,836**	**19,045**	**88,880**	**31,730**	**88,877**
2021 Total	**27,020**	**22**	**27,041**	**33**	**27,074**	**60,816**	**12,986**	**73,802**	**19,578**	**93,380**	**32,564**	**93,375**
2022 Total	**27,621**	**23**	**27,643**	**33**	**27,676**	**61,914**	**13,400**	**75,314**	**19,653**	**94,967**	**33,053**	**94,964**
2023 Total	**28,010**	**23**	**28,033**	**34**	**28,067**	**61,604**	**13,219**	**74,823**	**18,924**	**93,747**	**32,143**	**93,746**
2024 January	2,235	2	2,237	3	2,240	6,066	1,173	7,239	1,805	9,044	2,978	9,047
February	2,142	2	2,143	2	2,146	5,339	1,035	6,374	1,366	7,739	2,400	7,736
March	2,351	2	2,353	3	2,355	5,394	1,014	6,409	1,344	7,753	2,359	7,748
April	2,301	2	2,302	2	2,305	4,943	977	5,920	1,267	7,187	2,243	7,182
May	2,463	2	2,465	3	2,468	4,937	1,071	6,009	1,515	7,523	2,586	7,522
June	2,381	2	2,383	3	2,385	4,672	1,214	5,886	1,762	7,648	2,976	7,651
July	2,506	2	2,508	3	2,511	4,844	1,358	6,202	2,016	8,218	3,374	8,224
August	2,501	2	2,503	3	2,506	4,890	1,345	6,235	1,975	8,210	3,320	8,215
September	2,307	2	2,308	3	2,311	4,622	1,171	5,793	1,607	7,400	2,778	7,402
October	2,436	2	2,438	3	2,441	5,040	1,078	6,118	1,452	7,570	2,530	7,568
November	2,280	2	2,282	3	2,285	5,163	1,009	6,172	1,434	7,605	2,443	7,603
December	2,361	2	2,363	3	2,366	5,905	1,120	7,025	1,659	8,684	2,779	8,683
Total	**28,262**	**24**	**28,286**	**34**	**28,319**	**61,814**	**13,564**	**75,378**	**19,203**	**94,581**	**32,767**	**94,582**
2025 January	2,294	2	2,297	4	2,300	6,397	1,235	7,632	1,886	9,518	3,121	9,522
February	2,092	2	2,094	3	2,096	5,516	1,094	6,610	1,482	8,092	2,576	8,093
March	2,327	2	2,329	3	2,332	R 5,431	1,048	R 6,479	1,361	R 7,841	2,409	R 7,837
April	2,321	2	2,323	3	2,326	5,005	1,006	6,011	1,309	7,320	2,315	7,317
May	2,401	2	2,403	3	2,406	R 4,918	1,066	R 5,984	1,468	R 7,452	2,534	R 7,449
June	2,411	2	2,413	3	2,416	R 4,758	1,218	R 5,976	1,769	R 7,745	2,988	R 7,747
July	2,498	2	2,500	3	2,503	R 4,909	1,391	R 6,300	2,078	R 8,378	3,469	R 8,383
August	2,475	2	R 2,477	3	R 2,480	R 4,896	1,340	R 6,235	1,918	R 8,154	3,258	R 8,157
September	2,347	2	2,349	3	2,352	R 4,715	1,181	R 5,896	1,672	R 7,568	2,854	R 7,569
October	2,425	2	2,427	3	2,430	5,049	1,094	6,143	1,489	7,632	2,583	7,631
November	2,280	2	2,282	3	2,285	R 5,281	1,020	R 6,301	1,509	R 7,810	2,529	R 7,809
December	2,394	2	2,396	3	2,399	R 6,068	1,152	7,221	1,730	R 8,951	2,883	8,952
Total	**28,266**	**25**	**28,291**	**35**	**28,326**	R **62,942**	**13,846**	R **76,788**	**19,672**	R **96,460**	**33,518**	R **96,466**
2026 January	R 2,240	2	R 2,242	3	R 2,246	6,240	1,214	7,455	1,816	9,270	3,030	R 9,272
February	R 2,093	2	R 2,096	3	R 2,098	5,467	1,102	6,569	1,460	8,029	2,562	R 8,028
March	R 2,356	2	R 2,358	3	R 2,360	R 5,410	1,072	R 6,483	1,409	R 7,892	2,482	R 7,888
April	R 2,372	2	R 2,374	2	R 2,377	R 4,988	1,031	R 6,019	1,309	R 7,328	2,340	R 7,325
May	R 2,336	2	R 2,338	3	R 2,340	R 4,844	1,092	R 5,936	1,501	R 7,437	2,593	R 7,434
June	R 2,377	2	R 2,379	3	R 2,382	R 4,739	1,237	R 5,976	1,731	R 7,706	2,967	R 7,707
July	2,461	2	2,463	3	2,466	4,829	1,417	6,246	2,084	8,330	3,501	8,335
7-Month Total	**16,235**	**14**	**16,249**	**20**	**16,269**	**36,517**	**8,166**	**44,683**	**11,309**	**55,992**	**19,475**	**55,989**
2025 7-Month Total	**16,344**	**15**	**16,359**	**21**	**16,380**	**36,934**	**8,059**	**44,992**	**11,353**	**56,345**	**19,412**	**56,348**
2024 7-Month Total	**16,377**	**14**	**16,391**	**20**	**16,411**	**36,196**	**7,842**	**44,037**	**11,075**	**55,112**	**18,916**	**55,111**

[a] Includes NAICS 22 electricity-only and CHP plants whose primary business is to sell electricity, or electricity and heat, to the public. Through 1988, data are for electric utilities only. For 1989 forward, data are for electric utilities and independent power producers.

[b] Energy consumed in the form that it is first accounted for, before any transformation to secondary or tertiary forms of energy. See "Primary Energy Consumption" in Glossary.

[c] Electricity sold to the sector. See "Electricity Sales to Ultimate Customers" in Glossary.

[d] Sum of "Primary" and "Electricity." See "End-Use Energy Consumption" in Glossary.

[e] Calculated as the difference between primary energy consumed by the electric power sector and the energy content of electricity sales to ultimate customers sent to the end-use sectors. Allocated proportionally to the electricity sales to ultimate customers in each end-use sector. See Note 1, "Electrical System Energy Losses," at end of section.

[f] Equal to end-use energy consumption plus electrical system energy losses.

[g] Equal to the sum of total energy consumption in the four end-use sectors, which does not equal total primary energy consumption due to the use of sector-specific conversion factors for coal and natural gas.

[h] Total primary energy consumption. See Table 1.3.

R=Revised.

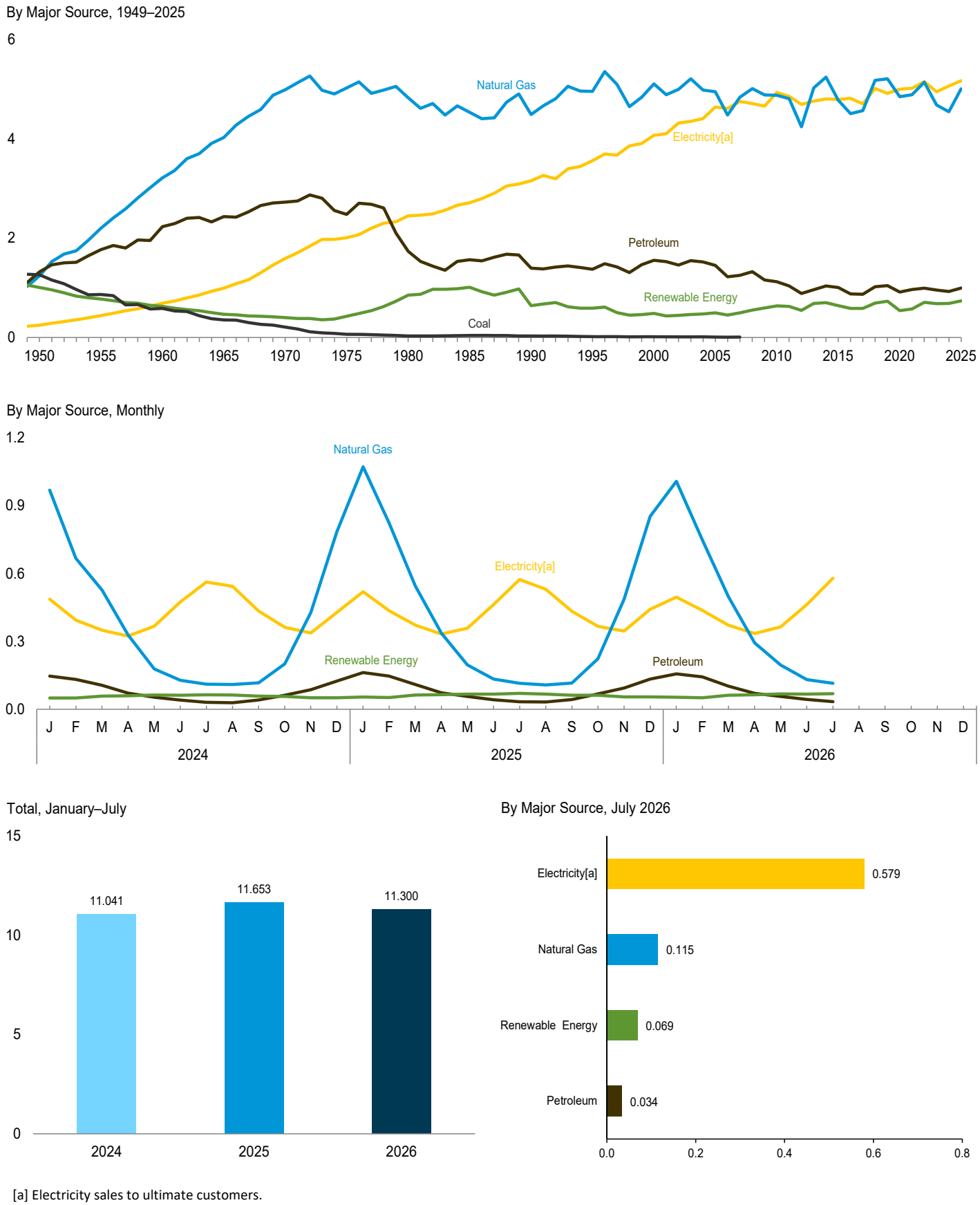
Notes: • Data are estimates, except for the electric power sector. • See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • See Note 2, "Other Energy Losses," at end of section. • See Note 3, "Energy Consumption Data and Surveys," at end of section. • Totals may 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/#consumption (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: • **End-Use Sectors:** Tables 2.2–2.5. • **Electric Power Sector:** Table 2.6. • **Primary Total:** Table 1.3.

Figure 2.2 Residential Sector Energy Consumption

(Quadrillion Btu)



[a] Electricity sales to ultimate customers.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#consumption.
Source: Table 2.2.

Table 2.2 Residential Sector Energy Consumption

(Trillion Btu)

	End-Use Energy Consumption[a]												
	Primary Consumption[b]												
	Fossil Fuels				Renewable Energy[c]								
	Coal	Natural Gas[d]	Petro-leum	Total	Geo-thermal	Solar[e]	Bio-mass	Total	Total Primary	Elec-tricity[f]	Total End Use	Electrical System Energy Losses[g]	Total
1950 Total	**1,261**	**1,240**	**1,322**	**3,824**	**NA**	**NA**	**1,006**	**1,006**	**4,830**	**246**	**5,076**	**661**	**5,736**
1955 Total	**867**	**2,198**	**1,767**	**4,833**	**NA**	**NA**	**775**	**775**	**5,608**	**438**	**6,046**	**990**	**7,036**
1960 Total	**585**	**3,212**	**2,228**	**6,025**	**NA**	**NA**	**627**	**627**	**6,651**	**687**	**7,339**	**1,387**	**8,726**
1965 Total	**352**	**4,028**	**2,432**	**6,812**	**NA**	**NA**	**468**	**468**	**7,280**	**993**	**8,273**	**1,950**	**10,223**
1970 Total	**209**	**4,987**	**2,726**	**7,922**	**NA**	**NA**	**401**	**401**	**8,323**	**1,591**	**9,914**	**3,264**	**13,178**
1975 Total	**63**	**5,023**	**2,479**	**7,565**	**NA**	**NA**	**425**	**425**	**7,990**	**2,007**	**9,997**	**4,103**	**14,100**
1980 Total	**31**	**4,825**	**1,734**	**6,590**	**NA**	**NA**	**850**	**850**	**7,440**	**2,448**	**9,888**	**5,194**	**15,082**
1985 Total	**39**	**4,534**	**1,566**	**6,139**	**NA**	**NA**	**1,010**	**1,010**	**7,149**	**2,709**	**9,858**	**5,486**	**15,344**
1990 Total	**31**	**4,487**	**1,395**	**5,912**	**6**	**55**	**580**	**640**	**6,552**	**3,153**	**9,705**	**6,501**	**16,206**
1995 Total	**17**	**4,954**	**1,374**	**6,345**	**7**	**63**	**520**	**589**	**6,934**	**3,557**	**10,491**	**7,256**	**17,747**
2000 Total	**11**	**5,105**	**1,554**	**6,670**	**9**	**57**	**420**	**486**	**7,156**	**4,069**	**11,225**	**8,507**	**19,732**
2005 Total	**8**	**4,946**	**1,450**	**6,405**	**16**	**49**	**430**	**495**	**6,901**	**4,638**	**11,538**	**9,340**	**20,879**
2010 Total	**NA**	**4,878**	**1,120**	**5,999**	**37**	**59**	**541**	**636**	**6,635**	**4,933**	**11,568**	**9,419**	**20,987**
2011 Total	**NA**	**4,805**	**1,034**	**5,838**	**40**	**62**	**524**	**626**	**6,465**	**4,855**	**11,319**	**8,967**	**20,286**
2012 Total	**NA**	**4,242**	**886**	**5,128**	**40**	**66**	**438**	**544**	**5,672**	**4,690**	**10,362**	**8,510**	**18,871**
2013 Total	**NA**	**5,023**	**963**	**5,986**	**40**	**72**	**572**	**683**	**6,669**	**4,759**	**11,428**	**8,554**	**19,983**
2014 Total	**NA**	**5,242**	**1,036**	**6,279**	**40**	**80**	**579**	**698**	**6,976**	**4,801**	**11,778**	**8,560**	**20,338**
2015 Total	**NA**	**4,777**	**1,007**	**5,784**	**40**	**87**	**513**	**640**	**6,424**	**4,791**	**11,214**	**8,306**	**19,521**
2016 Total	**NA**	**4,506**	**878**	**5,384**	**40**	**101**	**445**	**586**	**5,970**	**4,815**	**10,785**	**8,146**	**18,931**
2017 Total	**NA**	**4,564**	**871**	**5,436**	**40**	**115**	**430**	**585**	**6,021**	**4,704**	**10,725**	**7,751**	**18,476**
2018 Total	**NA**	**5,174**	**1,022**	**6,197**	**40**	**127**	**526**	**693**	**6,890**	**5,013**	**11,903**	**8,126**	**20,029**
2019 Total	**NA**	**5,208**	**1,045**	**6,253**	**40**	**141**	**547**	**728**	**6,981**	**4,914**	**11,895**	**7,686**	**19,582**
2020 Total	**NA**	**4,846**	**914**	**5,760**	**40**	**156**	**345**	**541**	**6,301**	**4,997**	**11,298**	**7,503**	**18,801**
2021 Total	**NA**	**4,889**	**967**	**5,856**	**40**	**178**	**356**	**574**	**6,431**	**5,017**	**11,448**	**7,564**	**19,012**
2022 Total	**NA**	**5,140**	**992**	**6,132**	**40**	**219**	**449**	**708**	**6,839**	**5,150**	**11,989**	**7,553**	**19,542**
2023 Total	**NA**	**4,682**	**955**	**5,638**	**40**	**260**	**381**	**681**	**6,318**	**4,947**	**11,266**	**7,083**	**18,349**
2024 January	NA	968	147	1,115	3	17	29	50	1,164	486	1,650	748	2,398
February	NA	667	132	799	3	19	28	50	849	394	1,243	520	1,763
March	NA	527	106	633	3	25	29	58	691	349	1,040	462	1,502
April	NA	329	71	400	3	28	28	60	459	323	782	419	1,201
May	NA	178	53	232	3	30	29	63	295	367	662	519	1,181
June	NA	128	40	168	3	30	28	62	230	474	704	688	1,392
July	NA	111	31	142	3	31	29	64	206	562	769	835	1,604
August	NA	109	29	138	3	30	29	63	201	543	743	797	1,540
September	NA	117	41	158	3	27	28	58	216	434	650	597	1,247
October	NA	201	62	263	3	24	29	57	320	362	682	488	1,169
November	NA	427	87	514	3	19	28	51	565	337	902	479	1,381
December	NA	785	125	910	3	18	29	51	960	428	1,388	634	2,023
Total	**NA**	**4,545**	**925**	**5,471**	**40**	**298**	**347**	**685**	**6,155**	**5,060**	**11,215**	**7,163**	**18,378**
2025 January	NA	1,071	162	1,233	3	19	32	54	1,287	520	1,807	794	2,600
February	NA	823	147	R 969	3	20	29	52	1,022	435	1,457	590	2,046
March	NA	545	109	654	3	28	32	63	717	372	1,089	483	1,572
April	NA	336	73	409	3	31	31	65	474	332	806	432	1,238
May	NA	R 196	57	252	3	32	32	67	R 320	358	R 678	493	R 1,170
June	NA	134	42	R 177	3	33	31	67	R 244	463	707	673	1,380
July	NA	115	33	148	3	35	32	70	R 217	573	791	856	1,647
August	NA	108	32	140	3	33	32	67	207	530	737	758	1,495
September	NA	116	43	160	3	28	31	62	222	433	654	612	1,267
October	NA	R 223	68	291	3	27	32	62	353	366	719	499	1,218
November	NA	R 486	94	R 580	3	21	31	55	R 635	345	R 981	511	R 1,492
December	NA	R 852	134	R 986	3	20	32	55	R 1,041	442	R 1,483	664	2,148
Total	**NA**	**R 5,006**	**994**	**R 6,000**	**40**	**327**	**372**	**738**	**R 6,738**	**5,169**	**R 11,907**	**7,344**	**R 19,252**
2026 January	NA	1,007	R 156	R 1,163	3	20	29	53	R 1,216	495	R 1,712	740	R 2,452
February	NA	748	R 143	R 890	3	22	26	51	R 941	437	R 1,378	579	R 1,957
March	NA	497	R 102	R 599	3	30	29	62	R 661	371	R 1,033	488	R 1,521
April	NA	R 293	70	R 363	3	33	28	64	R 427	335	R 763	426	R 1,189
May	NA	195	57	R 252	3	35	29	68	R 320	364	R 684	500	R 1,184
June	NA	131	R 44	174	3	36	28	67	241	463	R 704	647	1,351
July	NA	115	34	148	3	36	29	69	217	579	796	851	1,647
7-Month Total	**NA**	**2,984**	**605**	**3,589**	**23**	**212**	**200**	**434**	**4,024**	**3,044**	**7,068**	**4,232**	**11,300**
2025 7-Month Total	**NA**	**3,220**	**623**	**3,843**	**23**	**198**	**216**	**438**	**4,280**	**3,053**	**7,334**	**4,320**	**11,653**
2024 7-Month Total	**NA**	**2,909**	**580**	**3,489**	**23**	**181**	**202**	**406**	**3,895**	**2,955**	**6,850**	**4,191**	**11,041**

[a] Sum of "Total Primary" and "Electricity." See "End-Use Energy Consumption" in Glossary.

[b] Energy consumed in the form that it is first accounted for, before any transformation to secondary or tertiary forms of energy. See "Primary Energy Consumption" in Glossary.

[c] See Table 10.2a for notes on series components.

[d] Natural gas only; excludes the estimated portion of supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.

[e] Includes small-scale solar photovoltaic (PV) electricity and solar thermal energy in the residential sector. See Tables 10.2a and 10.5.

[f] Electricity sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.

[g] Total losses are calculated as the primary energy consumed by the electric power sector minus the energy content of electricity sales to ultimate customers. Total losses are allocated to the end-use sectors in proportion to each sector's share of total electricity sales to ultimate customers. See Note 1, "Electrical System Energy Losses," at end of section.

R=Revised. NA=Not available.

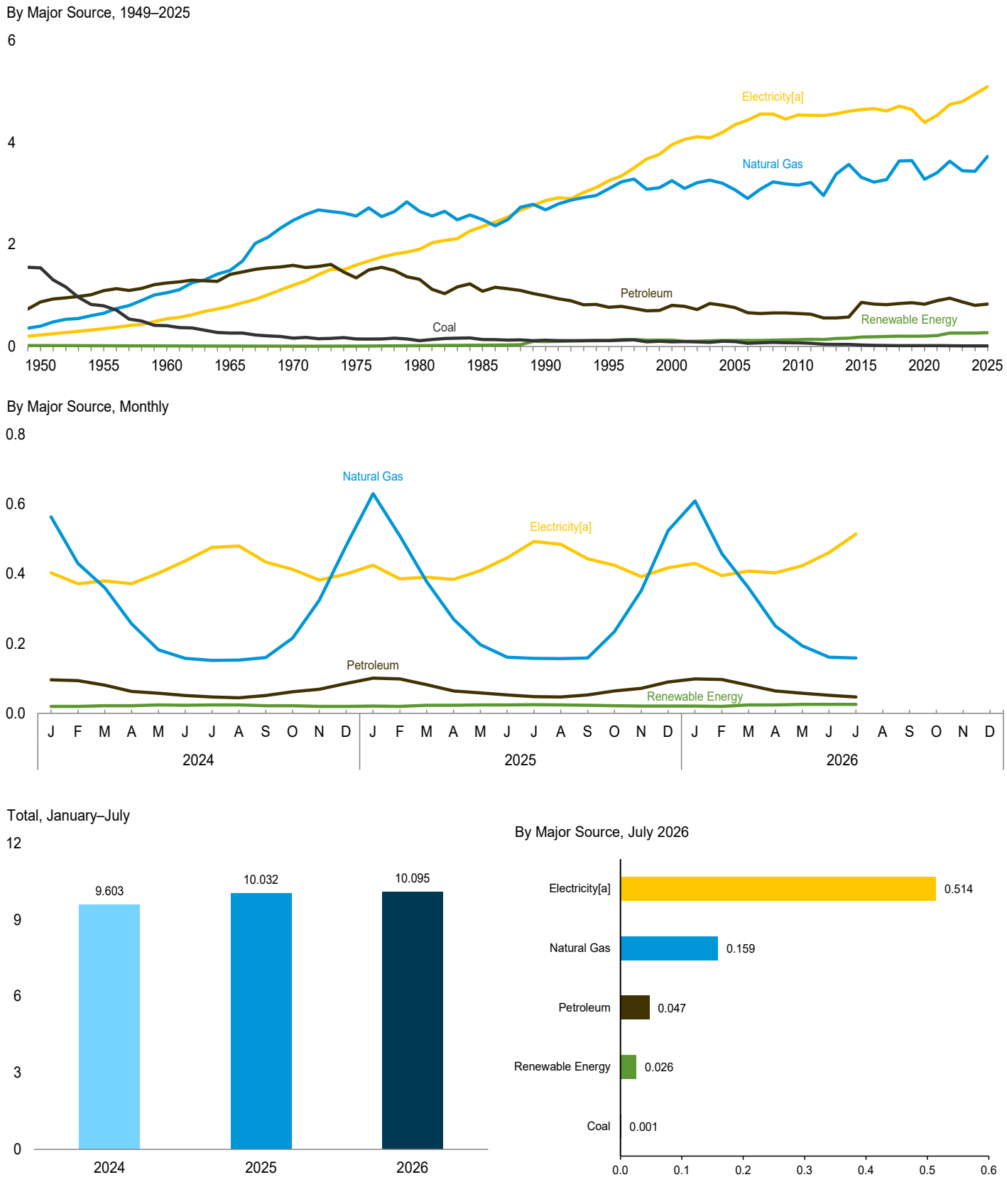
Notes: • Data are estimates, except for electricity sales to ultimate customers. • See Note 2, "Other Energy Losses," at end of section. • See Note 3, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

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

Sources: See end of section.

Figure 2.3 Commercial Sector Energy Consumption

(Quadrillion Btu)



[a] Electricity sales to ultimate customers.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#consumption.
Source: Table 2.3.

Table 2.3 Commercial Sector Energy Consumption

(Trillion Btu)

	End-Use Energy Consumption[a]														
	Primary Consumption[b]														
	Fossil Fuels				Renewable Energy[c]										
	Coal	Natural Gas[d]	Petro-leum[e]	Total	Hydro-electric Power[f]	Geo-thermal	Solar[g]	Wind	Bio-mass	Total	Total Primary	Elec-tricity[h]	Total End Use	Electrical System Energy Losses[i]	Total
1950 Total	1,542	401	872	2,815	NA	NA	NA	NA	19	19	2,834	225	3,059	604	3,663
1955 Total	801	651	1,095	2,547	NA	NA	NA	NA	15	15	2,561	350	2,911	791	3,702
1960 Total	407	1,056	1,248	2,711	NA	NA	NA	NA	12	12	2,723	543	3,266	1,096	4,362
1965 Total	265	1,490	1,413	3,168	NA	NA	NA	NA	9	9	3,177	789	3,966	1,549	5,514
1970 Total	165	2,473	1,592	4,229	NA	NA	NA	NA	8	8	4,237	1,201	5,438	2,464	7,902
1975 Total	147	2,558	1,346	4,051	NA	NA	NA	NA	8	8	4,059	1,598	5,657	3,267	8,924
1980 Total	115	2,651	1,318	4,084	NA	NA	NA	NA	21	21	4,105	1,906	6,011	4,044	10,055
1985 Total	137	2,488	1,083	3,708	NA	NA	NA	NA	24	24	3,732	2,351	6,084	4,762	10,845
1990 Total	124	2,680	991	3,795	(s)	3	(s)	–	94	97	3,892	2,860	6,753	5,898	12,650
1995 Total	117	3,096	769	3,982	(s)	5	(s)	–	113	118	4,099	3,252	7,352	6,634	13,985
2000 Total	92	3,252	807	4,150	(s)	8	(s)	–	119	127	4,277	3,956	8,233	8,271	16,504
2005 Total	97	3,073	761	3,931	(s)	14	1	–	105	120	4,051	4,351	8,401	8,762	17,163
2010 Total	70	3,165	647	3,881	(s)	19	4	(s)	111	134	4,014	4,539	8,553	8,666	17,219
2011 Total	62	3,216	632	3,910	(s)	20	7	(s)	115	141	4,051	4,531	8,583	8,370	16,952
2012 Total	44	2,960	560	3,563	(s)	20	11	(s)	108	139	3,702	4,528	8,230	8,216	16,446
2013 Total	41	3,380	558	3,979	(s)	20	15	(s)	120	155	4,134	4,562	8,696	8,200	16,897
2014 Total	40	3,572	578	4,190	(s)	20	19	(s)	124	163	4,353	4,614	8,966	8,226	17,192
2015 Total	31	3,316	864	4,211	(s)	20	21	(s)	146	187	4,398	4,643	9,040	8,050	17,090
2016 Total	24	3,224	832	4,079	1	20	23	(s)	148	191	4,270	4,665	8,935	7,893	16,828
2017 Total	21	3,273	820	4,113	1	20	28	(s)	146	195	4,309	4,616	8,925	7,606	16,530
2018 Total	19	3,638	845	4,502	1	20	35	1	146	203	4,705	4,715	9,419	7,643	17,062
2019 Total	17	3,647	857	4,521	1	21	40	1	139	201	4,722	4,643	9,365	7,263	16,628
2020 Total	15	3,279	827	4,120	1	21	46	1	137	205	4,325	4,393	8,718	6,595	15,313
2021 Total	15	3,409	898	4,322	1	21	54	1	139	215	4,537	4,533	9,070	6,834	15,904
2022 Total	14	3,635	947	4,596	1	20	63	1	180	263	4,860	4,746	9,605	6,961	16,566
2023 Total	12	3,447	872	4,331	1	20	69	(s)	172	263	4,594	4,804	9,398	6,878	16,276
2024 January	2	563	96	660	(s)	2	4	(s)	14	20	680	403	1,084	621	1,705
February	1	430	94	526	(s)	2	5	(s)	13	20	545	372	917	491	1,408
March	1	360	81	442	(s)	2	6	(s)	14	22	464	380	844	504	1,348
April	1	257	63	320	(s)	2	7	(s)	13	22	342	372	714	482	1,196
May	1	182	58	241	(s)	2	8	(s)	14	24	265	402	667	569	1,236
June	1	158	51	210	(s)	2	8	(s)	14	23	234	437	670	633	1,304
July	(s)	152	47	200	(s)	2	8	(s)	14	24	224	476	700	707	1,407
August	1	153	45	199	(s)	2	8	(s)	14	24	223	480	703	705	1,407
September	1	160	51	211	(s)	2	7	(s)	14	22	234	434	668	596	1,264
October	1	216	62	279	(s)	2	6	(s)	14	22	301	413	713	556	1,269
November	1	325	69	396	(s)	2	5	(s)	14	20	416	382	798	543	1,342
December	1	481	86	568	(s)	2	4	(s)	14	20	589	400	988	592	1,581
Total	11	3,436	805	4,252	1	20	76	(s)	167	264	4,516	4,951	9,466	7,009	16,475
2025 January	1	630	101	R 732	(s)	2	5	(s)	14	21	R 753	425	1,178	648	R 1,826
February	1	509	99	R 608	NM	2	5	(s)	13	20	628	386	1,014	523	1,538
March	1	377	82	R 461	NM	2	7	(s)	14	23	R 484	390	874	507	1,381
April	1	R 270	64	R 335	(s)	2	8	(s)	13	23	R 358	384	R 742	499	R 1,241
May	1	197	59	257	(s)	2	9	(s)	13	24	281	409	R 691	563	1,254
June	1	R 161	53	R 215	(s)	2	9	(s)	14	24	239	446	R 685	647	R 1,332
July	1	R 158	48	R 207	NM	2	9	(s)	14	25	R 232	493	R 725	736	1,461
August	1	R 157	47	R 204	(s)	2	9	(s)	14	24	R 228	485	R 714	695	R 1,409
September	1	R 159	53	213	(s)	2	8	(s)	13	23	R 236	443	679	627	1,306
October	1	234	64	299	(s)	2	7	(s)	14	22	R 321	425	747	579	1,326
November	1	352	72	R 424	(s)	2	5	(s)	13	21	R 445	392	837	579	R 1,416
December	1	524	90	615	NM	2	5	(s)	14	21	636	418	1,054	628	1,682
Total	11	R 3,727	832	R 4,571	1	20	87	(s)	163	271	R 4,842	5,096	R 9,938	7,240	R 17,178
2026 January	2	609	R 99	709	NM	2	6	(s)	13	21	730	430	R 1,161	643	R 1,804
February	1	459	R 97	R 558	NM	2	6	(s)	12	20	R 577	395	R 972	523	R 1,495
March	1	360	R 81	R 442	NM	2	8	(s)	14	24	R 466	408	R 874	536	1,410
April	R 1	250	64	R 315	(s)	2	9	(s)	13	24	R 339	403	R 742	512	1,254
May	1	194	58	R 253	NM	2	10	(s)	14	26	278	423	R 702	582	1,283
June	1	161	52	214	NM	2	10	(s)	13	26	R 240	461	700	645	1,345
July	1	159	47	207	(s)	2	11	(s)	14	26	234	514	748	756	1,503
7-Month Total	6	2,192	499	2,697	1	11	61	(s)	93	166	2,864	3,034	5,898	4,197	10,095
2025 7-Month Total	7	2,303	507	2,816	1	11	53	(s)	94	160	2,976	2,932	5,908	4,124	10,032
2024 7-Month Total	7	2,102	490	2,599	1	11	46	(s)	97	156	2,755	2,842	5,597	4,007	9,603

[a] Sum of "Total Primary" and "Electricity." See "End-Use Energy Consumption" in Glossary.

[b] Energy consumed in the form that it is first accounted for, before any transformation to secondary or tertiary forms of energy. See "Primary Energy Consumption" in Glossary.

[c] See Table 10.2a for notes on series components.

[d] Natural gas only; excludes the estimated portion of supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.

[e] Does not include biofuels that have been blended with petroleum—biofuels are included in "Biomass."

[f] Conventional hydroelectric power.

[g] Includes small-scale solar photovoltaic (PV) electricity and solar thermal energy in the commercial sector. See Tables 10.2a and 10.5.

[h] Electricity sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.

[i] Total losses are calculated as the primary energy consumed by the electric power sector minus the energy content of electricity sales to ultimate customers. Total losses are allocated to the end-use sectors in proportion to each sector's share of total electricity sales to ultimate customers. See Note 1, "Electrical System Energy Losses," at end of section.

R=Revised. NA=Not available. NM=Not meaningful. – =No data reported. (s)=Less than 0.5 trillion Btu.

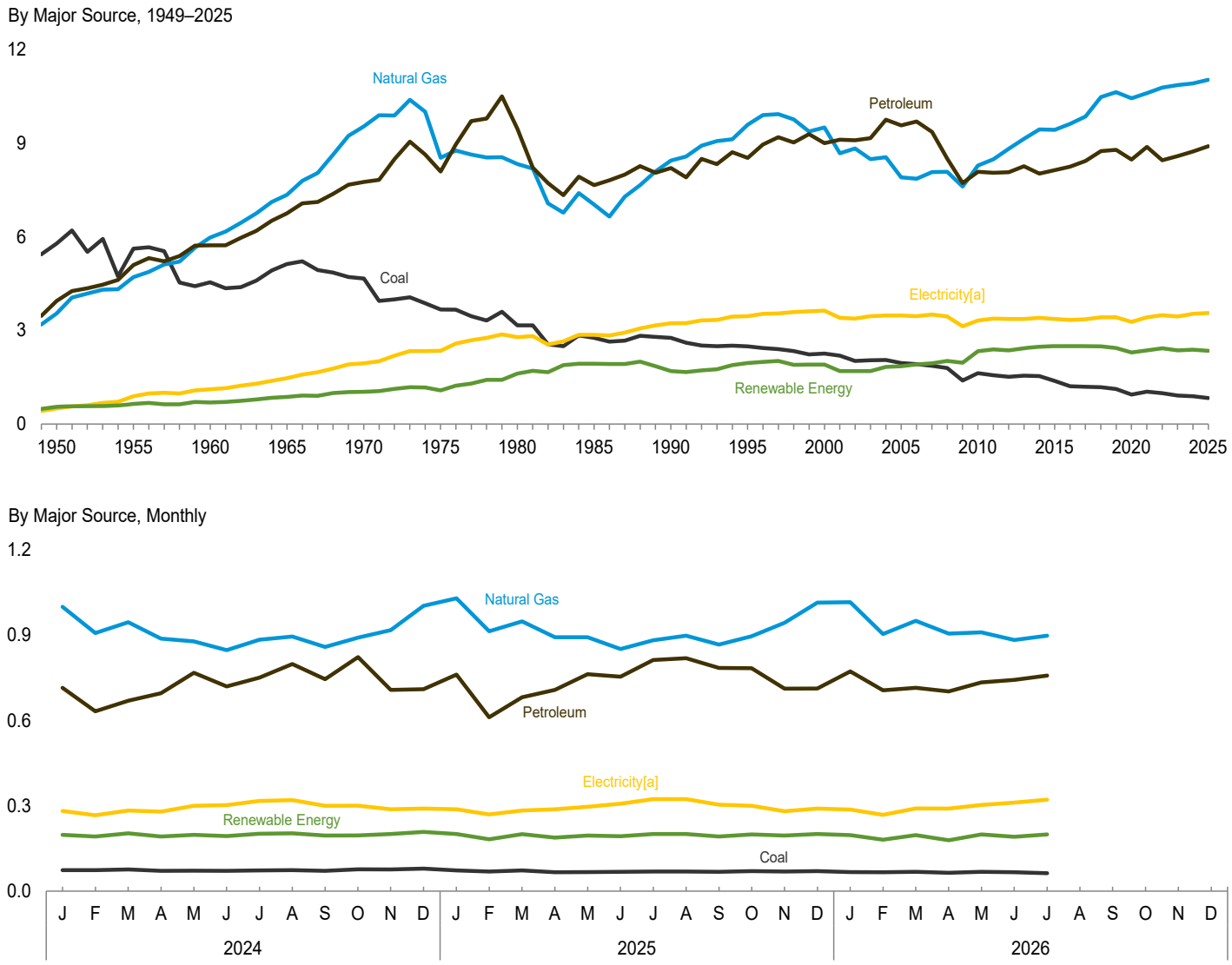
Notes: • Data are estimates, except for coal totals beginning in 2008; hydroelectric power; solar; wind; and electricity sales to ultimate customers beginning in 1979. • The commercial sector includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • See Note 2, "Other Energy Losses," at end of section. • See Note 3, "Energy Consumption Data and Surveys," at end of section. • 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/#consumption (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

Figure 2.4 Industrial Sector Energy Consumption

(Quadrillion Btu)



[a] Electricity sales to ultimate customers.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#consumption.
Source: Table 2.4.

Table 2.4 Industrial Sector Energy Consumption

(Trillion Btu)

	End-Use Energy Consumption[a]														
	Primary Consumption[b]														
	Fossil Fuels[c]				Renewable Energy[d]										
	Coal	Natural Gas[e]	Petroleum[f]	Total[g]	Hydroelectric Power[h]	Geothermal	Solar[i]	Wind	Biomass	Total	Total Primary	Electricity[j]	Total End Use	Electrical System Energy Losses[k]	Total
1950 Total	5,781	3,546	3,943	13,271	17	NA	NA	NA	532	549	13,820	500	14,319	1,340	15,659
1955 Total	5,620	4,701	5,093	15,404	11	NA	NA	NA	631	642	16,046	887	16,933	2,005	18,938
1960 Total	4,543	5,973	5,720	16,231	12	NA	NA	NA	680	692	16,923	1,107	18,030	2,234	20,264
1965 Total	5,127	7,339	6,750	19,197	11	NA	NA	NA	855	866	20,063	1,463	21,526	2,873	24,399
1970 Total	4,656	9,536	7,754	21,888	11	NA	NA	NA	1,019	1,030	22,918	1,948	24,866	3,995	28,862
1975 Total	3,667	8,532	8,092	20,304	11	NA	NA	NA	1,063	1,074	21,378	2,346	23,725	4,797	28,522
1980 Total	3,155	8,333	9,464	20,916	11	NA	NA	NA	1,600	1,611	22,527	2,781	25,308	5,900	31,209
1985 Total	2,760	7,032	7,656	17,434	11	NA	NA	NA	1,918	1,928	19,363	2,855	22,218	5,782	28,000
1990 Total	2,756	8,443	8,200	19,403	10	2	(s)	–	1,684	1,696	21,100	3,226	24,326	6,652	30,978
1995 Total	2,488	9,592	8,525	20,666	18	3	(s)	–	1,934	1,955	22,622	3,455	26,077	7,048	33,125
2000 Total	2,256	9,500	8,999	20,821	14	4	(s)	–	1,881	1,900	22,721	3,631	26,352	7,592	33,945
2005 Total	1,954	7,907	9,567	19,472	11	4	(s)	–	1,834	1,849	21,322	3,477	24,799	7,003	31,803
2010 Total	1,631	8,278	8,083	17,986	6	4	1	–	2,320	2,331	20,317	3,314	23,631	6,328	29,958
2011 Total	1,561	8,481	8,055	18,107	6	4	1	(s)	2,375	2,387	20,494	3,382	23,876	6,247	30,123
2012 Total	1,513	8,819	8,066	18,401	8	4	2	(s)	2,349	2,363	20,765	3,363	24,128	6,103	30,230
2013 Total	1,546	9,140	8,260	18,930	12	4	3	(s)	2,407	2,427	21,357	3,362	24,719	6,043	30,762
2014 Total	1,530	9,441	8,021	18,971	4	4	4	(s)	2,466	2,478	21,449	3,404	24,853	6,068	30,921
2015 Total	1,380	9,426	8,135	18,923	5	4	5	(s)	2,474	2,489	21,411	3,366	24,777	5,836	30,613
2016 Total	1,205	9,617	8,243	19,046	4	4	7	(s)	2,487	2,503	21,549	3,333	24,882	5,639	30,520
2017 Total	1,195	9,857	8,427	19,450	5	4	8	(s)	2,475	2,493	21,943	3,358	25,301	5,534	30,835
2018 Total	1,180	10,474	8,747	20,375	4	4	9	(s)	2,471	2,489	22,864	3,414	26,278	5,535	31,813
2019 Total	1,117	10,630	8,784	20,511	4	4	11	(s)	2,416	2,435	22,946	3,420	26,366	5,349	31,715
2020 Total	938	10,437	8,476	19,838	3	4	12	(s)	2,270	2,290	22,128	3,272	25,401	4,913	30,314
2021 Total	1,036	10,603	8,881	20,471	3	4	14	(s)	2,336	2,357	22,828	3,414	26,242	5,147	31,390
2022 Total	987	10,782	8,455	20,168	3	4	15	(s)	2,404	2,426	22,594	3,482	26,076	5,107	31,183
2023 Total	912	10,860	8,586	20,325	3	4	16	(s)	2,334	2,357	22,682	3,444	26,126	4,930	31,055
2024 January	74	1,000	715	1,788	(s)	(s)	1	(s)	196	198	1,986	282	2,267	433	2,701
February	74	907	632	1,611	(s)	(s)	1	(s)	190	192	1,803	267	2,070	353	2,423
March	76	945	670	1,686	(s)	(s)	2	(s)	201	203	1,889	284	2,173	376	2,548
April	71	888	696	1,649	(s)	(s)	2	(s)	190	192	1,841	280	2,121	363	2,484
May	72	878	768	1,716	(s)	(s)	2	(s)	196	198	1,914	300	2,214	424	2,639
June	71	847	720	1,633	(s)	(s)	2	(s)	191	194	1,827	302	2,129	438	2,567
July	73	884	751	1,706	(s)	(s)	2	(s)	200	202	1,908	317	2,225	471	2,696
August	74	895	799	1,763	(s)	(s)	2	(s)	200	203	1,966	320	2,286	470	2,756
September	71	859	745	1,671	(s)	(s)	2	(s)	192	195	1,866	300	2,166	412	2,578
October	77	891	823	1,787	(s)	(s)	1	(s)	194	196	1,983	301	2,284	406	2,691
November	76	918	708	1,700	(s)	(s)	1	(s)	200	201	1,902	288	2,189	409	2,598
December	79	1,003	710	1,787	(s)	(s)	1	(s)	206	208	1,995	290	2,285	429	2,715
Total	**887**	**10,913**	**8,735**	**20,498**	**3**	**4**	**18**	**(s)**	**2,358**	**2,383**	**22,882**	**3,530**	**26,412**	**4,998**	**31,409**
2025 January	73	R 1,030	761	R 1,862	(s)	(s)	1	(s)	199	201	2,062	288	R 2,351	440	R 2,791
February	69	914	611	1,594	(s)	(s)	1	(s)	180	182	1,775	270	2,045	366	2,412
March	73	949	682	R 1,703	(s)	(s)	2	(s)	197	200	R 1,903	284	R 2,187	369	2,555
April	66	R 893	708	R 1,664	(s)	(s)	2	(s)	185	188	1,851	288	R 2,140	375	R 2,515
May	67	R 893	763	1,720	(s)	(s)	2	(s)	192	195	1,915	297	R 2,213	409	R 2,622
June	68	851	754	R 1,671	(s)	(s)	2	(s)	190	193	1,864	307	2,171	446	2,617
July	69	R 882	812	R 1,760	(s)	(s)	2	(s)	198	201	R 1,961	323	R 2,284	482	R 2,767
August	69	R 898	819	R 1,784	(s)	(s)	2	(s)	198	201	R 1,985	323	R 2,307	462	R 2,769
September	68	R 867	785	R 1,718	(s)	(s)	2	(s)	189	192	R 1,910	304	R 2,214	430	R 2,644
October	70	896	784	R 1,750	(s)	(s)	2	(s)	197	199	R 1,950	300	R 2,250	409	R 2,659
November	69	R 944	712	R 1,726	(s)	(s)	2	(s)	193	195	R 1,921	281	R 2,202	416	R 2,618
December	70	R 1,014	R 713	1,796	(s)	(s)	1	(s)	199	201	R 1,998	290	R 2,287	435	2,722
Total	**831**	**R 11,031**	**8,903**	**R 20,749**	**3**	**4**	**22**	**1**	**2,318**	**2,347**	**R 23,096**	**3,556**	**R 26,652**	**5,052**	**R 31,705**
2026 January	67	1,016	R 773	R 1,856	(s)	(s)	2	(s)	195	197	R 2,054	287	R 2,340	429	R 2,769
February	66	904	R 706	R 1,674	(s)	(s)	2	(s)	178	181	R 1,855	268	R 2,123	355	R 2,478
March	68	R 950	R 715	R 1,731	(s)	(s)	2	(s)	193	197	R 1,927	291	R 2,218	382	R 2,600
April	R 65	R 906	R 702	1,671	(s)	(s)	2	(s)	176	179	R 1,850	290	R 2,140	368	2,509
May	R 68	910	R 734	R 1,711	(s)	(s)	3	(s)	195	199	R 1,910	303	R 2,213	416	R 2,630
June	R 66	883	R 743	R 1,690	(s)	(s)	3	(s)	187	191	1,881	311	R 2,192	436	2,628
July	63	898	758	1,718	(s)	(s)	3	(s)	196	199	1,918	322	2,240	474	2,714
7-Month Total	**463**	**6,466**	**5,131**	**12,051**	**2**	**2**	**16**	**(s)**	**1,322**	**1,343**	**13,395**	**2,072**	**15,467**	**2,860**	**18,327**
2025 7-Month Total	**485**	**6,412**	**5,090**	**11,974**	**2**	**2**	**13**	**(s)**	**1,342**	**1,359**	**13,333**	**2,058**	**15,391**	**2,888**	**18,280**
2024 7-Month Total	**511**	**6,348**	**4,951**	**11,789**	**2**	**2**	**11**	**(s)**	**1,364**	**1,380**	**13,169**	**2,031**	**15,200**	**2,857**	**18,057**

[a] Sum of "Total Primary" and "Electricity." See "End-Use Energy Consumption" in Glossary.

[b] Energy consumed in the form that it is first accounted for, before any transformation to secondary or tertiary forms of energy. See "Primary Energy Consumption" in Glossary.

[c] Includes non-combustion use of fossil fuels.

[d] See Table 10.2b for notes on series components and estimation.

[e] Natural gas only; excludes the estimated portion of supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.

[f] Does not include biofuels that have been blended with petroleum—biofuels are included in "Biomass."

[g] Includes coal coke net imports, which are not separately displayed. See Tables 1.4a and 1.4b.

[h] Conventional hydroelectric power.

[i] Includes both utility-scale and small-scale solar photovoltaic (PV) electricity net generation in the industrial sector. See Tables 10.2b and 10.5.

[j] Electricity sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.

[k] Total losses are calculated as the primary energy consumed by the electric power sector minus the energy content of electricity sales to ultimate customers. Total losses are allocated to the end-use sectors in proportion to each sector's share of total electricity sales to ultimate customers. See Note 1, "Electrical System Energy Losses," at end of section.

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

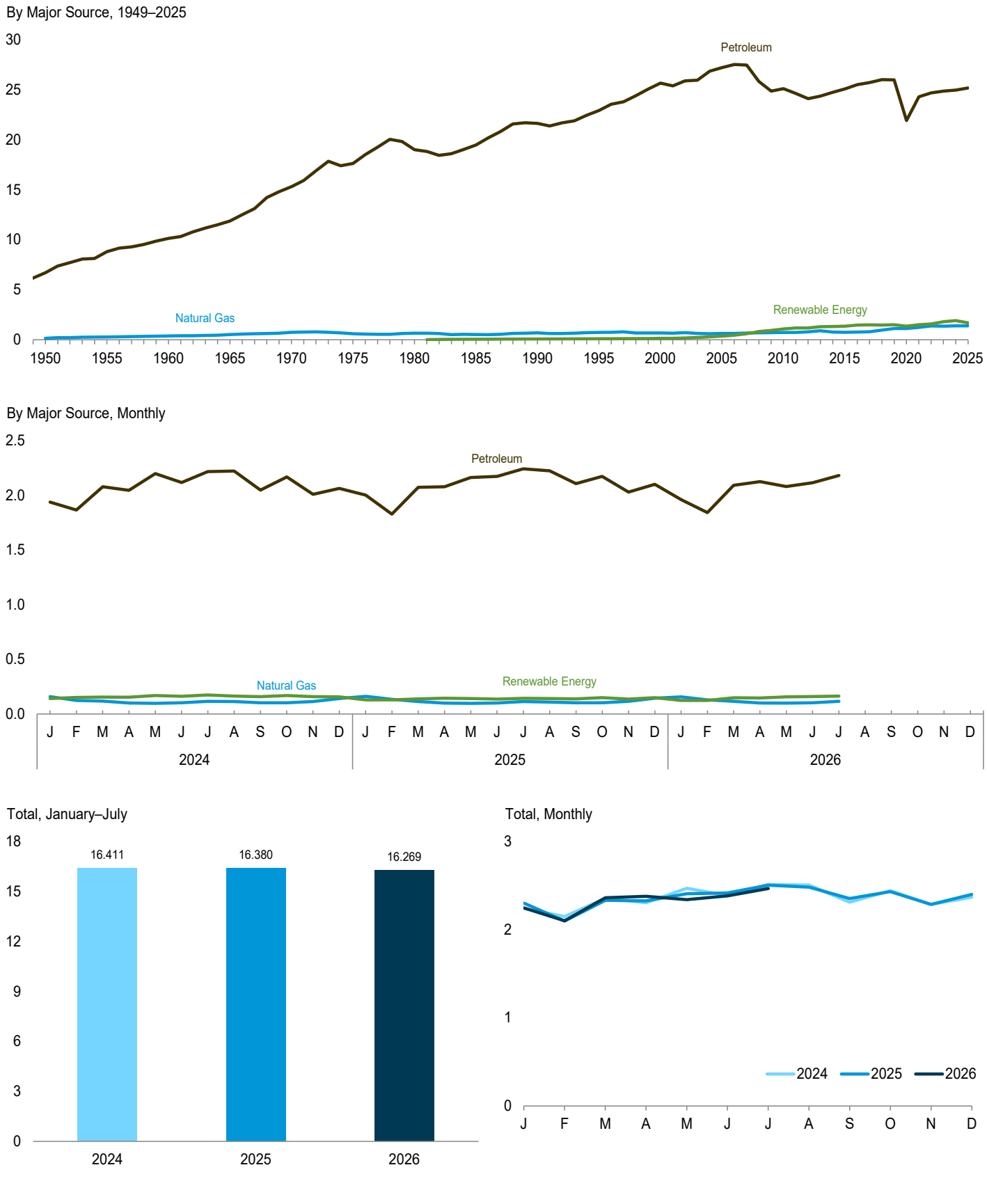
Notes: • Data are estimates, except for coal totals; hydroelectric power in 1949–1978 and 1989 forward; solar; wind; and electricity sales to ultimate customers. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • See Note 2, "Other Energy Losses," at end of section. • See Note 3, "Energy Consumption Data and Surveys," at end of section. • 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/#consumption (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

Figure 2.5 Transportation Sector Energy Consumption
(Quadrillion Btu)



Web Page: http://www.eia.gov/totalenergy/data/monthly/#consumption.
Source: Table 2.5.

Table 2.5 Transportation Sector Energy Consumption

(Trillion Btu)

	End-Use Energy Consumption[a]									
	Primary Consumption[b]									
	Fossil Fuels				Renewable Energy[c]				Electrical System Energy Losses[g]	
	Coal	Natural Gas[d]	Petroleum[e]	Total	Biomass	Total Primary	Electricity[f]	Total End Use		Total
1950 Total	1,564	130	6,690	8,383	NA	8,383	23	8,407	62	8,469
1955 Total	421	254	8,799	9,474	NA	9,474	20	9,494	45	9,539
1960 Total	75	359	10,125	10,560	NA	10,560	10	10,570	21	10,591
1965 Total	16	517	11,866	12,399	NA	12,399	10	12,409	20	12,428
1970 Total	7	745	15,311	16,062	NA	16,062	11	16,073	22	16,094
1975 Total	1	595	17,615	18,211	NA	18,211	10	18,221	21	18,241
1980 Total	(h)	650	19,009	19,659	NA	19,659	11	19,670	23	19,694
1985 Total	(h)	519	19,472	19,992	50	20,042	14	20,056	29	20,084
1990 Total	(h)	679	21,626	22,305	60	22,366	16	22,382	33	22,415
1995 Total	(h)	724	22,920	23,644	112	23,757	17	23,774	35	23,808
2000 Total	(h)	672	25,649	26,321	135	26,456	18	26,474	38	26,512
2005 Total	(h)	624	27,217	27,840	339	28,179	26	28,205	52	28,257
2010 Total	(h)	719	25,100	25,819	1,075	26,894	26	26,920	50	26,970
2011 Total	(h)	734	24,623	25,357	1,166	26,523	26	26,549	48	26,598
2012 Total	(h)	780	24,108	24,888	1,169	26,057	25	26,082	45	26,127
2013 Total	(h)	887	24,361	25,248	1,292	26,541	26	26,567	47	26,614
2014 Total	(h)	760	24,728	25,487	1,314	26,802	26	26,828	47	26,875
2015 Total	(h)	745	25,086	25,831	1,351	27,182	26	27,208	45	27,253
2016 Total	(h)	757	25,515	26,272	1,469	27,741	26	27,767	43	27,810
2017 Total	(h)	799	25,707	26,506	1,474	27,980	26	28,005	42	28,048
2018 Total	(h)	962	26,017	26,979	1,456	28,435	26	28,461	42	28,504
2019 Total	(h)	1,114	25,992	27,106	1,497	28,603	26	28,629	41	28,670
2020 Total	(h)	1,111	21,930	23,041	1,355	24,397	22	24,419	34	24,453
2021 Total	(h)	1,232	24,292	25,524	1,496	27,020	22	27,041	33	27,074
2022 Total	(h)	1,367	24,681	26,048	1,573	27,621	23	27,643	33	27,676
2023 Total	(h)	1,358	24,859	26,218	1,792	28,010	23	28,033	34	28,067
2024 January	(h)	158	1,937	2,095	141	2,235	2	2,237	3	2,240
February	(h)	125	1,865	1,990	151	2,142	2	2,143	2	2,146
March	(h)	118	2,077	2,195	155	2,351	2	2,353	3	2,355
April	(h)	101	2,046	2,147	153	2,301	2	2,302	2	2,305
May	(h)	98	2,197	2,295	168	2,463	2	2,465	3	2,468
June	(h)	103	2,116	2,219	162	2,381	2	2,383	3	2,385
July	(h)	116	2,216	2,332	174	2,506	2	2,508	3	2,511
August	(h)	115	2,222	2,336	164	2,501	2	2,503	3	2,506
September	(h)	102	2,047	2,149	158	2,307	2	2,308	3	2,311
October	(h)	102	2,167	2,269	168	2,436	2	2,438	3	2,441
November	(h)	114	2,008	2,122	158	2,280	2	2,282	3	2,285
December	(h)	142	2,062	2,204	157	2,361	2	2,363	3	2,366
Total	(h)	1,394	24,959	26,353	1,909	28,262	24	28,286	34	28,319
2025 January	(h)	162	2,002	2,164	130	2,294	2	2,297	4	2,300
February	(h)	134	1,828	1,961	130	2,092	2	2,094	3	2,096
March	(h)	115	2,073	2,188	139	2,327	2	2,329	3	2,332
April	(h)	100	2,077	2,177	145	2,321	2	2,323	3	2,326
May	(h)	97	2,162	2,259	142	2,401	2	2,403	3	2,406
June	(h)	101	2,173	2,274	137	2,411	2	2,413	3	2,416
July	(h)	114	2,241	R 2,354	144	2,498	2	2,500	3	2,503
August	(h)	R 110	2,223	2,334	141	2,475	2	R 2,477	3	R 2,480
September	(h)	102	2,106	2,208	139	2,347	2	2,349	3	2,352
October	(h)	103	2,172	2,275	150	2,425	2	2,427	3	2,430
November	(h)	116	2,028	2,144	136	2,280	2	2,282	3	2,285
December	(h)	145	2,100	2,245	150	2,394	2	2,396	3	2,399
Total	(h)	1,399	25,185	26,583	1,683	28,266	25	28,291	35	28,326
2026 January	(h)	157	R 1,960	R 2,116	124	R 2,240	2	R 2,242	3	R 2,246
February	(h)	129	R 1,841	R 1,970	124	R 2,093	2	R 2,096	3	R 2,098
March	(h)	116	R 2,091	R 2,207	148	R 2,356	2	R 2,358	3	R 2,360
April	(h)	101	R 2,125	R 2,226	147	R 2,372	2	R 2,374	2	R 2,377
May	(h)	99	R 2,080	R 2,180	156	R 2,336	2	R 2,338	3	R 2,340
June	(h)	102	R 2,115	R 2,217	160	R 2,377	2	R 2,379	3	R 2,382
July	(h)	116	2,181	2,297	163	2,461	2	2,463	3	2,466
7-Month Total	(h)	819	14,394	15,213	1,022	16,235	14	16,249	20	16,269
2025 7-Month Total	(h)	823	14,555	15,378	966	16,344	15	16,359	21	16,380
2024 7-Month Total	(h)	819	14,454	15,273	1,104	16,377	14	16,391	20	16,411

[a] Sum of "Total Primary" and "Electricity." See "End-Use Energy Consumption" in Glossary.

[b] Energy consumed in the form that it is first accounted for, before any transformation to secondary or tertiary forms of energy. See "Primary Energy Consumption" in Glossary.

[c] See Table 10.2c for notes on series components.

[d] Natural gas consumed in the operation of pipelines and smaller amounts consumed as vehicle fuel. Does not include supplemental gaseous fuels—see Note 3, "Supplemental Gaseous Fuels," at end of Section 4.

[e] Does not include biofuels. Biofuels are included in "Biomass." Includes non-combustion use of lubricants.

[f] Electricity sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.

[g] Total losses are calculated as the primary energy consumed by the electric power sector minus the energy content of electricity sales to ultimate customers. Total losses are allocated to the end-use sectors in proportion to each sector's share of total electricity sales to ultimate customers. See Note 1, "Electrical System Energy Losses," at end of section.

[h] Beginning in 1978, the small amounts of coal consumed for transportation are reported as industrial sector consumption.

R=Revised. NA=Not available.

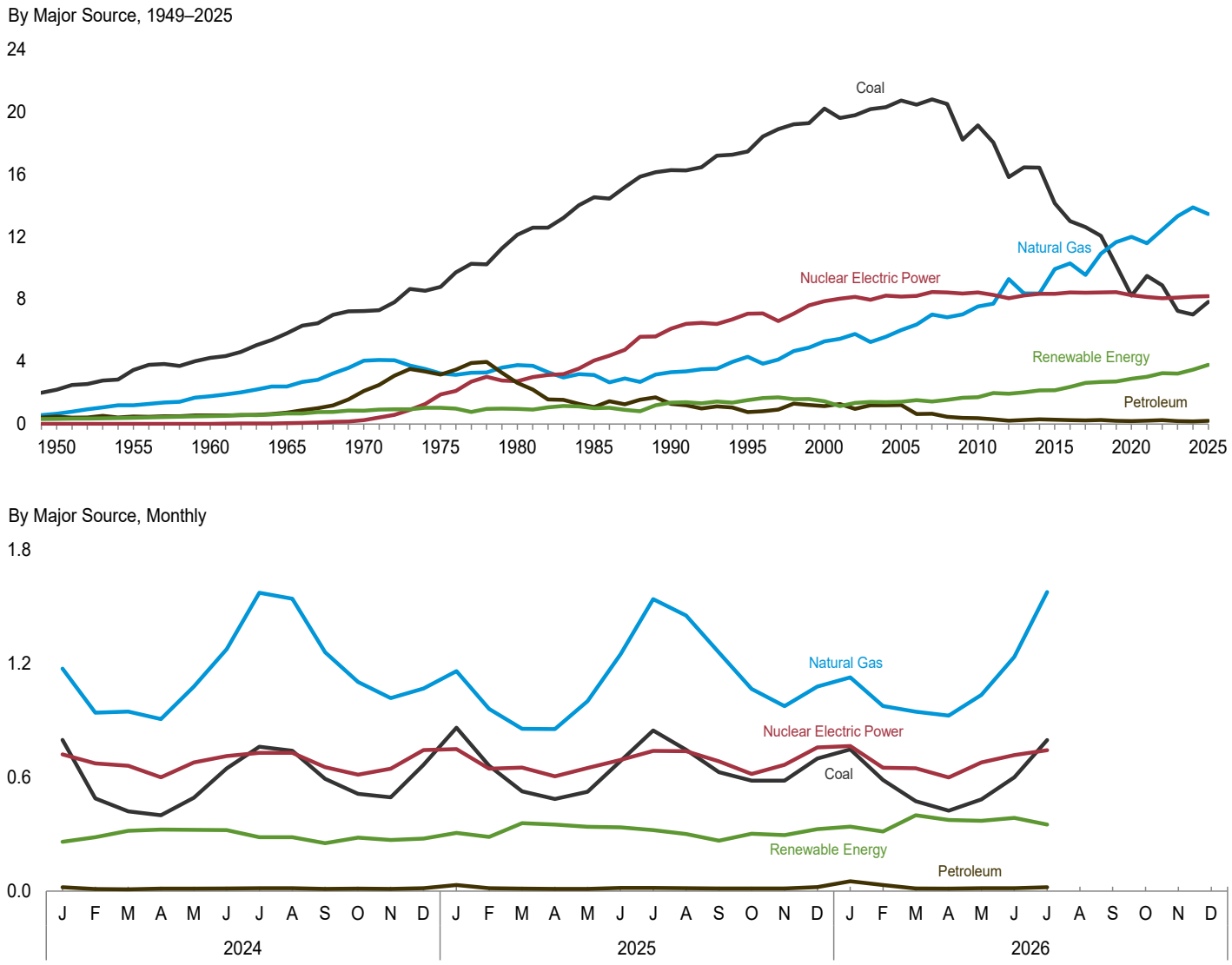
Notes: • Data are estimates, except for coal totals through 1977; and electricity sales to ultimate customers beginning in 1979. • See Note 2, "Other Energy Losses," at end of section. • See Note 3, "Energy Consumption Data and Surveys," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

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

Sources: See end of section.

Figure 2.6 Electric Power Sector Energy Consumption

(Quadrillion Btu)



Web Page: http://www.eia.gov/totalenergy/data/monthly/#consumption.
Source: Table 2.6.

Table 2.6 Electric Power Sector Energy Consumption

(Trillion Btu)

	Primary Consumption[a]												
	Fossil Fuels				Nuclear Electric Power	Renewable Energy[b]						Electricity Net Imports[f]	Total Primary
	Coal	Natural Gas[c]	Petroleum	Total		Hydroelectric Power[d]	Geothermal	Solar[e]	Wind	Biomass	Total		
1950 Total	**2,199**	**651**	**472**	**3,322**	**0**	**327**	**NA**	**NA**	**NA**	**5**	**333**	**6**	**3,661**
1955 Total	**3,458**	**1,194**	**471**	**5,123**	**0**	**385**	**NA**	**NA**	**NA**	**3**	**389**	**14**	**5,525**
1960 Total	**4,228**	**1,785**	**553**	**6,565**	**6**	**498**	**(s)**	**NA**	**NA**	**2**	**499**	**15**	**7,086**
1965 Total	**5,821**	**2,395**	**722**	**8,938**	**43**	**661**	**1**	**NA**	**NA**	**3**	**665**	**(s)**	**9,646**
1970 Total	**7,227**	**4,054**	**2,117**	**13,399**	**239**	**845**	**2**	**NA**	**NA**	**4**	**851**	**7**	**14,495**
1975 Total	**8,786**	**3,240**	**3,166**	**15,191**	**1,900**	**1,024**	**11**	**NA**	**NA**	**2**	**1,037**	**21**	**18,149**
1980 Total	**12,123**	**3,778**	**2,634**	**18,534**	**2,739**	**942**	**17**	**NA**	**NA**	**4**	**964**	**71**	**22,309**
1985 Total	**14,542**	**3,135**	**1,090**	**18,767**	**4,076**	**959**	**32**	**(s)**	**(s)**	**14**	**1,006**	**140**	**23,988**
1990 Total	**16,261**	**3,309**	**1,289**	**20,859**	**6,104**	**989**	**53**	**1**	**10**	**317**	**1,369**	**8**	**[g]28,340**
1995 Total	**17,466**	**4,302**	**755**	**22,523**	**7,075**	**1,042**	**46**	**2**	**11**	**422**	**1,522**	**134**	**31,254**
2000 Total	**20,220**	**5,293**	**1,144**	**26,658**	**7,862**	**926**	**48**	**2**	**19**	**453**	**1,447**	**115**	**36,083**
2005 Total	**20,737**	**6,015**	**1,222**	**27,974**	**8,161**	**911**	**50**	**2**	**61**	**406**	**1,430**	**85**	**37,649**
2010 Total	**19,133**	**7,528**	**370**	**27,031**	**8,434**	**882**	**52**	**4**	**323**	**459**	**1,720**	**89**	**37,275**
2011 Total	**18,035**	**7,712**	**295**	**26,042**	**8,269**	**1,083**	**52**	**6**	**410**	**437**	**1,988**	**127**	**36,426**
2012 Total	**15,821**	**9,287**	**214**	**25,322**	**8,062**	**934**	**53**	**14**	**480**	**453**	**1,935**	**161**	**35,480**
2013 Total	**16,451**	**8,376**	**255**	**25,082**	**8,244**	**904**	**54**	**30**	**572**	**470**	**2,030**	**197**	**35,554**
2014 Total	**16,427**	**8,362**	**295**	**25,085**	**8,338**	**880**	**54**	**59**	**619**	**530**	**2,143**	**182**	**35,747**
2015 Total	**14,138**	**9,926**	**276**	**24,341**	**8,337**	**845**	**54**	**83**	**650**	**525**	**2,158**	**227**	**35,063**
2016 Total	**12,996**	**10,301**	**244**	**23,542**	**8,427**	**909**	**54**	**121**	**774**	**505**	**2,363**	**227**	**34,558**
2017 Total	**12,622**	**9,555**	**218**	**22,395**	**8,419**	**1,019**	**54**	**180**	**867**	**510**	**2,630**	**192**	**33,636**
2018 Total	**12,053**	**10,922**	**260**	**23,235**	**8,438**	**993**	**54**	**216**	**929**	**496**	**2,689**	**152**	**34,514**
2019 Total	**10,181**	**11,658**	**189**	**22,028**	**8,452**	**978**	**51**	**243**	**1,009**	**448**	**2,729**	**133**	**33,343**
2020 Total	**8,229**	**12,000**	**184**	**20,413**	**8,251**	**969**	**53**	**302**	**1,152**	**428**	**2,904**	**161**	**31,730**
2021 Total	**9,498**	**11,583**	**205**	**21,285**	**8,131**	**854**	**53**	**391**	**1,289**	**426**	**3,014**	**134**	**32,564**
2022 Total	**8,885**	**12,459**	**244**	**21,589**	**8,061**	**865**	**55**	**487**	**1,481**	**374**	**3,263**	**141**	**33,053**
2023 Total	**7,247**	**13,329**	**176**	**20,751**	**8,099**	**832**	**56**	**562**	**1,436**	**342**	**3,228**	**65**	**32,143**
2024 January	798	1,173	20	1,991	721	73	5	33	119	31	260	6	2,978
February	489	941	11	1,441	674	71	4	43	140	27	285	1	2,400
March	421	947	10	1,379	662	79	5	54	154	27	319	-1	2,359
April	400	907	13	1,319	601	71	4	65	161	24	325	-2	2,243
May	492	1,079	13	1,585	679	83	4	76	134	26	323	(s)	2,586
June	647	1,276	14	1,937	712	76	4	83	132	27	322	5	2,976
July	761	1,574	16	2,351	729	73	4	83	97	28	285	8	3,374
August	740	1,542	16	2,299	729	70	4	83	100	29	285	7	3,320
September	592	1,260	12	1,863	654	54	4	70	100	26	253	7	2,778
October	513	1,103	13	1,628	614	52	4	67	135	23	282	6	2,530
November	495	1,018	12	1,524	646	57	4	47	137	25	270	2	2,443
December	666	1,069	16	1,751	744	66	5	43	135	28	277	7	2,779
Total	**7,014**	**13,890**	**166**	**21,070**	**8,165**	**825**	**53**	**746**	**1,541**	**320**	**3,485**	**47**	**32,767**
2025 January	862	1,160	33	2,055	749	73	5	52	149	29	307	10	3,121
February	661	961	16	1,638	646	66	4	56	134	25	286	6	2,576
March	526	856	13	1,395	652	76	5	79	173	27	359	3	2,409
April	486	855	12	1,353	605	78	4	91	156	22	351	6	2,315
May	524	1,002	12	1,538	649	83	4	101	126	25	339	8	2,534
June	686	1,249	17	1,952	692	75	4	108	122	27	337	6	2,988
July	847	1,540	17	2,405	739	68	4	113	108	28	322	3	3,469
August	746	1,453	16	2,215	738	68	5	108	93	28	301	4	3,258
September	627	1,259	14	1,900	684	52	4	95	88	27	266	4	2,854
October	582	1,067	14	1,664	618	56	4	83	135	25	303	-2	2,583
November	582	975	14	1,571	666	63	4	63	140	26	295	-4	2,529
December	699	1,079	22	1,800	757	81	5	52	160	29	327	-2	2,883
Total	**7,829**	**13,456**	**201**	**21,485**	**8,195**	**839**	**53**	**1,001**	**1,583**	**318**	**3,795**	**42**	**33,518**
2026 January	748	1,127	52	1,928	765	95	5	61	152	28	340	-2	3,030
February	586	976	32	1,594	651	76	4	72	135	27	315	1	2,562
March	474	946	14	1,434	648	91	5	98	178	28	400	(s)	2,482
April	424	925	13	1,361	599	76	4	105	168	22	376	4	2,340
May	484	1,035	15	1,534	679	77	4	123	140	26	371	9	2,593
June	601	1,235	15	1,852	718	81	4	132	143	27	386	11	2,967
July	797	1,578	20	2,395	743	69	4	140	110	28	351	12	3,501
7-Month Total	**4,114**	**7,823**	**161**	**12,097**	**4,804**	**566**	**31**	**731**	**1,025**	**186**	**2,539**	**35**	**19,475**
2025 7-Month Total	**4,593**	**7,622**	**121**	**12,336**	**4,731**	**519**	**31**	**601**	**968**	**183**	**2,302**	**42**	**19,412**
2024 7-Month Total	**4,008**	**7,897**	**97**	**12,003**	**4,778**	**526**	**31**	**437**	**935**	**189**	**2,118**	**17**	**18,916**

[a] See "Primary Energy Consumption" in Glossary.
[b] See Table 10.2c for notes on series components.
[c] Natural gas only; excludes the estimated portion of supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.
[d] Conventional hydroelectric power.
[e] Solar photovoltaic (PV) and solar thermal electricity net generation in the electric power sector. See Tables 10.2c and 10.5.
[f] Net imports equal imports minus exports.
[g] Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.
NA=Not available. (s)=Less than 0.5 trillion Btu.

Notes: • Data are for fuels consumed to produce electricity and useful thermal output. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • See Note 3, "Energy Consumption Data and Surveys," at end of section. • 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/#consumption (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.
Sources: See end of section.

Table 2.7 U.S. Government Energy Consumption by Agency, Fiscal Years

(Trillion Btu)

Fiscal Year[a]	Agri-culture	Defense	DHS[b]	Energy	GSA[c]	HHS[d]	Interior	Justice	NASA[e]	Postal Service	Trans-portation	Veterans Affairs	Other[f]	Total
1975	9.5	1,360.2	– –	50.4	22.3	6.5	9.4	5.9	13.4	30.5	19.3	27.1	10.5	1,565.0
1976	9.3	1,183.3	– –	50.3	20.6	6.7	9.4	5.7	12.4	30.0	19.5	25.0	11.2	1,383.4
1977	8.9	1,192.3	– –	51.6	20.4	6.9	9.5	5.9	12.0	32.7	20.4	25.9	11.9	1,398.5
1978	9.1	1,157.8	– –	50.1	20.4	6.5	9.2	5.9	11.2	30.9	20.6	26.8	12.4	1,360.9
1979	9.2	1,175.8	– –	49.6	19.6	6.4	10.4	6.4	11.1	29.3	19.6	25.7	12.3	1,375.4
1980	8.6	1,183.1	– –	47.4	18.1	6.0	8.5	5.7	10.4	27.2	19.2	24.8	12.3	1,371.2
1981	7.9	1,239.5	– –	47.3	18.0	6.7	7.6	5.4	10.0	27.9	18.8	24.0	11.1	1,424.2
1982	7.6	1,264.5	– –	49.0	18.1	6.4	7.4	5.8	10.1	27.5	19.1	24.2	11.6	1,451.4
1983	7.4	1,248.3	– –	49.5	16.1	6.2	7.7	5.5	10.3	26.5	19.4	24.1	10.8	1,431.8
1984	7.9	1,292.1	– –	51.6	16.2	6.4	8.4	6.4	10.6	27.7	19.8	24.6	10.7	1,482.5
1985	8.4	1,250.6	– –	52.2	20.7	6.0	7.8	8.2	10.9	27.8	19.6	25.1	13.1	1,450.3
1986	6.8	1,222.8	– –	46.9	14.0	6.2	6.9	8.6	11.2	28.0	19.4	25.0	10.8	1,406.7
1987	7.3	1,280.5	– –	48.5	13.1	6.6	6.6	8.1	11.3	28.5	19.0	24.9	11.9	1,466.3
1988	7.8	1,165.8	– –	49.9	12.4	6.4	7.0	9.4	11.3	29.6	18.7	26.3	15.8	1,360.3
1989	8.7	1,274.4	– –	44.2	12.7	6.7	7.1	7.7	12.4	30.3	18.5	26.2	15.6	1,464.7
1990	9.6	1,241.7	– –	43.5	17.5	7.1	7.4	7.0	12.4	30.6	19.0	24.9	17.5	1,438.0
1991	9.6	1,269.3	– –	42.1	14.0	6.2	7.1	8.0	12.5	30.8	19.0	25.1	18.1	1,461.7
1992	9.1	1,104.0	– –	44.3	13.8	6.8	7.0	7.5	12.6	31.7	17.0	25.3	15.7	1,294.8
1993	9.3	1,048.8	– –	43.4	14.1	7.2	7.5	9.1	12.4	33.7	19.4	25.7	16.2	1,246.8
1994	9.4	977.0	– –	42.1	14.0	7.5	7.9	10.3	12.6	35.0	19.8	25.6	17.1	1,178.2
1995	9.0	926.0	– –	47.3	13.7	6.1	6.4	10.2	12.4	36.2	18.7	25.4	17.1	1,128.5
1996	9.1	904.5	– –	44.6	14.5	6.6	4.3	12.1	11.5	36.4	19.6	26.8	17.7	1,107.7
1997	7.4	880.0	– –	43.1	14.4	7.9	6.6	12.0	12.0	40.8	19.1	27.3	20.8	1,091.2
1998	7.9	837.1	– –	31.5	14.1	7.4	6.4	15.8	11.7	39.5	18.5	27.6	19.5	1,037.1
1999	7.8	810.7	– –	27.0	14.4	7.1	7.5	15.4	11.4	39.8	22.6	27.5	19.8	1,010.9
2000	7.4	779.1	– –	30.5	17.6	8.0	7.8	19.7	11.1	43.3	21.2	27.0	20.3	993.1
2001	7.4	787.2	– –	31.1	18.4	8.5	9.5	19.7	10.9	43.4	17.8	27.7	20.7	1,002.3
2002	7.2	837.5	– –	30.7	17.5	8.0	8.2	17.7	10.7	41.6	18.3	27.7	18.4	1,043.4
2003	7.7	895.1	18.3	31.9	18.5	10.1	7.3	22.7	10.8	50.9	5.5	30.6	22.7	1,132.3
2004	7.0	960.7	23.5	31.4	18.3	8.8	8.7	17.5	9.9	50.5	5.2	29.9	20.4	1,191.7
2005	7.5	933.2	18.9	29.6	18.4	9.6	8.6	18.8	10.3	53.5	5.0	30.0	23.2	1,166.4
2006	6.8	843.7	17.1	32.9	18.2	9.3	8.1	23.5	10.2	51.8	4.6	29.3	20.9	1,076.4
2007	6.8	864.6	17.1	31.5	19.1	9.9	7.5	20.7	10.6	45.8	5.6	30.0	21.0	1,090.2
2008	6.5	910.8	22.0	32.1	18.8	10.3	7.1	19.0	10.8	47.1	7.7	29.0	22.4	1,143.4
2009	6.6	874.3	18.6	31.1	18.6	10.8	7.9	16.5	10.2	44.2	4.3	29.9	21.8	1,094.8
2010	6.8	889.9	21.2	31.7	18.8	10.4	7.3	15.7	10.1	43.3	5.7	30.2	21.8	1,112.7
2011	8.3	890.3	20.3	33.1	18.5	10.5	7.3	13.9	10.1	43.0	6.7	30.6	21.4	1,114.1
2012	6.7	828.5	20.1	30.3	16.3	10.0	6.7	15.1	8.9	40.8	5.6	29.7	20.5	1,039.3
2013	7.3	749.5	18.9	28.9	16.4	10.5	6.2	15.3	8.7	41.9	6.2	29.9	20.4	960.1
2014	6.3	730.6	18.5	29.4	17.0	9.5	6.2	15.6	8.3	43.0	6.3	31.4	20.6	942.6
2015	6.2	734.5	17.9	30.1	16.3	9.0	6.8	16.2	8.4	44.0	6.0	30.7	19.9	945.9
2016	6.2	709.2	18.1	28.9	15.8	8.7	6.4	15.6	8.5	43.9	6.0	30.3	19.5	917.2
2017	6.3	707.9	19.2	28.8	15.0	8.8	5.9	15.5	8.6	43.7	6.6	29.1	19.7	915.1
2018	6.1	690.6	16.8	27.3	15.6	10.0	6.1	16.2	8.4	45.5	7.0	29.7	19.0	898.4
2019	5.9	682.1	16.2	27.2	15.4	9.8	6.2	15.8	8.5	46.0	7.1	31.9	19.2	891.2
2020	5.4	648.8	17.1	26.4	14.4	9.5	5.5	14.6	8.1	46.1	6.4	30.6	17.0	850.0
2021	6.4	650.7	15.9	27.5	13.2	9.1	5.4	14.5	8.1	45.5	6.8	30.3	17.6	851.0
2022	8.0	622.5	16.5	26.3	12.8	9.6	6.2	14.5	8.5	48.3	6.6	30.8	17.2	827.6
2023	7.9	605.1	15.8	27.8	12.7	9.6	5.8	14.0	8.0	48.4	8.8	30.8	17.0	811.7
2024	8.2	598.6	15.3	26.6	12.2	9.8	5.7	14.0	8.0	47.8	7.7	31.2	16.4	801.5

[a] For 1975 and 1976, the U.S. Government's fiscal year was July 1 through June 30. Beginning in 1977, the U.S. Government's fiscal year is October 1 through September 30 (for example, fiscal year 2014 is October 2013 through September 2014).

[b] U.S. Department of Homeland Security.

[c] General Services Administration.

[d] U.S. Department of Health and Human Services.

[e] National Aeronautics and Space Administration.

[f] Includes all U.S. government agencies not separately displayed. See http://ctsedwweb.ee.doe.gov/Annual/Report/AgencyReference.aspx for agency list.

– – =Not applicable.

Notes: • Data include energy consumed at foreign installations and in foreign operations, including aviation and ocean bunkering, primarily by the U.S. Department of Defense. U.S. Government energy use for electricity generation and uranium enrichment is excluded. • Totals may not equal sum of components due to independent rounding.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#consumption (Excel and CSV files) for all annual data beginning in 1975.

Sources: U.S. Department of Energy, Office of the Undersecretary for Infrastructure, Federal Energy Management Program. See http://ctsedwweb.ee.doe.gov/Annual/Report/Report.aspx, "A-1 Total Site-Delivered Energy Use in All End-Use Sectors, by Federal Agency (Billion Btu)".

Table 2.8 U.S. Government Energy Consumption by Source, Fiscal Years

(Trillion Btu)

Fiscal Year[a]	Coal	Natural Gas[b]	Petroleum						Other Mobility Fuels[f]	Electricity	Purchased Steam and Other[g]	Total
			Aviation Gasoline	Fuel Oil[c]	Jet Fuel	LPG[d]	Motor Gasoline[e]	Total				
1975	77.9	166.2	22.0	376.0	707.4	5.6	63.2	1,174.2	0.0	141.5	5.1	1,565.0
1976	71.3	151.8	11.6	329.7	610.0	4.7	60.4	1,016.4	.0	139.3	4.6	1,383.4
1977	68.4	141.2	8.8	348.5	619.2	4.1	61.4	1,042.1	.0	141.1	5.7	1,398.5
1978	66.0	144.7	6.2	332.3	601.1	3.0	60.1	1,002.9	.0	141.0	6.4	1,360.9
1979	65.1	148.9	4.7	327.1	618.6	3.7	59.1	1,013.1	.0	141.2	7.1	1,375.4
1980	63.5	147.3	4.9	307.7	638.7	3.8	56.5	1,011.6	.2	141.9	6.8	1,371.2
1981	65.1	142.2	4.6	351.3	653.3	3.5	53.2	1,066.0	.2	144.5	6.2	1,424.2
1982	68.6	146.2	3.6	349.4	672.7	3.7	53.1	1,082.5	.2	147.5	6.2	1,451.4
1983	62.4	147.8	2.6	329.5	673.4	3.8	51.6	1,060.8	.2	151.5	9.0	1,431.8
1984	65.3	157.4	1.9	342.9	693.7	3.9	51.2	1,093.6	.2	155.9	10.1	1,482.5
1985	64.8	149.9	1.9	292.6	705.7	3.8	50.4	1,054.3	.2	167.2	13.9	1,450.3
1986	63.8	140.9	1.4	271.6	710.2	3.6	45.3	1,032.1	.3	155.8	13.7	1,406.7
1987	67.0	145.6	1.0	319.5	702.3	3.6	43.1	1,069.5	.4	169.9	13.9	1,466.3
1988	60.2	144.6	6.0	284.8	617.2	2.7	41.2	951.9	.4	171.2	32.0	1,360.3
1989	48.7	152.4	.8	245.3	761.7	3.5	41.1	1,052.4	2.2	188.6	20.6	1,464.7
1990	44.3	159.4	.5	245.2	732.4	3.8	37.2	1,019.1	2.6	193.6	19.1	1,438.0
1991	45.9	154.1	.4	232.6	774.5	3.0	34.1	1,044.7	6.0	192.7	18.3	1,461.7
1992	51.7	151.2	1.0	200.6	628.2	3.0	35.6	868.4	8.4	192.5	22.5	1,294.8
1993	38.3	152.9	.7	187.0	612.4	3.5	34.5	838.1	5.8	193.1	18.6	1,246.8
1994	35.0	143.9	.6	198.5	550.7	3.2	29.5	782.6	7.7	190.9	18.2	1,178.2
1995	31.7	149.4	.3	178.4	522.3	3.0	31.9	735.9	8.4	184.8	18.2	1,128.5
1996	23.3	147.3	.2	170.5	513.0	3.1	27.6	714.4	18.7	184.0	20.1	1,107.7
1997	22.5	153.8	.3	180.0	475.7	2.6	39.0	697.6	14.5	183.6	19.2	1,091.2
1998	23.9	140.4	.2	174.5	445.5	3.5	43.0	666.8	5.9	181.4	18.8	1,037.1
1999	21.2	137.4	.1	162.1	444.7	2.4	41.1	650.4	.4	180.0	21.5	1,010.9
2000	22.7	133.8	.2	171.3	403.1	2.5	43.9	621.0	1.8	193.6	20.2	993.1
2001	18.8	133.7	.2	176.9	415.2	3.1	42.5	638.0	4.8	188.4	18.6	1,002.3
2002	16.9	133.7	.2	165.6	472.9	2.8	41.3	682.8	3.2	188.3	18.5	1,043.4
2003	18.1	135.5	.3	190.8	517.9	3.2	46.3	758.4	3.3	193.8	23.2	1,132.3
2004	17.4	135.3	.2	261.4	508.2	2.9	44.1	816.9	3.1	197.1	22.0	1,191.7
2005	17.1	135.7	.4	241.4	492.2	3.4	48.8	786.1	5.6	197.6	24.3	1,166.4
2006	23.5	132.6	.6	209.3	442.6	2.7	48.3	703.6	2.1	196.7	18.2	1,076.4
2007	20.4	131.5	.4	212.9	461.1	2.7	46.5	723.7	2.9	194.9	16.7	1,090.2
2008	20.8	129.6	.4	198.4	525.4	2.3	49.0	775.4	3.6	196.2	17.9	1,143.4
2009	20.3	131.7	.3	166.4	505.7	3.2	48.3	723.9	10.1	191.3	17.7	1,094.8
2010	20.0	130.1	.4	157.8	535.8	2.5	51.3	747.7	3.0	193.7	18.2	1,112.7
2011	18.5	124.7	.9	166.5	533.6	2.0	52.7	755.8	2.7	193.2	19.1	1,114.1
2012	15.9	116.2	.4	148.6	493.5	1.7	50.1	694.4	3.1	187.2	22.5	1,039.3
2013	14.3	122.5	.7	140.8	424.0	1.9	46.6	614.0	2.8	184.7	21.8	960.1
2014	13.5	125.6	.3	134.6	414.3	1.8	44.9	595.9	3.6	182.1	21.9	942.6
2015	12.6	122.2	.3	135.0	418.9	1.8	46.8	602.8	3.0	184.4	20.9	945.9
2016	10.2	115.4	.3	130.5	403.9	1.7	46.5	583.0	2.7	184.5	21.4	917.2
2017	9.1	115.1	.3	135.1	400.1	1.5	46.4	583.5	2.7	181.7	23.0	915.1
2018	6.2	125.8	.3	129.4	383.2	1.7	45.5	560.1	2.6	180.1	23.6	898.4
2019	5.0	131.7	.3	127.2	376.8	1.9	46.6	552.8	2.1	178.2	21.5	891.2
2020	5.2	128.3	.2	131.0	345.0	1.7	43.3	521.3	1.2	173.8	20.2	850.0
2021	5.3	128.4	.4	123.9	352.0	1.7	44.6	522.6	1.3	173.2	20.3	851.0
2022	3.5	128.3	.2	127.9	326.9	1.6	44.4	501.1	1.2	172.1	21.4	827.6
2023	4.0	131.7	.2	125.5	311.3	1.8	46.7	485.4	1.1	170.5	19.1	811.7
2024	7.5	130.4	.2	122.0	304.1	1.8	46.0	474.1	1.1	170.1	18.1	801.5

[a] For 1975 and 1976, the U.S. Government's fiscal year was July 1 through June 30. Beginning in 1977, the U.S. Government's fiscal year is October 1 through September 30 (for example, fiscal year 2014 is October 2013 through September 2014).

[b] Natural gas, plus a small amount of supplemental gaseous fuels.

[c] Distillate fuel oil, including diesel fuel; and residual fuel oil, including Navy Special.

[d] Liquefied petroleum gases, primarily propane.

[e] Includes E10 (a mixture of 10% ethanol and 90% motor gasoline) and E15 (a mixture of 15% ethanol and 85% motor gasoline).

[f] Other types of fuel used in vehicles and equipment. Primarily includes alternative fuels such as compressed natural gas (CNG); liquefied natural gas (LNG); E85 (see "E85 (Flex fuel)" in Glossary); B20 (a mixture of 20% biodiesel and 80% diesel fuel); B100 (100% biodiesel); hydrogen; and methanol.

[g] Other types of energy used in facilities. Primarily includes chilled water, but also includes small amounts of renewable energy such as wood and solar thermal.

Notes: • Data include energy consumed at foreign installations and in foreign operations, including aviation and ocean bunkering, primarily by the U.S. Department of Defense. U.S. Government energy use for electricity generation and uranium enrichment is excluded. • Totals may not equal sum of components due to independent rounding.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#consumption (Excel and CSV files) for all annual data beginning in 1975.

Sources: U.S. Department of Energy, Office of the Undersecretary for Infrastructue, Federal Energy Management Program. See http://ctsedwweb.ee.doe.gov/Annual/Report/Report.aspx, "A-5 Historical Federal Energy Consumption and Cost Data by Agency and Energy Type (FY 1975 to Present)".

Note 1. Electrical System Energy Losses. Electrical system energy losses are calculated as the difference between total primary consumption by the electric power sector (see Table 2.6) and the total energy content of electricity sales to ultimate customers (see Table 7.6). Most of these losses are from the conversion of heat energy into mechanical energy to turn electric generators at fossil fuel, biomass, and nuclear plants. These losses are a necessary feature of the thermodynamic cycles of these power plants (steam-electric, gas-electric, and combined-cycle). Overall, while nearly two-thirds of total energy input was lost in conversion historically, efficiency gains and shifts in generation mix have reduced these losses to just over half. In addition to conversion losses, other losses include power plant use of electricity, transmission and distribution of electricity from power plants to end-use consumers (also called "line losses"), and unaccounted-for electricity. Currently, of electricity generated, approximately 5% is lost in plant use and 5% is lost in transmission and distribution. Total losses are allocated to the end-use sectors in proportion to each sector's share of total electricity sales.

Note 2. Other Energy Losses. Similar to electrical system energy losses, there are also other energy losses from energy consumption not separately identified. There are losses in the production of energy, the transformation of one form of energy to another form of energy, and the distribution and use of energy. For example, there are transformation losses in the process of refining crude oil into usable petroleum products, processing natural gas into marketable dry gas, and in the process of converting energy from the sun into usable energy with solar panels. All uses of primary energy have efficiency losses, usually in the form of heat, when energy is converted to do useful work. Examples include when motor gasoline is burned to move vehicles, when natural gas is burned to heat homes, or in any household appliance that uses electricity. The Lawrence Livermore National Laboratory estimates primary energy losses by end-use sector by applying an end-use efficiency factor to EIA's *Monthly Energy Review* consumption data—see https://flowcharts.llnl.gov/.

Note 3. Energy Consumption Data and Surveys. Most of the data in this section of the Monthly Energy Review (MER) are developed from a group of energy-related surveys, typically called "supply surveys," conducted by the U.S. Energy Information Administration (EIA). Supply surveys are directed to suppliers and marketers of specific energy sources. They measure the quantities of specific energy sources produced, or the quantities supplied to the market, or both. The data obtained from EIA's supply surveys are integrated to yield the summary consumption statistics published in this section (and in Section 1) of the MER.

Users of EIA's energy consumption statistics should be aware of a second group of energy-related surveys, typically called "consumption surveys." Consumption surveys gather information on the types of energy consumed by end users of energy, along with the characteristics of those end users that can be associated with energy use. For example, the "Manufacturing Energy Consumption Survey" belongs to the consumption survey group because it collects information directly from end users (the manufacturing establishments). There are important differences between the supply and consumption surveys that need to be taken into account in any analysis that uses both data sources. For information on those differences, see "Energy Consumption by End-Use Sector, A Comparison of Measures by Consumption and Supply Surveys," DOE/EIA-0533, U.S. Energy Information Administration, Washington, DC, April 6, 1990.

Table 2.2 Sources

Coal

1949–2007: Residential sector coal consumption data from Table 6.2 are converted to Btu by multiplying by the residential and commercial sectors coal consumption heat content factors.

Natural Gas

1949–1979: Residential sector natural gas (including supplemental gaseous fuels) consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas end-use sectors consumption heat content factors.

1980 forward: Residential sector natural gas (including supplemental gaseous fuels) consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas end-use sectors consumption heat content factors. The residential sector portion of supplemental gaseous fuels data in Btu is estimated using the method described in Note 3, "Supplemental Gaseous Fuels," at the end of Section 4. Residential sector natural gas (excluding supplemental gaseous

fuels) consumption is equal to residential sector natural gas (including supplemental gaseous fuels) consumption minus the residential sector portion of supplemental gaseous fuels.

Petroleum
1949 forward: Table 3.8a.

Fossil Fuels Total
1949–2007: Residential sector total fossil fuels consumption is the sum of the residential sector consumption values for coal, natural gas, and petroleum.

2008 forward: Residential sector total fossil fuels consumption is the sum of the residential sector consumption values for natural gas and petroleum.

Renewable Energy
1949 forward: Table 10.2a.

Total Primary Energy Consumption
1949 forward: Residential sector total primary energy consumption is the sum of the residential sector consumption values for fossil fuels and renewable energy.

Electricity Sales to Ultimate Customers
1949 forward: Residential sector electricity sales to ultimate customers from Table 7.6 are converted to Btu by multiplying by the electricity heat content factor.

End-Use Energy Consumption
1949 forward: Residential sector end-use energy consumption is the sum of residential sector total primary energy consumption and residential sector electricity sales to ultimate customers.

Electrical System Energy Losses
1949 forward: Total electrical system energy losses are equal to electric power sector total primary energy consumption from Table 2.6 minus total electricity sales to ultimate customers from Table 7.6 (converted to Btu by multiplying by the electricity heat content factor). Total electrical system energy losses are allocated to the residential sector in proportion to the residential sector's share of total electricity sales to ultimate customers from Table 7.6. See Note 1, "Electrical System Energy Losses."

Total Energy Consumption
1949 forward: Residential sector total energy consumption is the sum of the residential sector consumption values for total primary energy, electricity sales to ultimate customers, and electrical system energy losses.

Table 2.3 Sources

Coal
1949 forward: Commercial sector coal consumption data from Table 6.2 are converted to Btu by multiplying by the residential and commercial sectors coal consumption heat content factors.

Natural Gas
1949–1979: Commercial sector natural gas (including supplemental gaseous fuels) consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas end-use sectors consumption heat content factors.

1980 forward: Commercial sector natural gas (including supplemental gaseous fuels) consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas end-use sectors consumption heat content factors. The commercial sector portion of supplemental gaseous fuels data in Btu is estimated using the method described in Note 3, "Supplemental Gaseous Fuels," at the end of Section 4. Commercial sector natural gas (excluding supplemental

gaseous fuels) consumption is equal to commercial sector natural gas (including supplemental gaseous fuels) consumption minus the commercial sector portion of supplemental gaseous fuels.

Petroleum
1949–1992: Table 3.8a.

1993–2008: The commercial sector share of motor gasoline consumption is equal to commercial sector motor gasoline consumption from Table 3.7a divided by motor gasoline product supplied from Table 3.5. Commercial sector fuel ethanol (including denaturant) consumption is equal to total fuel ethanol (including denaturant) consumption from Table 10.3 multiplied by the commercial sector share of motor gasoline consumption. Commercial sector petroleum (excluding biofuels) consumption is equal to commercial sector petroleum (including biofuels) consumption from Table 3.8a minus commercial sector fuel ethanol (including denaturant) consumption.

2009 forward: Commercial sector fuel ethanol (minus denaturant) consumption is equal to total fuel ethanol (minus denaturant) consumption from Table 10.3 multiplied by the commercial sector share of motor gasoline consumption (see 1993–2008 sources above). Commercial sector petroleum (excluding biofuels) consumption is equal to commercial sector petroleum (including biofuels) consumption from Table 3.8a minus commercial sector fuel ethanol (minus denaturant) consumption.

Fossil Fuels Total
1949 forward: Commercial sector total fossil fuels consumption is the sum of the commercial sector consumption values for coal, natural gas, and petroleum.

Renewable Energy
1949 forward: Table 10.2a.

Total Primary Energy Consumption
1949 forward: Commercial sector total primary energy consumption is the sum of the commercial sector consumption values for fossil fuels and renewable energy.

Electricity Sales to Ultimate Customers
1949 forward: Commercial sector electricity sales to ultimate customers from Table 7.6 are converted to Btu by multiplying by the electricity heat content factor.

End-Use Energy Consumption
1949 forward: Commercial sector end-use energy consumption is the sum of commercial sector total primary energy consumption and commercial sector electricity sales to ultimate customers.

Electrical System Energy Losses
1949 forward: Total electrical system energy losses are equal to electric power sector total primary energy consumption from Table 2.6 minus total electricity sales to ultimate customers from Table 7.6 (converted to Btu by multiplying by the electricity heat content factor). Total electrical system energy losses are allocated to the commercial sector in proportion to the commercial sector's share of total electricity sales to ultimate customers from Table 7.6. See Note 1, "Electrical System Energy Losses."

Total Energy Consumption
1949 forward: Commercial sector total energy consumption is the sum of the commercial sector consumption values for total primary energy, electricity sales to ultimate customers, and electrical system energy losses.

Table 2.4 Sources

Coal
1949 forward: Coke plants coal consumption from Table 6.2 is converted to Btu by multiplying by the coke plants coal consumption heat content factors. Other industrial coal consumption from Table 6.2 is converted to Btu by multiplying by the other industrial coal consumption heat content factors. Industrial sector coal consumption is equal to coke plants coal consumption and other industrial coal consumption.

Natural Gas

1949–1979: Industrial sector natural gas (including supplemental gaseous fuels) consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas end-use sectors consumption heat content factors.

1980 forward: Industrial sector natural gas (including supplemental gaseous fuels) consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas end-use sectors consumption heat content factors. The industrial sector portion of supplemental gaseous fuels data in Btu is estimated using the method described in Note 3, "Supplemental Gaseous Fuels," at the end of Section 4. Industrial sector natural gas (excluding supplemental gaseous fuels) consumption is equal to industrial sector natural gas (including supplemental gaseous fuels) consumption minus the industrial sector portion of supplemental gaseous fuels.

Petroleum

1949–1992: Table 3.8b.

1993–2008: The industrial sector share of motor gasoline consumption is equal to industrial sector motor gasoline consumption from Table 3.7b divided by motor gasoline product supplied from Table 3.5. Industrial sector fuel ethanol (including denaturant) consumption is equal to total fuel ethanol (including denaturant) consumption from Table 10.3 multiplied by the industrial sector share of motor gasoline consumption. Industrial sector petroleum (excluding biofuels) consumption is equal to industrial sector petroleum (including biofuels) consumption from Table 3.8b minus industrial sector fuel ethanol (including denaturant) consumption.

2009 forward: Industrial sector fuel ethanol (minus denaturant) consumption is equal to total fuel ethanol (minus denaturant) consumption from Table 10.3 multiplied by the industrial sector share of motor gasoline consumption (see 1993–2008 sources above). Industrial sector petroleum (excluding biofuels) consumption is equal to industrial sector petroleum (including biofuels) consumption from Table 3.8b minus industrial sector fuel ethanol (minus denaturant) consumption.

Coal Coke Net Imports

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

Fossil Fuels Total

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

Renewable Energy

1949 forward: Table 10.2b.

Total Primary Energy Consumption

1949 forward: Industrial sector total primary energy consumption is the sum of the industrial sector consumption values for fossil fuels and renewable energy.

Electricity Sales to Ultimate Customers

1949 forward: Industrial sector electricity sales to ultimate customers from Table 7.6 are converted to Btu by multiplying by the electricity heat content factor.

End-Use Energy Consumption

1949 forward: Industrial sector end-use energy consumption is the sum of industrial sector total primary energy consumption and residential sector electricity sales to ultimate customers.

Electrical System Energy Losses

1949 forward: Total electrical system energy losses are equal to electric power sector total primary energy consumption

from Table 2.6 minus total electricity sales to ultimate customers from Table 7.6 (converted to Btu by multiplying by the electricity heat content factor). Total electrical system energy losses are allocated to the industrial sector in proportion

to the industrial sector's share of total electricity sales to ultimate customers from Table 7.6. See Note 1, "Electrical System Energy Losses."

Total Energy Consumption

1949 forward: Industrial sector total energy consumption is the sum of the industrial sector consumption values for total primary energy, electricity sales to ultimate customers, and electrical system energy losses.

Table 2.5 Sources

Coal

1949–1977: Transportation sector coal consumption data from Table 6.2 are converted to Btu by multiplying by the other industrial sector coal consumption heat content factors.

Natural Gas

1949 forward: Transportation sector natural gas consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas end-use sectors consumption heat content factors.

Petroleum

1949–1992: Table 3.8c.

1993–2008: The transportation sector share of motor gasoline consumption is equal to transportation sector motor gasoline consumption from Table 3.7c divided by motor gasoline product supplied from Table 3.5. Transportation sector fuel ethanol (including denaturant) consumption is equal to total fuel ethanol (including denaturant) consumption from Table 10.3 multiplied by the transportation sector share of motor gasoline consumption. Transportation sector petroleum (excluding biofuels) consumption is equal to transportation sector petroleum (including biofuels) consumption from Table 3.8c minus transportation sector fuel ethanol (including denaturant) consumption.

2009–2011: Transportation sector fuel ethanol (minus denaturant) consumption is equal to total fuel ethanol (minus denaturant) consumption from Table 10.3 multiplied by the transportation sector share of motor gasoline consumption (see 1993–2008 sources above). Transportation sector petroleum (excluding biofuels) consumption is equal to: transportation sector petroleum (including biofuels) consumption from Table 3.8c; minus transportation sector fuel ethanol (minus denaturant) consumption; 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); 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).

2012–2020: Transportation sector fuel ethanol (minus denaturant) consumption is equal to total fuel ethanol (minus denaturant) consumption from Table 10.3 multiplied by the transportation sector share of motor gasoline consumption (see 1993–2008 sources above). Transportation sector petroleum (excluding biofuels) consumption is equal to: transportation sector petroleum (including biofuels) consumption from Table 3.8c; minus transportation sector fuel ethanol (minus denaturant) consumption; minus biodiesel consumption from Table 10.4; 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).

2021 forward: Transportation sector fuel ethanol (minus denaturant) consumption is equal to total fuel ethanol (minus denaturant) consumption from Table 10.3 multiplied by the transportation sector share of motor gasoline consumption (see 1993–2008 sources above). Transportation sector petroleum (excluding biofuels) consumption is equal to: transportation sector petroleum (including biofuels) consumption from Table 3.8c; minus transportation sector fuel ethanol (minus denaturant) consumption; 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 Annual* and *Petroleum Supply Monthly* (data are converted to Btu by multiplying by the appropriate heat content factors).

Fossil Fuels Total

1949–1977: Transportation sector total fossil fuels consumption is the sum of the transportation sector consumption values for coal, natural gas, and petroleum.

1978 forward: Transportation sector total fossil fuels consumption is the sum of the transportation sector consumption values for natural gas and petroleum.

Renewable Energy

1981 forward: Table 10.2b.

Total Primary Energy Consumption

1949 –1980: Transportation sector total primary energy consumption is equal to transportation sector fossil fuels consumption.

1981 forward: Transportation sector total primary energy consumption is the sum of the transportation sector consumption values for fossil fuels and renewable energy.

Electricity Sales to Ultimate Customers

1949 forward: Transportation sector electricity sales to ultimate customers from Table 7.6 are converted to Btu by multiplying by the electricity heat content factor.

End-Use Energy Consumption

1949 forward: Transportation sector end-use energy consumption is the sum of transportation sector total primary energy consumption and residential sector electricity sales to ultimate customers.

Electrical System Energy Losses

1949 forward: Total electrical system energy losses are equal to electric power sector total primary energy consumption from Table 2.6 minus total electricity sales to ultimate customers from Table 7.6 (converted to Btu by multiplying by the electricity heat content factor). Total electrical system energy losses are allocated to the transportation sector in proportion to the transportation sector's share of total electricity sales to ultimate customers from Table 7.6. See Note 1, "Electrical System Energy Losses."

Total Energy Consumption

1949 forward: Transportation sector total energy consumption is the sum of the transportation sector consumption values for total primary energy, electricity sales to ultimate customers, and electrical system energy losses.

Table 2.6 Sources

Coal

1949 forward: Electric power sector coal consumption data from Table 6.2 are converted to Btu by multiplying by the electric power sector coal consumption heat content factors.

Natural Gas

1949–1979: Electric power sector natural gas (including supplemental gaseous fuels) consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas electric power sector consumption heat content factors.

1980 forward: Electric power sector natural gas (including supplemental gaseous fuels) consumption data from Table 4.3 are converted to Btu by multiplying by the natural gas electric power sector consumption heat content factors. The electric power sector portion of supplemental gaseous fuels data in Btu is estimated using the method described in Note 3, "Supplemental Gaseous Fuels," at the end of Section 4. Electric power sector natural gas (excluding supplemental gaseous fuels) consumption is equal to electric power sector natural gas (including supplemental gaseous fuels) consumption minus the electric power sector portion of supplemental gaseous fuels.

Petroleum
1949 forward: Table 3.8c.

Fossil Fuels Total
1949 forward: Electric power sector total fossil fuels consumption is the sum of the electric power sector consumption values for coal, natural gas, and petroleum.

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.

Renewable Energy
1949 forward: Table 10.2c.

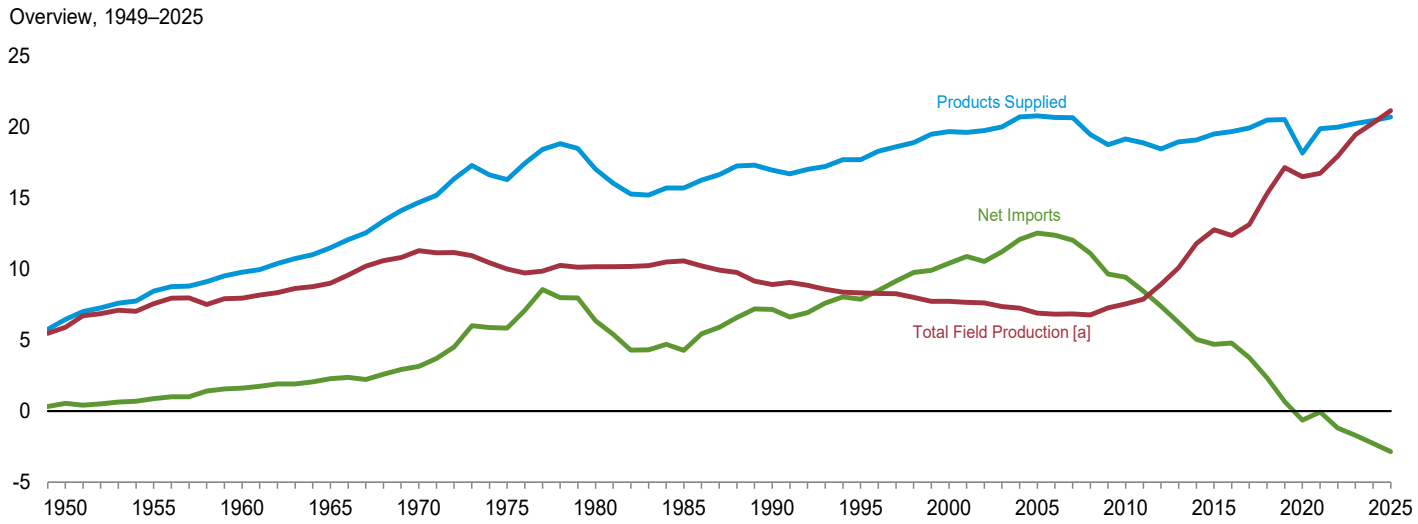
Electricity Net Imports
1949 forward: Electricity net imports are equal to electricity imports from Table 1.4a minus electricity exports from Table 1.4b.

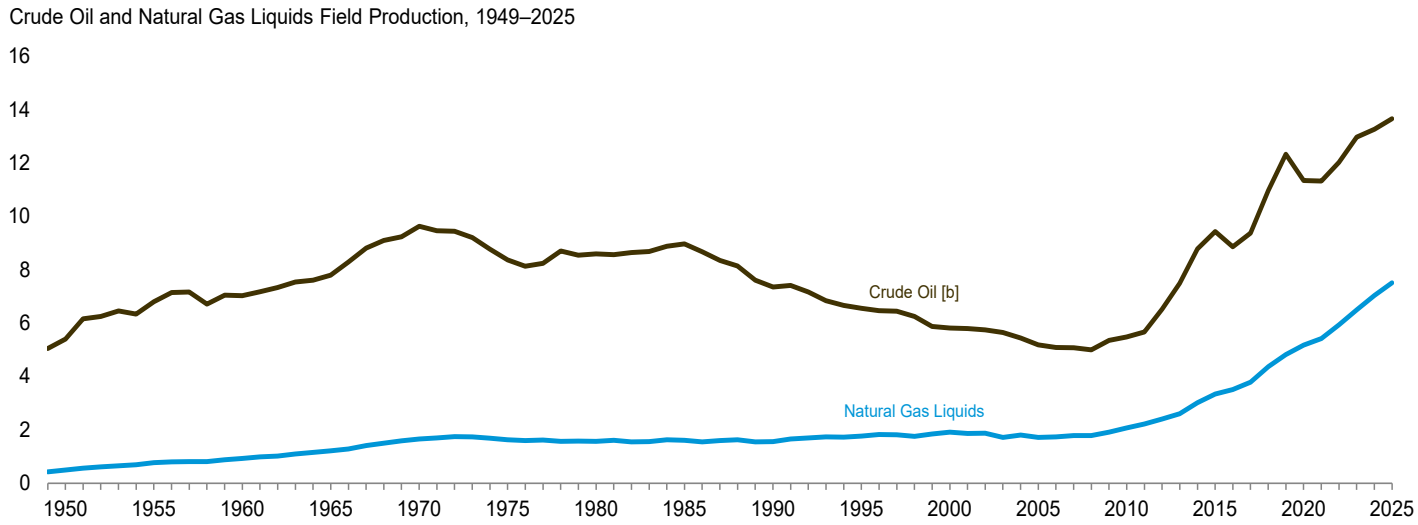
Total Primary Energy Consumption
1949 forward: Electric power sector total primary energy consumption is the sum of the electric power sector consumption values for fossil fuels, nuclear electric power, and renewable energy, plus electricity net imports.

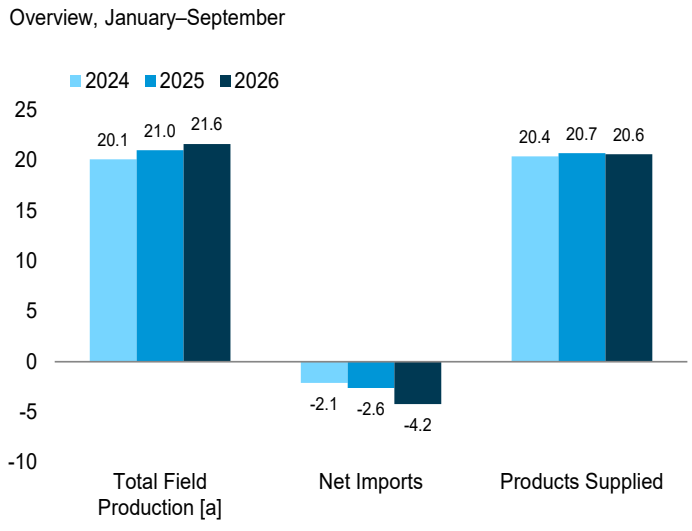
3. Petroleum

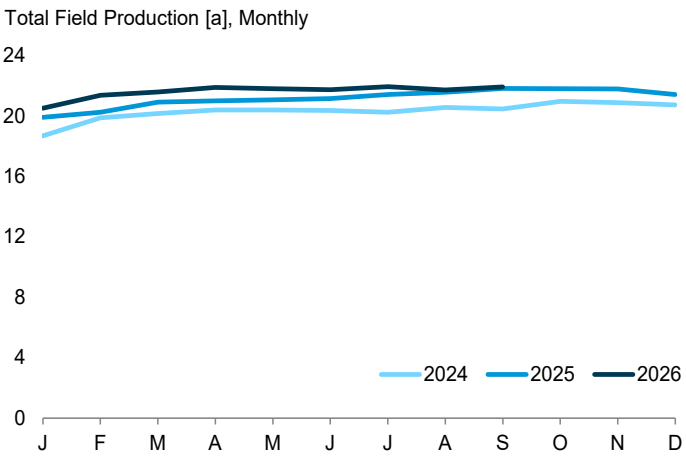
Figure 3.1 Petroleum Overview

(Million Barrels Per Day)









[a] Crude oil, including lease condensate, and natural gas liquids field production.
[b] Includes lease condensate.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum.
Source: Table 3.1.

Table 3.1 Petroleum Overview

(Thousand Barrels per Day)

	Field Production[a]					Biofuels Plant Net Production[e]	Processing Gain[f]	Trade			Stock Change[i]	Adjustments[c,j]	Petroleum Products Supplied
	Crude Oil[b,c]			Natural Gas Liquids	Total[c]			Imports[g]	Exports	Net Imports[h]			
	48 States[d]	Alaska	Total										
1950 Average	**5,407**	**0**	**5,407**	**499**	**5,906**	**NA**	**2**	**850**	**305**	**545**	**-56**	**-51**	**6,458**
1955 Average	**6,807**	**0**	**6,807**	**771**	**7,578**	**NA**	**34**	**1,248**	**368**	**880**	**(s)**	**-37**	**8,455**
1960 Average	**7,034**	**2**	**7,035**	**929**	**7,965**	**NA**	**146**	**1,815**	**202**	**1,613**	**-83**	**-8**	**9,797**
1965 Average	**7,774**	**30**	**7,804**	**1,210**	**9,014**	**NA**	**220**	**2,468**	**187**	**2,281**	**-8**	**-10**	**11,512**
1970 Average	**9,408**	**229**	**9,637**	**1,660**	**11,297**	**NA**	**359**	**3,419**	**259**	**3,161**	**103**	**-16**	**14,697**
1975 Average	**8,183**	**191**	**8,375**	**1,633**	**10,007**	**NA**	**460**	**6,056**	**209**	**5,846**	**32**	**41**	**16,322**
1980 Average	**6,980**	**1,617**	**8,597**	**1,573**	**10,170**	**NA**	**597**	**6,909**	**544**	**6,365**	**140**	**64**	**17,056**
1985 Average	**7,146**	**1,825**	**8,971**	**1,609**	**10,581**	**NA**	**557**	**5,067**	**781**	**4,286**	**-103**	**200**	**15,726**
1990 Average	**5,582**	**1,773**	**7,355**	**1,559**	**8,914**	**NA**	**683**	**8,018**	**857**	**7,161**	**107**	**338**	**16,988**
1995 Average	**5,076**	**1,484**	**6,560**	**1,762**	**8,322**	**NA**	**774**	**8,835**	**949**	**7,886**	**-246**	**496**	**17,725**
2000 Average	**4,851**	**970**	**5,822**	**1,911**	**7,733**	**NA**	**948**	**11,459**	**1,040**	**10,419**	**-69**	**532**	**19,701**
2005 Average	**4,320**	**864**	**5,184**	**1,717**	**6,901**	**NA**	**989**	**13,714**	**1,165**	**12,549**	**[k] 146**	**509**	**20,802**
2010 Average	**4,885**	**600**	**5,484**	**2,074**	**7,558**	**907**	**1,068**	**11,793**	**2,353**	**9,441**	**42**	**246**	**19,178**
2011 Average	**5,113**	**561**	**5,674**	**2,216**	**7,890**	**1,016**	**1,076**	**11,436**	**2,986**	**8,450**	**-138**	**325**	**18,896**
2012 Average	**5,998**	**526**	**6,524**	**2,408**	**8,932**	**964**	**1,059**	**10,598**	**3,205**	**7,393**	**151**	**285**	**18,482**
2013 Average	**6,981**	**515**	**7,495**	**2,606**	**10,101**	**1,002**	**1,087**	**9,859**	**3,621**	**6,237**	**-138**	**400**	**18,967**
2014 Average	**8,285**	**496**	**8,781**	**3,015**	**11,796**	**1,055**	**1,081**	**9,241**	**4,176**	**5,065**	**267**	**371**	**19,100**
2015 Average	**8,951**	**483**	**9,433**	**3,342**	**12,776**	**1,095**	**1,062**	**9,449**	**4,738**	**4,711**	**431**	**319**	**19,532**
2016 Average	**8,369**	**490**	**8,859**	**3,509**	**12,368**	**1,158**	**1,118**	**10,055**	**5,261**	**4,795**	**125**	**378**	**19,692**
2017 Average	**8,880**	**495**	**9,374**	**3,783**	**13,157**	**1,198**	**1,111**	**10,144**	**6,376**	**3,768**	**-364**	**353**	**19,952**
2018 Average	**10,493**	**479**	**10,972**	**4,369**	**15,342**	**1,234**	**1,138**	**9,943**	**7,601**	**2,341**	**44**	**501**	**20,512**
2019 Average	**11,869**	**466**	**12,335**	**4,825**	**17,160**	**1,125**	**1,069**	**9,141**	**8,471**	**670**	**28**	**548**	**20,543**
2020 Average	**10,901**	**448**	**11,349**	**5,175**	**16,523**	**1,009**	**923**	**7,863**	**8,498**	**-635**	**176**	**542**	**18,186**
2021 Average	**10,886**	**437**	**11,324**	**5,425**	**16,748**	**1,136**	**956**	**8,474**	**8,536**	**-62**	**-527**	**585**	**19,890**
2022 Average	**11,589**	**438**	**12,026**	**5,933**	**17,960**	**1,203**	**1,032**	**8,329**	**9,520**	**-1,191**	**-542**	**465**	**20,010**
2023 Average	**12,545**	**427**	**12,972**	**6,499**	**19,470**	**1,299**	**1,020**	**8,526**	**10,235**	**-1,709**	**31**	**225**	**20,275**
2024 January	12,123	428	12,551	6,140	18,691	1,280	969	8,479	10,145	-1,666	-514	1	19,789
February	12,733	433	13,166	6,707	19,873	1,375	839	8,359	10,931	-2,572	-237	220	19,972
March	12,762	434	13,196	6,960	20,156	1,363	924	8,046	10,698	-2,651	393	612	20,011
April	12,886	431	13,317	7,080	20,397	1,303	973	8,621	10,358	-1,737	1,022	241	20,155
May	12,835	417	13,253	7,140	20,393	1,314	976	9,190	10,417	-1,227	662	94	20,888
June	12,842	401	13,243	7,120	20,363	1,395	979	8,768	10,973	-2,204	193	197	20,537
July	12,821	408	13,229	7,009	20,239	1,425	920	9,087	10,618	-1,531	325	-134	20,593
August	13,020	396	13,416	7,139	20,555	1,414	1,003	8,159	10,834	-2,675	-200	488	20,985
September	12,819	409	13,228	7,235	20,463	1,380	987	8,171	10,688	-2,517	-200	-156	20,356
October	13,154	428	13,583	7,374	20,957	1,388	1,009	7,874	10,461	-2,587	-459	24	21,249
November	13,052	439	13,491	7,384	20,875	1,467	1,031	8,180	11,474	-3,294	87	376	20,367
December	13,096	434	13,530	7,204	20,735	1,443	1,020	8,311	10,942	-2,630	-289	-241	20,615
Average	**12,845**	**422**	**13,267**	**7,041**	**20,308**	**1,379**	**970**	**8,438**	**10,709**	**-2,271**	**64**	**143**	**20,464**
2025 January	12,726	441	13,167	6,739	19,906	1,332	958	8,353	10,545	-2,192	-764	-10	20,758
February	12,831	438	13,269	6,973	20,242	1,342	935	7,810	10,697	-2,887	-317	414	20,364
March	13,090	437	13,527	7,388	20,914	1,328	921	7,564	10,779	-3,214	208	267	20,008
April	13,122	436	13,558	7,437	20,995	1,296	932	7,730	10,422	-2,691	395	307	20,443
May	13,100	435	13,535	7,530	21,065	1,340	1,062	8,044	10,324	-2,280	879	224	20,533
June	13,233	423	13,656	7,488	21,145	1,390	1,027	7,983	10,745	-2,761	226	506	21,082
July	13,366	358	13,724	7,691	21,415	1,384	1,016	7,980	10,391	-2,411	614	401	21,192
August	13,447	387	13,835	7,740	21,575	1,355	1,037	8,193	10,683	-2,491	765	502	21,213
September	13,497	419	13,917	7,907	21,823	1,375	989	8,331	11,275	-2,943	172	-204	20,868
October	13,566	429	13,995	7,801	21,796	1,414	874	7,503	11,074	-3,571	-438	22	20,973
November	13,497	430	13,927	7,854	21,780	1,430	958	7,434	11,179	-3,746	474	544	20,493
December	13,376	434	13,810	7,607	21,416	1,421	993	8,291	11,308	-3,017	143	200	20,870
Average	**13,240**	**422**	**13,662**	**7,516**	**21,177**	**1,367**	**976**	**7,937**	**10,785**	**-2,848**	**199**	**263**	**20,736**
2026 January	[E] 12,877	[E] 428	[E] 13,305	7,213	[E] 20,517	1,322	959	8,173	10,780	-2,607	-578	-120	20,650
February	[E] 13,295	[E] 416	[E] 13,711	7,654	[E] 21,364	1,388	968	8,158	11,318	-3,159	137	715	21,138
March	[E] 13,308	[E] 418	[E] 13,726	7,864	[E] 21,590	1,415	959	8,155	11,868	-3,713	320	452	20,383
April	[E] 13,559	[E] 422	[E] 13,981	7,903	[E] 21,884	1,372	917	7,895	13,610	-5,715	-1,798	552	20,808
May	[RE] 13,395	[E] 416	[RE] 13,811	7,987	[RE] 21,798	1,468	956	7,611	13,540	-5,928	-1,900	[R] -122	20,071
June	[RE] 13,431	[E] 413	[RE] 13,844	7,885	[RE] 21,729	1,508	939	7,674	12,540	-4,865	-1,519	[R] -93	20,736
July	[RE] 13,526	[RE] 421	[RE] 13,948	[R] 7,984	[RE] 21,932	[R] 1,500	[R] 953	[R] 7,802	[R] 11,410	[R] -3,608	[R] -71	[R] -235	[R] 20,612
August	[E] 13,421	[E] 430	[E] 13,850	[E] 7,872	[E] 21,723	[E] 1,466	[E] 1,026	[E] 8,107	[E] 11,891	[E] -3,784	[E] 159	[E] 25	[E] 20,297
September	[E] 13,486	[E] 467	[E] 13,953	[E] 7,962	[E] 21,914	[E] 1,440	[E] 980	[E] 7,889	[E] 11,830	[E] -3,941	[E] -345	[E] 160	[E] 20,898
9-Month Average	**[E] 13,366**	**[E] 426**	**[E] 13,791**	**[E] 7,814**	**[E] 21,606**	**[E] 1,431**	**[E] 962**	**[E] 7,939**	**[E] 12,090**	**[E] -4,150**	**[E] -623**	**[E] 141**	**[E] 20,614**
2025 9-Month Average	**13,159**	**419**	**13,578**	**7,436**	**21,014**	**1,349**	**987**	**8,001**	**10,649**	**-2,648**	**248**	**267**	**20,721**
2024 9-Month Average	**12,759**	**417**	**13,177**	**6,947**	**20,124**	**1,361**	**953**	**8,544**	**10,626**	**-2,083**	**161**	**174**	**20,368**

[a] Crude oil production on leases, and 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).

[b] Includes lease condensate.

[c] Once a month, data for crude oil production, total field production, and adjustments are revised going back as far as the data year of the U.S. Energy Information Administration's (EIA) last published *Petroleum Supply Annual* (PSA)—these revisions are released at the same time as EIA's *Petroleum Supply Monthly*. Once a year, data for these series are revised going back as far as 10 years—these revisions are released at the same time as the PSA.

[d] United States excluding Alaska and Hawaii.

[e] Biofuels plant net production of fuel ethanol, biodiesel, renewable diesel fuel, other biofuels, natural gasoline, finished motor gasoline, and motor gasoline blending components. For 2009–2018, also includes oxygenates (excluding fuel ethanol).

[f] Refinery and blender net production minus refinery and blender net inputs. See Table 3.2.

[g] Includes Strategic Petroleum Reserve imports. See Table 3.3b.

[h] Net imports equal imports minus exports.

[i] A negative value indicates a decrease in stocks and a positive value indicates an increase. The current month stock change estimate is based on the change from the previous month's estimate, rather than the stocks values shown in Table 3.4. Includes crude oil stocks in the Strategic Petroleum Reserve, but excludes distillate fuel oil stocks in the Northeast Home Heating Oil Reserve. See Table 3.4.

[j] An adjustment for crude oil, hydrogen, oxygenates, biofuels, other hydrocarbons, motor gasoline blending components, finished motor gasoline, and distillate fuel oil. See EIA's *Petroleum Supply Monthly*, Appendix B, "PSM Explanatory Notes," for further information.

[k] Derived from the 2004 petroleum stocks value that excludes crude oil stocks on leases (1,628 million barrels), not the 2004 petroleum stocks value that includes crude oil stocks on leases (1,645 million barrels).

R=Revised. E=Estimate. NA=Not available. (s)=Less than 500 barrels per day and greater than -500 barrels per day.

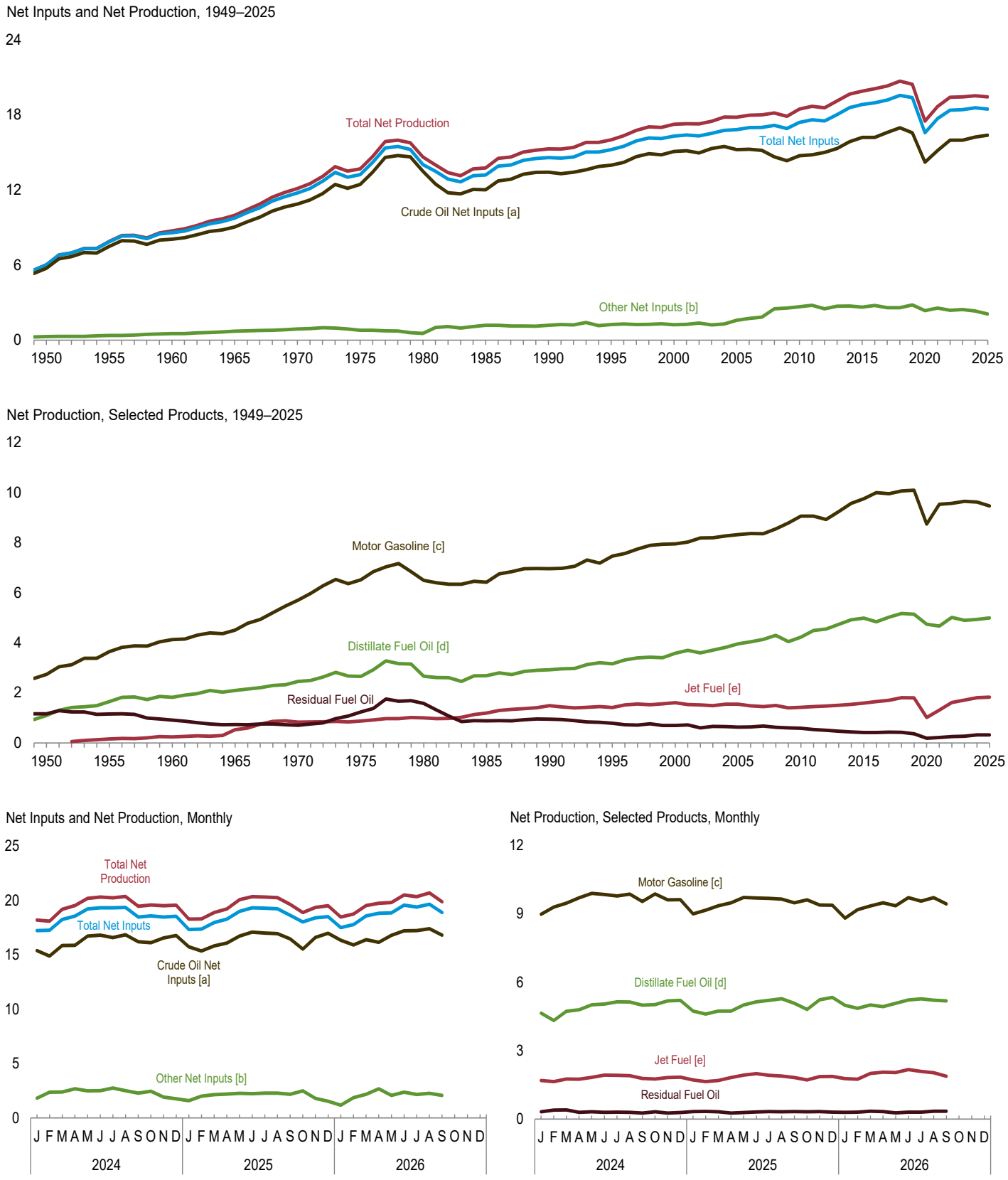
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

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

Sources: See end of section.

Figure 3.2 Refinery and Blender Net Inputs and Net Production

(Million Barrels per Day)



[a] Includes lease condensate.
[b] Natural gas liquids and other liquids.
[c] Beginning in 1993, includes fuel ethanol blended into motor gasoline.
[d] Beginning in 2009, includes biodiesel and renewable diesel fuel blended into distillate fuel oil.
[e] Beginning in 2005, includes kerosene-type jet fuel only.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum.
Source: Table 3.2.

Table 3.2 Refinery and Blender Net Inputs and Net Production

(Thousand Barrels per Day)

	Refinery and Blender Net Inputs[a]				Refinery and Blender Net Production[b]									
						Hydrocarbon Gas Liquids								
						Propane/Propylene								
	Crude Oil[c]	Natural Gas Liquids[d]	Other Liquids[e]	Total	Distillate Fuel Oil[f]	Propane	Propylene	Total[g]	Total[h]	Jet Fuel[i]	Motor Gasoline[j]	Residual Fuel Oil	Other Products[k]	Total
1950 Average	5,739	259	19	6,018	1,093	NA	NA	NA	80	([i])	2,735	1,165	947	6,019
1955 Average	7,480	345	32	7,857	1,651	NA	NA	NA	119	155	3,648	1,152	1,166	7,891
1960 Average	8,067	455	61	8,583	1,823	NA	NA	NA	212	241	4,126	908	1,420	8,729
1965 Average	9,043	618	88	9,750	2,096	NA	NA	NA	293	523	4,507	736	1,814	9,970
1970 Average	10,870	763	121	11,754	2,454	E 184	E 55	239	345	827	5,699	706	2,082	12,113
1975 Average	12,442	710	72	13,225	2,653	E 179	E 60	238	311	871	6,518	1,235	2,097	13,685
1980 Average	13,481	462	81	14,025	2,661	E 202	E 72	273	330	999	6,492	1,580	2,559	14,622
1985 Average	12,002	509	681	13,192	2,686	E 223	E 72	295	391	1,189	6,419	882	2,183	13,750
1990 Average	13,409	467	713	14,589	2,925	299	105	404	499	1,488	6,959	950	2,452	15,272
1995 Average	13,973	471	775	15,220	3,155	352	151	503	654	1,416	7,459	788	2,522	15,994
2000 Average	15,067	380	849	16,295	3,580	366	217	583	705	1,606	7,951	696	2,705	17,243
2005 Average	15,220	441	1,149	16,811	3,954	311	229	540	573	1,546	8,318	628	2,782	17,800
2010 Average	14,724	442	2,219	17,385	4,223	282	278	560	659	1,418	9,059	585	2,509	18,452
2011 Average	14,806	490	2,300	17,596	4,492	270	282	552	619	1,449	9,058	537	2,518	18,673
2012 Average	14,999	509	1,997	17,505	4,550	276	277	553	630	1,471	8,926	501	2,487	18,564
2013 Average	15,312	496	2,211	18,019	4,733	284	281	564	623	1,499	9,234	467	2,550	19,106
2014 Average	15,848	511	2,214	18,574	4,916	306	281	587	653	1,541	9,570	435	2,537	19,654
2015 Average	16,188	517	2,119	18,824	4,983	283	276	559	615	1,590	9,754	417	2,527	19,886
2016 Average	16,187	536	2,238	18,961	4,834	307	280	587	632	1,650	9,995	418	2,550	20,079
2017 Average	16,590	566	2,031	19,187	5,024	307	285	592	628	1,702	9,954	427	2,563	20,298
2018 Average	16,969	575	2,011	19,555	5,168	301	293	594	634	1,806	10,061	425	2,599	20,693
2019 Average	16,563	571	2,237	19,371	5,137	288	282	570	606	1,796	10,095	361	2,444	20,439
2020 Average	14,212	508	1,846	16,566	4,738	264	264	528	546	1,018	8,742	188	2,257	17,489
2021 Average	15,147	549	2,011	17,706	4,668	278	291	568	617	1,311	9,529	213	2,325	18,662
2022 Average	15,977	568	1,819	18,364	5,011	283	263	546	611	1,615	9,569	251	2,339	19,397
2023 Average	15,967	622	1,822	18,411	4,895	278	251	529	604	1,712	9,646	271	2,304	19,432
2024 January	15,395	692	1,133	17,220	4,642	268	249	517	337	1,692	8,977	320	2,220	18,189
February	14,882	692	1,679	17,253	4,318	253	221	475	347	1,644	9,289	399	2,095	18,092
March	15,865	640	1,752	18,257	4,729	274	262	536	629	1,758	9,461	406	2,198	19,181
April	15,882	598	2,086	18,566	4,791	269	276	545	796	1,754	9,696	296	2,206	19,539
May	16,719	542	1,957	19,218	5,010	278	278	556	834	1,835	9,892	323	2,300	20,194
June	16,816	527	1,988	19,330	5,044	281	270	551	822	1,930	9,841	295	2,378	20,309
July	16,580	515	2,232	19,327	5,138	279	251	531	777	1,921	9,781	307	2,322	20,246
August	16,853	572	1,941	19,366	5,128	287	262	550	793	1,907	9,861	302	2,378	20,370
September	16,203	695	1,582	18,480	4,992	265	256	521	604	1,786	9,535	265	2,287	19,467
October	16,117	744	1,712	18,573	5,020	251	271	522	396	1,762	9,869	322	2,213	19,582
November	16,554	798	1,126	18,478	5,184	272	279	551	308	1,826	9,608	267	2,317	19,508
December	16,772	761	1,008	18,541	5,207	293	279	572	310	1,840	9,614	292	2,297	19,561
Average	**16,225**	**648**	**1,683**	**18,556**	**4,936**	**273**	**263**	**536**	**580**	**1,805**	**9,620**	**316**	**2,268**	**19,526**
2025 January	15,737	723	870	17,330	4,736	269	262	531	351	1,719	8,994	327	2,160	18,288
February	15,357	658	1,354	17,369	4,606	270	239	509	438	1,643	9,150	338	2,129	18,305
March	15,829	529	1,611	17,970	4,737	282	238	519	628	1,690	9,349	326	2,161	18,891
April	16,090	513	1,678	18,281	4,735	289	245	533	756	1,826	9,478	265	2,155	19,213
May	16,726	498	1,774	18,999	5,005	290	263	554	806	1,928	9,717	287	2,317	20,061
June	17,092	500	1,724	19,316	5,139	299	262	560	825	1,995	9,685	318	2,382	20,344
July	16,999	527	1,765	19,292	5,204	279	269	548	821	1,920	9,676	333	2,354	20,307
August	16,942	538	1,749	19,229	5,281	286	241	527	784	1,890	9,637	326	2,348	20,266
September	16,465	699	1,473	18,637	5,072	279	235	513	593	1,823	9,476	333	2,331	19,627
October	15,526	751	1,745	18,023	4,809	245	214	459	374	1,716	9,611	321	2,066	18,896
November	16,603	894	907	18,404	5,232	291	246	537	320	1,863	9,380	329	2,238	19,362
December	16,985	908	624	18,517	5,331	296	257	553	340	1,871	9,371	307	2,290	19,509
Average	**16,369**	**645**	**1,440**	**18,454**	**4,993**	**281**	**248**	**529**	**587**	**1,825**	**9,462**	**317**	**2,245**	**19,429**
2026 January	16,335	767	406	17,507	4,985	273	243	516	346	1,772	8,803	296	2,264	18,466
February	15,908	641	1,229	17,778	4,858	270	226	496	436	1,747	9,178	307	2,220	18,746
March	16,396	591	1,593	18,580	5,005	285	253	538	602	2,004	9,343	345	2,239	19,538
April	16,145	566	2,110	18,820	4,930	292	254	546	716	2,058	9,476	329	2,228	19,737
May	16,787	508	1,560	18,855	5,071	284	254	537	766	2,042	9,346	278	2,309	19,811
June	17,200	525	1,844	19,569	5,220	297	253	549	761	2,174	9,703	303	2,347	20,508
July	R 17,230	R 570	R 1,597	R 19,397	R 5,270	R 291	R 248	R 539	R 753	R 2,092	R 9,552	R 305	R 2,378	R 20,350
August	E 17,400	F 546	RE 1,715	RF 19,661	E 5,209	NA	NA	RE 479	F 773	E 2,035	E 9,702	E 348	RE 2,619	RE 20,687
September	E 16,814	F 665	E 1,410	F 18,890	E 5,184	NA	NA	E 474	F 558	E 1,881	E 9,429	E 349	E 2,470	E 19,870
9-Month Average	**E 16,699**	**E 597**	**E 1,496**	**E 18,792**	**E 5,083**	**NA**	**NA**	**E 520**	**E 636**	**E 1,980**	**E 9,393**	**E 318**	**E 2,343**	**E 19,754**
2025 9-Month Average	**16,369**	**575**	**1,557**	**18,501**	**4,949**	**283**	**251**	**533**	**669**	**1,827**	**9,465**	**317**	**2,261**	**19,488**
2024 9-Month Average	**16,140**	**608**	**1,817**	**18,564**	**4,869**	**273**	**259**	**532**	**661**	**1,804**	**9,594**	**324**	**2,266**	**19,517**

[a] See "Refinery and Blender Net Inputs" in Glossary.

[b] See "Refinery and Blender Net Production" in Glossary.

[c] Includes lease condensate.

[d] Ethane, propane, normal butane, isobutane, and natural gasoline (pentanes plus).

[e] Unfinished oils (net). Beginning in 1981, also includes aviation gasoline blending components (net) and motor gasoline blending components (net). Beginning in 1993, also includes fuel ethanol. Beginning in 2009, also includes biofuels (excluding fuel ethanol), hydrogen, and other hydrocarbons. For 2009–2018, also includes oxygenates (excluding fuel ethanol).

[f] Beginning in 2009, includes biodiesel and renewable diesel fuel blended into distillate fuel oil. Beginning in 2021, also includes renewable heating oil blended into distillate fuel oil.

[g] Propane and propylene. Through 1983, also includes 40% of "Butane-Propane Mixtures."

[h] Ethane, propane, normal butane, isobutane, and refinery olefins (ethylene, propylene, butylene, and isobutylene).

[i] Beginning in 1965, includes kerosene-type jet fuel. (Through 1964, kerosene-type jet fuel is included with kerosene in "Other Products.") For 1952–2004, also includes naphtha-type jet fuel. (Through 1951, naphtha-type jet fuel is included in the products from which it was blended—gasoline, kerosene, and distillate fuel oil. Beginning in 2005, naphtha-type jet fuel is included in "Other Products.")

[j] Finished motor gasoline. Through 1963, also includes aviation gasoline and special naphthas. Beginning in 1993, also includes fuel ethanol blended into motor gasoline.

[k] Asphalt and road oil, kerosene, lubricants, petrochemical feedstocks, petroleum coke, still gas (refinery gas), waxes, and miscellaneous products. Through 1964, also includes kerosene-type jet fuel. Beginning in 1964, also includes finished aviation gasoline and special naphthas. Beginning in 2005, also includes naphtha-type jet fuel.

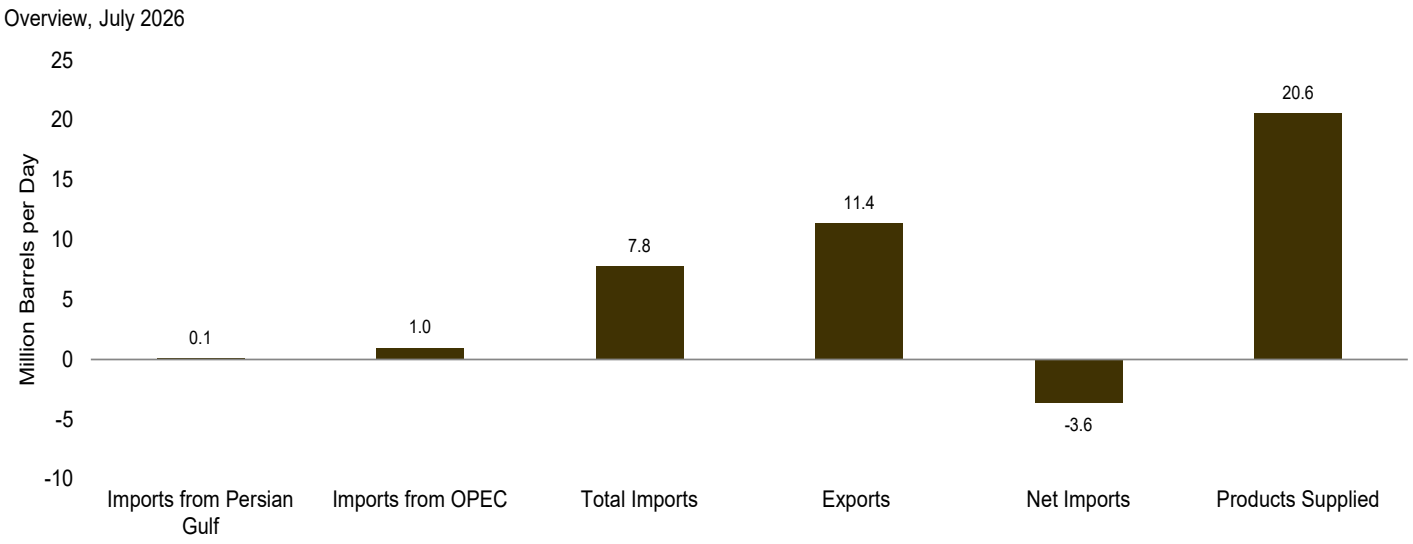
R=Revised. E=Estimate. F=Forecast. NA=Not available.

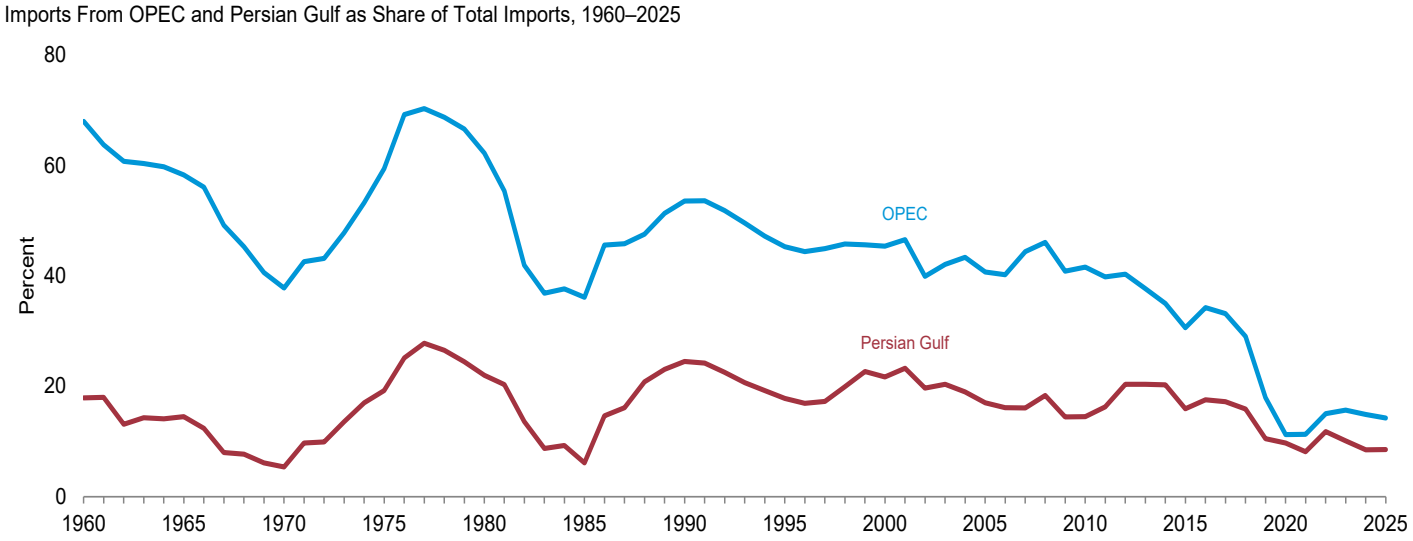
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

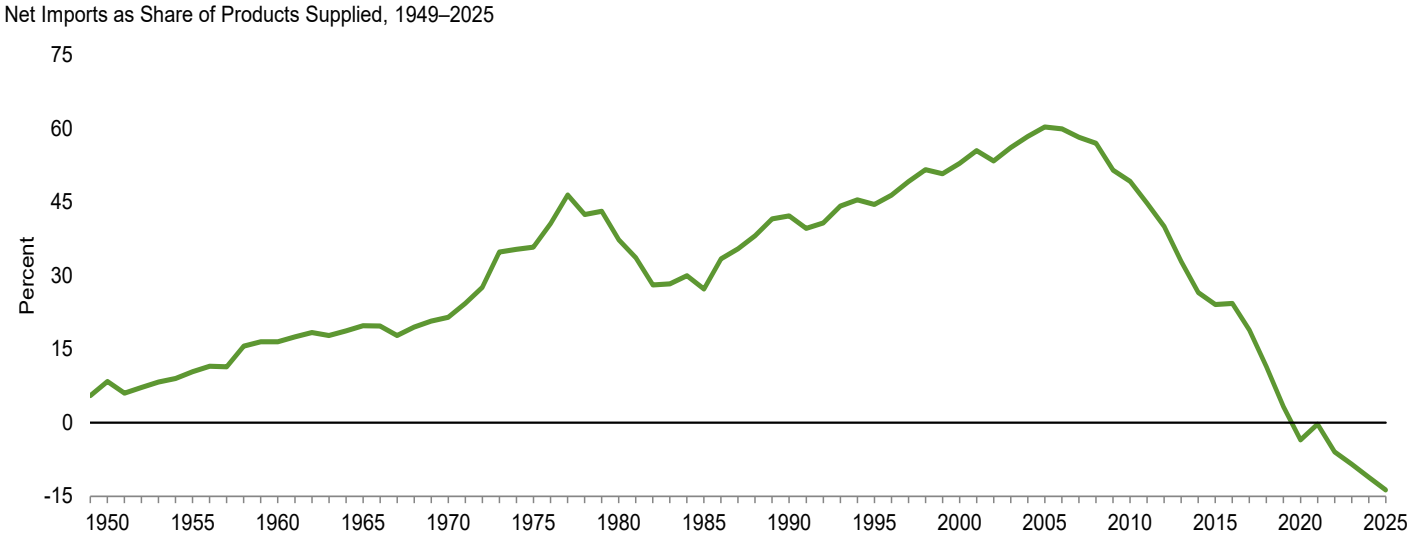
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#petroleum (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

Figure 3.3a Petroleum Trade: Overview







Note: OPEC=Organization of the Petroleum Exporting Countries.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum.
Source: Table 3.3a.

Table 3.3a Petroleum Trade: Overview

	Imports From Persian Gulf[a]	Imports From OPEC[b]	Imports	Exports	Net Imports	Products Supplied	As Share of Products Supplied: Imports From Persian Gulf[a]	As Share of Products Supplied: Imports From OPEC[b]	As Share of Products Supplied: Imports	As Share of Products Supplied: Net Imports	As Share of Total Imports: Imports From Persian Gulf[a]	As Share of Total Imports: Imports From OPEC[b]
	Thousand Barrels per Day						Percent					
1950 Average	**NA**	**NA**	**850**	**305**	**545**	**6,458**	**NA**	**NA**	**13.2**	**8.4**	**NA**	**NA**
1955 Average	**NA**	**NA**	**1,248**	**368**	**880**	**8,455**	**NA**	**NA**	**14.8**	**10.4**	**NA**	**NA**
1960 Average	**326**	**1,233**	**1,815**	**202**	**1,613**	**9,797**	**3.3**	**12.6**	**18.5**	**16.5**	**17.9**	**68.0**
1965 Average	**359**	**1,439**	**2,468**	**187**	**2,281**	**11,512**	**3.1**	**12.5**	**21.4**	**19.8**	**14.5**	**58.3**
1970 Average	**184**	**1,294**	**3,419**	**259**	**3,161**	**14,697**	**1.3**	**8.8**	**23.3**	**21.5**	**5.4**	**37.8**
1975 Average	**1,165**	**3,601**	**6,056**	**209**	**5,846**	**16,322**	**7.1**	**22.1**	**37.1**	**35.8**	**19.2**	**59.5**
1980 Average	**1,519**	**4,300**	**6,909**	**544**	**6,365**	**17,056**	**8.9**	**25.2**	**40.5**	**37.3**	**22.0**	**62.2**
1985 Average	**311**	**1,830**	**5,067**	**781**	**4,286**	**15,726**	**2.0**	**11.6**	**32.2**	**27.3**	**6.1**	**36.1**
1990 Average	**1,966**	**4,296**	**8,018**	**857**	**7,161**	**16,988**	**11.6**	**25.3**	**47.2**	**42.2**	**24.5**	**53.6**
1995 Average	**1,573**	**4,002**	**8,835**	**949**	**7,886**	**17,725**	**8.9**	**22.6**	**49.8**	**44.5**	**17.8**	**45.3**
2000 Average	**2,488**	**5,203**	**11,459**	**1,040**	**10,419**	**19,701**	**12.6**	**26.4**	**58.2**	**52.9**	**21.7**	**45.4**
2005 Average	**2,334**	**5,587**	**13,714**	**1,165**	**12,549**	**20,802**	**11.2**	**26.9**	**65.9**	**60.3**	**17.0**	**40.7**
2010 Average	**1,711**	**4,906**	**11,793**	**2,353**	**9,441**	**19,178**	**8.9**	**25.6**	**61.5**	**49.2**	**14.5**	**41.6**
2011 Average	**1,861**	**4,555**	**11,436**	**2,986**	**8,450**	**18,896**	**9.9**	**24.1**	**60.5**	**44.7**	**16.3**	**39.8**
2012 Average	**2,156**	**4,271**	**10,598**	**3,205**	**7,393**	**18,482**	**11.7**	**23.1**	**57.3**	**40.0**	**20.3**	**40.3**
2013 Average	**2,009**	**3,720**	**9,859**	**3,621**	**6,237**	**18,967**	**10.6**	**19.6**	**52.0**	**32.9**	**20.4**	**37.7**
2014 Average	**1,875**	**3,237**	**9,241**	**4,176**	**5,065**	**19,100**	**9.8**	**16.9**	**48.4**	**26.5**	**20.3**	**35.0**
2015 Average	**1,507**	**2,894**	**9,449**	**4,738**	**4,711**	**19,532**	**7.7**	**14.8**	**48.4**	**24.1**	**15.9**	**30.6**
2016 Average	**1,766**	**3,446**	**10,055**	**5,261**	**4,795**	**19,692**	**9.0**	**17.5**	**51.1**	**24.3**	**17.6**	**34.3**
2017 Average	**1,746**	**3,366**	**10,144**	**6,376**	**3,768**	**19,952**	**8.8**	**16.9**	**50.8**	**18.9**	**17.2**	**33.2**
2018 Average	**1,578**	**2,888**	**9,943**	**7,601**	**2,341**	**20,512**	**7.7**	**14.1**	**48.5**	**11.4**	**15.9**	**29.0**
2019 Average	**963**	**1,639**	**9,141**	**8,471**	**670**	**20,543**	**4.7**	**8.0**	**44.5**	**3.3**	**10.5**	**17.9**
2020 Average	**766**	**886**	**7,863**	**8,498**	**-635**	**18,186**	**4.2**	**4.9**	**43.2**	**-3.5**	**9.7**	**11.3**
2021 Average	**691**	**959**	**8,474**	**8,536**	**-62**	**19,890**	**3.5**	**4.8**	**42.6**	**-0.3**	**8.2**	**11.3**
2022 Average	**981**	**1,254**	**8,329**	**9,520**	**-1,191**	**20,010**	**4.9**	**6.3**	**41.6**	**-6.0**	**11.8**	**15.1**
2023 Average	**861**	**1,339**	**8,526**	**10,235**	**-1,709**	**20,275**	**4.2**	**6.6**	**42.1**	**-8.4**	**10.1**	**15.7**
2024 January	647	1,102	8,479	10,145	-1,666	19,789	3.3	5.6	42.8	-8.4	7.6	13.0
February	565	968	8,359	10,931	-2,572	19,972	2.8	4.8	41.9	-12.9	6.8	11.6
March	711	1,228	8,046	10,698	-2,651	20,011	3.6	6.1	40.2	-13.2	8.8	15.3
April	854	1,369	8,621	10,358	-1,737	20,155	4.2	6.8	42.8	-8.6	9.9	15.9
May	890	1,527	9,190	10,417	-1,227	20,888	4.3	7.3	44.0	-5.9	9.7	16.6
June	821	1,310	8,768	10,973	-2,204	20,537	4.0	6.4	42.7	-10.7	9.4	14.9
July	721	1,409	9,087	10,618	-1,531	20,593	3.5	6.8	44.1	-7.4	7.9	15.5
August	708	1,276	8,159	10,834	-2,675	20,985	3.4	6.1	38.9	-12.7	8.7	15.6
September	831	1,266	8,171	10,688	-2,517	20,356	4.1	6.2	40.1	-12.4	10.2	15.5
October	591	1,238	7,874	10,461	-2,587	21,249	2.8	5.8	37.1	-12.2	7.5	15.7
November	694	1,163	8,180	11,474	-3,294	20,367	3.4	5.7	40.2	-16.2	8.5	14.2
December	572	1,209	8,311	10,942	-2,630	20,615	2.8	5.9	40.3	-12.8	6.9	14.5
Average	**717**	**1,257**	**8,438**	**10,709**	**-2,271**	**20,464**	**3.5**	**6.1**	**41.2**	**-11.1**	**8.5**	**14.9**
2025 January	732	1,285	8,353	10,545	-2,192	20,758	3.5	6.2	40.2	-10.6	8.8	15.4
February	589	999	7,810	10,697	-2,887	20,364	2.9	4.9	38.4	-14.2	7.5	12.8
March	680	1,152	7,564	10,779	-3,214	20,008	3.4	5.8	37.8	-16.1	9.0	15.2
April	540	1,011	7,730	10,422	-2,691	20,443	2.6	4.9	37.8	-13.2	7.0	13.1
May	654	1,095	8,044	10,324	-2,280	20,533	3.2	5.3	39.2	-11.1	8.1	13.6
June	706	1,237	7,983	10,745	-2,761	21,082	3.3	5.9	37.9	-13.1	8.8	15.5
July	675	935	7,980	10,391	-2,411	21,192	3.2	4.4	37.7	-11.4	8.5	11.7
August	822	1,302	8,193	10,683	-2,491	21,213	3.9	6.1	38.6	-11.7	10.0	15.9
September	762	1,316	8,331	11,275	-2,943	20,868	3.7	6.3	39.9	-14.1	9.2	15.8
October	612	1,080	7,503	11,074	-3,571	20,973	2.9	5.2	35.8	-17.0	8.2	14.4
November	662	1,060	7,434	11,179	-3,746	20,493	3.2	5.2	36.3	-18.3	8.9	14.3
December	680	1,080	8,291	11,308	-3,017	20,870	3.3	5.2	39.7	-14.5	8.2	13.0
Average	**677**	**1,130**	**7,937**	**10,785**	**-2,848**	**20,736**	**3.3**	**5.5**	**38.3**	**-13.7**	**8.5**	**14.2**
2026 January	817	1,239	8,173	10,780	-2,607	20,650	4.0	6.0	39.6	-12.6	10.0	15.2
February	897	1,461	8,158	11,318	-3,159	21,138	4.2	6.9	38.6	-14.9	11.0	17.9
March	799	1,467	8,155	11,868	-3,713	20,383	3.9	7.2	40.0	-18.2	9.8	18.0
April	583	1,237	7,895	13,610	-5,715	20,808	2.8	5.9	37.9	-27.5	7.4	15.7
May	233	1,014	7,611	13,540	-5,928	20,071	1.2	5.1	37.9	-29.5	3.1	13.3
June	143	1,027	7,674	12,540	-4,865	20,736	0.7	5.0	37.0	-23.5	1.9	13.4
July	R 71	R 1,016	R 7,802	R 11,410	R -3,608	R 20,612	R 0.3	R 4.9	R 37.9	R -17.5	R 0.9	R 13.0
August	NA	NA	E 8,107	E 11,891	E -3,784	E 20,297	NA	NA	E 39.9	E -18.6	NA	NA
September	NA	NA	E 7,889	E 11,830	E -3,941	E 20,898	NA	NA	E 37.7	E -18.9	NA	NA
9-Month Average	**NA**	**NA**	**E 7,939**	**E 12,090**	**E -4,150**	**E 20,614**	**NA**	**NA**	**E 38.5**	**E -20.1**	**NA**	**NA**
2025 9-Month Average	**686**	**1,149**	**8,001**	**10,649**	**-2,648**	**20,721**	**3.3**	**5.5**	**38.6**	**-12.8**	**8.6**	**14.4**
2024 9-Month Average	**750**	**1,275**	**8,544**	**10,626**	**-2,083**	**20,368**	**3.7**	**6.3**	**41.9**	**-10.2**	**8.8**	**14.9**

[a] Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, United Arab Emirates, and the Neutral Zone (between Kuwait and Saudi Arabia).

[b] See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary. See Table 3.3c for notes on which countries are included in the data.

R=Revised. E=Estimate. NA=Not available.

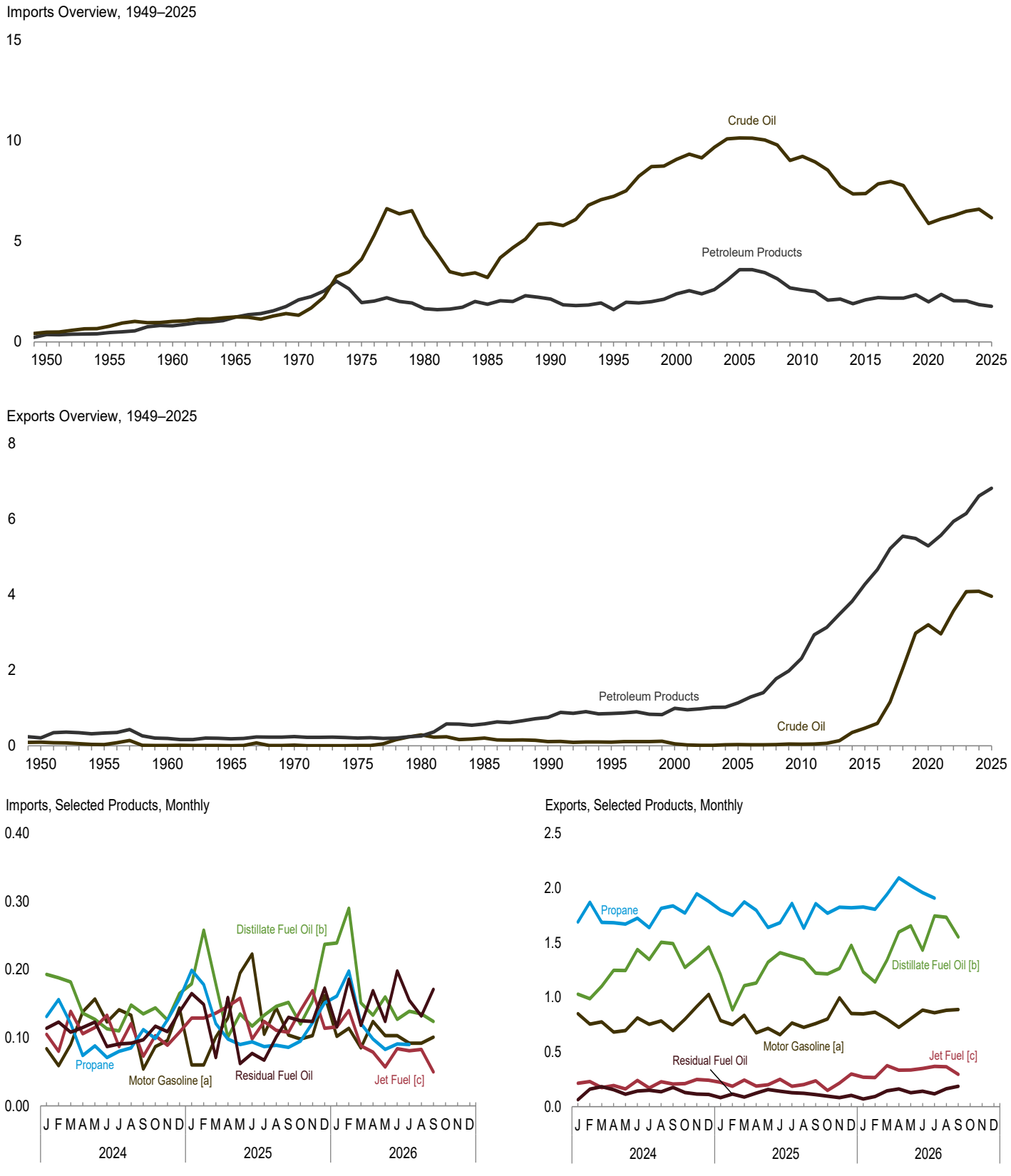
Notes: • For the feature article "Measuring Dependence on Imported Oil," published in the August 1995 *Monthly Energy Review,* see http://www.eia.gov/totalenergy/data/monthly/pdf/historical/imported_oil.pdf. • Beginning in October 1977, data include Strategic Petroleum Reserve imports. See Table 3.3b. • Annual averages may not equal average of months due to independent rounding. • U.S. geographic coverage is the 50 states and the District of Columbia. U.S. exports include shipments to U.S. territories, and imports include receipts from U.S. territories.

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

Sources: • **1949–1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976–1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981–2025:** EIA, *Petroleum Supply Annual,* annual reports, and unpublished revisions. • **2026:** EIA, *Petroleum Supply Monthly,* monthly reports; and, for the current two months, *Weekly Petroleum Status Report* data system and *Monthly Energy Review* data system calculations.

Figure 3.3b Petroleum Trade: Imports and Exports by Type

(Million Barrels per Day)



[a] Includes fuel ethanol blended into motor gasoline.
[b] Includes biodiesel and renewable diesel fuel blended into distillate fuel oil.
[c] Includes kerosene-type jet fuel only.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum.
Sources: Tables 3.3b and 3.3e.

Table 3.3b Petroleum Trade: Imports by Type

(Thousand Barrels per Day)

	Crude Oil[a]		Distillate Fuel Oil	Hydrocarbon Gas Liquids				Jet Fuel[e]	Motor Gasoline[f]	Residual Fuel Oil	Other[g]	Total
				Propane/Propylene			Total[d]					
	SPR[b]	Total		Propane	Propylene	Total[c]						
1950 Average	– –	487	7	NA	NA	–	–	([e])	(s)	329	27	850
1955 Average	– –	782	12	NA	NA	–	–	([e])	13	417	24	1,248
1960 Average	– –	1,015	35	NA	NA	NA	4	34	27	637	62	1,815
1965 Average	– –	1,238	36	NA	NA	NA	21	81	28	946	119	2,468
1970 Average	– –	1,324	147	NA	NA	26	58	144	67	1,528	150	3,419
1975 Average	– –	4,105	155	NA	NA	60	185	133	184	1,223	70	6,056
1980 Average	44	5,263	142	NA	NA	84	226	80	140	939	120	6,909
1985 Average	118	3,201	200	NA	NA	67	235	39	381	510	501	5,067
1990 Average	27	5,894	278	NA	NA	115	197	108	342	504	695	8,018
1995 Average	–	7,230	193	95	6	102	192	106	265	187	662	8,835
2000 Average	8	9,071	295	154	7	161	256	162	427	352	897	11,459
2005 Average	52	10,126	329	219	14	233	374	190	603	530	1,562	13,714
2010 Average	–	9,213	228	93	29	121	179	98	134	366	1,574	11,793
2011 Average	–	8,935	179	82	28	110	183	69	105	328	1,637	11,436
2012 Average	–	8,527	126	85	31	116	170	55	44	256	1,421	10,598
2013 Average	–	7,730	155	103	24	127	182	84	45	225	1,438	9,859
2014 Average	–	7,344	195	89	19	108	143	94	49	173	1,242	9,241
2015 Average	–	7,363	200	104	19	124	156	132	71	192	1,335	9,449
2016 Average	–	7,850	147	120	22	142	180	147	59	205	1,468	10,055
2017 Average	–	7,969	151	133	23	156	196	160	32	189	1,448	10,144
2018 Average	–	7,768	175	139	18	157	197	124	45	211	1,422	9,943
2019 Average	–	6,801	202	133	16	149	207	164	94	149	1,525	9,141
2020 Average	–	5,875	218	113	13	126	160	150	106	166	1,188	7,863
2021 Average	–	6,114	288	114	14	128	173	158	108	186	1,446	8,474
2022 Average	–	6,281	188	115	13	127	174	120	100	202	1,264	8,329
2023 Average	–	6,489	169	107	15	122	169	127	118	110	1,344	8,526
2024 January	–	6,626	193	131	15	146	201	105	84	114	1,155	8,479
February	–	6,536	188	156	15	171	219	80	59	123	1,154	8,359
March	–	6,180	182	121	14	135	182	139	90	108	1,165	8,046
April	–	6,593	136	74	15	88	134	106	138	115	1,400	8,621
May	–	7,043	127	88	15	103	150	115	157	123	1,474	9,190
June	–	6,685	113	71	16	87	141	133	123	87	1,487	8,768
July	–	7,116	110	80	15	95	150	87	141	91	1,393	9,087
August	–	6,326	148	85	14	99	152	121	133	92	1,187	8,159
September	–	6,455	135	113	15	127	188	73	54	97	1,169	8,171
October	–	6,352	144	99	15	115	168	103	87	117	903	7,874
November	–	6,578	126	126	16	142	199	89	96	109	985	8,180
December	–	6,557	165	157	13	170	236	108	144	138	963	8,311
Average	–	6,588	147	108	15	123	177	105	109	109	1,203	8,438
2025 January	–	6,649	179	199	12	211	279	129	60	165	892	8,353
February	–	6,045	258	178	13	191	256	129	60	149	914	7,810
March	–	5,756	179	121	17	138	198	136	101	71	1,124	7,564
April	–	6,022	101	98	13	111	172	146	129	159	1,002	7,730
May	–	6,263	135	90	14	104	162	158	195	62	1,068	8,044
June	–	6,165	117	94	13	106	158	98	223	77	1,146	7,983
July	–	6,324	133	87	14	100	152	124	105	67	1,076	7,980
August	–	6,283	146	89	15	103	165	111	144	101	1,242	8,193
September	–	6,399	152	86	12	98	164	108	104	130	1,274	8,331
October	–	5,898	120	95	11	106	185	140	98	125	937	7,503
November	–	5,780	154	122	13	135	220	169	103	124	883	7,434
December	–	6,413	237	151	10	161	246	114	162	173	946	8,291
Average	–	6,168	159	117	13	130	196	130	124	117	1,043	7,937
2026 January	–	6,469	239	161	11	173	251	116	102	116	880	8,173
February	–	6,457	290	198	12	210	274	140	114	186	697	8,158
March	–	6,536	151	121	14	135	230	88	85	118	947	8,155
April	–	6,257	133	98	14	111	200	79	124	169	933	7,895
May	–	5,953	160	83	14	97	192	57	103	124	1,023	7,611
June	–	6,044	127	91	13	105	206	84	103	198	912	7,674
July	–	R 6,224	R 139	R 90	R 15	R 105	R 200	R 81	R 92	R 155	R 912	R 7,802
August	–	E 6,709	E 135	NA	NA	E 90	NA	E 83	E 92	E 132	NA	E 8,107
September	–	E 6,398	E 124	NA	NA	E 83	NA	E 50	E 101	E 171	NA	E 7,889
9-Month Average	–	E 6,338	E 166	NA	NA	E 122	NA	E 86	E 102	E 152	NA	E 7,939
2025 9-Month Average	–	6,214	155	115	14	129	189	126	125	108	1,083	8,001
2024 9-Month Average	–	6,619	148	102	15	117	168	107	109	105	1,287	8,544

[a] Includes lease condensate.

[b] "SPR" is the Strategic Petroleum Reserve, which began in October 1977. Through 2003, includes crude oil imports by SPR only; beginning in 2004, includes crude oil imports by SPR, and crude oil imports into SPR by others.

[c] Propane and propylene. Through 1983, also includes 40% of "Butane-Propane Mixtures" and 30% of "Ethane-Propane Mixtures."

[d] Ethane, propane, normal butane, isobutane, natural gasoline (pentanes plus), and refinery olefins (ethylene, propylene, butylene, and isobutylene). Through 1983, also includes plant condensate and unfractionated stream.

[e] Beginning in 1965, includes kerosene-type jet fuel. (Through 1964, kerosene-type jet fuel is included with kerosene in "Other.") For 1956–2004, also includes naphtha-type jet fuel. (Through 1955, naphtha-type jet fuel is included in "Motor Gasoline." Beginning in 2005, naphtha-type jet fuel is included in "Other.")

[f] Finished motor gasoline. Through 1955, also includes naphtha-type jet fuel. Through 1963, also includes aviation gasoline and special naphthas. Through 1980, also includes motor gasoline blending components.

[g] Asphalt and road oil, aviation gasoline blending components, kerosene, lubricants, petrochemical feedstocks, petroleum coke, unfinished oils, waxes, and miscellaneous products. Through 1964, also includes kerosene-type jet fuel. Beginning in 1964, also includes finished aviation gasoline and special naphthas. Beginning in 1981, also includes motor gasoline blending components. Beginning in 1993, also includes fuel ethanol. Beginning in 2005, also includes naphtha-type jet fuel. Beginning in 2009, also includes biofuels (excluding fuel ethanol) and other hydrocarbons. For 2011–2018, also includes oxygenates (excluding fuel ethanol).

R=Revised. E=Estimate. NA=Not available. – – =Not applicable. – =No data reported. (s)=Less than 500 barrels per day.

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

Sources: • **1949–1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976–1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981–2025:** EIA, *Petroleum Supply Annual,* annual reports, and unpublished revisions. • **2026:** EIA, *Petroleum Supply Monthly,* monthly reports; and, for the current two months, *Weekly Petroleum Status Report* data system and *Monthly Energy Review* data system calculations.

Table 3.3c Petroleum Trade: Imports From OPEC Countries

(Thousand Barrels per Day)

	Algeria[a]	Gabon[b]	Iraq	Kuwait[c]	Libya[d]	Nigeria[e]	Saudi Arabia[c]	Venezuela	Other[f]	Total OPEC
1960 Average	([a])	([b])	**22**	**182**	([d])	([e])	**84**	**911**	**34**	**1,233**
1965 Average	([a])	([b])	**16**	**74**	**42**	([e])	**158**	**994**	**155**	**1,439**
1970 Average	**8**	([b])	**–**	**48**	**47**	([e])	**30**	**989**	**172**	**1,294**
1975 Average	**282**	**27**	**2**	**16**	**232**	**762**	**715**	**702**	**862**	**3,601**
1980 Average	**488**	**26**	**28**	**27**	**554**	**857**	**1,261**	**481**	**578**	**4,300**
1985 Average	**187**	**52**	**46**	**21**	**4**	**293**	**168**	**605**	**454**	**1,830**
1990 Average	**280**	**64**	**518**	**86**	**–**	**800**	**1,339**	**1,025**	**183**	**4,296**
1995 Average	**234**	([b])	**–**	**218**	**–**	**627**	**1,344**	**1,480**	**98**	**4,002**
2000 Average	**225**	([b])	**620**	**272**	**–**	**896**	**1,572**	**1,546**	**72**	**5,203**
2005 Average	**478**	([b])	**531**	**243**	**56**	**1,166**	**1,537**	**1,529**	**47**	**5,587**
2010 Average	**510**	([b])	**415**	**197**	**70**	**1,023**	**1,096**	**988**	**608**	**4,906**
2011 Average	**358**	([b])	**459**	**191**	**15**	**818**	**1,195**	**951**	**567**	**4,555**
2012 Average	**242**	([b])	**476**	**305**	**61**	**441**	**1,365**	**960**	**422**	**4,271**
2013 Average	**115**	([b])	**341**	**328**	**59**	**281**	**1,329**	**806**	**462**	**3,720**
2014 Average	**110**	([b])	**369**	**311**	**6**	**92**	**1,166**	**789**	**392**	**3,237**
2015 Average	**108**	([b])	**229**	**204**	**7**	**81**	**1,059**	**827**	**379**	**2,894**
2016 Average	**182**	**1**	**424**	**210**	**16**	**235**	**1,106**	**796**	**475**	**3,446**
2017 Average	**189**	**6**	**604**	**145**	**65**	**334**	**955**	**674**	**394**	**3,366**
2018 Average	**176**	**5**	**521**	**79**	**56**	**189**	**901**	**586**	**375**	**2,888**
2019 Average	**78**	**–**	**341**	**45**	**63**	**193**	**530**	**92**	**296**	**1,639**
2020 Average	**15**	**–**	**176**	**28**	**9**	**75**	**522**	**–**	**61**	**886**
2021 Average	**40**	**(s)**	**157**	**33**	**91**	**125**	**430**	**–**	**84**	**959**
2022 Average	**59**	**2**	**311**	**42**	**79**	**105**	**559**	**–**	**95**	**1,254**
2023 Average	**72**	**–**	**316**	**46**	**80**	**160**	**439**	**132**	**94**	**1,339**
2024 January	73	–	217	16	56	179	386	159	16	1,102
February	42	–	161	45	74	154	348	142	2	968
March	75	–	228	31	134	148	373	180	59	1,228
April	28	–	350	42	51	248	382	213	54	1,369
May	89	11	273	84	132	175	486	241	36	1,527
June	87	22	292	113	41	137	311	226	81	1,310
July	79	–	286	61	92	219	321	311	40	1,409
August	70	–	258	64	92	153	333	263	45	1,276
September	61	–	321	41	24	168	388	205	59	1,266
October	69	21	222	64	108	165	221	295	73	1,238
November	79	–	284	36	68	107	269	236	84	1,163
December	107	–	236	47	61	161	219	297	80	1,209
Average	**72**	**4**	**261**	**54**	**78**	**168**	**336**	**231**	**53**	**1,257**
2025 January	28	–	230	61	112	133	377	303	41	1,285
February	119	–	194	86	–	81	281	223	14	999
March	50	–	227	99	44	135	235	268	94	1,152
April	39	–	232	14	40	227	207	186	66	1,011
May	66	20	229	42	48	182	334	138	36	1,095
June	56	23	275	12	91	282	396	91	9	1,237
July	68	22	307	21	65	122	322	7	(s)	935
August	124	22	330	35	103	217	417	39	15	1,302
September	99	51	210	97	78	228	339	102	112	1,316
October	42	37	177	30	104	161	354	135	40	1,080
November	49	46	285	21	65	113	320	139	24	1,060
December	74	17	284	39	72	127	323	137	6	1,080
Average	**68**	**20**	**249**	**46**	**69**	**167**	**326**	**147**	**38**	**1,130**
2026 January	87	35	344	41	43	80	401	200	9	1,239
February	15	11	310	40	111	139	527	293	16	1,461
March	76	20	256	17	47	113	493	439	6	1,467
April	78	7	134	11	58	46	421	482	–	1,237
May	105	–	90	12	20	113	131	544	–	1,014
June	68	8	17	–	75	15	123	721	–	1,027
July	34	7	48	–	46	64	21	795	–	1,016
7-Month Average	**67**	**13**	**170**	**17**	**56**	**81**	**300**	**498**	**4**	**1,206**
2025 7-Month Average	**60**	**9**	**243**	**48**	**58**	**166**	**308**	**173**	**38**	**1,103**
2024 7-Month Average	**68**	**5**	**259**	**56**	**83**	**180**	**373**	**211**	**41**	**1,275**

[a] Algeria joined OPEC in 1969. For 1960–1968, Algeria is included in "Total Non-OPEC" on Table 3.3d.

[b] Gabon joined OPEC in 1975; withdrew from OPEC in 1995; and rejoined OPEC in July 2016. For 1960–1974 and 1995–June 2016, Gabon is included in "Total Non-OPEC" on Table 3.3d.

[c] Through 1970, includes half the imports from the Neutral Zone between Kuwait and Saudi Arabia. Beginning in 1971, imports from the Neutral Zone are reported as originating in either Kuwait or Saudi Arabia depending on the country reported to U.S. Customs.

[d] Libya joined OPEC in 1962. For 1960 and 1961, Libya is included in "Total Non-OPEC" on Table 3.3d.

[e] Nigeria joined OPEC in 1971. For 1960–1970, Nigeria is included in "Total Non-OPEC" on Table 3.3d.

[f] Includes these countries for the dates indicated: Angola (2007–2023), Congo-Brazzaville (June 2018 forward), Ecuador (1973–1992 and November 2007–2019), Equatorial Guinea (May 2017 forward), Indonesia (1962–2008 and January–November 2016), Iran (1960 forward), Qatar (1961–2018), and United Arab Emirates (1967–April 2026).

– =No data reported. (s)=Less than 500 barrels per day.

Notes: • See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary. Petroleum imports not classified as "OPEC" on this table are included on Table 3.3d. • The country of origin for petroleum products may not be the country of origin for the crude oil from which the products were produced. For example, refined products imported from West European refining areas may have been produced from Middle East crude oil. • Includes imports for the Strategic Petroleum Reserve, which began in October 1977. • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#petroleum (Excel and CSV files) for all available annual data beginning in 1960 and monthly data beginning in 1973.

Sources: • **1960–1972:** Bureau of Mines, *Minerals Yearbook,* annual reports. • **1973–1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976–1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981–2025:** EIA, *Petroleum Supply Annual,* annual reports. • **2026:** EIA, *Petroleum Supply Monthly,* monthly reports.

Table 3.3d Petroleum Trade: Imports From Non-OPEC Countries

(Thousand Barrels per Day)

	Brazil	Canada	Colombia	Ecuador[a]	Mexico	Nether-lands	Norway	Russia[b]	United Kingdom	U.S. Virgin Islands	Other	Total Non-OPEC
1960 Average	**1**	**120**	**42**	**NA**	**16**	**NA**	**NA**	**–**	**(s)**	**NA**	**NA**	**581**
1965 Average	**–**	**323**	**51**	**–**	**48**	**1**	**–**	**–**	**(s)**	**–**	**606**	**1,029**
1970 Average	**2**	**766**	**46**	**–**	**42**	**39**	**–**	**3**	**11**	**189**	**1,027**	**2,126**
1975 Average	**5**	**846**	**9**	**(a)**	**71**	**19**	**17**	**14**	**14**	**406**	**1,052**	**2,454**
1980 Average	**3**	**455**	**4**	**(a)**	**533**	**2**	**144**	**1**	**176**	**388**	**903**	**2,609**
1985 Average	**61**	**770**	**23**	**(a)**	**816**	**58**	**32**	**8**	**310**	**247**	**913**	**3,237**
1990 Average	**49**	**934**	**182**	**(a)**	**755**	**55**	**102**	**45**	**189**	**282**	**1,128**	**3,721**
1995 Average	**8**	**1,332**	**219**	**97**	**1,068**	**15**	**273**	**25**	**383**	**278**	**1,136**	**4,833**
2000 Average	**51**	**1,807**	**342**	**128**	**1,373**	**30**	**343**	**72**	**366**	**291**	**1,453**	**6,257**
2005 Average	**156**	**2,181**	**196**	**283**	**1,662**	**151**	**233**	**410**	**396**	**328**	**2,130**	**8,127**
2010 Average	**272**	**2,535**	**365**	**(a)**	**1,284**	**108**	**89**	**612**	**256**	**253**	**1,112**	**6,887**
2011 Average	**253**	**2,729**	**433**	**(a)**	**1,206**	**100**	**113**	**624**	**159**	**186**	**1,077**	**6,881**
2012 Average	**226**	**2,946**	**433**	**(a)**	**1,035**	**99**	**75**	**477**	**149**	**12**	**874**	**6,327**
2013 Average	**151**	**3,142**	**389**	**(a)**	**919**	**89**	**54**	**460**	**147**	**–**	**786**	**6,138**
2014 Average	**160**	**3,388**	**318**	**(a)**	**842**	**85**	**45**	**330**	**117**	**–**	**720**	**6,004**
2015 Average	**215**	**3,765**	**395**	**(a)**	**758**	**57**	**61**	**371**	**123**	**–**	**811**	**6,554**
2016 Average	**167**	**3,780**	**483**	**(a)**	**669**	**60**	**76**	**441**	**122**	**(s)**	**812**	**6,610**
2017 Average	**224**	**4,054**	**362**	**(a)**	**682**	**62**	**79**	**389**	**111**	**–**	**814**	**6,778**
2018 Average	**171**	**4,292**	**333**	**(a)**	**719**	**62**	**94**	**375**	**146**	**–**	**862**	**7,055**
2019 Average	**193**	**4,432**	**373**	**(a)**	**650**	**113**	**91**	**520**	**146**	**–**	**984**	**7,502**
2020 Average	**126**	**4,125**	**284**	**186**	**751**	**82**	**29**	**540**	**85**	**1**	**770**	**6,977**
2021 Average	**143**	**4,340**	**203**	**168**	**711**	**126**	**72**	**673**	**104**	**22**	**952**	**7,514**
2022 Average	**193**	**4,365**	**242**	**169**	**808**	**83**	**41**	**147**	**106**	**–**	**921**	**7,075**
2023 Average	**257**	**4,435**	**228**	**140**	**910**	**84**	**40**	**[c] (s)**	**95**	**–**	**998**	**7,187**
2024 January	305	4,857	289	87	717	39	28	–	90	–	965	7,377
February	240	4,810	196	131	690	89	5	–	212	–	1,018	7,391
March	283	4,425	200	114	577	82	7	–	109	6	1,016	6,818
April	216	4,527	321	105	643	137	43	–	86	(s)	1,174	7,253
May	347	4,707	267	187	661	132	77	–	146	–	1,139	7,663
June	291	4,519	224	153	747	108	34	–	120	–	1,263	7,458
July	299	4,918	289	169	517	164	62	–	100	–	1,161	7,678
August	346	4,406	216	125	572	110	60	–	108	–	939	6,882
September	188	4,567	271	114	636	110	67	–	116	–	836	6,905
October	257	4,577	261	116	563	55	27	–	107	–	673	6,636
November	356	4,591	297	174	620	87	7	–	60	–	827	7,017
December	236	4,937	233	16	571	106	62	–	76	10	856	7,103
Average	**281**	**4,654**	**255**	**124**	**626**	**102**	**40**	**–**	**110**	**1**	**988**	**7,181**
2025 January	192	5,003	258	113	484	63	74	–	89	1	790	7,068
February	249	4,774	199	113	552	69	71	–	22	–	763	6,811
March	232	4,329	190	107	479	84	14	–	85	–	892	6,412
April	153	4,212	296	122	454	126	48	–	112	–	1,197	6,719
May	323	4,295	246	107	517	196	50	–	129	–	1,086	6,949
June	254	4,195	209	119	505	200	18	–	96	–	1,151	6,746
July	325	4,595	276	172	431	114	39	–	72	–	1,022	7,045
August	307	4,299	270	66	524	138	20	–	106	–	1,161	6,891
September	301	4,616	214	128	570	65	21	–	101	–	1,000	7,015
October	144	4,398	155	53	519	70	12	–	116	–	955	6,422
November	103	4,280	185	37	583	44	18	–	106	22	995	6,374
December	191	4,995	224	97	441	68	9	–	67	7	1,113	7,211
Average	**231**	**4,499**	**227**	**103**	**504**	**103**	**32**	**–**	**92**	**2**	**1,012**	**6,806**
2026 January	236	4,719	228	96	463	26	18	–	78	–	1,070	6,934
February	144	4,722	302	35	443	74	12	–	29	–	937	6,698
March	151	4,690	208	106	452	56	1	–	119	11	893	6,689
April	81	4,679	214	79	407	75	–	–	49	5	1,070	6,658
May	182	4,496	201	183	397	114	10	–	88	–	927	6,598
June	124	4,703	189	172	348	67	31	–	55	–	960	6,648
July	270	4,773	192	169	485	59	41	–	53	–	744	6,786
7-Month Average	**171**	**4,682**	**218**	**121**	**428**	**67**	**16**	**–**	**68**	**2**	**943**	**6,717**
2025 7-Month Average	**247**	**4,485**	**240**	**122**	**488**	**122**	**44**	**–**	**87**	**(s)**	**987**	**6,823**
2024 7-Month Average	**284**	**4,681**	**255**	**135**	**650**	**107**	**37**	**–**	**123**	**1**	**1,105**	**7,377**

[a] Ecuador was a member of OPEC from 1973–1992 and November 2007–2019. For those time periods, Ecuador is included in "Total OPEC" on Table 3.3c.

[b] Through 1992, may include imports from republics other than Russia in the former U.S.S.R. See "Union of Soviet Socialist Republics (U.S.S.R.)" in Glossary.

[c] A small amount of Russian crude oil entered the United States in November 2023 from the Bahamas. The oil originated in Russia and was exported to the Bahamas prior to the signing of Executive Order 14066 on March 8, 2022.

NA=Not available. – =No data reported. (s)=Less than 500 barrels per day.

Notes: • See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary. Petroleum imports not classified as "OPEC" on Table 3.3c are included on this table. • The country of origin for petroleum products may not be the country of origin for the crude oil from which the products were produced. For example, refined products imported from West European refining areas may have been produced from Middle East crude oil. • Includes imports for the Strategic Petroleum Reserve, which began in October 1977. • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#petroleum (Excel and CSV files) for all available annual data beginning in 1960 and monthly data beginning in 1973.

Sources: • **1960–1972:** Bureau of Mines, *Minerals Yearbook,* annual reports. • **1973–1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976–1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981–2025:** EIA, *Petroleum Supply Annual,* annual reports. • **2026:** EIA, *Petroleum Supply Monthly,* monthly reports.

Table 3.3e Petroleum Trade: Exports by Type

(Thousand Barrels per Day)

	Crude Oil[a]	Distillate Fuel Oil	Hydrocarbon Gas Liquids		Jet Fuel[d]	Motor Gasoline[e]	Residual Fuel Oil	Other[f]	Total
			Propane[b]	Total[c]					
1950 Average	**95**	**34**	**NA**	**4**	**(d)**	**68**	**44**	**58**	**305**
1955 Average	**32**	**67**	**NA**	**12**	**(s)**	**95**	**93**	**69**	**368**
1960 Average	**8**	**27**	**NA**	**8**	**(s)**	**37**	**51**	**71**	**202**
1965 Average	**3**	**10**	**NA**	**21**	**3**	**2**	**41**	**108**	**187**
1970 Average	**14**	**2**	**13**	**27**	**6**	**1**	**54**	**154**	**259**
1975 Average	**6**	**1**	**13**	**26**	**2**	**2**	**15**	**158**	**209**
1980 Average	**287**	**3**	**10**	**21**	**1**	**1**	**33**	**197**	**544**
1985 Average	**204**	**67**	**48**	**64**	**13**	**10**	**197**	**225**	**781**
1990 Average	**109**	**109**	**28**	**41**	**43**	**55**	**211**	**287**	**857**
1995 Average	**95**	**183**	**38**	**59**	**26**	**104**	**136**	**12**	**949**
2000 Average	**50**	**173**	**53**	**78**	**32**	**144**	**139**	**46**	**1,040**
2005 Average	**32**	**138**	**37**	**60**	**53**	**136**	**251**	**496**	**1,165**
2010 Average	**42**	**656**	**109**	**164**	**84**	**296**	**405**	**706**	**2,353**
2011 Average	**47**	**854**	**124**	**249**	**97**	**479**	**424**	**835**	**2,986**
2012 Average	**67**	**1,007**	**171**	**314**	**132**	**409**	**388**	**886**	**3,205**
2013 Average	**134**	**1,134**	**302**	**468**	**156**	**373**	**362**	**994**	**3,621**
2014 Average	**351**	**1,101**	**423**	**703**	**163**	**442**	**364**	**1,052**	**4,176**
2015 Average	**465**	**1,176**	**615**	**966**	**168**	**476**	**326**	**1,161**	**4,738**
2016 Average	**591**	**1,179**	**799**	**1,211**	**175**	**635**	**298**	**1,171**	**5,261**
2017 Average	**1,158**	**1,381**	**914**	**1,404**	**184**	**749**	**308**	**1,192**	**6,376**
2018 Average	**2,048**	**1,289**	**949**	**1,602**	**223**	**879**	**321**	**1,240**	**7,601**
2019 Average	**2,982**	**1,306**	**1,098**	**1,830**	**220**	**815**	**229**	**1,090**	**8,471**
2020 Average	**3,206**	**1,187**	**1,262**	**2,081**	**96**	**722**	**148**	**1,058**	**8,498**
2021 Average	**2,963**	**1,069**	**1,327**	**2,309**	**107**	**816**	**97**	**1,173**	**8,536**
2022 Average	**3,576**	**1,204**	**1,399**	**2,409**	**178**	**867**	**110**	**1,175**	**9,520**
2023 Average	**4,082**	**1,116**	**1,618**	**2,681**	**173**	**816**	**125**	**1,242**	**10,235**
2024 January	3,903	1,030	1,689	2,713	215	851	64	1,370	10,145
February	4,593	987	1,870	2,899	230	755	160	1,306	10,931
March	4,333	1,102	1,687	2,769	174	776	183	1,361	10,698
April	3,991	1,248	1,683	2,857	193	682	156	1,231	10,358
May	4,217	1,246	1,671	2,718	162	696	114	1,265	10,417
June	4,160	1,438	1,725	2,855	241	813	144	1,321	10,973
July	4,263	1,347	1,638	2,766	172	753	150	1,168	10,618
August	3,985	1,505	1,815	2,896	229	785	137	1,297	10,834
September	3,796	1,492	1,837	3,060	207	697	176	1,261	10,688
October	3,865	1,273	1,771	2,927	211	800	129	1,255	10,461
November	4,289	1,362	1,948	3,223	249	917	116	1,318	11,474
December	3,752	1,461	1,878	3,093	242	1,027	112	1,255	10,942
Average	**4,093**	**1,291**	**1,767**	**2,897**	**210**	**797**	**137**	**1,284**	**10,709**
2025 January	3,968	1,209	1,798	3,012	224	789	82	1,261	10,545
February	4,263	885	1,750	3,057	186	750	115	1,441	10,697
March	3,985	1,107	1,873	3,098	244	837	88	1,419	10,779
April	3,835	1,132	1,797	3,106	189	675	124	1,360	10,422
May	3,610	1,322	1,640	3,007	201	718	158	1,309	10,324
June	3,761	1,408	1,682	2,996	251	659	141	1,528	10,745
July	3,499	1,376	1,859	3,187	187	765	128	1,250	10,391
August	3,998	1,344	1,633	2,890	202	726	122	1,401	10,683
September	4,356	1,221	1,858	3,241	237	760	111	1,348	11,275
October	4,401	1,215	1,770	3,065	149	803	97	1,343	11,074
November	3,818	1,265	1,824	3,199	217	997	82	1,601	11,179
December	4,068	1,477	1,820	3,093	300	853	104	1,412	11,308
Average	**3,961**	**1,250**	**1,775**	**3,079**	**216**	**778**	**113**	**1,388**	**10,785**
2026 January	3,922	1,232	1,826	3,149	270	849	70	1,288	10,780
February	4,345	1,141	1,806	3,343	267	865	94	1,262	11,318
March	4,043	1,341	1,943	3,527	376	803	146	1,632	11,868
April	5,593	1,597	2,093	3,659	334	726	163	1,538	13,610
May	5,728	1,655	2,023	3,776	336	806	128	1,110	13,540
June	4,735	1,432	1,958	3,716	350	883	141	1,282	12,540
July	R 3,556	R 1,745	R 1,908	R 3,444	R 368	R 859	R 118	R 1,320	R 11,410
August	E 3,819	E 1,733	NA	NA	E 365	E 882	E 164	NA	E 11,891
September	E 4,021	E 1,552	NA	NA	E 296	E 889	E 187	NA	E 11,830
9-Month Average	**E 4,415**	**E 1,496**	**NA**	**NA**	**E 330**	**E 840**	**E 135**	**NA**	**E 12,090**
2025 9-Month Average	**3,915**	**1,226**	**1,765**	**3,066**	**214**	**742**	**119**	**1,367**	**10,649**
2024 9-Month Average	**4,136**	**1,266**	**1,734**	**2,836**	**202**	**757**	**143**	**1,287**	**10,626**

[a] Includes lease condensate.

[b] Through 1983, also includes 40% of "Butane-Propane Mixtures." Through 2012, also includes propylene.

[c] Ethane, propane, normal butane, isobutane, and natural gasoline (pentanes plus). Through 2012, also includes refinery olefins (ethylene, propylene, butylene, and isobutylene).

[d] Beginning in 1965, includes kerosene-type jet fuel. (Through 1964, kerosene-type jet fuel is included with kerosene in "Other.") For 1953–2004, also includes naphtha-type jet fuel. (Through 1952, naphtha-type jet fuel is included in the products from which it was blended: motor gasoline, kerosene, and distillate fuel oil. Beginning in 2005, naphtha-type jet fuel is included in "Other.")

[e] Finished motor gasoline. Through 1952, also includes naphtha-type jet fuel. Through 1963, also includes aviation gasoline and special naphthas. Through 1980, also includes motor gasoline blending components.

[f] Asphalt and road oil, kerosene, lubricants, petrochemical feedstocks, petroleum coke, unfinished oils, waxes, and miscellaneous products. Through 1964, also includes kerosene-type jet fuel. Beginning in 1964, also includes finished aviation gasoline and special naphthas. Beginning in 1981, also includes motor gasoline blending components. Beginning in 2005, also includes naphtha-type jet fuel. For 2009–2018, also includes oxygenates (excluding fuel ethanol). Beginning in 2010, also includes fuel ethanol. Beginning in 2011, also includes biofuels (excluding fuel ethanol).

R=Revised. E=Estimate. NA=Not available. (s)=Less than 500 barrels per day.

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

Sources: • **1949–1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976–1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981–2025:** EIA, *Petroleum Supply Annual,* annual reports, and unpublished revisions. • **2026:** EIA, *Petroleum Supply Monthly,* monthly reports; and, for the current two months, *Weekly Petroleum Status Report* data system and *Monthly Energy Review* data system calculations.

Table 3.3f Petroleum Trade: Exports by Country of Destination

(Thousand Barrels per Day)

	Brazil	Canada	China	India	Japan	Mexico	Nether-lands	Singa-pore	South Korea	United Kingdom	Other	Total
1960 Average	**4**	**34**	**NA**	**NA**	**62**	**18**	**6**	**NA**	**NA**	**12**	**NA**	**202**
1965 Average	**3**	**26**	**NA**	**NA**	**40**	**27**	**10**	**NA**	**NA**	**12**	**NA**	**187**
1970 Average	**7**	**31**	**NA**	**NA**	**69**	**33**	**15**	**NA**	**NA**	**12**	**NA**	**259**
1975 Average	**6**	**22**	**NA**	**1**	**27**	**42**	**23**	**NA**	**NA**	**7**	**NA**	**209**
1980 Average	**4**	**108**	**–**	**1**	**32**	**28**	**23**	**6**	**2**	**7**	**335**	**544**
1985 Average	**3**	**74**	**–**	**2**	**108**	**61**	**44**	**24**	**27**	**14**	**424**	**781**
1990 Average	**2**	**91**	**–**	**6**	**92**	**89**	**54**	**15**	**60**	**11**	**438**	**857**
1995 Average	**16**	**73**	**2**	**3**	**76**	**125**	**33**	**46**	**57**	**14**	**505**	**949**
2000 Average	**28**	**110**	**3**	**3**	**90**	**358**	**42**	**36**	**20**	**10**	**342**	**1,040**
2005 Average	**39**	**181**	**12**	**11**	**56**	**268**	**25**	**43**	**16**	**21**	**492**	**1,165**
2010 Average	**123**	**233**	**52**	**10**	**88**	**448**	**165**	**128**	**13**	**19**	**1,073**	**2,353**
2011 Average	**157**	**351**	**73**	**17**	**79**	**570**	**248**	**121**	**15**	**35**	**1,320**	**2,986**
2012 Average	**166**	**416**	**85**	**36**	**89**	**565**	**239**	**115**	**16**	**41**	**1,435**	**3,205**
2013 Average	**179**	**549**	**129**	**41**	**117**	**532**	**274**	**136**	**13**	**36**	**1,616**	**3,621**
2014 Average	**217**	**809**	**89**	**70**	**150**	**559**	**241**	**124**	**46**	**53**	**1,817**	**4,176**
2015 Average	**188**	**955**	**191**	**78**	**166**	**690**	**226**	**122**	**65**	**89**	**1,968**	**4,738**
2016 Average	**260**	**935**	**203**	**140**	**250**	**880**	**265**	**147**	**108**	**92**	**1,980**	**5,261**
2017 Average	**395**	**871**	**447**	**200**	**350**	**1,081**	**251**	**210**	**176**	**186**	**2,209**	**6,376**
2018 Average	**400**	**1,024**	**374**	**297**	**466**	**1,194**	**337**	**185**	**382**	**272**	**2,670**	**7,601**
2019 Average	**474**	**1,035**	**196**	**460**	**555**	**1,158**	**451**	**126**	**580**	**336**	**3,102**	**8,471**
2020 Average	**438**	**932**	**715**	**471**	**519**	**1,042**	**456**	**167**	**451**	**350**	**2,959**	**8,498**
2021 Average	**418**	**835**	**632**	**566**	**488**	**1,156**	**419**	**227**	**565**	**318**	**2,913**	**8,536**
2022 Average	**394**	**845**	**641**	**486**	**501**	**1,152**	**533**	**391**	**550**	**414**	**3,613**	**9,520**
2023 Average	**239**	**850**	**993**	**402**	**589**	**1,162**	**833**	**355**	**625**	**392**	**3,794**	**10,235**
2024 January	323	893	886	297	491	1,083	905	217	602	523	3,925	10,145
February	221	788	944	363	597	1,133	1,122	371	636	425	4,331	10,931
March	166	891	833	485	588	1,160	825	411	897	327	4,113	10,698
April	254	914	1,001	505	487	1,024	914	169	558	513	4,020	10,358
May	186	816	1,032	452	480	1,122	855	353	877	290	3,953	10,417
June	312	770	877	594	733	1,245	1,024	378	834	388	3,819	10,973
July	322	916	849	394	584	1,174	1,156	158	617	445	4,003	10,618
August	249	816	696	427	629	1,213	1,254	373	818	438	3,921	10,834
September	306	872	849	461	761	1,165	993	440	719	385	3,737	10,688
October	203	821	753	387	625	1,104	1,153	383	576	529	3,925	10,461
November	282	1,075	858	505	675	1,275	1,285	222	697	486	4,116	11,474
December	273	807	861	517	551	1,372	1,227	460	530	433	3,909	10,942
Average	**258**	**865**	**869**	**449**	**600**	**1,173**	**1,059**	**328**	**697**	**432**	**3,980**	**10,709**
2025 January	288	884	893	362	472	1,164	1,077	282	503	362	4,259	10,545
February	338	968	926	588	694	1,042	810	383	722	285	3,941	10,697
March	341	854	898	480	723	1,251	1,071	210	755	377	3,819	10,779
April	380	741	546	733	601	999	1,140	179	726	346	4,032	10,422
May	345	727	426	687	633	1,039	1,319	85	716	261	4,085	10,324
June	437	1,035	381	831	600	1,082	1,286	152	569	260	4,112	10,745
July	307	1,125	563	407	643	1,003	940	143	637	289	4,334	10,391
August	443	959	527	734	513	959	987	139	713	268	4,442	10,683
September	273	873	679	795	735	1,095	864	118	988	375	4,480	11,275
October	522	809	698	618	876	1,057	1,016	157	902	353	4,065	11,074
November	302	835	699	541	733	1,213	1,395	108	731	463	4,159	11,179
December	455	827	667	499	694	1,100	1,599	161	687	441	4,180	11,308
Average	**370**	**886**	**657**	**605**	**659**	**1,084**	**1,127**	**175**	**720**	**340**	**4,160**	**10,785**
2026 January	331	734	736	437	677	901	1,424	71	684	473	4,313	10,780
February	211	1,010	744	516	583	1,101	1,686	72	658	301	4,435	11,318
March	237	899	878	698	885	943	1,235	184	1,050	429	4,431	11,868
April	343	905	763	801	1,286	964	1,650	462	1,054	348	5,033	13,610
May	255	696	912	635	1,717	1,055	1,609	409	1,039	363	4,851	13,540
June	407	856	946	550	1,439	1,234	1,047	206	863	315	4,676	12,540
July	452	774	921	531	1,104	1,003	1,311	169	592	413	4,141	11,410
7-Month Average	**320**	**836**	**844**	**596**	**1,104**	**1,027**	**1,420**	**226**	**850**	**379**	**4,553**	**12,155**
2025 7-Month Average	**348**	**904**	**660**	**582**	**623**	**1,084**	**1,095**	**203**	**661**	**312**	**4,085**	**10,555**
2024 7-Month Average	**255**	**856**	**917**	**441**	**565**	**1,134**	**970**	**293**	**718**	**416**	**4,021**	**10,587**

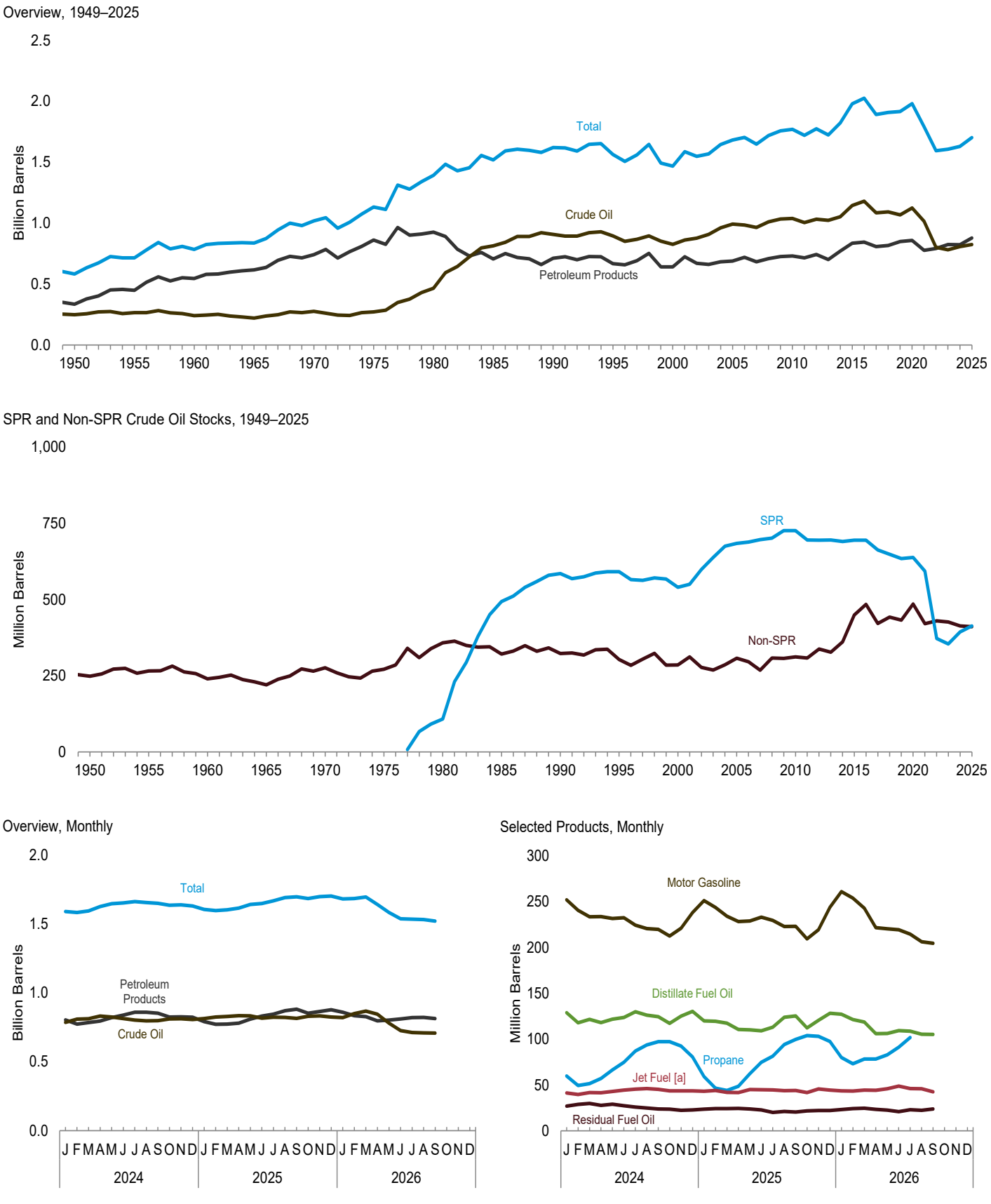
NA=Not available. – =No data reported.

Notes: • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#petroleum (Excel and CSV files) for all available annual data beginning in 1960 and monthly data beginning in 1981.

Sources: • **1960–1972:** Bureau of Mines, *Minerals Yearbook,* annual reports. • **1973–1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976–1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981–2025:** EIA, *Petroleum Supply Annual,* annual reports. • **2026:** EIA, *Petroleum Supply Monthly,* monthly reports.

Figure 3.4 Petroleum Stocks



[a] Includes kerosene-type jet fuel only.
Notes: • SPR=Strategic Petroleum Reserve. • Stocks are at end of period.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum.
Source: Table 3.4.

Table 3.4 Petroleum Stocks

(Million Barrels)

	Crude Oil[a]				Hydrocarbon Gas Liquids								
					Propane/Propylene								
	SPR[b]	Non-SPR[c,d]	Total[d]	Distillate Fuel Oil[e]	Propane	Propylene[f]	Total[g]	Total[h]	Jet Fuel[i]	Motor Gasoline[j]	Residual Fuel Oil[k]	Other[l]	Total
1950 Year	– –	**248**	**248**	**72**	**NA**	**NA**	**NA**	**2**	(i)	**116**	**41**	**104**	**583**
1955 Year	– –	**266**	**266**	**111**	**NA**	**NA**	**NA**	**7**	**3**	**165**	**39**	**123**	**715**
1960 Year	– –	**240**	**240**	**138**	**NA**	**NA**	**NA**	**23**	**7**	**195**	**45**	**137**	**785**
1965 Year	– –	**220**	**220**	**155**	**NA**	**NA**	**NA**	**35**	**19**	**175**	**56**	**176**	**836**
1970 Year	– –	**276**	**276**	**195**	**NA**	**NA**	**44**	**74**	**28**	**209**	**54**	**181**	**1,018**
1975 Year	– –	**271**	**271**	**209**	**NA**	**NA**	**82**	**133**	**30**	**235**	**74**	**181**	**1,133**
1980 Year	**108**	**358**	**466**	**205**	**NA**	**NA**	**71**	**137**	**42**	**261**	**92**	**189**	**1,392**
1985 Year	**493**	**321**	**814**	**144**	**NA**	**NA**	**39**	**82**	**40**	**223**	**50**	**165**	**1,519**
1990 Year	**586**	**323**	**908**	**132**	**NA**	**NA**	**49**	**104**	**52**	**220**	**49**	**156**	**1,621**
1995 Year	**592**	**303**	**895**	**130**	**NA**	**NA**	**43**	**100**	**40**	**202**	**37**	**158**	**1,563**
2000 Year	**541**	**286**	**826**	**118**	**NA**	**NA**	**41**	**88**	**45**	**196**	**36**	**159**	**1,468**
2005 Year	**685**	**308**	**992**	**136**	**NA**	**NA**	**57**	**117**	**42**	**208**	**37**	**148**	**1,682**
2010 Year	**727**	**312**	**1,039**	**164**	**46**	**2**	**47**	**118**	**43**	**219**	**41**	**145**	**1,770**
2011 Year	**696**	**308**	**1,004**	**149**	**48**	**2**	**50**	**121**	**41**	**223**	**34**	**146**	**1,720**
2012 Year	**695**	**338**	**1,033**	**135**	**63**	**2**	**64**	**148**	**40**	**231**	**34**	**154**	**1,775**
2013 Year	**696**	**327**	**1,023**	**128**	**40**	**1**	**42**	**121**	**37**	**228**	**38**	**149**	**1,724**
2014 Year	**691**	**361**	**1,052**	**136**	**72**	**2**	**74**	**170**	**38**	**240**	**34**	**151**	**1,822**
2015 Year	**695**	**449**	**1,144**	**161**	**91**	**2**	**93**	**192**	**40**	**235**	**42**	**164**	**1,979**
2016 Year	**695**	**485**	**1,180**	**166**	**77**	**2**	**79**	**196**	**43**	**239**	**41**	**161**	**2,025**
2017 Year	**663**	**422**	**1,084**	**146**	**62**	**2**	**64**	**187**	**41**	**237**	**29**	**167**	**1,892**
2018 Year	**649**	**443**	**1,092**	**140**	**64**	**2**	**66**	**184**	**42**	**247**	**28**	**176**	**1,908**
2019 Year	**635**	**433**	**1,068**	**140**	**80**	**2**	**81**	**212**	**40**	**254**	**31**	**172**	**1,917**
2020 Year	**638**	**485**	**1,124**	**161**	**70**	**1**	**71**	**228**	**39**	**243**	**30**	**156**	**1,981**
2021 Year	**594**	**421**	**1,015**	**130**	**64**	**1**	**65**	**193**	**36**	**232**	**26**	**161**	**1,792**
2022 Year	**372**	**430**	**802**	**119**	**77**	**1**	**78**	**211**	**35**	**224**	**31**	**172**	**1,595**
2023 Year	**355**	**426**	**781**	**130**	**80**	**1**	**81**	**223**	**40**	**241**	**24**	**167**	**1,606**
2024 January	358	428	786	129	60	1	61	185	41	252	27	170	1,590
February	361	448	809	118	50	1	50	163	40	241	29	183	1,583
March	364	448	812	122	52	1	52	170	42	234	30	187	1,595
April	367	465	832	118	57	1	58	188	42	234	28	185	1,626
May	370	455	825	122	66	1	68	214	43	232	29	181	1,647
June	373	440	814	124	75	1	76	235	45	233	27	176	1,652
July	375	428	803	130	87	1	88	265	46	224	26	169	1,662
August	380	418	797	126	94	1	95	278	46	221	25	163	1,656
September	383	415	798	125	97	1	99	277	45	220	24	162	1,650
October	387	424	811	117	97	2	99	269	44	213	24	158	1,636
November	392	421	813	125	92	1	94	254	44	221	22	160	1,639
December	**394**	**413**	**807**	**130**	**81**	**1**	**82**	**226**	**44**	**238**	**23**	**162**	**1,630**
2025 January	395	419	814	120	59	1	60	184	43	251	24	169	1,606
February	395	430	825	120	47	1	47	163	44	244	24	177	1,597
March	397	432	829	117	44	1	45	173	42	234	24	183	1,603
April	399	435	835	111	49	1	50	194	42	228	25	181	1,615
May	402	431	833	110	62	1	63	225	45	229	24	176	1,642
June	403	414	817	109	75	1	76	252	45	233	23	170	1,649
July	403	420	823	113	82	1	83	273	45	230	20	165	1,668
August	405	417	822	124	94	1	95	294	44	223	21	163	1,692
September	407	408	815	125	100	1	101	304	44	223	21	165	1,697
October	410	421	831	112	104	1	105	305	42	209	22	163	1,684
November	412	421	833	121	103	1	105	292	46	219	22	165	1,698
December	**413**	**411**	**825**	**128**	**98**	**1**	**99**	**274**	**44**	**244**	**22**	**165**	**1,702**
2026 January	415	406	821	127	80	1	81	232	44	261	23	173	1,682
February	415	435	850	121	73	1	74	216	43	254	24	176	1,685
March	415	453	868	119	78	1	79	222	45	243	25	174	1,695
April	395	450	845	106	78	1	80	231	44	222	23	171	1,641
May	355	425	781	106	83	1	84	237	46	220	23	169	1,583
June	322	404	726	109	91	1	92	250	49	219	21	162	1,537
July	R 305	409	713	R 109	R 102	R 1	103	R 271	R 46	R 215	R 23	R 158	R 1,535
August	E 286	E 424	E 710	E 105	NA	NA	E 109	F 284	E 46	E 206	E 22	E 158	E 1,532
September	E 283	E 425	E 708	E 105	NA	NA	E 108	F 291	E 43	E 205	E 24	E 147	E 1,521

[a] Includes lease condensate.

[b] "SPR" is the Strategic Petroleum Reserve, which began in October 1977. Crude oil stocks in the SPR include non-U.S. stocks held under foreign or commercial storage agreements.

[c] All crude oil stocks other than those in SPR.

[d] Beginning in 1981, includes stocks of Alaskan crude oil in transit.

[e] Excludes stocks in the Northeast Home Heating Oil Reserve. Beginning in 2009, includes biodiesel and renewable diesel fuel blended into distillate fuel oil. Beginning in 2021, also includes renewable heating oil blended into distillate fuel oil.

[f] Includes propylene stocks at refineries only.

[g] Propane and propylene. Through 1983, also includes 40% of "Butane-Propane Mixtures" and 30% of "Ethane-Propane Mixtures."

[h] Ethane, propane, normal butane, isobutane, natural gasoline (pentanes plus), and refinery olefins (ethylene, propylene, butylene, and isobutylene). Through 1983, also includes plant condensate and unfractionated stream.

[i] Beginning in 1965, includes kerosene-type jet fuel. (Through 1964, kerosene-type jet fuel is included with kerosene in "Other.") For 1952–2004, also includes naphtha-type jet fuel. (Through 1951, naphtha-type jet fuel is included in the products from which it was blended—gasoline, kerosene, and distillate fuel oil. Beginning in 2005, naphtha-type jet fuel is included in "Other.")

[j] Includes finished motor gasoline and motor gasoline blending components; excludes oxygenates. Through 1963, also includes aviation gasoline and special naphthas.

[k] Through 2019, includes residual fuel oil stocks at (or in) refineries, bulk terminals, and pipelines. Beginning in 2020, includes residual fuel oil stocks at refineries and bulk terminals only.

[l] Asphalt and road oil, aviation gasoline blending components, kerosene, lubricants, petrochemical feedstocks, petroleum coke, unfinished oils, waxes, and miscellaneous products. Through 1964, also includes kerosene-type jet fuel. Beginning in 1964, also includes finished aviation gasoline and special naphthas. Beginning in 1993, also includes fuel ethanol. Beginning in 2005, also includes naphtha-type jet fuel. For 2005–2018, also includes oxygenates (excluding fuel ethanol). Beginning in 2009, also includes biofuels (excluding fuel ethanol) and other hydrocarbons.

R=Revised. E=Estimate. F=Forecast. NA=Not available. – – =Not applicable.

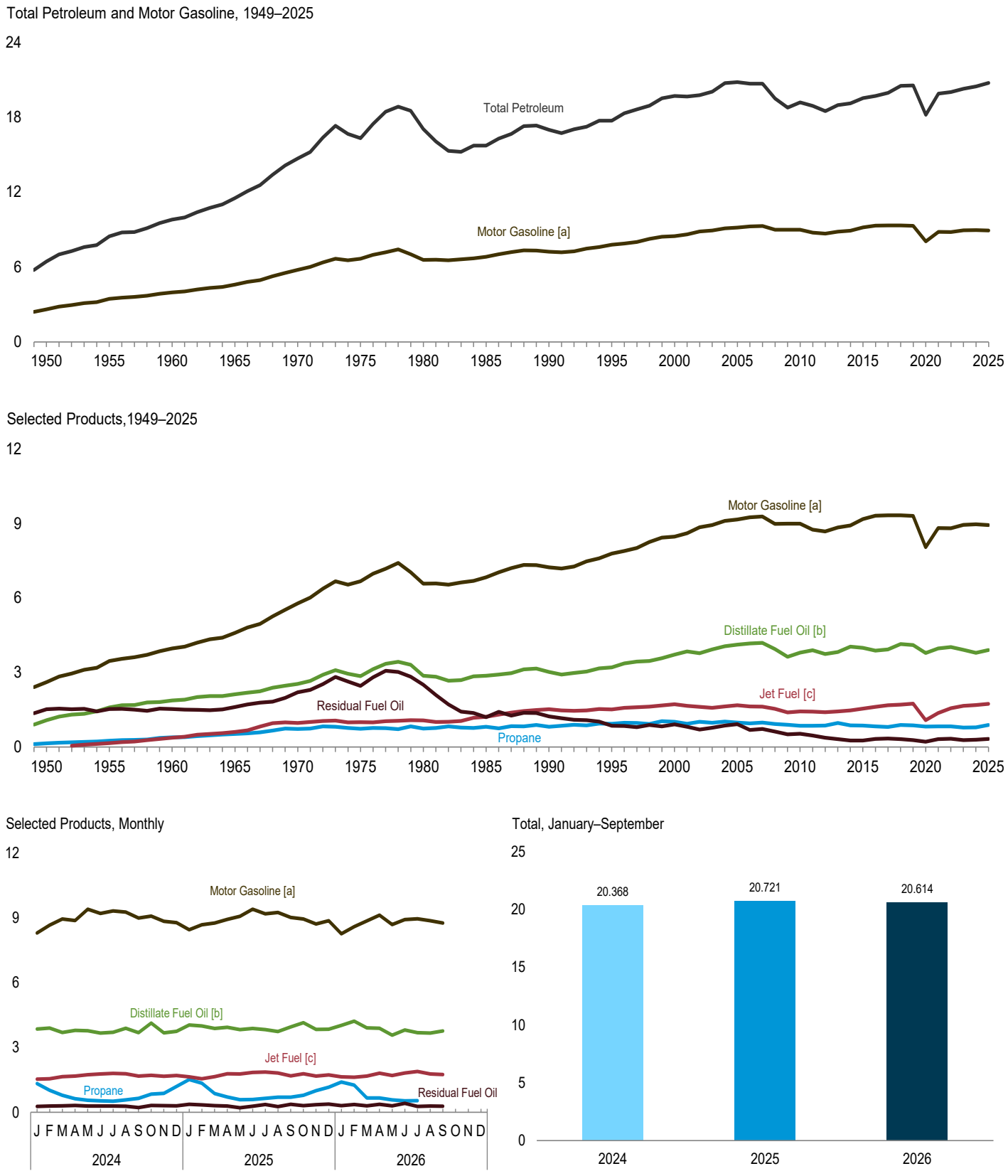
Notes: • Stocks are at end of period. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

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

Sources: • **1949–1975:** Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual,* annual reports. • **1976–1980:** U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement, Annual,* annual reports. • **1981–2025:** EIA, *Petroleum Supply Annual,* annual reports, and unpublished revisions. • **2026:** EIA, *Petroleum Supply Monthly,* monthly reports, and unpublished revisions; and, for the current two months, *Weekly Petroleum Status Report* data system, Short-Term Integrated Forecasting System, and *Monthly Energy Review* data system calculations.

Figure 3.5 Petroleum Products Supplied by Type

(Million Barrels per Day)



[a] Beginning in 1993, includes fuel ethanol blended into motor gasoline.
[b] Beginning in 2009, includes biodiesel and renewable diesel fuel blended into distillate fuel oil.
[c] Beginning in 2005, includes kerosene-type jet fuel only.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum.
Source: Table 3.5.

Table 3.5 Petroleum Products Supplied by Type

(Thousand Barrels per Day)

	Asphalt and Road Oil	Aviation Gasoline	Distillate Fuel Oil[a]	Hydrocarbon Gas Liquids				Jet Fuel[d]	Kerosene	Lubricants	Motor Gasoline[e]	Petroleum Coke	Residual Fuel Oil	Other[f]	Total
				Propane/Propylene											
				Propane	Propylene	Total[b]	Total[c]								
1950 Average	**180**	**108**	**1,082**	E 146	E 13	E 158	**234**	(d)	**323**	**106**	**2,616**	**41**	**1,517**	**250**	**6,458**
1955 Average	**254**	**192**	**1,592**	E 251	E 22	E 273	**404**	**154**	**320**	**116**	**3,463**	**67**	**1,526**	**366**	**8,455**
1960 Average	**302**	**161**	**1,872**	E 386	E 33	E 419	**621**	**371**	**271**	**117**	**3,969**	**149**	**1,529**	**435**	**9,797**
1965 Average	**368**	**120**	**2,126**	E 523	E 45	E 568	**841**	**602**	**267**	**129**	**4,593**	**202**	**1,608**	**657**	**11,512**
1970 Average	**447**	**55**	**2,540**	E 727	E 55	**782**	**1,224**	**967**	**263**	**136**	**5,785**	**212**	**2,204**	**866**	**14,697**
1975 Average	**419**	**39**	**2,851**	E 730	E 60	**790**	**1,352**	**1,001**	**159**	**137**	**6,675**	**247**	**2,462**	**982**	**16,322**
1980 Average	**396**	**35**	**2,866**	E 742	E 72	**813**	**1,590**	**1,068**	**158**	**159**	**6,579**	**237**	**2,508**	**1,460**	**17,056**
1985 Average	**425**	**27**	**2,868**	E 810	E 72	**883**	**1,721**	**1,218**	**114**	**145**	**6,831**	**264**	**1,202**	**909**	**15,726**
1990 Average	**483**	**24**	**3,021**	E 812	E 105	**917**	**1,705**	**1,522**	**43**	**164**	**7,235**	**339**	**1,229**	**1,225**	**16,988**
1995 Average	**486**	**21**	**3,207**	E 938	E 157	**1,096**	**2,100**	**1,514**	**54**	**156**	**7,789**	**365**	**852**	**1,180**	**17,725**
2000 Average	**525**	**20**	**3,722**	E 1,011	E 224	**1,235**	**2,434**	**1,725**	**67**	**166**	**8,472**	**406**	**909**	**1,255**	**19,701**
2005 Average	**546**	**19**	**4,118**	E 986	E 243	**1,229**	**2,146**	**1,679**	**70**	**141**	**9,159**	**515**	**920**	**1,489**	**20,802**
2010 Average	**362**	**15**	**3,800**	**852**	**305**	**1,157**	**2,263**	**1,432**	**20**	**131**	**8,993**	**376**	**535**	**1,251**	**19,178**
2011 Average	**355**	**15**	**3,899**	**851**	**310**	**1,161**	**2,250**	**1,425**	**12**	**125**	**8,753**	**361**	**461**	**1,240**	**18,896**
2012 Average	**340**	**14**	**3,741**	**862**	**308**	**1,170**	**2,293**	**1,398**	**5**	**114**	**8,682**	**360**	**369**	**1,165**	**18,482**
2013 Average	**323**	**12**	**3,827**	**969**	**306**	**1,275**	**2,501**	**1,434**	**5**	**121**	**8,843**	**354**	**319**	**1,227**	**18,967**
2014 Average	**327**	**12**	**4,037**	**870**	**298**	**1,167**	**2,443**	**1,470**	**9**	**126**	**8,921**	**347**	**257**	**1,151**	**19,100**
2015 Average	**343**	**11**	**3,995**	**865**	**295**	**1,160**	**2,550**	**1,548**	**6**	**138**	**9,178**	**349**	**259**	**1,153**	**19,532**
2016 Average	**351**	**11**	**3,877**	**833**	**301**	**1,134**	**2,541**	**1,614**	**9**	**130**	**9,317**	**345**	**326**	**1,170**	**19,692**
2017 Average	**351**	**11**	**3,932**	**803**	**309**	**1,111**	**2,637**	**1,682**	**5**	**121**	**9,327**	**316**	**342**	**1,228**	**19,952**
2018 Average	**327**	**12**	**4,146**	**888**	**311**	**1,199**	**3,014**	**1,707**	**5**	**117**	**9,329**	**327**	**318**	**1,210**	**20,512**
2019 Average	**348**	**13**	**4,103**	**868**	**298**	**1,166**	**3,139**	**1,743**	**7**	**113**	**9,309**	**303**	**275**	**1,189**	**20,543**
2020 Average	**343**	**11**	**3,786**	**824**	**278**	**1,101**	**3,228**	**1,076**	**7**	**102**	**8,049**	**260**	**208**	**1,116**	**18,186**
2021 Average	**371**	**12**	**3,972**	**829**	**305**	**1,134**	**3,440**	**1,370**	**6**	**105**	**8,816**	**269**	**314**	**1,215**	**19,890**
2022 Average	**378**	**12**	**4,026**	**834**	**276**	**1,110**	**3,357**	**1,560**	**5**	**111**	**8,810**	**253**	**329**	**1,169**	**20,010**
2023 Average	**368**	**11**	**3,916**	**780**	**267**	**1,047**	**3,505**	**1,653**	**11**	**83**	**8,945**	**253**	**274**	**1,256**	**20,275**
2024 January	233	7	3,856	1,331	267	1,599	4,044	1,532	16	86	8,290	223	279	1,225	19,789
February	230	15	3,900	1,020	239	1,258	3,826	1,552	8	72	8,659	141	294	1,276	19,972
March	258	9	3,693	789	271	1,061	3,671	1,651	8	77	8,937	148	300	1,260	20,011
April	296	14	3,793	631	286	917	3,463	1,678	12	103	8,869	334	323	1,271	20,155
May	405	12	3,769	560	289	849	3,548	1,742	12	79	9,391	308	293	1,329	20,888
June	477	17	3,663	529	280	808	3,448	1,772	9	92	9,199	202	295	1,362	20,537
July	465	16	3,699	511	269	779	3,218	1,802	2	82	9,318	326	293	1,372	20,593
August	511	14	3,889	573	274	848	3,587	1,784	(s)	99	9,257	220	285	1,341	20,985
September	446	14	3,687	644	271	915	3,754	1,676	(s)	82	8,983	206	221	1,286	20,356
October	472	12	4,131	843	281	1,124	3,998	1,712	1	74	9,070	193	316	1,271	21,249
November	352	11	3,680	875	297	1,172	3,948	1,669	10	51	8,832	204	307	1,303	20,367
December	239	7	3,743	1,197	294	1,491	4,387	1,704	12	50	8,773	132	306	1,262	20,615
Average	**366**	**12**	**3,792**	**792**	**277**	**1,069**	**3,741**	**1,690**	**8**	**79**	**8,967**	**220**	**293**	**1,297**	**20,464**
2025 January	228	8	4,042	1,516	281	1,798	4,497	1,643	25	68	8,442	319	371	1,115	20,758
February	234	13	3,992	1,349	262	1,611	4,169	1,552	26	62	8,676	110	349	1,180	20,364
March	253	10	3,877	867	245	1,112	3,711	1,655	16	73	8,758	175	309	1,170	20,008
April	328	13	3,933	711	266	977	3,594	1,788	7	92	8,921	251	293	1,223	20,443
May	395	13	3,830	587	272	859	3,584	1,780	6	91	9,067	331	215	1,220	20,533
June	475	13	3,884	592	269	862	3,657	1,846	7	80	9,394	216	288	1,219	21,082
July	490	17	3,831	646	282	928	3,818	1,867	3	110	9,177	270	361	1,250	21,192
August	493	13	3,735	701	251	952	4,042	1,820	5	102	9,240	236	267	1,259	21,213
September	497	14	3,952	700	251	951	3,790	1,688	(s)	113	9,012	188	372	1,242	20,868
October	439	15	4,142	793	225	1,018	3,901	1,786	2	100	8,942	177	313	1,156	20,973
November	344	12	3,839	1,000	254	1,254	4,125	1,680	15	101	8,714	128	354	1,180	20,493
December	224	8	3,847	1,167	270	1,436	4,267	1,729	22	88	8,858	213	378	1,236	20,870
Average	**367**	**12**	**3,908**	**883**	**261**	**1,144**	**3,929**	**1,737**	**11**	**90**	**8,935**	**219**	**322**	**1,204**	**20,736**
2026 January	206	9	4,025	1,404	257	1,661	4,600	1,646	30	114	8,258	279	307	1,176	20,650
February	261	12	4,213	1,259	257	1,516	4,420	1,624	14	118	8,586	298	363	1,227	21,138
March	294	9	3,904	668	257	925	3,764	1,682	5	130	8,853	232	300	1,210	20,383
April	354	19	3,887	666	257	923	3,725	1,814	14	91	9,123	161	377	1,244	20,808
May	383	11	3,567	578	269	847	3,743	1,706	6	81	8,682	299	302	1,290	20,071
June	491	11	3,810	530	270	800	3,570	1,817	14	93	8,917	262	415	1,336	20,736
July	R 465	R 14	R 3,685	R 543	R 261	R 804	R 3,651	R 1,890	R 5	R 111	R 8,946	R 210	R 274	R 1,361	R 20,612
August	F 510	RF 14	E 3,669	NA	NA	E 781	RF 3,753	E 1,774	RF 2	RF 86	E 8,857	F 275	E 289	RE 1,069	E 20,297
September	F 499	F 14	E 3,763	NA	NA	E 894	F 3,899	E 1,745	F 7	F 78	E 8,753	F 281	E 286	E 1,574	E 20,898
9-Month Average	**E 385**	**E 12**	**E 3,832**	**NA**	**NA**	**E 1,013**	**E 3,899**	**E 1,745**	**E 11**	**E 100**	**E 8,775**	**E 255**	**E 323**	**E 1,276**	**E 20,614**
2025 9-Month Average	**378**	**13**	**3,896**	**849**	**265**	**1,113**	**3,872**	**1,739**	**10**	**88**	**8,967**	**234**	**314**	**1,209**	**20,721**
2024 9-Month Average	**370**	**13**	**3,772**	**731**	**272**	**1,003**	**3,617**	**1,689**	**7**	**86**	**8,991**	**235**	**287**	**1,303**	**20,368**

[a] Beginning in 2009, includes biodiesel and renewable diesel fuel blended into distillate fuel oil. For 2011–2020, also includes biodiesel adjustments (supply of biodiesel not reported as input on surveys) reclassified as distillate fuel oil adjustments. Beginning in 2021, also includes renewable heating oil blended into distillate fuel oil.

[b] Propane and propylene. Through 1983, also includes 40% of "Butane-Propane Mixtures" and 30% of "Ethane-Propane Mixtures."

[c] Ethane, propane, normal butane, isobutane, and refinery olefins (ethylene, propylene, butylene, and isobutylene). Through 1983, also includes plant condensate and unfractionated stream. Through 2021, also includes natural gasoline (pentanes plus).

[d] Beginning in 1957, includes kerosene-type jet fuel. For 1952–2004, also includes naphtha-type jet fuel. (Through 1951, naphtha-type jet fuel is included in the products from which it was blended—gasoline, kerosene, and distillate fuel oil. Beginning in 2005, naphtha-type jet fuel is included in "Other.")

[e] Finished motor gasoline. Through 1963, also includes special naphthas. Beginning in 1993, also includes fuel ethanol blended into motor gasoline.

[f] Petrochemical feedstocks, still gas (refinery gas), waxes, and miscellaneous products. Beginning in 1964, also includes special naphthas. Beginning in 1981, also includes negative barrels per day of distillate and residual fuel oil reclassified as unfinished oils (through 2021), and other products (from both primary and secondary supply) reclassified as gasoline blending components. Beginning in 1983, also includes crude oil burned as fuel. Beginning in 2005, also includes naphtha-type jet fuel. Beginning in 2021, also includes biofuels (excluding fuel ethanol) products supplied.

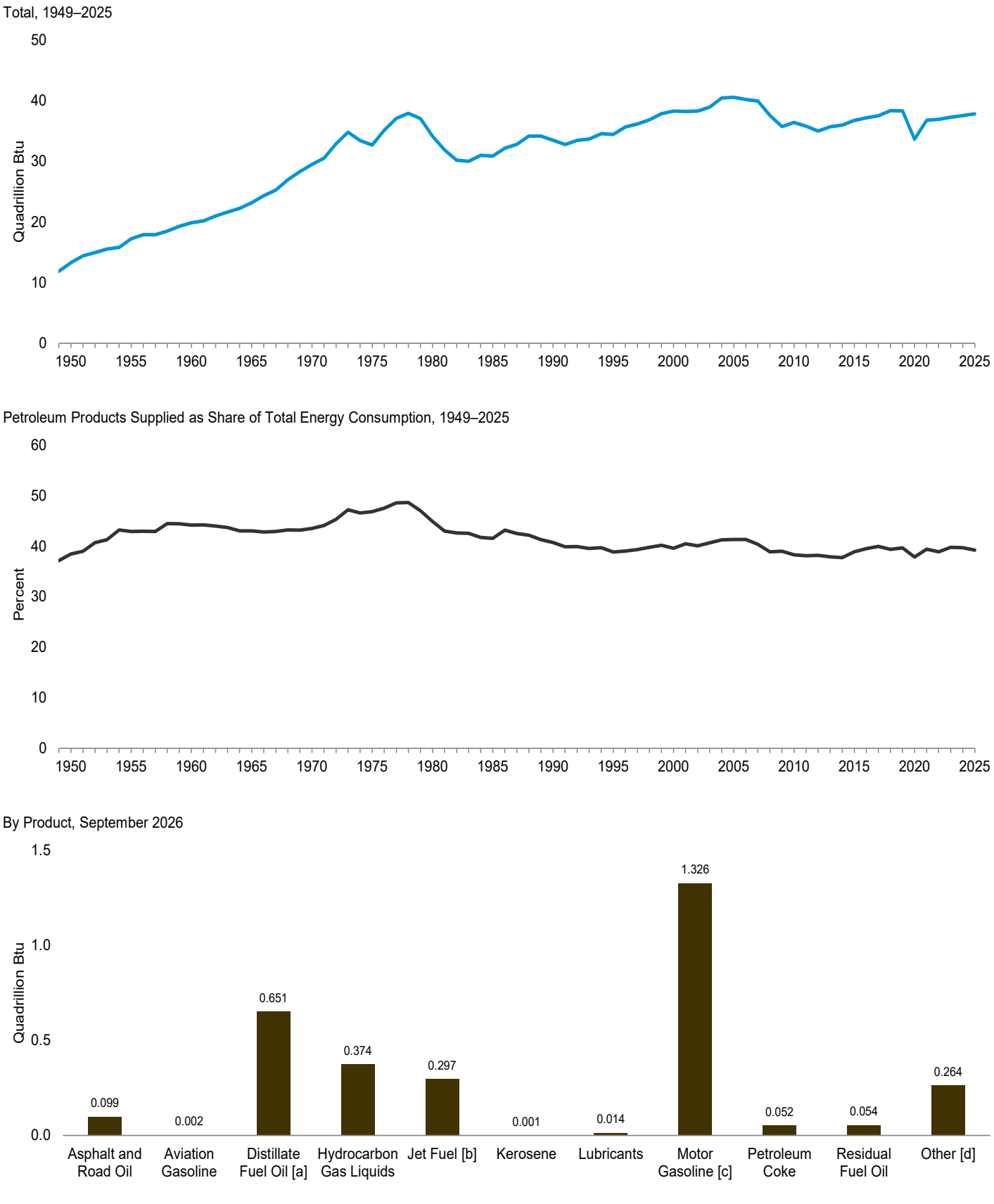
R=Revised. E=Estimate. F=Forecast. NA=Not available. (s)=Less than 500 barrels per day and greater than -500 barrels per day.

Notes: • Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. See Note 1, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • 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/#petroleum (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

Figure 3.6 Heat Content of Petroleum Products Supplied by Type



[a] Includes biodiesel and renewable diesel fuel blended into distillate fuel oil.
[b] Includes kerosene-type jet fuel only.
[c] Includes fuel ethanol blended into motor gasoline.
[d] All petroleum products not separately displayed.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum.
Sources: Tables 1.1 and 3.6.

Table 3.6 Heat Content of Petroleum Products Supplied by Type

(Trillion Btu)

	Asphalt and Road Oil	Aviation Gasoline	Distillate Fuel Oil[a]	Hydrocarbon Gas Liquids			Jet Fuel[d]	Kerosene	Lubricants	Motor Gasoline[e]	Petroleum Coke	Residual Fuel Oil	Other[f]	Total
				Propane/Propylene										
				Propane	Propylene	Total[b]	Total[c]								
1950 Total	435	199	2,300	E 204	E 18	E 222	326	(d)	668	236	5,015	90	3,482	546	13,298
1955 Total	615	354	3,385	E 352	E 30	E 383	562	301	662	258	6,640	147	3,502	798	17,225
1960 Total	734	298	3,992	E 543	E 47	E 589	866	739	563	259	7,631	328	3,517	947	19,874
1965 Total	890	222	4,519	E 733	E 63	E 796	1,170	1,215	553	286	8,806	444	3,691	1,390	23,184
1970 Total	1,082	100	5,401	E 1,019	E 77	1,096	1,667	1,973	544	301	11,091	465	5,057	1,817	29,499
1975 Total	1,014	71	6,061	E 1,024	E 84	1,108	1,811	2,047	329	304	12,798	542	5,649	2,071	32,699
1980 Total	962	64	6,110	E 1,043	E 100	1,143	2,135	2,190	329	354	12,648	522	5,772	3,073	34,159
1985 Total	1,029	50	6,098	E 1,136	E 101	1,237	2,252	2,497	236	322	13,098	582	2,759	1,945	30,866
1990 Total	1,170	45	6,422	E 1,138	E 147	1,285	2,259	3,129	88	362	13,872	745	2,820	2,589	33,500
1995 Total	1,178	40	6,812	E 1,316	E 220	1,536	2,791	3,132	112	346	14,794	802	1,955	2,499	34,458
2000 Total	1,276	36	7,927	E 1,421	E 315	1,735	3,216	3,580	140	369	16,127	895	2,091	2,636	38,292
2005 Total	1,323	35	8,745	E 1,382	E 341	1,723	2,812	3,475	144	312	17,358	1,125	2,111	3,122	40,561
2010 Total	878	27	8,011	1,194	428	1,621	2,881	2,963	41	291	16,632	831	1,228	2,645	36,427
2011 Total	859	27	8,211	1,194	434	1,628	2,811	2,950	25	276	16,175	801	1,058	2,621	35,815
2012 Total	827	25	7,898	1,212	432	1,645	2,887	2,901	11	254	16,085	802	849	2,474	35,012
2013 Total	783	22	8,051	1,358	429	1,787	3,166	2,969	11	268	16,332	786	731	2,583	35,702
2014 Total	793	22	8,492	1,219	417	1,636	3,067	3,042	19	280	16,473	772	590	2,430	35,978
2015 Total	832	21	8,402	1,212	413	1,626	3,221	3,204	13	305	16,941	776	595	2,435	36,745
2016 Total	853	20	8,170	1,171	423	1,594	3,184	3,350	18	289	17,238	771	751	2,553	37,198
2017 Total	849	21	8,263	1,126	432	1,557	3,272	3,481	11	267	17,201	708	784	2,667	37,525
2018 Total	793	22	8,715	1,245	436	1,680	3,720	3,533	11	259	17,209	730	729	2,630	38,351
2019 Total	844	23	8,625	1,217	418	1,635	3,897	3,608	14	250	17,166	678	631	2,585	38,322
2020 Total	832	20	7,976	1,158	390	1,548	3,956	2,234	16	227	14,883	583	478	2,433	33,638
2021 Total	898	22	8,357	1,162	427	1,589	4,230	2,835	12	233	16,250	603	721	2,623	36,784
2022 Total	916	22	8,470	1,169	386	1,555	3,957	3,228	11	245	16,236	570	756	2,532	36,943
2023 Total	892	21	8,239	1,093	374	1,467	4,124	3,422	22	184	16,485	569	629	2,702	37,288
2024 January	48	1	689	159	32	190	413	269	3	16	1,298	43	54	223	3,058
February	44	2	652	114	27	140	358	255	1	13	1,268	25	54	216	2,889
March	53	1	660	94	32	126	367	290	1	14	1,399	29	58	229	3,103
April	59	2	656	73	33	106	330	285	2	19	1,344	62	61	224	3,044
May	83	2	673	67	34	101	350	306	2	15	1,470	59	57	243	3,261
June	95	3	633	61	32	93	329	302	2	17	1,394	38	56	241	3,108
July	96	3	661	61	32	93	319	317	(s)	15	1,459	63	57	250	3,240
August	105	2	695	68	33	101	352	314	(s)	19	1,449	42	56	245	3,278
September	89	2	638	74	31	105	360	285	(s)	15	1,361	38	42	227	3,057
October	97	2	738	100	33	134	395	301	(s)	14	1,420	37	62	232	3,298
November	70	2	636	101	34	135	380	284	2	9	1,338	38	58	230	3,046
December	49	1	669	142	35	177	441	299	2	9	1,373	26	60	230	3,160
Total	**888**	**23**	**8,000**	**1,113**	**388**	**1,502**	**4,395**	**3,507**	**16**	**175**	**16,573**	**501**	**674**	**2,790**	**37,541**
2025 January	47	1	722	181	33	214	456	289	4	13	1,321	61	72	205	3,193
February	43	2	645	145	28	173	380	246	4	11	1,226	19	61	195	2,833
March	52	2	693	103	29	132	369	291	3	14	1,370	34	60	214	3,102
April	65	2	680	82	31	113	344	304	1	17	1,351	47	55	216	3,082
May	81	2	685	70	32	102	352	313	1	17	1,419	64	42	223	3,198
June	95	2	672	68	31	99	347	314	1	15	1,423	40	54	217	3,180
July	101	3	685	77	34	110	374	328	(s)	21	1,436	52	70	229	3,299
August	101	2	668	83	30	113	397	320	1	19	1,446	45	52	231	3,282
September	99	2	684	81	29	110	360	287	(s)	21	1,365	35	70	221	3,143
October	90	2	740	94	27	121	384	314	(s)	19	1,399	34	61	212	3,256
November	69	2	664	115	29	144	399	286	3	18	1,320	24	67	209	3,059
December	46	1	688	139	32	171	427	304	4	16	1,386	41	74	226	3,213
Total	**890**	**23**	**8,225**	**1,238**	**365**	**1,604**	**4,589**	**3,596**	**23**	**200**	**16,462**	**496**	**740**	**2,597**	**37,841**
2026 January	42	1	720	167	31	198	467	289	5	21	1,292	54	60	215	3,167
February	48	2	680	135	28	163	403	258	2	20	1,214	52	64	202	2,945
March	60	1	698	80	31	110	364	296	1	24	1,385	45	59	221	3,154
April	70	3	672	77	30	106	349	308	2	17	1,382	30	71	220	3,124
May	79	2	638	69	32	101	360	300	1	15	1,359	58	59	236	3,105
June	98	2	659	61	31	92	333	309	2	17	1,350	49	78	236	3,133
July	R 96	2	R 659	R 65	R 31	R 96	R 354	R 332	1	R 21	R 1,400	R 40	R 53	R 248	R 3,207
August	F 105	F 2	E 656	NA	NA	E 93	RF 372	E 312	F (s)	F 16	E 1,386	F 53	E 56	E 187	E 3,146
September	F 99	F 2	E 651	NA	NA	E 103	F 374	E 297	F 1	F 14	E 1,326	F 52	E 54	E 264	E 3,135
9-Month Total	**E 698**	**E 17**	**E 6,031**	**NA**	**NA**	**E 1,062**	**E 3,378**	**E 2,701**	**E 17**	**E 166**	**E 12,093**	**E 432**	**E 554**	**E 2,029**	**E 28,116**
2025 9-Month Total	**685**	**17**	**6,133**	**890**	**277**	**1,167**	**3,380**	**2,692**	**16**	**146**	**12,357**	**397**	**538**	**1,951**	**28,313**
2024 9-Month Total	**672**	**18**	**5,957**	**770**	**286**	**1,055**	**3,180**	**2,623**	**12**	**142**	**12,442**	**400**	**494**	**2,098**	**28,038**

[a] Beginning in 2009, includes biodiesel and renewable diesel fuel blended into distillate fuel oil. For 2011–2020, also includes biodiesel adjustments (supply of biodiesel not reported as input on surveys) reclassified as distillate fuel oil adjustments. Beginning in 2021, also includes renewable heating oil blended into distillate fuel oil.

[b] Propane and propylene. Through 1983, also includes 40% of "Butane-Propane Mixtures" and 30% of "Ethane-Propane Mixtures."

[c] Ethane, propane, normal butane, isobutane, and refinery olefins (ethylene, propylene, butylene, and isobutylene). Through 1983, also includes plant condensate and unfractionated stream. Through 2021, also includes natural gasoline (pentanes plus).

[d] Beginning in 1957, includes kerosene-type jet fuel. For 1952–2004, also includes naphtha-type jet fuel. (Through 1951, naphtha-type jet fuel is included in the products from which it was blended—gasoline, kerosene, and distillate fuel oil. Beginning in 2005, naphtha-type jet fuel is included in "Other.")

[e] Finished motor gasoline. Through 1963, also includes special naphthas. Beginning in 1993, also includes fuel ethanol blended into motor gasoline.

[f] Petrochemical feedstocks, still gas (refinery gas), waxes, and miscellaneous products. Beginning in 1964, also includes special naphthas. Beginning in 1981, also includes negative barrels per day of distillate and residual fuel oil reclassified as unfinished oils (through 2021), and other products (from both primary and secondary supply) reclassified as gasoline blending components. Beginning in 1983, also includes crude oil burned as fuel. Beginning in 2005, also includes naphtha-type jet fuel. Beginning in 2021, also includes biofuels (excluding fuel ethanol) products supplied.

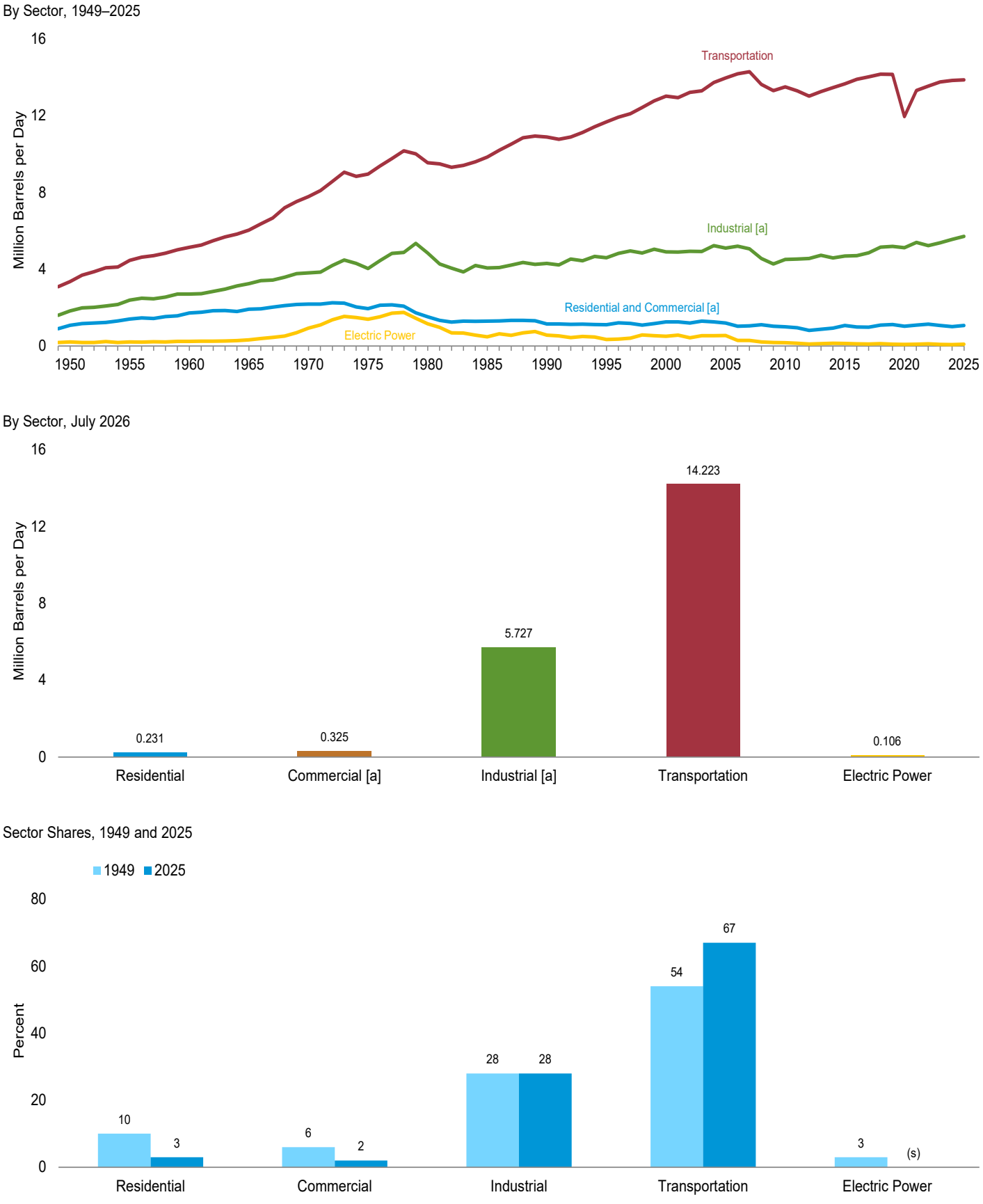
R=Revised. E=Estimate. F=Forecast. NA=Not available. (s)=Less than 0.5 trillion Btu and greater than -0.5 trillion Btu.

Notes: • Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. See Note 1, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • 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/#petroleum (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

Figure 3.7 Petroleum Consumption by Sector



[a] Includes combined-heat-and-power plants and a small number of electricity-only plants.
(s)=Less than 0.5 percent.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum.
Sources: Tables 3.7a–3.7c.

Table 3.7a Petroleum Consumption: Residential and Commercial Sectors

(Thousand Barrels per Day)

	Residential Sector				Commercial Sector[a]						
	Distillate Fuel Oil	HGL[b] Propane	Kero-sene	Total	Distillate Fuel Oil	HGL[b] Propane	Kero-sene	Motor Gasoline[c,d]	Petroleum Coke	Residual Fuel Oil	Total
1950 Average	**390**	**104**	**168**	**662**	**123**	**28**	**23**	**52**	**NA**	**185**	**411**
1955 Average	**562**	**144**	**179**	**885**	**177**	**38**	**24**	**69**	**NA**	**209**	**519**
1960 Average	**736**	**217**	**171**	**1,123**	**232**	**58**	**23**	**35**	**NA**	**243**	**590**
1965 Average	**805**	**275**	**161**	**1,242**	**251**	**74**	**26**	**40**	**NA**	**281**	**672**
1970 Average	**883**	**392**	**144**	**1,419**	**276**	**102**	**30**	**45**	**NA**	**311**	**764**
1975 Average	**850**	**365**	**78**	**1,293**	**276**	**92**	**24**	**46**	**NA**	**214**	**653**
1980 Average	**617**	**222**	**51**	**890**	**243**	**63**	**20**	**56**	**NA**	**245**	**626**
1985 Average	**514**	**224**	**77**	**815**	**297**	**68**	**16**	**50**	**NA**	**99**	**530**
1990 Average	**460**	**252**	**31**	**742**	**252**	**73**	**6**	**58**	**0**	**100**	**489**
1995 Average	**426**	**282**	**36**	**743**	**225**	**78**	**11**	**10**	**(s)**	**62**	**385**
2000 Average	**424**	**395**	**46**	**865**	**230**	**107**	**14**	**23**	**(s)**	**40**	**415**
2005 Average	**402**	**366**	**40**	**809**	**210**	**94**	**10**	**24**	**(s)**	**50**	**389**
2010 Average	**266**	**378**	**14**	**658**	**185**	**100**	**2**	**28**	**(s)**	**27**	**343**
2011 Average	**248**	**351**	**9**	**608**	**186**	**102**	**2**	**24**	**(s)**	**23**	**336**
2012 Average	**228**	**281**	**4**	**513**	**168**	**96**	**1**	**21**	**(s)**	**14**	**300**
2013 Average	**233**	**331**	**4**	**568**	**163**	**108**	**(s)**	**22**	**(s)**	**11**	**304**
2014 Average	**253**	**349**	**7**	**609**	**169**	**114**	**1**	**29**	**(s)**	**3**	**318**
2015 Average	**262**	**318**	**5**	**584**	**171**	**106**	**1**	**[d] 204**	**(s)**	**2**	**483**
2016 Average	**206**	**306**	**7**	**518**	**154**	**107**	**1**	**203**	**(s)**	**2**	**467**
2017 Average	**205**	**307**	**4**	**517**	**153**	**111**	**1**	**196**	**(s)**	**2**	**462**
2018 Average	**241**	**361**	**4**	**606**	**153**	**126**	**1**	**199**	**(s)**	**1**	**480**
2019 Average	**223**	**402**	**5**	**630**	**155**	**130**	**1**	**200**	**(s)**	**1**	**487**
2020 Average	**193**	**352**	**5**	**551**	**131**	**143**	**1**	**201**	**(s)**	**1**	**477**
2021 Average	**225**	**345**	**5**	**575**	**156**	**155**	**1**	**203**	**(s)**	**1**	**516**
2022 Average	**227**	**360**	**4**	**591**	**158**	**144**	**1**	**239**	**(s)**	**1**	**542**
2023 Average	**222**	**337**	**7**	**566**	**154**	**131**	**1**	**210**	**(s)**	**1**	**497**
2024 January	354	686	11	1,051	245	231	2	162	(s)	2	642
February	428	533	6	967	296	188	1	170	(s)	3	657
March	287	447	6	740	199	164	1	175	0	2	541
April	193	312	9	514	133	127	1	174	0	1	436
May	161	192	9	362	112	94	1	184	(s)	1	392
June	142	128	7	277	98	76	1	180	(s)	1	356
July	95	117	1	214	66	73	(s)	182	0	1	322
August	82	121	(s)	202	57	74	(s)	181	0	(s)	312
September	143	141	(s)	284	99	79	(s)	176	0	1	355
October	188	241	1	430	130	107	(s)	178	0	1	416
November	221	417	7	644	153	156	1	173	0	1	484
December	294	593	9	897	204	205	1	172	(s)	2	584
Average	**215**	**327**	**6**	**547**	**149**	**131**	**1**	**176**	**(s)**	**1**	**458**
2025 January	363	[R] 784	19	1,166	251	[R] 262	3	165	(s)	2	685
February	454	[R] 655	19	1,129	315	227	3	170	(s)	3	718
March	295	454	12	761	204	171	2	171	0	2	550
April	198	328	5	531	137	136	1	175	0	1	450
May	165	222	4	392	115	107	1	177	0	1	400
June	145	142	5	[R] 293	101	84	1	184	0	1	371
July	98	131	2	230	68	81	(s)	180	0	1	329
August	84	135	3	222	58	82	1	181	0	1	322
September	147	156	(s)	303	102	88	(s)	176	0	1	367
October	193	277	2	[R] 472	133	122	(s)	175	0	1	432
November	226	[R] 461	11	698	157	173	2	171	0	1	503
December	302	647	16	965	209	224	2	173	(s)	2	612
Average	**221**	**365**	**8**	**594**	**153**	**146**	**1**	**175**	**(s)**	**1**	**477**
2026 January	[R] 362	736	22	[R] 1,120	[R] 251	249	3	162	(s)	2	[R] 667
February	[R] 453	[R] 629	11	[R] 1,093	[R] 314	[R] 219	2	168	(s)	3	[R] 706
March	[R] 294	407	4	[R] 705	[R] 204	158	1	173	(s)	2	[R] 537
April	[R] 197	299	11	[R] 507	[R] 136	128	2	179	0	1	[R] 446
May	[R] 165	225	5	[R] 394	[R] 114	107	1	170	0	1	[R] 393
June	[R] 145	145	11	[R] 301	[R] 100	85	2	175	0	1	[R] 363
July	97	130	4	231	67	81	1	175	0	1	325
7-Month Average	**242**	**365**	**9**	**617**	**168**	**146**	**1**	**172**	**(s)**	**2**	**489**
2025 7-Month Average	**243**	**386**	**9**	**638**	**168**	**152**	**1**	**175**	**(s)**	**2**	**498**
2024 7-Month Average	**236**	**344**	**7**	**587**	**163**	**136**	**1**	**175**	**(s)**	**1**	**477**

[a] Commercial sector fuel use, including that at commercial combined-heat-and-power (CHP) and commercial electricity-only plants.

[b] Hydrocarbon gas liquids.

[c] Finished motor gasoline. Through 1963, also includes special naphthas. Beginning in 1993, also includes fuel ethanol blended into motor gasoline.

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

R=Revised. NA=Not available. (s)=Less than 500 barrels per day and greater than -500 barrels per day.

Notes: • Data are estimates. • For total petroleum consumption by all sectors, see petroleum products supplied data in Table 3.5. Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. See Note 1, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • 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/#petroleum (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

Due to the suspension of Form EIA-782A, *Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report*, sectoral distillate and residual fuel oil consumption after April 2022 are estimates.

Table 3.7b Petroleum Consumption: Industrial Sector

(Thousand Barrels per Day)

	Industrial Sector[a]												
			Hydrocarbon Gas Liquids										
			Propane/Propylene										
	Asphalt and Road Oil	Distillate Fuel Oil	Propane	Propylene	Total[b]	Total[c]	Kerosene	Lubricants	Motor Gasoline[d,e]	Petroleum Coke	Residual Fuel Oil	Other[f]	Total
1950 Average	**180**	**328**	**12**	**13**	**24**	**100**	**132**	**43**	**131**	**41**	**617**	**250**	**1,822**
1955 Average	**254**	**466**	**59**	**22**	**81**	**212**	**116**	**47**	**173**	**67**	**686**	**366**	**2,387**
1960 Average	**302**	**476**	**98**	**33**	**131**	**333**	**78**	**48**	**198**	**149**	**689**	**435**	**2,708**
1965 Average	**368**	**541**	**152**	**45**	**197**	**470**	**80**	**62**	**179**	**202**	**689**	**657**	**3,247**
1970 Average	**447**	**577**	**201**	**55**	**256**	**699**	**89**	**70**	**150**	**203**	**708**	**866**	**3,808**
1975 Average	**419**	**630**	**242**	**60**	**302**	**863**	**58**	**68**	**116**	**246**	**658**	**982**	**4,038**
1980 Average	**396**	**621**	**445**	**72**	**516**	**1,293**	**87**	**82**	**82**	**234**	**586**	**1,460**	**4,842**
1985 Average	**425**	**526**	**497**	**72**	**569**	**1,408**	**21**	**75**	**114**	**261**	**326**	**909**	**4,065**
1990 Average	**483**	**541**	**471**	**105**	**576**	**1,364**	**6**	**84**	**97**	**325**	**179**	**1,225**	**4,304**
1995 Average	**486**	**532**	**566**	**157**	**723**	**1,727**	**7**	**80**	**105**	**328**	**147**	**1,180**	**4,594**
2000 Average	**525**	**563**	**500**	**224**	**724**	**1,923**	**8**	**86**	**79**	**361**	**105**	**1,255**	**4,903**
2005 Average	**546**	**594**	**506**	**243**	**749**	**1,666**	**19**	**72**	**187**	**404**	**123**	**1,489**	**5,100**
2010 Average	**362**	**547**	**371**	**305**	**676**	**1,782**	**4**	**61**	**140**	**310**	**52**	**1,251**	**4,510**
2011 Average	**355**	**586**	**395**	**310**	**705**	**1,794**	**2**	**58**	**138**	**295**	**59**	**1,240**	**4,525**
2012 Average	**340**	**602**	**481**	**308**	**789**	**1,912**	**1**	**53**	**136**	**319**	**30**	**1,165**	**4,559**
2013 Average	**323**	**601**	**526**	**306**	**832**	**2,058**	**1**	**57**	**142**	**295**	**21**	**1,227**	**4,724**
2014 Average	**327**	**648**	**401**	**298**	**698**	**1,974**	**1**	**59**	**114**	**290**	**18**	**1,151**	**4,582**
2015 Average	**343**	**555**	**434**	**295**	**729**	**2,119**	**1**	**64**	[e] **140**	**295**	**15**	**1,153**	**4,685**
2016 Average	**351**	**548**	**412**	**301**	**714**	**2,120**	**1**	**61**	**142**	**289**	**23**	**1,170**	**4,703**
2017 Average	**351**	**572**	**376**	**309**	**684**	**2,210**	**1**	**56**	**143**	**269**	**22**	**1,228**	**4,852**
2018 Average	**327**	**595**	**392**	**311**	**703**	**2,518**	**1**	**55**	**146**	**278**	**19**	**1,210**	**5,149**
2019 Average	**348**	**573**	**327**	**298**	**626**	**2,598**	**1**	**53**	**145**	**267**	**18**	**1,189**	**5,191**
2020 Average	**343**	**506**	**323**	**278**	**600**	**2,726**	**1**	**50**	**146**	**218**	**14**	**1,116**	**5,120**
2021 Average	**371**	**563**	**322**	**305**	**627**	**2,933**	**1**	**49**	**143**	**227**	**20**	**1,082**	**5,390**
2022 Average	**378**	**569**	**322**	**276**	**598**	**2,846**	**1**	**52**	**150**	**212**	**20**	**999**	**5,228**
2023 Average	**368**	**556**	**303**	**267**	**570**	**3,028**	**2**	**40**	**150**	**225**	**17**	**988**	**5,374**
2024 January	233	640	407	267	674	3,119	2	41	136	196	18	965	5,350
February	230	583	291	239	529	3,097	1	34	142	120	18	937	5,163
March	258	484	170	271	441	3,051	1	36	146	134	19	960	5,090
April	296	548	184	286	470	3,016	2	49	145	313	21	943	5,333
May	405	523	266	289	556	3,254	2	38	154	286	18	1,002	5,681
June	477	411	317	280	596	3,236	1	44	151	173	18	1,014	5,525
July	465	459	313	269	581	3,020	(s)	39	153	294	18	1,003	5,449
August	511	583	371	274	645	3,384	(s)	47	152	188	17	1,018	5,900
September	446	490	416	271	687	3,526	(s)	39	147	187	14	949	5,798
October	472	735	487	281	768	3,642	(s)	35	148	176	20	936	6,165
November	352	501	295	297	592	3,368	1	24	145	187	19	968	5,567
December	239	493	391	294	685	3,581	2	24	144	110	19	946	5,557
Average	**366**	**538**	**326**	**277**	**603**	**3,275**	**1**	**38**	**147**	**197**	**18**	**970**	**5,550**
2025 January	228	681	460	281	[R] 742	3,441	4	32	138	285	23	936	[R] 5,768
February	234	510	458	262	720	3,278	4	30	142	85	22	933	[R] 5,239
March	253	552	233	245	478	3,077	2	35	143	149	20	947	5,179
April	328	593	238	266	504	3,121	1	44	146	229	19	976	5,456
May	395	516	249	272	521	3,247	1	44	148	308	14	996	5,669
June	475	497	357	269	[R] 626	3,422	1	38	154	183	18	1,035	5,823
July	490	494	425	282	708	3,597	(s)	52	150	237	22	1,035	6,079
August	493	436	475	251	726	3,815	1	49	151	204	17	1,051	6,217
September	497	611	447	251	698	3,537	(s)	54	148	160	23	1,016	6,045
October	439	694	385	225	610	3,493	(s)	47	146	149	20	915	5,903
November	344	550	358	254	612	3,483	2	48	143	105	22	943	[R] 5,640
December	224	502	[R] 286	270	556	[R] 3,386	3	42	145	193	23	989	5,508
Average	**367**	**553**	**364**	**261**	**624**	**3,409**	**2**	**43**	**146**	**192**	**20**	**981**	**5,714**
2026 January	206	[R] 627	[R] 410	257	667	3,606	5	54	135	252	16	1,011	[R] 5,911
February	261	[R] 608	[R] 402	257	[R] 659	[R] 3,563	2	56	141	271	25	1,005	[R] 5,932
March	294	[R] 569	94	257	351	3,190	1	62	145	212	18	963	[R] 5,453
April	354	[R] 566	230	257	487	[R] 3,289	2	43	149	139	23	968	[R] 5,534
May	383	[R] 344	237	269	506	3,402	1	39	142	273	18	1,018	[R] 5,621
June	491	[R] 459	291	270	561	3,331	2	44	146	230	25	1,017	[R] 5,744
July	465	398	324	261	584	3,431	1	53	146	180	16	1,037	5,727
7-Month Average	**351**	**509**	**282**	**261**	**544**	**3,400**	**2**	**50**	**144**	**222**	**20**	**1,003**	**5,701**
2025 7-Month Average	**344**	**550**	**345**	**268**	**613**	**3,313**	**2**	**39**	**146**	**213**	**20**	**980**	**5,607**
2024 7-Month Average	**338**	**521**	**278**	**272**	**550**	**3,113**	**1**	**40**	**147**	**217**	**19**	**975**	**5,372**

[a] Industrial sector fuel use, including that at industrial combined-heat-and-power (CHP) and industrial electricity-only plants.

[b] Propane and propylene. Through 1983, also includes 40% of "Butane-Propane Mixtures" and 30% of "Ethane-Propane Mixtures."

[c] Ethane, propane, normal butane, isobutane, and refinery olefins (ethylene, propylene, butylene, and isobutylene). Through 1983, also includes plant condensate and unfractionated stream. Through 2021, also includes natural gasoline (pentanes plus).

[d] Finished motor gasoline. Through 1963, also includes special naphthas. Beginning in 1993, also includes fuel ethanol blended into motor gasoline.

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

[f] Petrochemical feedstocks, still gas (refinery gas), waxes, and miscellaneous products. Beginning in 1964, also includes special naphthas. Beginning in 1981, also includes negative barrels per day of distillate and residual fuel oil reclassified as unfinished oils (through 2021), and other products (from both primary and secondary supply) reclassified as gasoline blending components. Beginning in 1983, also includes crude oil burned as fuel. Beginning in 2005, also includes naphtha-type jet fuel.

R=Revised. (s)=Less than 500 barrels per day and greater than -500 barrels per day.

Notes: • Data are estimates. • For total petroleum consumption by all sectors, see petroleum products supplied data in Table 3.5. Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. See Note 1, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • 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/#petroleum (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

Due to the suspension of Form EIA-782A, *Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report,* sectoral distillate and residual fuel oil consumption after April 2022 are estimates.

Table 3.7c Petroleum Consumption: Transportation and Electric Power Sectors

(Thousand Barrels per Day)

	Transportation Sector									Electric Power Sector[a]			
	Aviation Gasoline	Distillate Fuel Oil[c]	HGL[b] Propane[d]	Jet Fuel[e]	Lubricants	Motor Gasoline[f,g]	Residual Fuel Oil	Other[h]	Total	Distillate Fuel Oil[i]	Petroleum Coke	Residual Fuel Oil[j]	Total
1950 Average	**108**	**226**	**2**	**(e)**	**64**	**2,433**	**524**	**NA**	**3,356**	**15**	**NA**	**192**	**207**
1955 Average	**192**	**372**	**9**	**154**	**70**	**3,221**	**440**	**NA**	**4,458**	**15**	**NA**	**191**	**206**
1960 Average	**161**	**418**	**13**	**371**	**68**	**3,736**	**367**	**NA**	**5,135**	**10**	**NA**	**231**	**241**
1965 Average	**120**	**514**	**23**	**602**	**67**	**4,374**	**336**	**NA**	**6,036**	**14**	**NA**	**302**	**316**
1970 Average	**55**	**738**	**32**	**967**	**66**	**5,589**	**332**	**NA**	**7,778**	**66**	**9**	**853**	**928**
1975 Average	**39**	**998**	**31**	**992**	**70**	**6,512**	**310**	**NA**	**8,951**	**107**	**1**	**1,280**	**1,388**
1980 Average	**35**	**1,311**	**13**	**1,062**	**77**	**6,441**	**608**	**NA**	**9,546**	**79**	**2**	**1,069**	**1,151**
1985 Average	**27**	**1,491**	**21**	**1,218**	**71**	**6,667**	**342**	**NA**	**9,838**	**40**	**3**	**435**	**478**
1990 Average	**24**	**1,722**	**16**	**1,522**	**80**	**7,080**	**443**	**NA**	**10,888**	**45**	**14**	**507**	**566**
1995 Average	**21**	**1,973**	**13**	**1,514**	**76**	**7,674**	**397**	**NA**	**11,668**	**51**	**37**	**247**	**334**
2000 Average	**20**	**2,422**	**8**	**1,725**	**81**	**8,370**	**386**	**NA**	**13,012**	**82**	**45**	**378**	**505**
2005 Average	**19**	**2,858**	**20**	**1,679**	**68**	**8,948**	**365**	**NA**	**13,957**	**54**	**111**	**382**	**547**
2010 Average	**15**	**2,764**	**[d] 3**	**1,432**	**70**	**8,824**	**389**	**(h)**	**13,496**	**38**	**65**	**67**	**170**
2011 Average	**15**	**2,849**	**3**	**1,425**	**67**	**8,591**	**338**	**(h)**	**13,289**	**30**	**66**	**41**	**137**
2012 Average	**14**	**2,719**	**3**	**1,398**	**61**	**8,525**	**291**	**(h)**	**13,011**	**25**	**41**	**33**	**99**
2013 Average	**12**	**2,804**	**4**	**1,434**	**65**	**8,679**	**253**	**(h)**	**13,252**	**26**	**59**	**34**	**119**
2014 Average	**12**	**2,928**	**5**	**1,470**	**67**	**8,778**	**195**	**(h)**	**13,455**	**39**	**57**	**41**	**137**
2015 Average	**11**	**2,974**	**7**	**1,548**	**74**	**[g] 8,835**	**202**	**(h)**	**13,651**	**33**	**54**	**41**	**128**
2016 Average	**11**	**2,944**	**8**	**1,614**	**70**	**8,973**	**271**	**(h)**	**13,891**	**26**	**57**	**31**	**113**
2017 Average	**11**	**2,976**	**9**	**1,682**	**64**	**8,988**	**290**	**(h)**	**14,019**	**26**	**47**	**29**	**101**
2018 Average	**12**	**3,118**	**9**	**1,707**	**62**	**8,984**	**263**	**(h)**	**14,156**	**38**	**49**	**34**	**121**
2019 Average	**13**	**3,127**	**9**	**1,743**	**60**	**8,965**	**231**	**(h)**	**14,146**	**26**	**36**	**26**	**88**
2020 Average	**11**	**2,935**	**6**	**1,076**	**52**	**7,703**	**170**	**(h)**	**11,953**	**21**	**42**	**23**	**86**
2021 Average	**12**	**2,999**	**7**	**1,370**	**56**	**8,469**	**268**	**133**	**13,314**	**28**	**42**	**25**	**95**
2022 Average	**12**	**3,032**	**8**	**1,560**	**59**	**8,421**	**275**	**169**	**13,535**	**40**	**41**	**33**	**113**
2023 Average	**11**	**2,959**	**8**	**1,653**	**43**	**8,586**	**228**	**268**	**13,757**	**25**	**28**	**28**	**81**
2024 January	7	2,567	8	1,532	45	7,992	225	260	12,636	50	26	33	110
February	15	2,574	8	1,552	38	8,348	249	339	13,122	18	21	24	63
March	9	2,704	8	1,651	40	8,616	256	300	13,584	19	14	23	56
April	14	2,891	8	1,678	54	8,550	278	328	13,801	28	21	23	71
May	12	2,950	8	1,742	41	9,053	249	328	14,382	23	22	25	71
June	17	2,989	8	1,772	48	8,869	249	348	14,300	23	29	27	79
July	16	3,050	8	1,802	43	8,983	247	370	14,519	29	32	28	89
August	14	3,138	8	1,784	52	8,924	240	323	14,483	29	32	27	87
September	14	2,934	8	1,676	43	8,660	180	338	13,854	20	18	27	65
October	12	3,055	8	1,712	39	8,744	267	335	14,171	23	17	28	68
November	11	2,783	8	1,669	27	8,515	260	335	13,607	22	17	26	65
December	7	2,719	8	1,704	26	8,457	252	316	13,489	33	23	33	89
Average	**12**	**2,864**	**8**	**1,690**	**41**	**8,644**	**246**	**326**	**13,832**	**26**	**23**	**27**	**76**
2025 January	8	2,646	9	1,643	36	8,138	298	179	12,957	100	33	48	182
February	13	2,674	9	1,552	32	8,365	292	247	13,185	38	25	31	94
March	10	2,805	9	1,655	38	8,443	263	223	13,446	21	26	25	72
April	13	2,983	9	1,788	48	8,600	249	247	13,938	23	22	24	69
May	13	3,015	9	1,780	48	8,741	177	224	14,006	19	23	23	65
June	13	3,109	9	1,846	42	9,057	240	185	14,500	32	33	30	95
July	17	3,143	9	1,867	57	8,847	306	214	14,459	28	34	32	94
August	13	3,129	9	1,820	54	8,908	222	207	14,363	27	32	28	87
September	14	3,070	9	1,688	59	8,688	321	226	14,074	23	28	27	78
October	15	3,101	9	1,786	52	8,621	265	241	14,090	22	28	27	77
November	12	2,875	9	1,680	53	8,401	305	237	13,572	30	23	25	79
December	8	2,787	9	1,729	46	8,540	299	246	13,665	47	19	54	121
Average	**12**	**2,946**	**9**	**1,737**	**47**	**8,614**	**269**	**223**	**13,858**	**34**	**27**	**31**	**93**
2026 January	9	[R] 2,610	9	1,646	60	7,961	208	165	[R] 12,666	176	27	81	284
February	12	[R] 2,722	9	1,624	62	8,278	286	222	[R] 13,214	117	27	49	192
March	9	[R] 2,807	9	1,682	68	8,535	255	247	[R] 13,612	31	20	25	76
April	19	[R] 2,960	9	1,814	48	8,795	329	276	[R] 14,248	27	22	24	73
May	11	[R] 2,911	9	1,706	43	8,370	258	271	[R] 13,579	32	26	24	83
June	11	[R] 3,079	9	1,817	48	8,597	[R] 362	319	[R] 14,242	27	32	27	87
July	14	3,080	9	1,890	58	8,624	224	323	14,223	42	30	34	106
7-Month Average	**12**	**2,882**	**9**	**1,741**	**55**	**8,451**	**274**	**261**	**13,685**	**64**	**26**	**38**	**128**
2025 7-Month Average	**12**	**2,913**	**9**	**1,735**	**43**	**8,600**	**260**	**217**	**13,789**	**38**	**28**	**30**	**96**
2024 7-Month Average	**13**	**2,819**	**8**	**1,676**	**44**	**8,632**	**250**	**324**	**13,767**	**27**	**24**	**26**	**77**

[a] Electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 1988, data are for electric utilities only; beginning in 1989, data are for electric utilities and independent power producers.

[b] Hydrocarbon gas liquids.

[c] Beginning in 2009, includes biodiesel and renewable diesel fuel blended into distillate fuel oil. For 2011–2020, also includes biodiesel adjustments (supply of biodiesel not reported as input on surveys) reclassified as distillate fuel oil adjustments.

[d] There is a discontinuity in this time series between 2009 and 2010 due to a change in data sources.

[e] Beginning in 1957, includes kerosene-type jet fuel. For 1952–2004, also includes naphtha-type jet fuel. (Through 1951, naphtha-type jet fuel is included in the products from which it was blended—gasoline, kerosene, and distillate fuel oil. Beginning in 2005, naphtha-type jet fuel is included in "Other" on Table 3.7b.)

[f] Finished motor gasoline. Through 1963, also includes special naphthas. Beginning in 1993, also includes fuel ethanol blended into motor gasoline.

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

[h] Biofuels (excluding fuel ethanol) products supplied. Includes supply of non-fuel ethanol biofuels (such as B100 biodiesel and R100 renewable diesel fuel) not reported as input on surveys. For 2009–2020, data in this category were classified as biofuels (excluding fuel ethanol) adjustments.

[i] Fuel oil nos. 1, 2, and 4. Through 1979, data are for gas turbine and internal combustion plant use of petroleum. Through 2000, electric utility data also include small amounts of kerosene and jet fuel.

[j] Fuel oil nos. 5 and 6. Through 1979, data are for steam plant use of petroleum. Through 2000, electric utility data also include a small amount of fuel oil no. 4.

R=Revised. NA=Not available.

Notes: • Transportation sector data are estimates. • For total petroleum consumption by all sectors, see petroleum products supplied data in Table 3.5. Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. Other measurements of consumption by fuel type or sector may differ. For example, jet fuel product supplied may not equal jet fuel consumed by U.S-flagged aircraft. See Note 1, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

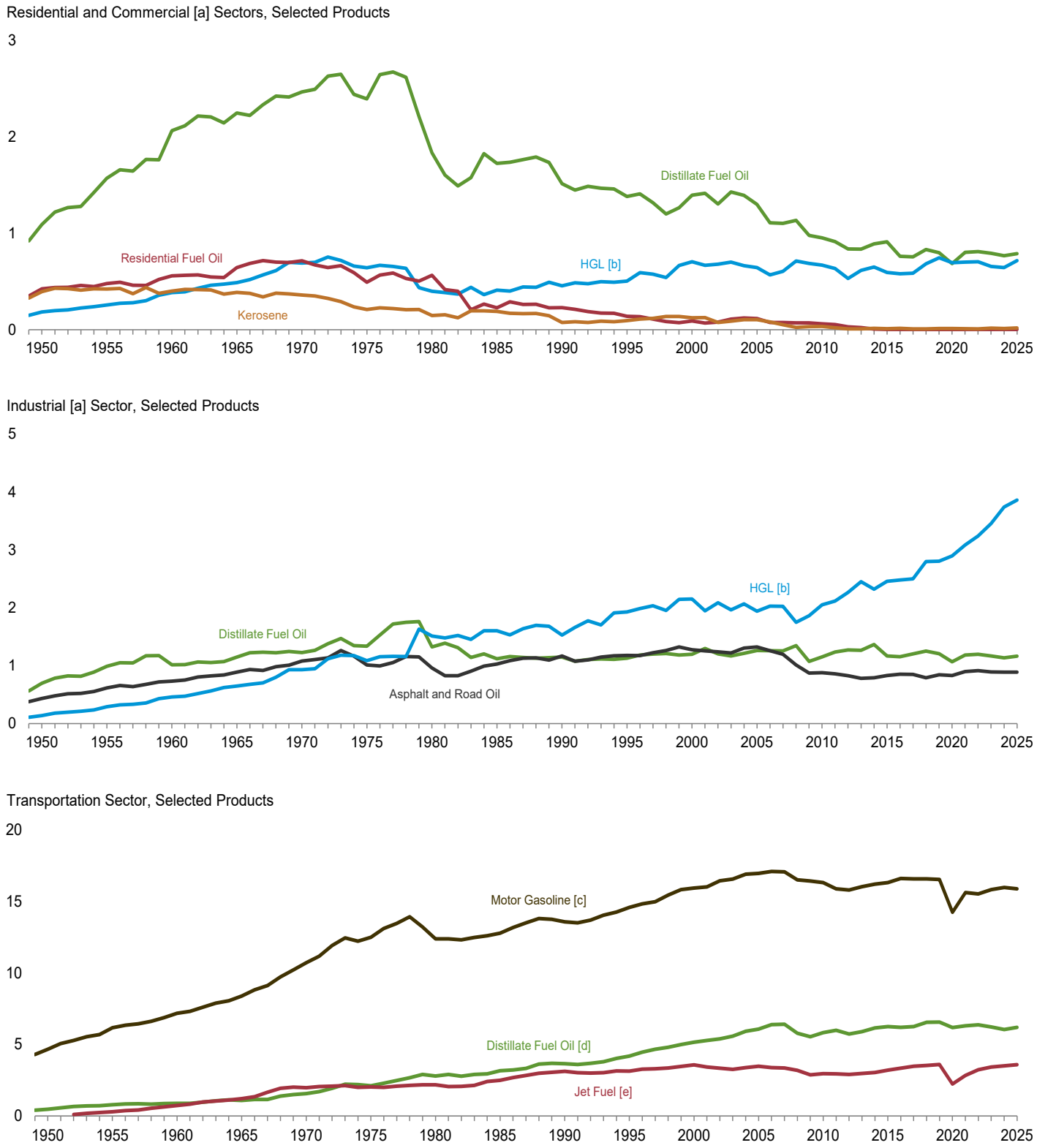
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#petroleum (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

Due to the suspension of Form EIA-782A, *Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report*, sectoral distillate and residual fuel oil consumption after April 2022 are estimates.

Figure 3.8a Heat Content of Petroleum Consumption by End-Use Sector, 1949–2025

(Quadrillion Btu)

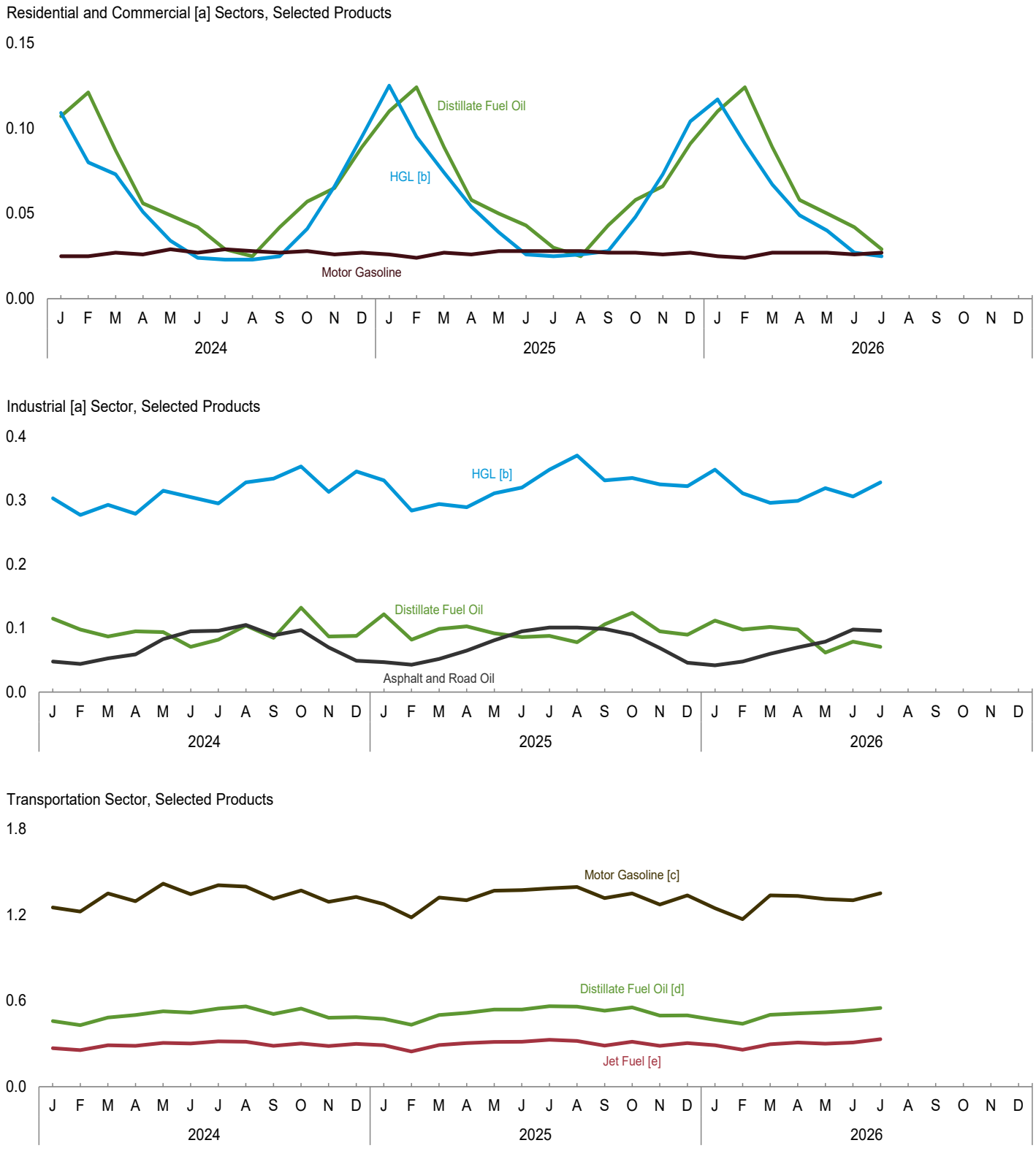


[a] Includes combined-heat-and-power plants and a small number of electricity-only plants.
[b] Hydrocarbon gas liquids.
[c] Beginning in 1993, includes fuel ethanol blended into motor gasoline.
[d] Beginning in 2009, includes biodiesel and renewable diesel fuel blended into distillate fuel oil.
[e] Beginning in 2005, includes kerosene-type jet fuel only.

Note: Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. Other measurements of consumption by fuel type or sector may differ. For example, jet fuel product supplied may not equal jet fuel consumed by U.S.-flagged aircraft.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum.
Sources: Tables 3.8a–3.8c.

Figure 3.8b Heat Content of Petroleum Consumption by End-Use Sector, Monthly

(Quadrillion Btu)



[a] Includes combined-heat-and-power plants and a small number of electricity-only plants.
[b] Hydrocarbon gas liquids.
[c] Includes fuel ethanol blended into motor gasoline.
[d] Includes biodiesel and renewable diesel fuel blended into distillate fuel oil.
[e] Includes kerosene-type jet fuel only.

Note: Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. Other measurements of consumption by fuel type or sector may differ. For example, jet fuel product supplied may not equal jet fuel consumed by U.S.-flagged aircraft.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#petroleum.
Sources: Tables 3.8a–3.8c.

Table 3.8a Heat Content of Petroleum Consumption: Residential and Commercial Sectors

(Trillion Btu)

	Residential Sector				Commercial Sector[a]						
	Distillate Fuel Oil	HGL[b] Propane	Kero-sene	Total	Distillate Fuel Oil	HGL[b] Propane	Kero-sene	Motor Gasoline[c,d]	Petroleum Coke	Residual Fuel Oil	Total
1950 Total	**829**	**146**	**347**	**1,322**	**262**	**39**	**47**	**100**	**NA**	**424**	**872**
1955 Total	**1,194**	**202**	**371**	**1,767**	**377**	**54**	**51**	**133**	**NA**	**480**	**1,095**
1960 Total	**1,568**	**305**	**354**	**2,228**	**494**	**81**	**48**	**67**	**NA**	**559**	**1,248**
1965 Total	**1,713**	**386**	**334**	**2,432**	**534**	**103**	**54**	**77**	**NA**	**645**	**1,413**
1970 Total	**1,878**	**549**	**298**	**2,726**	**587**	**143**	**61**	**86**	**NA**	**714**	**1,592**
1975 Total	**1,807**	**512**	**161**	**2,479**	**587**	**130**	**49**	**89**	**NA**	**492**	**1,346**
1980 Total	**1,316**	**312**	**107**	**1,734**	**518**	**88**	**41**	**107**	**NA**	**565**	**1,318**
1985 Total	**1,092**	**315**	**159**	**1,566**	**631**	**95**	**33**	**96**	**NA**	**228**	**1,083**
1990 Total	**978**	**353**	**64**	**1,395**	**536**	**102**	**12**	**111**	**0**	**230**	**991**
1995 Total	**904**	**395**	**74**	**1,374**	**478**	**109**	**22**	**18**	**(s)**	**141**	**769**
2000 Total	**904**	**556**	**95**	**1,554**	**490**	**151**	**30**	**44**	**(s)**	**92**	**807**
2005 Total	**853**	**514**	**84**	**1,450**	**447**	**132**	**22**	**46**	**(s)**	**116**	**762**
2010 Total	**562**	**530**	**29**	**1,120**	**391**	**140**	**5**	**52**	**(s)**	**62**	**650**
2011 Total	**523**	**493**	**19**	**1,034**	**391**	**143**	**3**	**44**	**(s)**	**54**	**635**
2012 Total	**482**	**396**	**8**	**886**	**355**	**136**	**1**	**39**	**(s)**	**31**	**562**
2013 Total	**491**	**463**	**8**	**963**	**344**	**152**	**1**	**40**	**(s)**	**24**	**561**
2014 Total	**533**	**490**	**14**	**1,036**	**357**	**160**	**2**	**54**	**1**	**8**	**581**
2015 Total	**551**	**446**	**10**	**1,007**	**360**	**148**	**1**	**[d]376**	**1**	**4**	**890**
2016 Total	**435**	**430**	**14**	**878**	**326**	**150**	**2**	**375**	**(s)**	**4**	**858**
2017 Total	**432**	**431**	**8**	**871**	**323**	**156**	**1**	**361**	**(s)**	**4**	**845**
2018 Total	**508**	**507**	**8**	**1,022**	**323**	**176**	**1**	**366**	**(s)**	**3**	**870**
2019 Total	**471**	**563**	**11**	**1,045**	**327**	**182**	**2**	**369**	**(s)**	**2**	**883**
2020 Total	**408**	**495**	**11**	**914**	**276**	**201**	**2**	**371**	**(s)**	**2**	**853**
2021 Total	**474**	**484**	**9**	**967**	**328**	**217**	**1**	**375**	**(s)**	**3**	**925**
2022 Total	**479**	**504**	**8**	**992**	**332**	**202**	**1**	**440**	**(s)**	**3**	**979**
2023 Total	**468**	**472**	**15**	**955**	**324**	**184**	**2**	**386**	**(s)**	**3**	**900**
2024 January	63	82	2	147	44	27	(s)	25	(s)	(s)	97
February	72	59	1	132	50	21	(s)	25	(s)	(s)	96
March	51	53	1	106	36	20	(s)	27	0	(s)	83
April	33	36	2	71	23	15	(s)	26	0	(s)	64
May	29	23	2	53	20	11	(s)	29	(s)	(s)	60
June	25	15	1	40	17	9	(s)	27	(s)	(s)	53
July	17	14	(s)	31	12	9	(s)	29	0	(s)	49
August	15	14	(s)	29	10	9	(s)	28	0	(s)	47
September	25	16	(s)	41	17	9	(s)	27	0	(s)	53
October	34	29	(s)	62	23	13	(s)	28	0	(s)	64
November	38	48	1	87	26	18	(s)	26	0	(s)	71
December	53	71	2	125	36	24	(s)	27	(s)	(s)	88
Total	**454**	**460**	**12**	**925**	**314**	**184**	**2**	**324**	**(s)**	**3**	**828**
2025 January	65	93	3	162	45	31	(s)	26	(s)	(s)	103
February	73	[R]70	3	147	51	24	(s)	24	(s)	1	100
March	53	54	2	109	37	20	(s)	27	0	(s)	84
April	34	38	1	73	24	16	(s)	26	0	(s)	66
May	30	26	1	57	20	13	(s)	28	0	(s)	61
June	25	16	1	42	17	10	(s)	28	0	(s)	55
July	17	16	(s)	33	12	10	(s)	28	0	(s)	50
August	15	16	1	32	10	10	(s)	28	0	(s)	49
September	25	18	(s)	43	18	10	(s)	27	0	(s)	55
October	34	33	(s)	68	24	15	(s)	27	0	(s)	66
November	39	53	2	94	27	20	(s)	26	0	(s)	73
December	54	77	3	134	37	27	(s)	27	(s)	(s)	92
Total	**466**	**511**	**17**	**994**	**323**	**205**	**3**	**322**	**(s)**	**3**	**856**
2026 January	[R]65	88	4	[R]156	[R]45	30	1	25	(s)	(s)	[R]101
February	[R]73	68	2	[R]143	[R]51	24	(s)	24	(s)	(s)	[R]99
March	[R]53	48	1	[R]102	36	19	(s)	27	(s)	(s)	[R]83
April	34	34	2	70	[R]24	15	(s)	27	0	(s)	[R]66
May	29	27	1	57	20	13	(s)	27	0	(s)	60
June	25	17	2	[R]44	17	10	(s)	26	0	(s)	54
July	17	15	1	34	12	10	(s)	27	0	(s)	49
7-Month Total	**297**	**297**	**11**	**605**	**205**	**119**	**2**	**184**	**(s)**	**2**	**512**
2025 7-Month Total	**297**	**314**	**11**	**623**	**206**	**124**	**2**	**187**	**(s)**	**2**	**521**
2024 7-Month Total	**290**	**282**	**9**	**580**	**201**	**111**	**1**	**189**	**(s)**	**2**	**504**

[a] Commercial sector fuel use, including that at commercial combined-heat-and-power (CHP) and commercial electricity-only plants.

[b] Hydrocarbon gas liquids.

[c] Finished motor gasoline. Through 1963, also includes special naphthas. Beginning in 1993, also includes fuel ethanol blended into motor gasoline.

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

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

Notes: • Data are estimates. • For total heat content of petroleum consumption by all sectors, see data for heat content of petroleum products supplied in Table 3.6. Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. See Note 1, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • 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/#petroleum (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

Due to the suspension of Form EIA-782A, *Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report*, sectoral distillate and residual fuel oil consumption after April 2022 are estimates.

Table 3.8b Heat Content of Petroleum Consumption: Industrial Sector

(Trillion Btu)

	Industrial Sector[a]												
			Hydrocarbon Gas Liquids										
			Propane/Propylene										
	Asphalt and Road Oil	Distillate Fuel Oil	Propane	Propylene	Total[b]	Total[c]	Kerosene	Lubricants	Motor Gasoline[d,e]	Petroleum Coke	Residual Fuel Oil	Other[f]	Total
1950 Total	**435**	**698**	**17**	**18**	**34**	**138**	**274**	**94**	**251**	**90**	**1,416**	**546**	**3,943**
1955 Total	**615**	**991**	**83**	**30**	**113**	**293**	**241**	**103**	**332**	**147**	**1,573**	**798**	**5,093**
1960 Total	**734**	**1,016**	**137**	**47**	**184**	**461**	**161**	**107**	**381**	**328**	**1,584**	**947**	**5,720**
1965 Total	**890**	**1,150**	**213**	**63**	**276**	**649**	**165**	**137**	**342**	**444**	**1,582**	**1,390**	**6,750**
1970 Total	**1,082**	**1,226**	**282**	**77**	**359**	**930**	**185**	**155**	**288**	**446**	**1,624**	**1,817**	**7,754**
1975 Total	**1,014**	**1,339**	**339**	**84**	**423**	**1,126**	**119**	**149**	**223**	**540**	**1,509**	**2,071**	**8,092**
1980 Total	**962**	**1,324**	**625**	**100**	**726**	**1,718**	**181**	**182**	**158**	**516**	**1,349**	**3,073**	**9,464**
1985 Total	**1,029**	**1,119**	**696**	**101**	**798**	**1,813**	**44**	**166**	**218**	**575**	**748**	**1,945**	**7,656**
1990 Total	**1,170**	**1,150**	**660**	**147**	**807**	**1,781**	**12**	**186**	**185**	**714**	**411**	**2,589**	**8,200**
1995 Total	**1,178**	**1,130**	**794**	**220**	**1,014**	**2,269**	**15**	**178**	**200**	**721**	**337**	**2,499**	**8,527**
2000 Total	**1,276**	**1,199**	**703**	**315**	**1,017**	**2,498**	**16**	**190**	**150**	**796**	**241**	**2,636**	**9,001**
2005 Total	**1,323**	**1,262**	**709**	**341**	**1,050**	**2,138**	**39**	**160**	**354**	**894**	**281**	**3,122**	**9,574**
2010 Total	**878**	**1,153**	**520**	**428**	**947**	**2,207**	**7**	**136**	**260**	**694**	**120**	**2,645**	**8,099**
2011 Total	**859**	**1,236**	**554**	**434**	**988**	**2,172**	**4**	**127**	**254**	**663**	**135**	**2,621**	**8,071**
2012 Total	**827**	**1,271**	**677**	**432**	**1,109**	**2,351**	**2**	**118**	**252**	**717**	**70**	**2,474**	**8,082**
2013 Total	**783**	**1,266**	**737**	**429**	**1,165**	**2,545**	**1**	**125**	**263**	**663**	**48**	**2,583**	**8,278**
2014 Total	**793**	**1,366**	**562**	**417**	**978**	**2,409**	**3**	**131**	**210**	**653**	**41**	**2,430**	**8,035**
2015 Total	**832**	**1,170**	**609**	**413**	**1,022**	**2,618**	**2**	**142**	[e] **258**	**663**	**34**	**2,435**	**8,153**
2016 Total	**853**	**1,157**	**579**	**423**	**1,002**	**2,592**	**2**	**135**	**262**	**653**	**52**	**2,553**	**8,261**
2017 Total	**849**	**1,205**	**527**	**432**	**959**	**2,673**	**1**	**125**	**264**	**610**	**50**	**2,667**	**8,446**
2018 Total	**793**	**1,254**	**550**	**436**	**985**	**3,024**	**2**	**122**	**269**	**629**	**43**	**2,630**	**8,766**
2019 Total	**844**	**1,206**	**459**	**418**	**877**	**3,139**	**1**	**118**	**267**	**602**	**41**	**2,585**	**8,803**
2020 Total	**832**	**1,068**	**454**	**390**	**843**	**3,252**	**3**	**111**	**269**	**495**	**32**	**2,433**	**8,495**
2021 Total	**898**	**1,186**	**451**	**427**	**878**	**3,519**	**1**	**109**	**264**	**515**	**46**	**2,360**	**8,899**
2022 Total	**916**	**1,199**	**452**	**386**	**838**	**3,240**	**1**	**115**	**276**	**485**	**47**	**2,196**	**8,475**
2023 Total	**892**	**1,170**	**425**	**374**	**799**	**3,455**	**4**	**89**	**276**	**510**	**39**	**2,170**	**8,606**
2024 January	48	115	48	32	80	303	(s)	8	21	38	4	179	716
February	44	98	32	27	59	277	(s)	6	21	22	3	162	633
March	53	87	20	32	52	293	(s)	7	23	26	4	179	671
April	59	95	21	33	54	279	(s)	9	22	59	4	171	697
May	83	94	32	34	66	315	(s)	7	24	55	4	187	770
June	95	71	36	32	69	305	(s)	8	23	33	3	184	722
July	96	82	37	32	69	295	(s)	7	24	57	3	188	753
August	105	104	44	33	77	328	(s)	9	24	37	3	190	800
September	89	85	48	31	79	334	(s)	7	22	35	3	172	747
October	97	132	58	33	91	353	(s)	7	23	34	4	175	825
November	70	87	34	34	68	313	(s)	4	22	35	4	175	710
December	49	88	47	35	82	345	(s)	4	22	22	4	177	711
Total	**888**	**1,136**	**458**	**388**	**847**	**3,740**	**2**	**83**	**271**	**453**	**42**	**2,138**	**8,755**
2025 January	47	122	55	33	88	331	1	6	22	55	4	175	762
February	43	82	49	28	77	284	1	5	20	15	4	158	613
March	52	99	28	29	57	294	(s)	7	22	29	4	177	684
April	65	103	27	31	58	289	(s)	8	22	43	4	175	709
May	81	92	30	32	62	311	(s)	8	23	60	3	185	764
June	95	86	41	31	72	320	(s)	7	23	35	3	187	756
July	101	88	51	34	84	348	(s)	10	24	46	4	193	814
August	101	78	57	30	86	370	(s)	9	24	40	3	196	821
September	99	106	52	29	80	331	(s)	10	22	30	4	184	786
October	90	124	46	27	73	335	(s)	9	23	29	4	171	785
November	69	95	41	29	[R] 70	325	(s)	9	22	20	4	170	713
December	46	90	34	32	66	322	1	8	23	37	4	184	715
Total	**890**	**1,165**	**510**	**365**	**875**	**3,861**	**3**	**95**	**269**	**439**	**46**	**2,154**	**8,923**
2026 January	42	[R] 112	49	31	79	348	1	10	21	49	3	187	[R] 774
February	48	[R] 98	43	28	71	311	(s)	10	20	47	4	168	[R] 707
March	60	[R] 102	11	31	42	296	(s)	12	23	41	4	179	[R] 716
April	70	[R] 98	[R] 26	30	56	299	(s)	8	23	26	4	175	[R] 703
May	79	[R] 62	28	32	60	319	(s)	7	22	53	4	190	[R] 736
June	98	[R] 79	33	31	65	306	(s)	8	22	43	5	184	[R] 745
July	96	71	39	31	69	328	(s)	10	23	35	3	194	760
7-Month Total	**494**	**622**	**230**	**212**	**442**	**2,208**	**2**	**65**	**154**	**295**	**27**	**1,277**	**5,142**
2025 7-Month Total	**484**	**672**	**281**	**218**	**499**	**2,177**	**2**	**51**	**156**	**283**	**26**	**1,249**	**5,102**
2024 7-Month Total	**478**	**640**	**228**	**222**	**450**	**2,068**	**2**	**52**	**158**	**290**	**25**	**1,249**	**4,962**

[a] Industrial sector fuel use, including that at industrial combined-heat-and-power (CHP) and industrial electricity-only plants.

[b] Propane and propylene. Through 1983, also includes 40% of "Butane-Propane Mixtures" and 30% of "Ethane-Propane Mixtures."

[c] Ethane, propane, normal butane, isobutane, and refinery olefins (ethylene, propylene, butylene, and isobutylene). Through 1983, also includes plant condensate and unfractionated stream. Through 2021, also includes natural gasoline (pentanes plus).

[d] Finished motor gasoline. Through 1963, also includes special naphthas. Beginning in 1993, also includes fuel ethanol blended into motor gasoline.

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

[f] Petrochemical feedstocks, still gas (refinery gas), waxes, and miscellaneous products. Beginning in 1964, also includes special naphthas. Beginning in 1981, also includes negative barrels per day of distillate and residual fuel oil reclassified as unfinished oils (through 2021), and other products (from both primary and secondary supply) reclassified as gasoline blending components. Beginning in 1983, also includes crude oil burned as fuel. Beginning in 2005, also includes naphtha-type jet fuel.

R=Revised. (s)=Less than 0.5 trillion Btu and greater than -0.5 trillion Btu.

Notes: • Data are estimates. • For total heat content of petroleum consumption by all sectors, see data for heat content of petroleum products supplied in Table 3.6. Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. See Note 1, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • 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/#petroleum (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

Due to the suspension of Form EIA-782A, *Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report*, sectoral distillate and residual fuel oil consumption after April 2022 are estimates.

Table 3.8c Heat Content of Petroleum Consumption: Transportation and Electric Power Sectors (Trillion Btu)

	Transportation Sector									Electric Power Sector[a]			
	Aviation Gasoline	Distillate Fuel Oil[c]	HGL[b] Propane[d]	Jet Fuel[e]	Lubricants	Motor Gasoline[f,g]	Residual Fuel Oil	Other[h]	Total	Distillate Fuel Oil[i]	Petroleum Coke	Residual Fuel Oil[j]	Total
1950 Total	**199**	**480**	**3**	**(e)**	**141**	**4,664**	**1,201**	**NA**	**6,690**	**32**	**NA**	**440**	**472**
1955 Total	**354**	**791**	**13**	**301**	**155**	**6,175**	**1,009**	**NA**	**8,799**	**32**	**NA**	**439**	**471**
1960 Total	**298**	**892**	**19**	**739**	**152**	**7,183**	**844**	**NA**	**10,125**	**22**	**NA**	**530**	**553**
1965 Total	**222**	**1,093**	**32**	**1,215**	**149**	**8,386**	**770**	**NA**	**11,866**	**29**	**NA**	**693**	**722**
1970 Total	**100**	**1,569**	**44**	**1,973**	**147**	**10,716**	**761**	**NA**	**15,311**	**141**	**19**	**1,958**	**2,117**
1975 Total	**71**	**2,121**	**43**	**2,029**	**155**	**12,485**	**711**	**NA**	**17,615**	**226**	**2**	**2,937**	**3,166**
1980 Total	**64**	**2,795**	**18**	**2,179**	**172**	**12,383**	**1,398**	**NA**	**19,009**	**169**	**5**	**2,459**	**2,634**
1985 Total	**50**	**3,170**	**30**	**2,497**	**156**	**12,784**	**786**	**NA**	**19,472**	**85**	**7**	**998**	**1,090**
1990 Total	**45**	**3,661**	**23**	**3,129**	**176**	**13,575**	**1,016**	**NA**	**21,626**	**97**	**30**	**1,163**	**1,289**
1995 Total	**40**	**4,191**	**18**	**3,132**	**168**	**14,576**	**911**	**NA**	**23,036**	**108**	**81**	**566**	**755**
2000 Total	**36**	**5,159**	**12**	**3,580**	**179**	**15,933**	**888**	**NA**	**25,787**	**175**	**99**	**871**	**1,144**
2005 Total	**35**	**6,068**	**28**	**3,475**	**151**	**16,958**	**837**	**NA**	**27,553**	**114**	**231**	**876**	**1,222**
2010 Total	**27**	**5,826**	**[d] 5**	**2,963**	**155**	**16,320**	**892**	**(h)**	**26,187**	**80**	**137**	**154**	**370**
2011 Total	**27**	**5,997**	**5**	**2,950**	**148**	**15,877**	**776**	**(h)**	**25,780**	**64**	**138**	**93**	**295**
2012 Total	**25**	**5,736**	**5**	**2,901**	**135**	**15,795**	**671**	**(h)**	**25,268**	**52**	**85**	**77**	**214**
2013 Total	**22**	**5,894**	**6**	**2,969**	**143**	**16,030**	**581**	**(h)**	**25,645**	**55**	**123**	**77**	**255**
2014 Total	**22**	**6,154**	**8**	**3,042**	**149**	**16,209**	**447**	**(h)**	**26,030**	**82**	**118**	**95**	**295**
2015 Total	**21**	**6,251**	**10**	**3,204**	**163**	**[g] 16,308**	**463**	**(h)**	**26,420**	**70**	**112**	**94**	**276**
2016 Total	**20**	**6,197**	**12**	**3,350**	**154**	**16,601**	**623**	**(h)**	**26,958**	**55**	**118**	**71**	**244**
2017 Total	**21**	**6,248**	**12**	**3,481**	**142**	**16,576**	**665**	**(h)**	**27,146**	**55**	**97**	**66**	**218**
2018 Total	**22**	**6,550**	**13**	**3,533**	**137**	**16,573**	**604**	**(h)**	**27,432**	**81**	**101**	**78**	**260**
2019 Total	**23**	**6,567**	**12**	**3,608**	**132**	**16,531**	**529**	**(h)**	**27,403**	**54**	**76**	**59**	**189**
2020 Total	**20**	**6,179**	**9**	**2,234**	**116**	**14,243**	**391**	**(h)**	**23,191**	**44**	**87**	**53**	**184**
2021 Total	**22**	**6,309**	**10**	**2,835**	**123**	**15,611**	**615**	**263**	**25,788**	**60**	**88**	**57**	**205**
2022 Total	**22**	**6,377**	**11**	**3,228**	**130**	**15,519**	**630**	**336**	**26,254**	**83**	**85**	**76**	**244**
2023 Total	**21**	**6,224**	**12**	**3,422**	**95**	**15,822**	**523**	**532**	**26,651**	**53**	**58**	**64**	**176**
2024 January	1	458	1	269	8	1,251	44	44	2,077	9	5	7	20
February	2	430	1	255	7	1,223	45	54	2,017	3	3	4	11
March	1	483	1	290	8	1,349	50	51	2,233	3	3	4	10
April	2	500	1	285	10	1,295	52	54	2,199	5	4	4	13
May	2	527	1	306	8	1,417	48	55	2,365	4	4	5	13
June	3	517	1	302	9	1,344	47	57	2,278	4	5	5	14
July	3	545	1	317	8	1,406	48	63	2,390	5	6	6	16
August	2	561	1	314	10	1,397	47	55	2,386	5	6	5	16
September	2	507	1	285	8	1,312	34	55	2,205	4	3	5	12
October	2	546	1	301	7	1,369	52	57	2,334	4	3	5	13
November	2	481	1	284	5	1,290	49	55	2,166	4	3	5	12
December	1	486	1	299	5	1,324	49	53	2,219	6	4	6	16
Total	**23**	**6,041**	**11**	**3,507**	**91**	**15,977**	**566**	**651**	**26,868**	**56**	**47**	**62**	**166**
2025 January	1	473	1	289	7	1,274	58	30	2,133	18	6	9	33
February	2	432	1	246	6	1,182	51	38	1,958	6	4	5	16
March	2	501	1	291	7	1,321	51	38	2,212	4	5	5	13
April	2	516	1	304	9	1,302	47	40	2,222	4	4	5	12
May	2	539	1	313	9	1,368	35	38	2,304	3	4	5	12
June	2	538	1	314	8	1,372	45	30	2,309	6	6	6	17
July	3	562	1	328	11	1,384	60	36	2,384	5	6	6	17
August	2	559	1	320	10	1,394	43	35	2,365	5	6	5	16
September	2	531	1	287	11	1,316	60	37	2,245	4	5	5	14
October	2	554	1	314	10	1,349	52	41	2,323	4	5	5	14
November	2	497	1	286	10	1,272	58	39	2,164	5	4	5	14
December	1	498	1	304	9	1,336	58	42	2,249	8	3	11	22
Total	**23**	**6,199**	**12**	**3,596**	**104**	**15,871**	**618**	**443**	**26,867**	**72**	**57**	**72**	**201**
2026 January	1	R 466	1	289	11	1,246	40	28	R 2,083	32	5	16	52
February	2	R 439	1	258	10	1,170	50	34	R 1,964	19	4	9	32
March	1	R 502	1	296	13	1,336	50	42	R 2,240	5	4	5	14
April	3	R 512	1	308	9	1,332	62	45	R 2,272	5	4	5	13
May	2	R 520	1	300	8	1,310	50	46	R 2,237	6	5	5	15
June	2	R 532	1	309	9	1,302	68	52	R 2,275	5	6	5	15
July	2	550	1	332	11	1,350	44	55	2,345	8	5	7	20
7-Month Total	**13**	**3,522**	**7**	**2,092**	**71**	**9,044**	**365**	**301**	**15,416**	**78**	**32**	**50**	**161**
2025 7-Month Total	**13**	**3,560**	**7**	**2,085**	**56**	**9,203**	**347**	**250**	**15,522**	**46**	**34**	**41**	**121**
2024 7-Month Total	**14**	**3,460**	**7**	**2,025**	**57**	**9,285**	**335**	**377**	**15,559**	**33**	**29**	**35**	**97**

[a] Electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 1988, data are for electric utilities only; beginning in 1989, data are for electric utilities and independent power producers.

[b] Hydrocarbon gas liquids.

[c] Beginning in 2009, includes biodiesel and renewable diesel fuel blended into distillate fuel oil. For 2011–2020, also includes biodiesel adjustments (supply of biodiesel not reported as input on surveys) reclassified as distillate fuel oil adjustments.

[d] There is a discontinuity in this time series between 2009 and 2010 due to a change in data sources.

[e] Beginning in 1957, includes kerosene-type jet fuel. For 1952–2004, also includes naphtha-type jet fuel. (Through 1951, naphtha-type jet fuel is included in the products from which it was blended—gasoline, kerosene, and distillate fuel oil. Beginning in 2005, naphtha-type jet fuel is included in "Other" on Table 3.8b.)

[f] Finished motor gasoline. Through 1963, also includes special naphthas. Beginning in 1993, also includes fuel ethanol blended into motor gasoline.

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

[h] Biofuels (excluding fuel ethanol) products supplied. Includes supply of non-fuel ethanol biofuels (such as B100 biodiesel and R100 renewable diesel fuel) not reported as input on surveys. For 2009–2020, data in this category were classified as biofuels (excluding fuel ethanol) adjustments.

[i] Fuel oil nos. 1, 2, and 4. Through 1979, data are for gas turbine and internal combustion plant use of petroleum. Through 2000, electric utility data also include small amounts of kerosene and jet fuel.

[j] Fuel oil nos. 5 and 6. Through 1979, data are for steam plant use of petroleum. Through 2000, electric utility data also include a small amount of fuel oil no. 4.

R=Revised. NA=Not available.

Notes: • Transportation sector data are estimates. • For total heat content of petroleum consumption by all sectors, see data for heat content of petroleum products supplied in Table 3.6. Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. Other measurements of consumption by fuel type or sector may differ. For example, jet fuel product supplied may not equal jet fuel consumed by U.S.-flagged aircraft. See Note 1, "Petroleum Products Supplied and Petroleum Consumption," at end of section. • 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/#petroleum (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

Due to the suspension of Form EIA-782A, *Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report*, sectoral distillate and residual fuel oil consumption after April 2022 are estimates.

Note 1. Petroleum Products Supplied and Petroleum Consumption. Total petroleum products supplied is the sum of the products supplied for each petroleum product, crude oil, unfinished oils, and gasoline blending components. This also includes petroleum products supplied for non-combustion use in the industrial and transportation sectors (see Tables 1.13a and 1.13b). In general, except for crude oil, product supplied of each product is computed as follows: field production, plus transfers to crude oil supply, plus biofuels plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports. Crude oil product supplied is the sum of crude oil burned on leases and at pipeline pump stations as reported on Form EIA-813, "Monthly Crude Oil Report." Prior to 1983, crude oil burned on leases and used at pipeline pump stations was reported as either distillate or residual fuel oil and was included as product supplied for these products. Petroleum product supplied (see Tables 3.5 and 3.6) is an approximation of petroleum consumption and is synonymous with the term "Petroleum Consumption" in Tables 3.7a–3.8c.

Note 2. Petroleum Survey Respondents. The U.S. Energy Information Administration (EIA) uses a number of sources and methods to maintain the survey respondent lists. On a regular basis, survey managers review such industry publications as the *Oil & Gas Journal* and *Oil Daily* for information on facilities or companies starting up or closing down operations. Those sources are augmented by articles in newspapers, communications from respondents indicating changes in status, and information received from survey systems.

To supplement routine frames maintenance and to provide more thorough coverage, a comprehensive frames investigation is conducted every 3 years. This investigation results in the reassessment and recompilation of the complete frame for each survey. The effort also includes the evaluation of the impact of potential frame changes on the historical time series of data from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

Note 3. Historical Petroleum Data. Detailed information on petroleum data through 1993 can be found in Notes 1–6 on pages 60 and 61 in the July 2013 *Monthly Energy Review* (MER) at http://www.eia.gov/totalenergy/data/monthly/archive/00351307.pdf. The notes discuss:

Note 1, "Petroleum Survey Respondents": In 1993, EIA added numerous companies that produce, blend, store, or import oxygenates to the monthly surveys.

Note 2, "Motor Gasoline": In 1981, EIA expanded its universe to include nonrefinery blenders and separated blending components from finished motor gasoline as a reporting category. In 1993, EIA made adjustments to finished motor gasoline product supplied data to more accurately account for fuel ethanol and motor gasoline blending components blended into finished motor gasoline.

Note 3, "Distillate and Residual Fuel Oils": In 1981, EIA eliminated the requirement to report crude oil in pipelines or burned on leases as either distillate or residual fuel oil.

Note 4, "Petroleum New Stock Basis": In 1975, 1979, 1981, and 1983, EIA added numerous respondents to bulk terminal and pipeline surveys; in 1984, EIA made changes in the reporting of natural gas liquids; and in 1993, EIA changed how it collected bulk terminal and pipeline stocks of oxygenates. These changes affected stocks reported and stock change calculations.

Note 5, "Stocks of Alaskan Crude Oil": In 1981, EIA began to include data for stocks of Alaskan crude oil in transit.

Note 6, "Petroleum Data Discrepancies": In 1976, 1978, and 1979, there are some small discrepancies between data in the MER and the *Petroleum Supply Annual*.

Table 3.1 Sources

1949–1975: Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement*, *Annual*, annual reports.

1976–1980: U.S. Energy Information Administration (EIA), Energy Data Reports, *Petroleum Statement*, *Annual*, annual reports.

1981–2001: EIA, *Petroleum Supply Annual* (PSA), annual reports.

2002 forward: EIA, PSA, annual reports, and revisions at https://www.eia.gov/petroleum/data.php#summary; *Petroleum Supply Monthly*, monthly reports, and revisions at https://www.eia.gov/petroleum/data.php#summary; revisions to crude oil production, total field production, and adjustments (based on crude oil production data from: Form EIA-914, "Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report"; state government agencies; U.S. Department of the Interior, Bureau of Safety and Environmental Enforcement, and predecessor agencies; and Form EIA-182, "Domestic Crude Oil First Purchase Report"); and, for the current two months, *Weekly Petroleum Status Report* data system and *Monthly Energy Review* data system calculations.

Table 3.2 Sources

1949–1975: Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement*, *Annual*, annual reports; and U.S. Energy Information Administration (EIA) estimates. (For 1967–1975, refinery and blender net production estimates for propylene are equal to "Propane/Propylene Production at Refineries for Chemical Use"; and estimates for propane are equal to total propane/propylene minus propylene.)

1976–1980: EIA, Energy Data Reports, *Petroleum Statement, Annual,* annual reports, and estimates. (Refinery and blender net production estimates for propylene are equal to "Propane/Propylene Production at Refineries for Chemical Use"; and estimates for propane are equal to total propane/propylene minus propylene.)

1981–2025: EIA, *Petroleum Supply Annual*, annual reports, revisions at https://www.eia.gov/petroleum/data.php#summary, and estimates. (For 1981–1985, refinery and blender net production estimates for propylene are equal to "Propane/Propylene Production at Refineries for Petrochemical Use"; and estimates for propane are equal to total propane/propylene minus propylene. For 1986–1988, refinery and blender net production estimates for propylene are created using the 1989 annual propylene share of "Net Refinery Production of Propane/Propylene"; and estimates for propane are equal to total propane/propylene minus propylene.)

2026: EIA, *Petroleum Supply Monthly,* monthly reports; and, for the current two months, *Weekly Petroleum Status Report* data system, Short-Term Integrated Forecasting System, and *Monthly Energy Review* data system calculations.

Table 3.5 Sources

1949–1975: Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement*, *Annual*, annual reports; and U.S. Energy Information Administration (EIA) estimates. (For 1949–1966, product supplied estimates for total propane/propylene are created using sales and shipments data from Bureau of Mines, Mineral Industry Surveys, *Sales of Liquefied Petroleum Gases and Ethane,* annual reports, and *Shipments of Liquefied Petroleum Gases and Ethane,* annual reports–annual growth rates of sales and shipments are applied to the 1967 total propane/propylene product supplied value to create historical annual estimates. For 1949–1966, product supplied estimates for propylene are created using the 1967 annual propylene share of total propane/propylene product supplied; and estimates for propane are equal to total propane/propylene minus propylene. For 1967–1975, product supplied estimates for propylene are equal to propylene refinery and blender net production from Table 3.2; and estimates for propane are equal to total propane/propylene minus propylene.)

1976–1980: EIA, Energy Data Reports, *Petroleum Statement, Annual,* annual reports, and estimates. (Product supplied estimates for propylene are equal to propylene refinery and blender net production from Table 3.2; and estimates for propane are equal to total propane/propylene minus propylene.)

1981–2025: EIA, *Petroleum Supply Annual*, annual reports, revisions at https://www.eia.gov/petroleum/data.php#summary, and estimates. (For 1981–1992, product supplied estimates for propylene are equal to propylene refinery and blender net production from Table 3.2; and estimates for propane are equal to total propane/propylene minus propylene. For

1993–2009, product supplied estimates for propylene are equal to propylene refinery and blender net production from Table 3.2, plus propylene imports from Table 3.3b; and estimates for propane are equal to total propane/propylene minus propylene.)

2026: EIA, *Petroleum Supply Monthly,* monthly reports, and revisions at https://www.eia.gov/petroleum/data.php#summary; and, for the current two months, *Weekly Petroleum Status Report* data system, Short-Term Integrated Forecasting System, and *Monthly Energy Review* data system calculations.

Table 3.6 Sources

Asphalt and Road Oil

Product supplied data in thousand barrels per day for asphalt and road oil are from Table 3.5, and are converted to trillion Btu by multiplying by the asphalt and road oil heat content factor.

Aviation Gasoline

Product supplied data in thousand barrels per day for aviation gasoline are from Table 3.5, and are converted to trillion Btu by multiplying by the aviation gasoline (finished) heat content factor.

Distillate Fuel Oil

1949–2008: Product supplied data in thousand barrels per day for distillate fuel oil are from Table 3.5, and are converted to trillion Btu by multiplying by the distillate fuel oil heat content factors.

2009–2011: Consumption data for biodiesel are 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). Refinery and blender net inputs data for renewable diesel fuel are set equal to "other renewable diesel fuel" 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 renewable diesel fuel heat content factor). Product supplied data for distillate fuel oil from Table 3.5, minus consumption data for biodiesel and refinery and blender net inputs data for renewable diesel fuel, are converted to Btu by multiplying by the distillate fuel oil heat content factors. Total distillate fuel oil product supplied is the sum of values for distillate fuel oil (excluding biodiesel and renewable diesel fuel), biodiesel, and renewable diesel fuel.

2012–2020: Consumption data for biodiesel are from Table 10.4a. Refinery and blender net inputs data for renewable diesel fuel are set equal to "other renewable diesel fuel" 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 renewable diesel fuel heat content factor). Product supplied data for distillate fuel oil from Table 3.5, minus consumption data for biodiesel and refinery and blender net inputs data for renewable diesel fuel, are converted to Btu by multiplying by the distillate fuel oil heat content factors. Total distillate fuel oil product supplied is the sum of the values for distillate fuel oil (excluding biodiesel and renewable diesel fuel), biodiesel, and renewable diesel fuel.

2021 forward: Refinery and blender net inputs data for biodiesel and renewable diesel fuel are set equal to refinery and blender net inputs 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 biodiesel and renewable diesel fuel heat content factors). Product supplied data for distillate fuel oil from Table 3.5, minus refinery and blender net inputs data for biodiesel and renewable diesel fuel, are converted to Btu by multiplying by the distillate fuel oil heat content factors. Total distillate fuel oil product supplied is the sum of the values for distillate fuel oil (excluding biodiesel and renewable diesel fuel), biodiesel, and renewable diesel fuel.

Hydrocarbon Gas Liquids (HGL)—Propane

Product supplied data in thousand barrels per day for propane are from Table 3.5, and are converted to trillion Btu by multiplying by the propane heat content factor.

Hydrocarbon Gas Liquids (HGL)—Propylene
Product supplied data in thousand barrels per day for propylene are from Table 3.5, and are converted to trillion Btu by multiplying by the propylene heat content factor.

Hydrocarbon Gas Liquids (HGL)—Propane/Propylene Total
Prior to the current two months, total propane/propylene product supplied is the sum of the data in trillion Btu for propane and propylene.

For the current two months, product supplied data in thousand barrels per day for total propane/propylene are from Table 3.5, and are converted to trillion Btu by multiplying by the propane/propylene heat content factor.

Hydrocarbon Gas Liquids (HGL)—Total
Prior to the current two months, product supplied data in thousand barrels per day for the component products of HGL (ethane, propane, normal butane, isobutane, natural gasoline (through 2021), and refinery olefins—ethylene, propylene, butylene, and isobutylene) are from the PSA, PSM, and earlier publications (see sources for Table 3.5). These data are converted to trillion Btu by multiplying by the appropriate heat content factors. Total HGL product supplied is the sum of the data in trillion Btu for the HGL component products.

For the current two months: Note that "liquefied petroleum gases" ("LPG") below include ethane, propane, normal butane, isobutane, and refinery olefins (ethylene, propylene, butylene, and isobutylene). Product supplied data in thousand barrels per day for LPG are from EIA's Short-Term Integrated Forecasting System (STIFS). (The STIFS model results are used in EIA's *Short-Term Energy Outlook*, which is accessible on the Web at https://www.eia.gov/outlooks/steo/.) These data are converted to trillion Btu by multiplying by the previous year's quantity-weighted LPG heat content factor (derived using LPG component heat content factors). Total HGL product supplied is equal to the data in trillion Btu for LPG.

Jet Fuel
Product supplied data in thousand barrels per day for kerosene-type jet fuel and, through 2004, naphtha-type jet fuel are from the PSA, PSM, and earlier publications (see sources for Table 3.5). These data are converted to trillion Btu by multiplying by the appropriate heat content factors. Total jet fuel product supplied is the sum of the data in trillion Btu for kerosene-type and naphtha-type jet fuel.

Kerosene
Product supplied data in thousand barrels per day for kerosene are from Table 3.5, and are converted to trillion Btu by multiplying by the kerosene heat content factor.

Lubricants
Product supplied data in thousand barrels per day for lubricants are from Table 3.5, and are converted to trillion Btu by multiplying by the lubricants heat content factor.

Motor Gasoline
Product supplied data in thousand barrels per day for motor gasoline are from Table 3.5, and are converted to trillion Btu by multiplying by the motor gasoline heat content factors.

Petroleum Coke
Product supplied data in thousand barrels per day for petroleum coke are from Table 3.5, and are converted to trillion Btu by multiplying by the petroleum coke heat content factors.

Residual Fuel Oil
Product supplied data in thousand barrels per day for residual fuel oil are from Table 3.5, and are converted to trillion Btu by multiplying by the residual fuel oil heat content factor.

Other Products
Prior to the current two months, product supplied data in thousand barrels per day for "other" products are from the PSA, PSM, and earlier publications (see sources for Table 3.5). "Other" products include petrochemical feedstocks,

special naphthas, still gas (refinery gas), waxes, and miscellaneous products; beginning in 1981, also includes negative barrels per day of distillate and residual fuel oil reclassified as unfinished oils, and other products (from both primary and secondary supply) reclassified as gasoline blending components; beginning in 1983, also includes crude oil burned as fuel; beginning in 2005, also includes naphtha-type jet fuel; and beginning in 2021, also includes biofuels excluding fuel ethanol (biodiesel, renewable diesel fuel, and other biofuels). These data are converted to trillion Btu by multiplying by the appropriate heat content factors. Total "Other" products supplied is the sum of the data in trillion Btu for the individual products.

For the current two months, total "Other" products supplied is calculated by first estimating total petroleum products supplied (product supplied data in thousand barrels per day for total petroleum from Table 3.5 are converted to trillion Btu by multiplying by the total petroleum consumption heat content factor), and then subtracting data in trillion Btu (from Table 3.6) for asphalt and road oil, aviation gasoline, distillate fuel oil, jet fuel, kerosene, total HGL, lubricants, motor gasoline, petroleum coke, and residual fuel oil.

Total Petroleum

Total petroleum products supplied is the sum of the data in trillion Btu for the products (except "Propane") shown in Table 3.6.

Tables 3.7a–3.7c Sources

Petroleum consumption data for 1949–1972 are from the following sources:

1949–1959: Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual*, annual reports, and U.S. Energy Information Administration (EIA) estimates.

1960–1972: EIA, State Energy Data System.

Petroleum consumption data beginning in 1973 are derived from data for "petroleum products supplied" from the following sources:

1973–1975: Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement Annual*, annual reports.

1976–1980: EIA, Energy Data Reports, *Petroleum Statement Annual*, annual reports.

1981–2025: EIA, *Petroleum Supply Annual* (PSA), annual reports, and revisions at https://www.eia.gov/petroleum/data.php#summary.

2026: EIA, *Petroleum Supply Monthly* (PSM), monthly reports, and revisions at https://www.eia.gov/petroleum/data.php#summary.

Beginning in 1973, energy-use allocation procedures by individual product are as follows:

Asphalt and Road Oil

All consumption of asphalt and road oil is assigned to the industrial sector.

Aviation Gasoline

All consumption of aviation gasoline is assigned to the transportation sector.

Biofuels Excluding Fuel Ethanol

Beginning in 2021, biofuels excluding fuel ethanol consumption is assigned to the transportation sector. Biofuels excluding fuel ethanol consumption consists of products supplied of biodiesel, renewable diesel fuel, and other biofuels.

Distillate Fuel Oil

Distillate fuel oil consumption is assigned to the sectors as follows:

Distillate Fuel Oil, Electric Power Sector

See sources for Table 7.4b. For 1973–1979, electric utility consumption of distillate fuel oil is assumed to be the amount of petroleum (minus small amounts of kerosene and kerosene-type jet fuel deliveries) consumed in gas turbine and internal combustion plants. For 1980–2000, electric utility consumption of distillate fuel oil is assumed to be the amount of light oil (fuel oil nos. 1 and 2, plus small amounts of kerosene and jet fuel) consumed.

Distillate Fuel Oil, End-Use Sectors, Annual Data

The aggregate end-use amount is total distillate fuel oil product supplied minus the amount consumed by the electric power sector. Through 2020, the end-use total consumed annually is allocated to the individual end-use sectors (residential, commercial, industrial, and transportation) in proportion to each sector's share of sales as reported in EIA's *Fuel Oil and Kerosene Sales* (Sales), annual reports.

1973–1978: Each year's sales subtotal of the heating plus industrial category is split into residential, commercial, and industrial (including farm) in proportion to the 1979 shares; and this estimated industrial (including farm) portion is added to sales for oil company, off-highway diesel, and all other uses. The transportation sector sales total is the sum of sales for railroad, vessel bunkering, on-highway diesel, and military uses.

1979–2020: The residential sector and commercial sector sales totals are directly from the Sales reports. The industrial sector sales total is the sum of sales for industrial, farm, oil company, off-highway diesel, and all other uses. The transportation sector sales total is the sum of sales for railroad, vessel bunkering, on-highway diesel, and military uses.

2021 forward: The end-use total consumed annually is allocated to the individual end-use sectors (residential, commercial, industrial, and transportation) in proportion to each sector's share of consumption as reported in EIA's State Energy Data System (SEDS). Shares for the current year are based on the previous year's SEDS-based annual consumption data, which are adjusted using the growth rate for forecast distillate fuel oil consumption in EIA's *Short-Term Energy Outlook* (STEO), Table 4a.

Distillate Fuel Oil, End-Use Sectors, Monthly Data

Residential sector and commercial sector monthly consumption is estimated by allocating the annual estimates, which are described above, into the months in proportion to each month's share of the year's sales of No. 2 heating oil. (For each month of the current year, the residential and commercial consumption increase from the same month in the previous year is based on the percent increase in that month's No. 2 heating oil sales from the same month in the previous year.) The years' No. 2 heating oil sales totals are from the following sources: for 1973–1980, the Ethyl Corporation, *Monthly Report of Heating Oil Sales*; for 1981 and 1982, the American Petroleum Institute, *Monthly Report of Heating Oil Sales*; and for 1983 forward, EIA, Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report," No. 2 Fuel Oil Sales to End Users and for Resale. (Note that beginning in May 2022, residential sector and commercial sector consumption estimates for each month are based on the previous year's monthly percent increase in No. 2 heating oil sales.)

The transportation highway use portion is allocated into the months in proportion to each month's share of the year's total sales for highway use as reported by the Federal Highway Administration's Table MF-25, "Private and Commercial Highway Use of Special Fuels by Months." Beginning in 1994, the sales-for-highway-use data are no longer available as a monthly series; the 1993 data are used for allocating succeeding year's totals into months.

A distillate fuel oil "balance" is calculated as total distillate fuel oil product supplied minus the amount consumed by the electric power sector, residential sector, commercial sector, and for highway use.

Industrial sector monthly consumption is estimated by multiplying each month's distillate fuel oil "balance" by the annual industrial consumption share of the annual distillate fuel oil "balance."

Total transportation sector monthly consumption is estimated as total distillate fuel oil product supplied minus the amount consumed by the residential, commercial, industrial, and electric power sectors.

Annual residential sector propane consumption: Through 2002, annual residential sector propane consumption is estimated by applying the average of the state residential shares for 2003–2008 to the combined residential and commercial propane sales. Beginning in 2003, annual residential sector propane consumption is assumed to equal propane retail sales to the residential sector and sales to retailers/cylinder markets.

Monthly residential sector propane consumption: Beginning in 1973, annual residential sector propane consumption is split into the estimated portion for residential space heating and water heating, and the estimated portion for all other residential uses. The annual values in thousand barrels for residential space heating and water heating are allocated to the months in proportion to U.S. heating degree days in Table 1.11. The annual values in thousand barrels for all other residential uses are allocated to the months by dividing the annual values by the number of days in the year and then multiplying by the number of days in the month. Monthly total residential sector propane consumption is the sum of the monthly values for residential space heating and water heating and for all other residential uses.

Annual commercial sector propane consumption: Through 2002, annual commercial sector propane consumption is equal to the combined residential and commercial propane sales minus residential sector propane consumption. Beginning in 2003, annual commercial sector propane consumption is assumed to equal commercial sector propane sales.

Monthly commercial sector propane consumption: Beginning in 1973, annual commercial sector propane consumption is split into the estimated portion for commercial space heating and water heating, and the estimated portion for all other commercial uses. The annual values in thousand barrels for commercial space heating and water heating are allocated to the months in proportion to U.S. heating degree days in Table 1.11. The annual values in thousand barrels for all other commercial uses are allocated to the months by dividing the annual values by the number of days in the year and then multiplying by the number of days in the month. Monthly total commercial sector propane consumption is the sum of the monthly values for commercial space heating and water heating and for all other commercial uses.

Annual transportation sector propane consumption: Through 2009, annual transportation sector propane consumption is assumed to equal the transportation portion of propane sales for internal combustion engines (these sales are allocated between the transportation and industrial sectors using data for special fuels used on highways provided by the U.S. Department of Transportation, Federal Highway Administration). Beginning in 2010, annual transportation sector propane consumption is from EIA, *Annual Energy Outlook,* Table 37, "Transportation Sector Energy Use by Fuel Type within a Mode."

Monthly transportation sector propane consumption: Beginning in 1973, the annual values in thousand barrels for transportation sector propane consumption are allocated to the months by dividing the annual values by the number of days in the year and then multiplying by the number of days in the month.

Annual and monthly industrial sector propane consumption: Industrial sector propane consumption is estimated as the difference between propane total product supplied from Table 3.5 and the sum of the estimated propane consumption by the residential, commercial, and transportation sectors.

Sources of the annual consumption estimates for creating annual sector shares are:

1973–1982: EIA's "Sales of Liquefied Petroleum Gases and Ethane" reports, based primarily on data collected by Form EIA-174, "Sales of Liquefied Petroleum Gases."

1983: End-use consumption estimates for 1983 are based on 1982 end-use consumption because the collection of data under Form EIA-174 was discontinued after data year 1982.

1984–2007: American Petroleum Institute (API), "Sales of Natural Gas Liquids and Liquefied Refinery Gases," table on sales of natural gas liquids and liquefied refinery gases by end use. EIA adjusts the data to remove quantities of natural gasoline and to estimate withheld values.

2008 and 2009: Propane consumption is from API, “Sales of Natural Gas Liquids and Liquefied Refinery Gases,” table on sales of propane by end use. EIA adjusts the data to estimate withheld values. Other LPG consumption is from EIA, PSA, annual reports, and is allocated to the industrial sector.

2010–2016: Propane consumption is from API, “Sales of Natural Gas Liquids and Liquefied Refinery Gases,” table on sales of odorized propane by end use; and EIA, *Annual Energy Outlook*, Table 37, “Transportation Sector Energy Use by Fuel Type Within a Mode.” EIA adjusts the data to estimate withheld values. Other LPG consumption is from EIA, PSA, annual reports, and is allocated to the industrial sector.

2017 forward: Propane consumption is from Propane Education & Research Council, “Retail Propane Sales Report,” data on propane sales by sector; and EIA, *Annual Energy Outlook,* Table 37, “Transportation Sector Energy Use by Fuel Type Within a Mode.” EIA adjusts the data to estimate withheld values. Other LPG consumption is from EIA, PSA, annual reports, and is allocated to the industrial sector.

Hydrocarbon Gas Liquids (HGL)—Propylene

Industrial sector propylene consumption is equal to propylene product supplied in Table 3.5.

Hydrocarbon Gas Liquids (HGL)—Propane/Propylene Total

Industrial sector total propane/propylene consumption is the sum of the industrial sector consumption values for propane and propylene.

Hydrocarbon Gas Liquids (HGL)—Total

The residential, commercial, and transportation sector total HGL consumption values are equal to the propane consumption values for those sectors. The industrial sector total HGL consumption value is equal to total HGL product supplied in Table 3.5 minus propane consumption in the residential, commercial, and transportation sectors.

Jet Fuel

Through 1982, small amounts of kerosene-type jet fuel were consumed by the electric power sector. Kerosene-type jet fuel deliveries to the electric power sector as reported on Form FERC-423 (formerly Form FPC-423) were used as estimates of this consumption. Through 2004, all remaining jet fuel (kerosene-type and naphtha-type) is assigned to the transportation sector. Beginning in 2005, kerosene-type jet fuel is assigned to the transportation sector, while naphtha-type jet fuel is classified under "Other Petroleum Products," which is assigned to the industrial sector. (Note: Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. Other measurements of consumption by fuel type or sector may differ. For example, jet fuel product supplied may not equal jet fuel consumed by U.S.-flagged aircraft.)

Kerosene

Through 2020, kerosene product supplied is allocated to the individual end-use sectors (residential, commercial, and industrial) in proportion to each sector's share of sales as reported in EIA's *Fuel Oil and Kerosene Sales* (Sales), annual reports.

1973–1978: Each year's sales category called "heating" is allocated to the residential, commercial, and industrial (including farm) sectors in proportion to the 1979 shares; and this estimated industrial (including farm) portion is added to sales for all other uses.

1979–2020: The residential sector and commercial sector sales totals are directly from the Sales reports. The industrial sector sales total is the sum of sales for industrial, farm, and all other uses.

2021 forward: Kerosene product supplied is allocated to the individual end-use sectors (residential, commercial, and industrial) in proportion to each sector’s share of consumption as reported in EIA’s State Energy Data System (SEDS). Shares for the current year are based on the most recent data year in SEDS.

Lubricants

1973–2009: The consumption of lubricants is allocated to the industrial and transportation sectors for all months according to proportions developed from annual sales of lubricants to the two sectors from U.S. Department of

Commerce, U.S. Census Bureau, *Current Industrial Reports*, "Sales of Lubricating and Industrial Oils and Greases." The 1973 shares are applied to 1973 and 1974; the 1975 shares are applied to 1975 and 1976; and the 1977 shares are applied to 1977 through 2009.

2010 forward: The consumption of lubricants in the industrial sector is estimated by EIA based on Kline & Company data on finished lubricant demand for industrial (less marine and railroad) use. The consumption of lubricants in the transportation sector is estimated by EIA based on Kline & Company data on finished lubricant demand for consumer total, commercial total, marine, and railroad use. Estimates for lubricant consumption from 2010 forward are not compatible with data before 2010.

Motor Gasoline

The total monthly consumption of motor gasoline is allocated to the sectors in proportion to aggregations of annual sales categories created on the basis of the U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Tables MF-21, MF-24, and MF-25, as follows:

Through 2014, commercial sales are the sum of sales for public non-highway use and miscellaneous use. Beginning in 2015, commercial sales are the sum of sales for public non-highway use, lawn and garden use, and miscellaneous use.

For all years, industrial sales are the sum of sales for agriculture, construction, and "industrial and commercial" use (as classified in the *Highway Statistics*).

Through 2014, transportation sales are the sum of sales for highway use (minus the sales of special fuels, which are primarily diesel fuel and are accounted for in the transportation sector of distillate fuel) and sales for marine use. Beginning in 2015, transportation sales are the sum of sales for highway use (minus the sales of special fuels, which are primarily diesel fuel and are accounted for in the transportation sector of distillate fuel) and sales for boating use and recreational vehicle use.

Petroleum Coke

Portions of petroleum coke are consumed by the electric power sector (see sources for Table 7.4b) and the commercial sector (see sources for Table 7.4c). The remaining petroleum coke is assigned to the industrial sector.

Residual Fuel Oil

Residual fuel oil consumption is assigned to the sectors as follows:

Residual Fuel Oil, Electric Power Sector

See sources for Table 7.4b. For 1973–1979, electric utility consumption of residual fuel oil is assumed to be the amount of petroleum consumed in steam-electric power plants. For 1980–2000, electric utility consumption of residual fuel oil is assumed to be the amount of heavy oil (fuel oil nos. 4, 5, and 6) consumed.

Residual Fuel Oil, End-Use Sectors, Annual Data

The aggregate end-use amount is total residual fuel oil product supplied minus the amount consumed by the electric power sector. Through 2020, the end-use total consumed annually is allocated to the individual end-use sectors (commercial, industrial, and transportation) in proportion to each sector's share of sales as reported in EIA's *Fuel Oil and Kerosene Sales* (Sales), annual reports.

1973–1978: Each year’s sales subtotal of the heating plus industrial category is allocated to the commercial and industrial sectors in proportion to the 1979 shares; and this estimated industrial portion is added to sales for oil company and all other uses. Transportation sector sales are the sum of sales for railroad, vessel bunkering, and military uses.

1979–2020: Commercial sector sales are directly from the Sales reports. Industrial sector sales are the sum of sales for industrial, oil company, and all other uses. Transportation sector sales are the sum of sales for railroad, vessel bunkering, and military uses.

2021 forward: The end-use total consumed annually is allocated to the individual end-use sectors (commercial, industrial, and transportation) in proportion to each sector’s share of consumption as reported in EIA’s State Energy

Data System (SEDS). Shares for the current year are based on the previous year's SEDS-based annual consumption data, which are adjusted using the growth rate for forecast residual fuel oil consumption in EIA's *Short-Term Energy Outlook* (STEO), Table 4a.

Residual Fuel Oil, End-Use Sectors, Monthly Data

Commercial sector monthly consumption is estimated by allocating the annual estimates, which are described above, into the months in proportion to each month's share of the year's sales of No. 2 heating oil. (For each month of the current year, the consumption increase from the same month in the previous year is based on the percent increase in that month's No. 2 heating oil sales from the same month in the previous year.) The years' No. 2 heating oil sales totals are from the following sources: for 1973–1980, the Ethyl Corporation, *Monthly Report of Heating Oil Sales*; for 1981 and 1982, the American Petroleum Institute, *Monthly Report of Heating Oil Sales*; and for 1983 forward, EIA, Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report," No. 2 Fuel Oil Sales to End Users and for Resale. (Note that beginning in May 2022, commercial sector consumption estimates for each month are based on the previous year's monthly percent increase in No. 2 heating oil sales.)

A residual fuel oil "balance" is calculated as total residual fuel oil product supplied minus the amount consumed by the electric power sector, commercial sector, and by industrial combined-heat-and-power plants (see sources for Table 7.4c).

Transportation sector monthly consumption is estimated by multiplying each month's residual fuel oil "balance" by the annual transportation consumption share of the annual residual fuel oil "balance."

Total industrial sector monthly consumption is estimated as total residual fuel oil product supplied minus the amount consumed by the commercial, transportation, and electric power sectors.

Other Products

Consumption of biofuels excluding fuel ethanol is assigned to the transportation sector. Consumption of all remaining products, which include petrochemical feedstocks, special naphthas, still gas (refinery gas), waxes, and miscellaneous products, is assigned to the industrial sector. Beginning in 1981, also includes negative barrels per day of distillate and residual fuel oil reclassified as unfinished oils, and other products (from both primary and secondary supply) reclassified as gasoline blending components. Beginning in 1983, also includes crude oil burned as fuel. Beginning in 2005, also includes naphtha-type jet fuel.

Table 3.8a Sources

Distillate Fuel Oil

Residential and commercial sector consumption data in thousand barrels per day for distillate fuel oil are from Table 3.7a, and are converted to trillion Btu by multiplying by the distillate fuel oil heat content factors.

Hydrocarbon Gas Liquids (HGL)—Propane

Residential and commercial sector consumption data in thousand barrels per day for propane are from Table 3.7a, and are converted to trillion Btu by multiplying by the propane heat content factor. The residential and commercial sector total HGL consumption values are equal to the propane consumption values for those sectors.

Kerosene

Residential and commercial sector consumption data in thousand barrels per day for kerosene are from Table 3.7a, and are converted to trillion Btu by multiplying by the kerosene heat content factor.

Motor Gasoline

Commercial sector consumption data in thousand barrels per day for motor gasoline are from Table 3.7a, and are converted to trillion Btu by multiplying by the motor gasoline heat content factors.

Petroleum Coke

1949–2003: Commercial sector consumption data in thousand barrels per day for petroleum coke are from Table 3.7a, and are converted to trillion Btu by multiplying by the total petroleum coke heat content factor.

2004 forward: Commercial sector consumption data in thousand barrels per day for petroleum coke are from Table 3.7a, and are converted to trillion Btu by multiplying by the marketable petroleum coke heat content factor.

Residual Fuel Oil
Commercial sector consumption data in thousand barrels per day for residual fuel oil are from Table 3.7a, and are converted to trillion Btu by multiplying by the residual fuel oil heat content factor.

Total Petroleum
Residential sector total petroleum consumption is the sum of the data in trillion Btu for the petroleum products shown under "Residential Sector" in Table 3.8a. Commercial sector total petroleum consumption is the sum of the data in trillion Btu for the petroleum products shown under "Commercial Sector" in Table 3.8a.

Table 3.8b Sources

Asphalt and Road Oil
Industrial sector consumption data in thousand barrels per day for asphalt and road oil are from Table 3.7b, and are converted to trillion Btu by multiplying by the asphalt and road oil heat content factor.

Distillate Fuel Oil
Industrial sector consumption data in thousand barrels per day for distillate fuel oil are from Table 3.7b, and are converted to trillion Btu by multiplying by the distillate fuel oil heat content factors.

Hydrocarbon Gas Liquids (HGL)—Propane
Industrial sector propane consumption data are calculated by subtracting propane consumption data in trillion Btu for the residential (Table 3.8a), commercial (Table 3.8a), and transportation (Table 3.8c) sectors from total propane consumption (see sources for Table 3.6).

Hydrocarbon Gas Liquids (HGL)—Propylene
Product supplied data in thousand barrels per day for propylene are from Table 3.5, and are converted to trillion Btu by multiplying by the propylene heat content factor.

Hydrocarbon Gas Liquids (HGL)—Propane/Propylene Total
Total industrial sector propane/propylene consumption is the sum of the data in trillion Btu for propane and propylene.

Hydrocarbon Gas Liquids (HGL)—Total
Industrial sector consumption data for HGL are calculated by subtracting HGL consumption data in trillion Btu for the residential (Table 3.8a), commercial (Table 3.8a), and transportation (Table 3.8c) sectors from total HGL consumption (Table 3.6).

Kerosene
Industrial sector consumption data in thousand barrels per day for kerosene are from Table 3.7b, and are converted to trillion Btu by multiplying by the kerosene heat content factor.

Lubricants
Industrial sector consumption data in thousand barrels per day for lubricants are from Table 3.7b, and are converted to trillion Btu by multiplying by the lubricants heat content factor.

Motor Gasoline
Industrial sector consumption data in thousand barrels per day for motor gasoline are from Table 3.7b, and are converted to trillion Btu by multiplying by the motor gasoline heat content factors.

Petroleum Coke
1949–2003: Industrial sector consumption data in thousand barrels per day for petroleum coke are from Table 3.7b, and are converted to trillion Btu by multiplying by the total petroleum coke heat content factor.

2004 forward: Industrial sector consumption data for petroleum coke are calculated by subtracting petroleum coke consumption data in trillion Btu for the commercial (Table 3.8a) and electric power (Table 3.8c) sectors from total petroleum coke consumption (Table 3.6).

Residual Fuel Oil

Industrial sector consumption data in thousand barrels per day for residual fuel oil are from Table 3.7b, and are converted to trillion Btu by multiplying by the residual fuel oil heat content factor.

Other Products

Industrial sector "Other" data are equal to the "Other" data in Table 3.6 minus transportation sector “Other” (biofuels excluding fuel ethanol) data (see sources for Table 3.8c).

Total Petroleum

Industrial sector total petroleum consumption is the sum of the data in trillion Btu for the petroleum products shown in Table 3.8b.

Table 3.8c Sources

Aviation Gasoline

Transportation sector consumption data in thousand barrels per day for aviation gasoline are from Table 3.7c, and are converted to trillion Btu by multiplying by the aviation gasoline (finished) heat content factor.

Distillate Fuel Oil, Electric Power Sector

Electric power sector consumption data in thousand barrels per day for distillate fuel oil are from Table 3.7c, and are converted to trillion Btu by multiplying by the distillate fuel oil heat content factors.

Distillate Fuel Oil, Transportation Sector

1949–2008: Transportation sector consumption data in thousand barrels per day for distillate fuel oil are from Table 3.7c, and are converted to trillion Btu by multiplying by the distillate fuel oil heat content factors.

2009–2011: Consumption data for biodiesel are 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). Refinery and blender net inputs data for renewable diesel fuel are set equal to “other renewable diesel fuel” 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 renewable diesel fuel heat content factor). Transportation sector distillate fuel oil consumption data from Table 3.7c, minus consumption data for biodiesel and refinery and blender net inputs data for renewable diesel fuel, are converted to Btu by multiplying by the distillate fuel oil heat content factors. Total transportation sector distillate fuel oil consumption is the sum of the values for distillate fuel oil (excluding biodiesel and renewable diesel fuel), biodiesel, and renewable diesel fuel.

2012–2020: Consumption data for biodiesel are from Table 10.4a. Refinery and blender net inputs data for renewable diesel fuel are set equal to “other renewable diesel fuel” 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 renewable diesel fuel heat content factor). Transportation sector distillate fuel oil consumption data from Table 3.7c, minus consumption data for biodiesel and refinery and blender net inputs data for renewable diesel fuel, are converted to Btu by multiplying by the distillate fuel oil heat content factors. Total transportation sector distillate fuel oil consumption is the sum of the values for distillate fuel oil (excluding biodiesel and renewable diesel fuel), biodiesel, and renewable diesel fuel.

2021 forward: Refinery and blender net inputs data for biodiesel and renewable diesel fuel are set equal to refinery and blender net inputs 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 biodiesel and renewable diesel fuel heat content factors). Transportation sector distillate fuel oil consumption data from Table 3.7c, minus refinery and blender net inputs data for biodiesel and renewable diesel fuel, are converted to Btu by multiplying by the distillate fuel oil heat content factors.

Total transportation sector distillate fuel oil consumption is the sum of the values for distillate fuel oil (excluding biodiesel and renewable diesel fuel), biodiesel, and renewable diesel fuel.

Hydrocarbon Gas Liquids (HGL)—Propane

Transportation sector consumption data in thousand barrels per day for propane are from Table 3.7c, and are converted to trillion Btu by multiplying by the propane heat content factor. The transportation sector total HGL consumption values are equal to the transportation sector propane consumption values.

Jet Fuel

Transportation sector consumption data in thousand barrels per day for kerosene-type jet fuel and, through 2004, naphtha-type jet fuel (see sources for Table 3.7c) are converted to trillion Btu by multiplying by the appropriate heat content factors. Total transportation sector jet fuel consumption is the sum of the data in trillion Btu for kerosene-type and naphtha-type jet fuel. (Note: Petroleum products supplied is an approximation of petroleum consumption and is synonymous with the term "petroleum consumption" in Tables 3.7a–3.8c. Other measurements of consumption by fuel type or sector may differ. For example, jet fuel product supplied may not equal jet fuel consumed by U.S.-flagged aircraft.)

Lubricants

Transportation sector consumption data in thousand barrels per day for lubricants are from Table 3.7c, and are converted to trillion Btu by multiplying by the lubricants heat content factor.

Motor Gasoline

Transportation sector consumption data in thousand barrels per day for motor gasoline are from Table 3.7c, and are converted to trillion Btu by multiplying by the motor gasoline heat content factors.

Petroleum Coke

1949–2003: Electric power sector consumption data in thousand barrels per day for petroleum coke are from Table 3.7c, and are converted to trillion Btu by multiplying by the total petroleum coke heat content factor.

2004 forward: Electric power sector consumption data in thousand barrels per day for petroleum coke are from Table 3.7c, and are converted to trillion Btu by multiplying by the marketable petroleum coke heat content factor.

Residual Fuel Oil

Transportation and electric power consumption data in thousand barrels per day for residual fuel oil are from Table 3.7c, and are converted to trillion Btu by multiplying by the residual fuel oil heat content factor.

Other Products

Beginning in 2021, transportation sector consumption data in thousand barrels per day for biofuels excluding fuel ethanol are from Table 3.7c, and are converted to trillion Btu by multiplying the fuel types (biodiesel, renewable diesel fuel, and other biofuels) by the appropriate heat content factors.

Total Petroleum

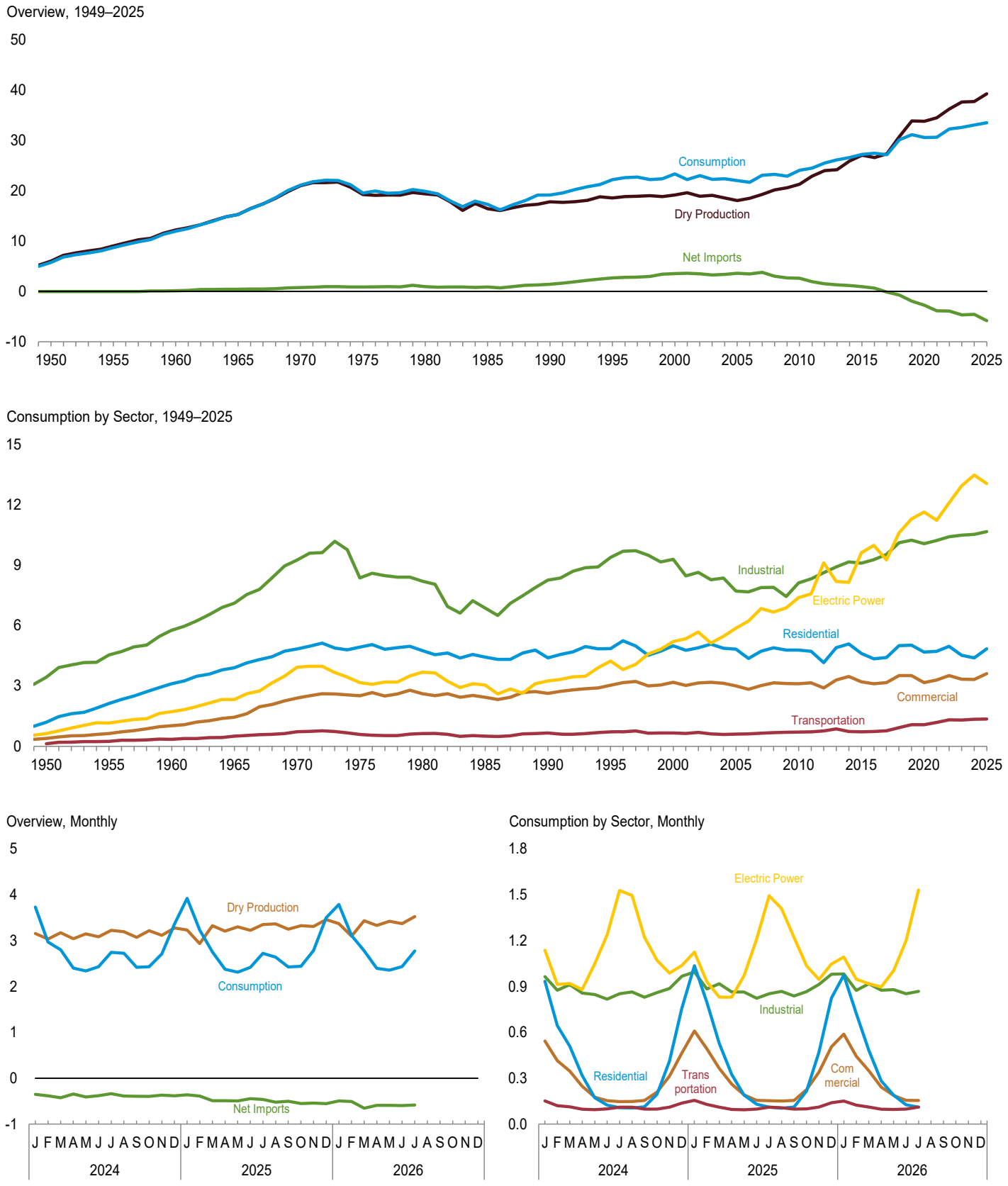
Transportation sector total petroleum consumption is the sum of the data in trillion Btu for the petroleum products shown under "Transportation Sector" in Table 3.8c. Electric power sector total petroleum consumption is the sum of the data in trillion Btu for the petroleum products shown under "Electric Power Sector" in Table 3.8c.

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4. Natural Gas

Figure 4.1 Natural Gas

(Trillion Cubic Feet)



Web Page: http://www.eia.gov/totalenergy/data/monthly/#naturalgas.
Sources: Tables 4.1 and 4.3.

Table 4.1 Natural Gas Overview

(Billion Cubic Feet)

	Gross Withdrawals[a]	Marketed Production (Wet)[b]	NGPL Production[c]	Dry Gas Production[d]	Supplemental Gaseous Fuels[e]	Trade			Net Storage Withdrawals[f]	Balancing Item[g]	Consumption[h]
						Imports	Exports	Net Imports			
1950 Total	**8,480**	**[i] 6,282**	**260**	**[i] 6,022**	**NA**	**0**	**26**	**-26**	**-54**	**-175**	**5,767**
1955 Total	**11,720**	**[i] 9,405**	**377**	**[i] 9,029**	**NA**	**11**	**31**	**-20**	**-68**	**-247**	**8,694**
1960 Total	**15,088**	**[i] 12,771**	**543**	**[i] 12,228**	**NA**	**156**	**11**	**144**	**-132**	**-274**	**11,967**
1965 Total	**17,963**	**[i] 16,040**	**753**	**[i] 15,286**	**NA**	**456**	**26**	**430**	**-118**	**-319**	**15,280**
1970 Total	**23,786**	**[i] 21,921**	**906**	**[i] 21,014**	**NA**	**821**	**70**	**751**	**-398**	**-228**	**21,139**
1975 Total	**21,104**	**[i] 20,109**	**872**	**[i] 19,236**	**NA**	**953**	**73**	**880**	**-344**	**-235**	**19,538**
1980 Total	**21,870**	**20,180**	**777**	**19,403**	**155**	**985**	**49**	**936**	**23**	**-640**	**19,877**
1985 Total	**19,607**	**17,270**	**816**	**16,454**	**126**	**950**	**55**	**894**	**235**	**-428**	**17,281**
1990 Total	**21,523**	**18,594**	**784**	**17,810**	**123**	**1,532**	**86**	**1,447**	**-513**	**307**	**[j] 19,174**
1995 Total	**23,744**	**19,506**	**908**	**18,599**	**110**	**2,841**	**154**	**2,687**	**415**	**396**	**22,207**
2000 Total	**24,174**	**20,198**	**1,016**	**19,182**	**90**	**3,782**	**244**	**3,538**	**829**	**-306**	**23,333**
2005 Total	**23,457**	**18,927**	**876**	**18,051**	**64**	**4,341**	**729**	**3,612**	**52**	**236**	**22,014**
2010 Total	**26,816**	**22,382**	**1,066**	**21,316**	**65**	**3,741**	**1,137**	**2,604**	**-13**	**115**	**24,087**
2011 Total	**28,479**	**24,036**	**1,134**	**22,902**	**60**	**3,469**	**1,506**	**1,963**	**-354**	**-94**	**24,477**
2012 Total	**29,542**	**25,283**	**1,250**	**24,033**	**61**	**3,138**	**1,619**	**1,519**	**-9**	**-66**	**25,538**
2013 Total	**29,523**	**25,562**	**1,357**	**24,206**	**55**	**2,883**	**1,572**	**1,311**	**546**	**38**	**26,155**
2014 Total	**31,405**	**27,498**	**1,608**	**25,890**	**60**	**2,695**	**1,514**	**1,181**	**-254**	**-283**	**26,593**
2015 Total	**32,915**	**28,772**	**1,707**	**27,065**	**59**	**2,718**	**1,784**	**935**	**-547**	**-268**	**27,244**
2016 Total	**32,592**	**28,400**	**1,808**	**26,592**	**57**	**3,006**	**2,335**	**671**	**340**	**-216**	**27,444**
2017 Total	**33,292**	**29,238**	**1,897**	**27,341**	**66**	**3,033**	**3,154**	**-121**	**254**	**-400**	**27,140**
2018 Total	**37,326**	**33,009**	**2,235**	**30,774**	**69**	**2,889**	**3,608**	**-719**	**314**	**-290**	**30,149**
2019 Total	**40,780**	**36,447**	**2,548**	**33,899**	**61**	**2,742**	**4,658**	**-1,916**	**-503**	**-397**	**31,143**
2020 Total	**40,730**	**36,521**	**2,710**	**33,811**	**63**	**2,551**	**5,285**	**-2,734**	**-180**	**-358**	**30,603**
2021 Total	**41,677**	**37,338**	**2,809**	**34,529**	**66**	**2,808**	**6,653**	**-3,845**	**83**	**-188**	**30,646**
2022 Total	**43,701**	**39,329**	**3,075**	**36,255**	**73**	**3,024**	**6,906**	**-3,882**	**280**	**-434**	**32,292**
2023 Total	**45,400**	**41,038**	**3,385**	**37,652**	**86**	**2,928**	**7,610**	**-4,682**	**-555**	**90**	**32,592**
2024 January	3,874	3,461	306	3,155	8	323	674	-351	861	57	3,730
February	3,701	3,327	294	3,032	8	258	644	-385	271	41	2,967
March	3,870	3,479	308	3,172	8	243	668	-425	52	-6	2,801
April	3,713	3,336	295	3,041	8	222	567	-345	-263	-41	2,400
May	3,829	3,452	305	3,147	8	238	646	-408	-370	-38	2,339
June	3,732	3,381	299	3,082	8	247	627	-380	-260	-19	2,431
July	3,895	3,538	313	3,225	8	271	608	-337	-124	-26	2,746
August	3,857	3,505	310	3,195	8	261	650	-389	-84	-6	2,724
September	3,706	3,368	298	3,070	8	247	638	-392	-257	-13	2,416
October	3,899	3,529	312	3,217	8	254	649	-395	-334	-64	2,431
November	3,797	3,416	302	3,114	8	270	639	-369	27	-71	2,710
December	3,995	3,594	318	3,276	8	309	695	-386	487	-24	3,362
Total	**45,868**	**41,384**	**3,659**	**37,725**	**96**	**3,145**	**7,707**	**-4,562**	**6**	**-209**	**33,056**
2025 January	[E] 3,933	[E] 3,532	299	[E] 3,233	11	336	694	-359	[R] 1,008	[R] 29	[R] 3,922
February	[E] 3,579	[E] 3,216	280	[E] 2,936	9	296	683	-388	636	39	3,232
March	[E] 4,058	[E] 3,655	329	[E] 3,327	8	263	753	-490	-48	[R] -45	[R] 2,752
April	[E] 3,906	[E] 3,526	320	[E] 3,206	8	236	725	-489	-304	-43	2,377
May	[E] 4,024	[E] 3,638	336	[E] 3,302	7	241	736	-495	-497	[R] -6	[R] 2,310
June	[E] 3,905	[E] 3,547	322	[E] 3,225	6	246	692	-445	-355	[R] -13	[R] 2,418
July	[E] 4,023	[E] 3,690	342	[E] 3,348	8	258	721	-463	-151	[R] -22	[R] 2,720
August	[E] 4,066	[E] 3,713	344	[E] 3,368	7	238	762	-524	-186	[R] -26	[R] 2,640
September	[E] 3,941	[E] 3,588	340	[E] 3,248	7	226	729	-503	-309	[R] -19	[R] 2,424
October	[E] 4,054	[E] 3,675	348	[E] 3,327	7	233	783	-551	-308	-32	2,443
November	[E] 4,030	[E] 3,648	340	[E] 3,308	8	264	807	-542	31	[R] -24	[R] 2,781
December	[E] 4,216	[E] 3,801	340	[E] 3,460	10	328	881	-553	594	[R] -14	3,498
Total	**[E] 47,734**	**[E] 43,229**	**3,942**	**[E] 39,288**	**95**	**3,164**	**8,965**	**-5,802**	**[R] 110**	**[R] -175**	**[R] 33,516**
2026 January	[E] 4,100	[E] 3,693	322	[E] 3,372	10	340	[R] 834	-494	906	-4	3,789
February	[E] 3,771	[E] 3,407	308	[E] 3,099	9	276	784	-507	501	11	[R] 3,112
March	[E] 4,195	[E] 3,784	351	[E] 3,433	8	239	890	-651	-5	[R] -6	[R] 2,778
April	[E] 4,062	[E] 3,673	342	[E] 3,331	8	217	808	-591	-307	-45	2,396
May	[E] 4,160	[RE] 3,780	356	[RE] 3,424	6	224	817	-593	-430	[R] -52	2,355
June	[E] 4,066	[RE] 3,710	340	[E] 3,370	7	227	[R] 822	[R] -594	-361	[R] 11	2,433
July	[E] 4,247	[E] 3,880	356	[E] 3,525	8	244	827	-583	-142	-32	2,776
7-Month Total	**[E] 28,601**	**[E] 25,927**	**2,374**	**[E] 23,553**	**56**	**1,767**	**5,781**	**-4,014**	**161**	**-117**	**19,639**
2025 7-Month Total	**[E] 27,426**	**[E] 24,804**	**2,229**	**[E] 22,576**	**56**	**1,875**	**5,004**	**-3,129**	**288**	**-61**	**19,730**
2024 7-Month Total	**26,614**	**23,973**	**2,120**	**21,853**	**56**	**1,803**	**4,434**	**-2,631**	**166**	**-31**	**19,413**

[a] Gases withdrawn from natural gas, crude oil, coalbed, and shale gas wells. Includes natural gas, natural gas plant liquids, and nonhydrocarbon gases; but excludes lease condensate.

[b] Gross withdrawals minus repressuring, nonhydrocarbon gases removed, and vented and flared. See Note 1, "Natural Gas Production," at end of section.

[c] Natural gas plant liquids (NGPL) production, gaseous equivalent. This data series was previously called "Extraction Loss." See Note 2, "Natural Gas Plant Liquids Production," at end of section.

[d] Marketed production (wet) minus NGPL production.

[e] See Note 3, "Supplemental Gaseous Fuels," at end of section.

[f] Net withdrawals from underground storage. For 1987–2024, also includes net withdrawals of liquefied natural gas in above-ground tanks. See Note 4, "Natural Gas Storage," at end of section.

[g] See Note 5, "Natural Gas Balancing Item," at end of section. Beginning in 1980, excludes transit shipments that cross the U.S.-Canada border (i.e., natural gas delivered to its destination via the other country).

[h] See Note 6, "Natural Gas Consumption," at end of section.

[i] Through 1979, may include unknown quantities of nonhydrocarbon gases.

[j] For 1989–1992, a small amount of consumption at independent power producers may be counted in both "Other Industrial" and "Electric Power Sector" on Table 4.3. See Note 7, "Natural Gas Consumption, 1989–1992," at end of section.

R=Revised. E=Estimate. NA=Not available.

Notes: • See Note 8, "Natural Gas Data Adjustments, 1993–2000, 2017, and 2020," at end of section. • Through 1964, all volumes are shown on a pressure base of 14.65 psia (pounds per square inch absolute) at 60° Fahrenheit; beginning in 1965, the pressure base is 14.73 psia at 60° Fahrenheit. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia (except Alaska, for which underground storage is excluded from "Net Storage Withdrawals" through 2012).

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

Sources: • **Imports and Exports:** Tables 4.2a and 4.2b. • **Consumption:** Table 4.3. • **Balancing Item:** Calculated as consumption minus dry gas production, supplemental gaseous fuels, net imports, and net storage withdrawals. • **All Other Data: 1949–2024**—U.S. Energy Information Administration (EIA), *Natural Gas Annual,* annual reports. **2025 forward**—EIA, *Natural Gas Monthly,* April 2026, Table 1.

Table 4.2a Natural Gas Imports by Country

(Billion Cubic Feet)

	Algeria[a]	Austr-alia[a]	Canada[b]	Egypt[a]	Mexico[b]	Nigeria[a]	Norway[a]	Oman[a]	Qatar[a]	Trinidad and Tobago[a]	United Arab Emirates[a]	Yemen[a]	Other[a]	Total
1950 Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1955 Total	**0**	**0**	**11**	**0**	**(s)**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**(s)**	**11**
1960 Total	**0**	**0**	**109**	**0**	**47**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**156**
1965 Total	**0**	**0**	**405**	**0**	**52**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**456**
1970 Total	**1**	**0**	**779**	**0**	**(s)**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**(s)**	**821**
1975 Total	**5**	**0**	**948**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**953**
1980 Total	**86**	**0**	**797**	**0**	**102**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**985**
1985 Total	**24**	**0**	**926**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**950**
1990 Total	**84**	**0**	**1,448**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,532**
1995 Total	**18**	**0**	**2,816**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,841**
2000 Total	**47**	**6**	**3,544**	**0**	**12**	**13**	**0**	**10**	**46**	**99**	**3**	**0**	**21**	**3,782**
2005 Total	**97**	**0**	**3,700**	**73**	**9**	**8**	**0**	**2**	**3**	**439**	**0**	**0**	**11**	**4,341**
2010 Total	**0**	**0**	**3,280**	**73**	**30**	**42**	**26**	**0**	**46**	**190**	**0**	**39**	**81**	**3,741**
2011 Total	**0**	**0**	**3,117**	**35**	**3**	**2**	**15**	**0**	**91**	**129**	**0**	**60**	**92**	**3,469**
2012 Total	**0**	**0**	**2,963**	**3**	**(s)**	**0**	**6**	**0**	**34**	**112**	**0**	**20**	**(s)**	**3,138**
2013 Total	**0**	**0**	**2,786**	**0**	**1**	**3**	**6**	**0**	**7**	**70**	**0**	**11**	**0**	**2,883**
2014 Total	**0**	**0**	**2,635**	**0**	**1**	**0**	**6**	**0**	**0**	**43**	**0**	**8**	**3**	**2,695**
2015 Total	**0**	**0**	**2,626**	**0**	**1**	**0**	**12**	**0**	**0**	**71**	**0**	**7**	**0**	**2,718**
2016 Total	**0**	**0**	**2,918**	**0**	**1**	**0**	**3**	**0**	**0**	**84**	**0**	**0**	**0**	**3,006**
2017 Total	**0**	**0**	**2,955**	**0**	**1**	**6**	**0**	**0**	**0**	**70**	**0**	**0**	**0**	**3,033**
2018 Total	**0**	**0**	**2,811**	**0**	**3**	**3**	**0**	**0**	**0**	**66**	**0**	**0**	**6**	**2,889**
2019 Total	**0**	**0**	**2,687**	**0**	**2**	**3**	**0**	**0**	**0**	**47**	**0**	**0**	**3**	**2,742**
2020 Total	**0**	**0**	**2,500**	**0**	**2**	**7**	**3**	**0**	**0**	**39**	**0**	**0**	**0**	**2,551**
2021 Total	**0**	**0**	**2,785**	**0**	**2**	**0**	**0**	**0**	**0**	**21**	**0**	**0**	**0**	**2,808**
2022 Total	**0**	**0**	**3,000**	**0**	**1**	**0**	**0**	**0**	**0**	**24**	**0**	**0**	**0**	**3,024**
2023 Total	**0**	**0**	**2,914**	**0**	**1**	**0**	**0**	**0**	**0**	**12**	**0**	**0**	**1**	**2,928**
2024 January	0	0	319	0	(s)	0	3	0	0	1	0	0	(s)	323
February	0	0	256	0	(s)	0	0	0	0	3	0	0	(s)	258
March	0	0	239	0	(s)	0	0	0	0	5	0	0	0	243
April	0	0	222	0	(s)	0	0	0	0	0	0	0	(s)	222
May	0	0	238	0	(s)	0	0	0	0	0	0	0	(s)	238
June	0	0	247	0	(s)	0	0	0	0	0	0	0	0	247
July	0	0	271	0	(s)	0	0	0	0	0	0	0	(s)	271
August	0	0	261	0	(s)	0	0	0	0	0	0	0	(s)	261
September	0	0	244	0	(s)	0	2	0	0	0	0	0	(s)	247
October	0	0	254	0	(s)	0	0	0	0	0	0	0	(s)	254
November	0	0	270	0	(s)	0	0	0	0	0	0	0	0	270
December	0	0	307	0	(s)	0	0	0	0	2	0	0	(s)	309
Total	**0**	**0**	**3,129**	**0**	**(s)**	**0**	**5**	**0**	**0**	**10**	**0**	**0**	**(s)**	**3,145**
2025 January	0	0	334	0	(s)	0	0	0	0	1	0	0	(s)	336
February	0	0	296	0	(s)	0	0	0	0	0	0	0	(s)	296
March	0	0	263	0	(s)	0	0	0	0	0	0	0	(s)	263
April	0	0	236	0	(s)	0	0	0	0	0	0	0	0	236
May	0	0	240	0	(s)	0	0	0	0	0	0	0	0	241
June	0	0	246	0	(s)	0	0	0	0	0	0	0	0	246
July	0	0	258	0	(s)	0	0	0	0	0	0	0	(s)	258
August	0	0	238	0	(s)	0	0	0	0	0	0	0	0	238
September	0	0	223	0	(s)	0	0	0	0	3	0	0	0	226
October	0	0	233	0	(s)	0	0	0	0	0	0	0	0	233
November	0	0	264	0	(s)	0	0	0	0	0	0	0	0	264
December	0	0	321	0	(s)	0	0	0	4	3	0	0	0	328
Total	**0**	**0**	**3,153**	**0**	**(s)**	**0**	**0**	**0**	**4**	**7**	**0**	**0**	**(s)**	**3,164**
2026 January	0	0	329	0	(s)	0	0	0	0	10	0	0	0	340
February	0	0	274	0	(s)	0	0	0	0	2	0	0	0	276
March	0	0	239	0	(s)	0	0	0	0	0	0	0	(s)	239
April	0	0	217	0	(s)	0	0	0	0	0	0	0	(s)	217
May	0	0	224	0	(s)	0	0	0	0	0	0	0	(s)	224
June	0	0	227	0	(s)	0	0	0	0	0	0	0	(s)	227
July	0	0	244	0	(s)	0	0	0	0	0	0	0	(s)	244
7-Month Total	**0**	**0**	**1,754**	**0**	**(s)**	**0**	**0**	**0**	**0**	**13**	**0**	**0**	**(s)**	**1,767**
2025 7-Month Total	**0**	**0**	**1,874**	**0**	**(s)**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**(s)**	**1,875**
2024 7-Month Total	**0**	**0**	**1,792**	**0**	**(s)**	**0**	**3**	**0**	**0**	**9**	**0**	**0**	**(s)**	**1,803**

[a] As liquefied natural gas.

[b] By pipeline, except for small amounts of: liquefied natural gas (LNG) imported from Canada in 1973, 1977, 1981, and 2013 forward; and compressed natural gas (CNG) imported from Canada in 2014 forward; See Note 9, "Natural Gas Imports and Exports," at end of section.

(s)=Less than 500 million cubic feet.

Notes: • See Note 9, "Natural Gas Imports and Exports," at end of section. • Through 1964, all volumes are shown on a pressure base of 14.65 psia (pounds per square inch absolute) at 60° Fahrenheit; beginning in 1965, the pressure base is 14.73 psia at 60° Fahrenheit. • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 states and the District of Columbia.

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

Sources: • **1949–1954:** U.S. Energy Information Administration (EIA) estimates based on Bureau of Mines, Minerals Yearbook, "Natural Gas" chapter. • **1955–1971:** Federal Power Commission data. • **1972–1987:** EIA, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." • **1988–2024:** EIA, *Natural Gas Annual*, annual reports. • **2025 forward:** EIA, *Natural Gas Monthly*, April 2026, Table 4; and U.S. Department of Energy, Office of Fossil Energy, "Natural Gas Imports and Exports."

Table 4.2b Natural Gas Exports by Country

(Billion Cubic Feet)

	Brazil[a]	Canada[b]	Chile[a]	China[a]	France[a]	India[a]	Japan[a]	Mexico[b]	South Korea[a]	Spain[a]	Turkey[a]	United Kingdom[a]	Other[a]	Total
1950 Total	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**23**	**0**	**0**	**0**	**0**	**0**	**26**
1955 Total	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**20**	**0**	**0**	**0**	**0**	**0**	**31**
1960 Total	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**11**
1965 Total	**0**	**18**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**26**
1970 Total	**0**	**11**	**0**	**0**	**0**	**0**	**44**	**15**	**0**	**0**	**0**	**0**	**0**	**70**
1975 Total	**0**	**10**	**0**	**0**	**0**	**0**	**53**	**9**	**0**	**0**	**0**	**0**	**0**	**73**
1980 Total	**0**	**(s)**	**0**	**0**	**0**	**0**	**45**	**4**	**0**	**0**	**0**	**0**	**0**	**49**
1985 Total	**0**	**(s)**	**0**	**0**	**0**	**0**	**53**	**2**	**0**	**0**	**0**	**0**	**0**	**55**
1990 Total	**0**	**17**	**0**	**0**	**0**	**0**	**53**	**16**	**0**	**0**	**0**	**0**	**0**	**86**
1995 Total	**0**	**28**	**0**	**0**	**0**	**0**	**65**	**61**	**0**	**0**	**0**	**0**	**0**	**154**
2000 Total	**0**	**73**	**0**	**0**	**0**	**0**	**66**	**106**	**0**	**0**	**0**	**0**	**0**	**244**
2005 Total	**0**	**358**	**0**	**0**	**0**	**0**	**65**	**305**	**0**	**0**	**0**	**0**	**0**	**729**
2010 Total	**3**	**739**	**0**	**0**	**0**	**3**	**33**	**333**	**12**	**4**	**0**	**10**	**32**	**1,137**
2011 Total	**11**	**937**	**3**	**7**	**0**	**13**	**18**	**499**	**9**	**6**	**0**	**3**	**52**	**1,506**
2012 Total	**8**	**971**	**0**	**0**	**0**	**3**	**14**	**620**	**0**	**0**	**0**	**0**	**14**	**1,619**
2013 Total	**0**	**911**	**0**	**0**	**0**	**0**	**0**	**661**	**0**	**0**	**0**	**0**	**0**	**1,572**
2014 Total	**3**	**770**	**0**	**0**	**0**	**0**	**13**	**729**	**0**	**0**	**0**	**0**	**0**	**1,514**
2015 Total	**6**	**701**	**0**	**0**	**0**	**0**	**8**	**1,054**	**0**	**0**	**3**	**0**	**11**	**1,784**
2016 Total	**11**	**771**	**29**	**17**	**0**	**17**	**11**	**1,405**	**10**	**3**	**9**	**0**	**51**	**2,335**
2017 Total	**18**	**917**	**26**	**103**	**0**	**21**	**53**	**1,671**	**130**	**29**	**25**	**3**	**157**	**3,154**
2018 Total	**36**	**836**	**41**	**90**	**18**	**58**	**126**	**1,871**	**252**	**10**	**23**	**51**	**194**	**3,608**
2019 Total	**54**	**973**	**90**	**7**	**118**	**91**	**201**	**2,010**	**270**	**167**	**31**	**119**	**527**	**4,658**
2020 Total	**112**	**904**	**81**	**214**	**90**	**124**	**288**	**2,026**	**317**	**200**	**124**	**160**	**644**	**5,285**
2021 Total	**308**	**937**	**122**	**453**	**171**	**196**	**355**	**2,171**	**453**	**215**	**189**	**195**	**887**	**6,653**
2022 Total	**72**	**962**	**30**	**97**	**571**	**123**	**209**	**2,084**	**293**	**427**	**192**	**464**	**1,382**	**6,906**
2023 Total	**39**	**1,026**	**31**	**173**	**493**	**164**	**310**	**2,256**	**276**	**270**	**156**	**450**	**1,966**	**7,610**
2024 January	7	92	4	8	28	11	19	188	21	39	43	43	172	674
February	6	114	4	16	49	14	23	170	16	14	20	35	163	644
March	0	116	6	17	61	14	29	182	21	22	9	14	177	668
April	1	73	5	10	38	21	22	191	17	10	3	7	169	567
May	6	67	7	26	20	45	41	215	28	8	0	7	175	646
June	14	67	7	17	7	29	28	204	45	17	0	6	187	627
July	4	66	11	30	14	25	30	218	24	15	0	4	168	608
August	17	66	4	28	8	25	30	221	43	21	0	14	173	650
September	22	70	0	32	24	32	32	206	26	14	0	4	178	638
October	13	72	0	11	40	27	30	204	21	7	24	14	185	649
November	10	85	2	10	24	7	28	178	16	11	47	45	176	639
December	6	110	6	7	43	7	23	177	11	33	69	57	148	695
Total	**106**	**997**	**56**	**213**	**355**	**256**	**336**	**2,354**	**289**	**211**	**215**	**249**	**2,070**	**7,707**
2025 January	0	86	3	0	50	11	4	194	11	30	71	63	173	694
February	9	101	0	0	64	7	6	173	10	18	73	69	152	683
March	5	109	3	0	70	14	20	186	17	52	11	38	227	753
April	3	77	3	0	53	11	21	204	40	56	3	10	244	725
May	3	75	4	0	52	15	25	225	21	16	4	7	288	736
June	5	67	10	0	27	14	17	219	22	5	3	7	295	692
July	12	71	7	0	11	15	17	215	19	39	4	4	308	721
August	14	81	0	0	30	14	14	232	30	35	3	0	307	762
September	10	71	3	1	47	19	22	206	14	28	0	14	294	729
October	7	78	0	0	52	11	34	202	27	40	25	32	276	783
November	13	94	3	0	38	14	28	190	18	22	70	60	256	807
December	6	124	3	0	38	11	14	187	22	32	96	67	280	881
Total	**88**	**1,034**	**41**	**1**	**533**	**154**	**223**	**2,434**	**250**	**373**	**363**	**372**	**3,099**	**8,965**
2026 January	3	109	0	0	45	7	3	189	7	50	81	92	247	R 834
February	3	113	3	0	33	14	7	177	7	30	34	60	301	784
March	8	120	0	0	62	18	25	200	38	51	13	22	334	890
April	1	75	6	0	47	40	25	195	24	22	7	6	358	808
May	4	90	4	0	18	30	43	224	50	9	4	7	336	817
June	10	74	4	5	11	46	29	R 229	47	13	0	4	350	R 822
July	12	81	8	5	16	47	47	228	27	20	0	7	330	827
7-Month Total	**42**	**663**	**25**	**9**	**231**	**202**	**178**	**1,442**	**200**	**194**	**139**	**199**	**2,257**	**5,781**
2025 7-Month Total	**38**	**585**	**31**	**0**	**327**	**85**	**111**	**1,416**	**140**	**216**	**169**	**198**	**1,687**	**5,004**
2024 7-Month Total	**38**	**594**	**44**	**124**	**216**	**158**	**193**	**1,368**	**172**	**125**	**75**	**115**	**1,210**	**4,434**

[a] As liquefied natural gas.

[b] By pipeline, except for small amounts of: liquefied natural gas (LNG) exported to Canada in 2007 and 2012 forward; compressed natural gas (CNG) exported to Canada in 2013 forward; and LNG exported to Mexico beginning in 1998. See Note 9, "Natural Gas Imports and Exports," at end of section.

R=Revised. (s)=Less than 500 million cubic feet.

Notes: • Exports include re-exports. • See Note 9, "Natural Gas Imports and Exports," at end of section. • Through 1964, all volumes are shown on a pressure base of 14.65 psia (pounds per square inch absolute) at 60° Fahrenheit; beginning in 1965, the pressure base is 14.73 psia at 60° Fahrenheit. • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 states and the District of Columbia.

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

Sources: • **1949–1954:** U.S. Energy Information Administration (EIA) estimates based on Bureau of Mines, Minerals Yearbook, "Natural Gas" chapter. • **1955–1971:** Federal Power Commission data. • **1972–1987:** EIA, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." • **1988–2024:** EIA, *Natural Gas Annual*, annual reports. • **2025 forward:** EIA, *Natural Gas Monthly*, April 2026, Table 5; and U.S. Department of Energy, Office of Fossil Energy, "Natural Gas Imports and Exports."

Table 4.3 Natural Gas Consumption by Sector

(Billion Cubic Feet)

	End-Use Sectors											
			Industrial					Transportation				
				Other Industrial								
	Residential	Commercial[a]	Lease and Plant Fuel	CHP[b]	Non-CHP[c]	Total	Total	Pipelines[d] and Distribution[e]	Vehicle Fuel	Total	Electric Power Sector[f,g]	Total
1950 Total	**1,198**	**388**	**928**	(h)	**2,498**	**2,498**	**3,426**	**126**	**NA**	**126**	**629**	**5,767**
1955 Total	**2,124**	**629**	**1,131**	(h)	**3,411**	**3,411**	**4,542**	**245**	**NA**	**245**	**1,153**	**8,694**
1960 Total	**3,103**	**1,020**	**1,237**	(h)	**4,535**	**4,535**	**5,771**	**347**	**NA**	**347**	**1,725**	**11,967**
1965 Total	**3,903**	**1,444**	**1,156**	(h)	**5,955**	**5,955**	**7,112**	**501**	**NA**	**501**	**2,321**	**15,280**
1970 Total	**4,837**	**2,399**	**1,399**	(h)	**7,851**	**7,851**	**9,249**	**722**	**NA**	**722**	**3,932**	**21,139**
1975 Total	**4,924**	**2,508**	**1,396**	(h)	**6,968**	**6,968**	**8,365**	**583**	**NA**	**583**	**3,158**	**19,538**
1980 Total	**4,752**	**2,611**	**1,026**	(h)	**7,172**	**7,172**	**8,198**	**635**	**NA**	**635**	**3,682**	**19,877**
1985 Total	**4,433**	**2,432**	**966**	(h)	**5,901**	**5,901**	**6,867**	**504**	**NA**	**504**	**3,044**	**17,281**
1990 Total	**4,391**	**2,623**	**1,236**	**1,055**	[i] **5,963**	[i] **7,018**	**8,255**	**660**	**(s)**	**660**	[i] **3,245**	[i] **19,174**
1995 Total	**4,850**	**3,031**	**1,220**	**1,258**	**6,906**	**8,164**	**9,384**	**700**	**5**	**705**	**4,237**	**22,207**
2000 Total	**4,996**	**3,182**	**1,151**	**1,386**	**6,757**	**8,142**	**9,293**	**642**	**13**	**655**	**5,206**	**23,333**
2005 Total	**4,827**	**2,999**	**1,112**	**1,084**	**5,518**	**6,601**	**7,713**	**584**	**23**	**607**	**5,869**	**22,014**
2010 Total	**4,782**	**3,103**	**1,286**	**1,029**	**5,797**	**6,826**	**8,112**	**674**	**29**	**703**	**7,387**	**24,087**
2011 Total	**4,714**	**3,155**	**1,323**	**1,063**	**5,931**	**6,994**	**8,317**	**688**	**30**	**718**	**7,574**	**24,477**
2012 Total	**4,150**	**2,895**	**1,396**	**1,149**	**6,077**	**7,226**	**8,622**	**731**	**30**	**761**	**9,111**	**25,538**
2013 Total	**4,897**	**3,295**	**1,483**	**1,170**	**6,255**	**7,425**	**8,909**	**833**	**30**	**863**	**8,191**	**26,155**
2014 Total	**5,087**	**3,466**	**1,512**	**1,145**	**6,501**	**7,646**	**9,158**	**700**	**35**	**735**	**8,146**	**26,593**
2015 Total	**4,613**	**3,202**	**1,576**	**1,222**	**6,300**	**7,522**	**9,098**	**678**	**39**	**718**	**9,613**	**27,244**
2016 Total	**4,347**	**3,110**	**1,545**	**1,209**	**6,519**	**7,729**	**9,274**	**687**	**42**	**729**	**9,985**	**27,444**
2017 Total	**4,413**	**3,165**	**1,583**	**1,257**	**6,686**	**7,943**	**9,526**	**722**	**48**	**770**	**9,266**	**27,140**
2018 Total	**4,998**	**3,514**	**1,694**	**1,314**	**7,103**	**8,417**	**10,112**	**877**	**50**	**927**	**10,599**	**30,149**
2019 Total	**5,019**	**3,515**	**1,823**	**1,374**	**7,042**	**8,417**	**10,240**	**1,018**	**53**	**1,071**	**11,299**	**31,143**
2020 Total	**4,674**	**3,163**	**1,851**	**1,458**	**6,755**	**8,213**	**10,064**	**1,020**	**49**	**1,070**	**11,632**	**30,603**
2021 Total	**4,717**	**3,289**	**1,851**	**1,379**	**6,995**	**8,375**	**10,225**	**1,131**	**54**	**1,186**	**11,229**	**30,646**
2022 Total	**4,964**	**3,511**	**1,879**	**1,375**	**7,154**	**8,529**	**10,408**	**1,252**	**65**	**1,317**	**12,092**	**32,292**
2023 Total	**4,524**	**3,331**	**1,934**	**1,396**	**7,157**	**8,553**	**10,487**	**1,248**	**60**	**1,309**	**12,941**	**32,592**
2024 January	934	543	163	129	672	801	964	147	5	152	1,137	3,730
February	644	415	157	113	605	718	875	115	5	120	913	2,967
March	509	347	164	115	632	747	912	108	5	113	919	2,801
April	318	248	157	110	589	699	857	92	5	97	880	2,400
May	172	176	163	112	573	685	848	89	5	95	1,048	2,339
June	124	153	159	112	546	658	817	94	5	99	1,238	2,431
July	107	147	167	121	566	686	853	106	5	111	1,528	2,746
August	105	148	165	123	575	698	864	105	5	111	1,496	2,724
September	113	154	159	114	556	670	829	93	5	98	1,223	2,416
October	194	209	166	109	584	693	860	93	5	98	1,071	2,431
November	412	314	161	114	611	725	886	104	5	110	987	2,710
December	757	464	169	124	673	798	967	131	5	137	1,037	3,362
Total	**4,389**	**3,318**	**1,951**	**1,397**	**7,183**	**8,580**	**10,531**	**1,278**	**64**	**1,341**	**13,476**	**33,056**
2025 January	1,036	R 609	E 167	130	R 699	R 829	995	E 152	E 5	E 156	1,125	R 3,922
February	796	492	E 152	111	621	732	884	E 125	E 4	E 129	932	3,232
March	R 528	365	E 172	118	R 628	R 746	R 918	E 106	E 5	E 111	830	R 2,752
April	R 325	R 261	E 166	110	R 588	697	R 864	E 92	E 4	E 96	830	2,377
May	R 189	191	E 172	111	581	R 692	863	E 89	E 5	E 94	972	R 2,310
June	130	R 156	E 167	110	545	655	R 823	E 93	E 4	E 98	1,211	R 2,418
July	111	R 153	E 174	116	R 562	R 678	R 852	E 105	E 5	E 110	1,494	R 2,720
August	R 104	R 151	E 175	118	R 575	R 693	R 868	E 102	E 5	E 107	1,409	R 2,640
September	R 112	R 154	E 169	113	R 557	R 669	R 838	E 94	E 4	E 98	1,221	R 2,424
October	216	R 226	E 173	113	R 581	693	R 867	E 94	E 5	E 99	1,035	2,443
November	R 470	R 340	E 172	117	R 624	R 741	R 913	RE 107	E 4	E 112	946	R 2,781
December	R 824	R 506	E 179	124	R 677	R 801	R 980	E 135	E 5	E 140	1,047	3,498
Total	R **4,843**	R **3,606**	E **2,038**	**1,389**	R **7,237**	R **8,626**	R **10,665**	RE **1,295**	E **53**	E **1,349**	**13,054**	R **33,516**
2026 January	974	589	E 174	126	683	808	982	E 146	E 5	E 151	1,093	3,789
February	R 723	444	E 161	108	605	713	874	E 120	E 4	E 124	947	R 3,112
March	481	349	E 178	113	R 627	R 740	R 918	E 107	E 5	E 112	918	R 2,778
April	283	242	E 173	109	594	703	876	E 93	E 4	E 97	898	2,396
May	188	R 187	E 178	109	592	701	879	E 91	E 5	E 96	1,004	2,355
June	126	156	E 175	109	570	679	R 853	E 94	E 4	E 98	1,199	2,433
July	111	154	E 183	116	569	685	868	E 107	E 5	E 112	1,531	2,776
7-Month Total	**2,887**	**2,121**	E **1,223**	**789**	**4,240**	**5,029**	**6,251**	E **759**	E **31**	E **790**	**7,590**	**19,639**
2025 7-Month Total	**3,115**	**2,227**	E **1,170**	**806**	**4,224**	**5,030**	**6,199**	E **763**	E **31**	E **793**	**7,395**	**19,730**
2024 7-Month Total	**2,808**	**2,029**	**1,130**	**812**	**4,183**	**4,995**	**6,126**	**751**	**37**	**788**	**7,663**	**19,413**

[a] All commercial sector fuel use, including that at commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See Table 7.4c for CHP fuel use.

[b] Industrial combined-heat-and-power (CHP) and a small number of industrial electricity-only plants.

[c] All industrial sector fuel use other than that in "Lease and Plant Fuel" and "CHP."

[d] Natural gas consumed in the operation of pipelines, primarily in compressors. Beginning in 2009, includes line loss, which is known volumes of natural gas that are the result of leaks, damage, accidents, migration, and/or blow down.

[e] Natural gas used as fuel in the delivery of natural gas to consumers. Beginning in 2009, includes line loss, which is known volumes of natural gas that are the result of leaks, damage, accidents, migration, and/or blow down.

[f] The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

[g] Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.

[h] Included in "Non-CHP."

[i] For 1989–1992, a small amount of consumption at independent power producers may be counted in both "Other Industrial" and "Electric Power Sector." See Note 7, "Natural Gas Consumption, 1989–1992," at end of section.

E=Estimate. NA=Not available. (s)=Less than 500 million cubic feet.

Notes: • Data are for natural gas, plus a small amount of supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of section. • See Note 8, "Natural Gas Data Adjustments, 1993–2000, 2017, and 2020," at end of section. • See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • Through 1964, all volumes are shown on a pressure base of 14.65 psia (pounds per square inch absolute) at 60° Fahrenheit; beginning in 1965, the pressure base is 14.73 psia at 60° Fahrenheit. • 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/#naturalgas (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: • **Residential, Commercial, Lease and Plant Fuel, Other Industrial Total** and **Pipelines and Distribution: 1949–2024**—U.S. Energy Information Administration (EIA), *Natural Gas Annual (NGA)*, annual reports and unpublished revisions. **2025 forward**—EIA, *Natural Gas Monthly (NGM)*, April 2026, Table 2. • **Other Industrial CHP:** Table 7.4c. • **Other Industrial Non-CHP:** Calculated as other industrial total minus other industrial CHP. • **Industrial Total:** Calculated as lease and plant fuel plus other industrial total. • **Vehicle Fuel: 1990 and 1991**—EIA, NGA 2000, (November 2001), Table 95. **1992–1998**—EIA, "Alternatives to Traditional Transportation Fuels 1999" (October 1999), Table 10, and "Alternatives to Traditional Transportation Fuels 2003" (February 2004), Table 10. Data for compressed natural gas and liquefied natural gas in gasoline-equivalent gallons were converted to cubic feet by multiplying by the motor gasoline conversion factor and dividing by the natural gas end-use sectors conversion factor. **1999–2024**—EIA, NGA, annual reports. **2025 forward**—EIA, NGM, April 2026, Table 2. • **Transportation Total:** Calculated as pipelines and distribution plus vehicle fuel. • **Electric Power Sector:** Table 7.4b. • **Total Consumption:** Calculated as the sum of residential, commercial, industrial total, transportation total, and electric power sector.

Table 4.4 Natural Gas in Underground Storage

(Volumes in Billion Cubic Feet)

	Natural Gas in Underground Storage, End of Period			Change in Working Gas From Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total[a]	Volume	Percent	Withdrawals	Injections	Net[b,c]
1950 Total	**NA**	**NA**	**NA**	**NA**	**NA**	**175**	**230**	**-54**
1955 Total	**863**	**505**	**1,368**	**40**	**8.7**	**437**	**505**	**-68**
1960 Total	**NA**	**NA**	**2,184**	**NA**	**NA**	**713**	**844**	**-132**
1965 Total	**1,848**	**1,242**	**3,090**	**83**	**7.2**	**960**	**1,078**	**-118**
1970 Total	**2,326**	**1,678**	**4,004**	**257**	**18.1**	**1,459**	**1,857**	**-398**
1975 Total	**3,162**	**2,212**	**5,374**	**162**	**7.9**	**1,760**	**2,104**	**-344**
1980 Total	**3,642**	**2,655**	**6,297**	**-99**	**-3.6**	**1,910**	**1,896**	**14**
1985 Total	**3,842**	**2,607**	**6,448**	**-270**	**-9.4**	**2,359**	**2,128**	**231**
1990 Total	**3,868**	**3,068**	**6,936**	**555**	**22.1**	**1,934**	**2,433**	**-499**
1995 Total	**4,349**	**2,153**	**6,503**	**-453**	**-17.4**	**2,974**	**2,566**	**408**
2000 Total	**4,352**	**1,719**	**6,071**	**-806**	**-31.9**	**3,498**	**2,684**	**814**
2005 Total	**4,200**	**2,635**	**6,835**	**-61**	**-2.3**	**3,057**	**3,002**	**55**
2010 Total	**4,301**	**3,111**	**7,412**	**-19**	**-.6**	**3,274**	**3,291**	**-17**
2011 Total	**4,302**	**3,462**	**7,764**	**351**	**11.3**	**3,074**	**3,422**	**-348**
2012 Total	**4,372**	**3,413**	**7,785**	**-49**	**-1.4**	**2,818**	**2,825**	**-7**
2013 Total	**4,365**	**2,890**	**7,255**	**-523**	**-15.3**	**3,702**	**3,156**	**546**
2014 Total	**4,365**	**3,141**	**7,506**	**251**	**8.7**	**3,586**	**3,839**	**-253**
2015 Total	**4,372**	**3,667**	**8,038**	**525**	**16.7**	**3,100**	**3,638**	**-539**
2016 Total	**4,380**	**3,297**	**7,677**	**-370**	**-10.1**	**3,325**	**2,977**	**348**
2017 Total	**4,360**	**3,033**	**7,392**	**-264**	**-8.0**	**3,590**	**3,337**	**254**
2018 Total	**4,361**	**2,708**	**7,069**	**-324**	**-10.7**	**3,999**	**3,676**	**324**
2019 Total	**4,380**	**3,188**	**7,568**	**480**	**17.7**	**3,653**	**4,153**	**-500**
2020 Total	**4,394**	**3,341**	**7,735**	**153**	**4.8**	**3,412**	**3,590**	**-178**
2021 Total	**4,438**	**3,210**	**7,648**	**-131**	**-3.9**	**3,761**	**3,678**	**83**
2022 Total	**4,451**	**2,925**	**7,376**	**-285**	**-8.9**	**4,175**	**3,898**	**277**
2023 Total	**4,468**	**3,456**	**7,923**	**530**	**18.1**	**3,295**	**3,841**	**-546**
2024 January	4,467	2,611	7,078	141	5.7	951	106	844
February	4,467	2,350	6,817	277	13.4	458	195	263
March	4,466	2,306	6,772	456	24.7	320	274	46
April	4,466	2,562	7,029	446	21.1	155	411	-256
May	4,469	2,923	7,392	367	14.3	112	475	-363
June	4,471	3,175	7,645	273	9.4	128	382	-254
July	4,472	3,294	7,765	258	8.5	177	296	-120
August	4,477	3,370	7,847	201	6.4	244	322	-79
September	4,482	3,615	8,097	125	3.6	151	401	-250
October	4,483	3,938	8,421	131	3.4	94	422	-327
November	4,485	3,915	8,400	174	4.7	247	224	23
December	4,485	3,438	7,922	-18	-.5	633	157	476
Total	**4,485**	**3,438**	**7,922**	**-18**	**-.5**	**3,668**	**3,664**	**5**
2025 January	4,490	R 2,425	R 6,914	R -187	-7.2	R 1,104	96	R 1,008
February	4,488	R 1,790	R 6,278	R -560	R -23.8	772	136	636
March	4,491	R 1,836	R 6,326	R -470	R -20.4	287	336	-48
April	4,489	R 2,141	R 6,630	R -422	-16.5	144	448	-304
May	4,489	R 2,637	R 7,126	R -287	R -9.8	82	579	-497
June	4,491	R 2,990	R 7,481	R -185	R -5.8	106	461	-355
July	4,490	R 3,144	R 7,634	R -150	R -4.5	191	342	-151
August	4,501	R 3,318	R 7,820	R -52	R -1.5	180	366	-186
September	4,501	R 3,626	R 8,127	R 11	R .3	108	417	-309
October	4,502	R 3,931	R 8,432	R -8	-.2	117	425	-308
November	4,500	R 3,901	R 8,401	R -14	R -.3	276	245	31
December	4,499	R 3,306	R 7,805	R -132	R -3.8	760	166	594
Total	**4,499**	**R 3,306**	**R 7,805**	**R -132**	**R -3.8**	**R 4,127**	**4,017**	**R 110**
2026 January	4,498	2,402	6,900	R -23	R -.9	1,014	108	906
February	4,496	1,903	6,399	R 113	R 6.3	651	150	501
March	4,497	1,906	6,403	R 70	R 3.8	301	306	-5
April	4,501	2,210	6,711	R 69	R 3.2	147	454	-307
May	4,504	2,636	7,140	R -1	R .0	107	537	-430
June	4,504	2,995	7,499	R 5	.2	109	470	-361
July	4,505	3,137	7,642	-7	-.2	200	342	-142
7-Month Total	--	--	--	--	--	**2,528**	**2,367**	**161**
2025 7-Month Total	--	--	--	--	--	**2,686**	**2,398**	**288**
2024 7-Month Total	--	--	--	--	--	**2,300**	**2,138**	**161**

[a] For total underground storage capacity at the end of each calendar year, see Note 4, "Natural Gas Storage," at end of section.

[b] For 1980–2024, data differ from those shown on Table 4.1, which includes liquefied natural gas storage for that period.

[c] Positive numbers indicate that withdrawals are greater than injections. Negative numbers indicate that injections are greater than withdrawals. Net withdrawals or injections may not equal the difference between applicable ending stocks. See Note 4, "Natural Gas Storage," at end of section.

R=Revised. -- =Not applicable. NA=Not available.

Notes: • Through 1964, all volumes are shown on a pressure base of 14.65 psia (pounds per square inch absolute) at 60° Fahrenheit; beginning in 1965, the pressure base is 14.73 psia at 60° Fahrenheit. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia (except Alaska, which is excluded through 2012).

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

Sources: • **Storage Activity: 1949–1975**—U.S. Energy Information Administration (EIA), *Natural Gas Annual 1994, Volume 2,* Table 9. **1976–1979**—EIA, *Natural Gas Production and Consumption 1979,* Table 1. **1980–1995**—EIA, *Historical Natural Gas Annual 1930 Through 2000,* Table 11. **1996–2014**—EIA, *Natural Gas Monthly (NGM),* monthly issues. **2015–2024**—EIA, NGA, annual reports. **2025 forward**—EIA, NGM, April 2026, Table 8. • **All Other Data:1954–1974**—American Gas Association, *Gas Facts,* annual issues. **1975 and 1976**—Federal Energy Administration (FEA), Form FEA-G318-M-0, "Underground Gas Storage Report," and Federal Power Commission (FPC), Form FPC-8, "Underground Gas Storage Report." **1977 and 1978**—EIA, Form FEA-G318-M-0, "Underground Gas Storage Report," and Federal Energy Regulatory Commission (FERC), Form FERC-8, "Underground Gas Storage Report." **1979–1995**—EIA, Form EIA-191, "Underground Gas Storage Report," and FERC, Form FERC-8, "Underground Gas Storage Report." **1996–2024**—EIA, NGA, annual reports. **2025 forward**—EIA, NGM, April 2026, Table 8.

Note 1. Natural Gas Production. Final annual data are from the U.S. Energy Information Administration's (EIA) *Natural Gas Annual (NGA)*.

Data for the two most recent months presented are estimated. Some of the data for earlier months are also estimated or computed. For a discussion of computation and estimation procedures, see EIA's *Natural Gas Monthly (NGM)*.

Monthly data are considered preliminary until after publication of the NGA. Preliminary monthly data are gathered from reports to the Interstate Oil Compact Commission and the U.S. Minerals Management Service. Volumetric data are converted, as necessary, to a standard pressure base of 14.73 psia (pounds per square inch absolute) at 60° Fahrenheit. Unless there are major changes, data are not revised until after publication of the NGA.

Differences between annual data in the NGA and the sum of preliminary monthly data (January–December) are allocated proportionally to the months to create final monthly data.

Note 2. Natural Gas Plant Liquids Production. Natural gas plant liquids (NGPL) production is the reduction in volume of natural gas resulting from the removal of natural gas liquid constituents at natural gas processing plants—these natural gas plant liquids are transferred to petroleum supply.

Annual data are from EIA's *Natural Gas Annual (NGA)*, where they are estimated on the basis of the type and quantity of liquid products extracted from the gas stream and the calculated volume of such products at standard conditions. For a detailed explanation of the calculations used to derive estimated NGPL production, see the NGA.

Through 2006, preliminary monthly data are estimated on the basis of NGPL production as an annual percentage of marketed production. Beginning in 2007, preliminary monthly data are estimated on the basis of NGPL production reported on Form EIA-816, "Monthly Natural Gas Liquids Report."

Monthly data are revised and considered final after publication of the NGA. Final monthly data are estimated by allocating annual NGPL production data to the months on the basis of total natural gas marketed production data from the NGA.

Note 3. Supplemental Gaseous Fuels. Supplemental gaseous fuels are any substances that, introduced into or commingled with natural gas, increase the volume available for disposition. Such substances include, but are not limited to, propane-air, refinery gas, coke oven gas, still gas, manufactured gas, biomass gas, and air or inert gases added for Btu stabilization.

Annual data beginning with 1980 are from EIA's *Natural Gas Annual (NGA)*. Unknown quantities of supplemental gaseous fuels are included in consumption data for 1979 and earlier years. Monthly data are considered preliminary until after publication of the NGA. Monthly estimates are based on the annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. The ratio is applied to the monthly sum of the three elements to compute a monthly supplemental gaseous fuels figure.

Although the total amount of supplemental gaseous fuels consumed is known for 1980 forward, the amount consumed by each energy-use sector is estimated by EIA. These estimates are used to create natural gas (without supplemental gaseous fuels) data for Tables 1.3, 2.2, 2.3, 2.4, and 2.6 (note: to avoid double-counting in these tables, supplemental gaseous fuels are accounted for in their primary energy category: "Coal," "Petroleum," or "Biomass"). It is assumed that supplemental gaseous fuels are commingled with natural gas consumed by the residential, commercial, other industrial, and electric power sectors, but are not commingled with natural gas used for lease and plant fuel, pipelines and distribution, or vehicle fuel. The estimated consumption of supplemental gaseous fuels by each sector (residential, commercial, other industrial, and electric power) is calculated as that sector's natural gas consumption (see Table 4.3) divided by the sum of natural gas consumption by the residential, commercial, other industrial, and electric power sectors (see Table 4.3), and then multiplied by total supplemental gaseous fuels consumption (see Table 4.1). For estimated sectoral consumption of supplemental gaseous fuels in Btu, the residential, commercial, and other industrial values in cubic feet are multiplied by the "End-Use Sectors" conversion factors, and the electric power values in cubic

feet are multiplied by the "Electric Power Sector" conversion factors. Total supplemental gaseous fuels consumption in Btu is calculated as the sum of the Btu values for the sectors.

Note 4. Natural Gas Storage. Natural gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals from the quantity in storage at the end of the previous period. Injection and withdrawal data from the FERC-8/EIA-191 survey may be adjusted to correspond to data from Form EIA-176 for publication of EIA's *Natural Gas Annual (NGA)*.

Total underground storage capacity, which includes both active and inactive fields, at the end of each calendar year since 1975 (first year data were available), in billion cubic feet, was:

Total underground storage capacity, including active and inactive fields (billion cubic feet)

Decade	Year-0	Year-1	Year-2	Year-3	Year-4	Year-5	Year-6	Year-7	Year-8	Year-9
1970s						6,280	6,544	6,678	6,890	6,929
1980s	7,434	7,805	7,915	7,985	8,043	8,087	8,145	8,124	8,124	8,120
1990s	7,794	7,993	7,932	7,989	8,043	7,953	7,980	8,332	8,179	8,229
2000s	8,241	8,182	8,207	8,206	8,255	8,268	8,330	8,402	8,499	8,656
2010s	8,764	8,849	8,991	9,173	9,233	9,231	9,239	9,261	9,241	9,231
2020s	9,259	9,265	9,269	9,278	9,319	P9,371				

Through 1990, monthly underground storage data are collected from the Federal Energy Regulatory Commission Form FERC-8 (interstate data) and EIA Form EIA-191 (intrastate data). Beginning in 1991, all data are collected on the revised Form EIA-191. Injection and withdrawal data from the EIA-191 survey may be adjusted to correspond to data from Form EIA-176 following publication of EIA's NGA.

The final monthly and annual storage and withdrawal data for 1980–2024 include both underground and liquefied natural gas (LNG) storage. Annual data on LNG additions and withdrawals are from Form EIA-176. Monthly data are estimated by computing the ratio of each month's underground storage additions and withdrawals to annual underground storage additions and withdrawals and applying the ratio to the annual LNG data.

Note 5. Natural Gas Balancing Item. The balancing item for natural gas represents the difference between the sum of the components of natural gas supply and the sum of components of natural gas disposition. The differences may be due to quantities lost or to the effects of data reporting problems. Reporting problems include differences due to the net result of conversions of flow data metered at varying temperature and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycle and calendar period time frames; and imbalances resulting from the merger of data reporting systems that vary in scope, format, definitions, and type of respondents.

Note 6. Natural Gas Consumption. Natural gas consumption statistics include data for the following: "Residential Sector": residential deliveries; "Commercial Sector": commercial deliveries, including to commercial combined-heat-and-power (CHP) and commercial electricity-only plants; "Industrial Sector": lease and plant fuel use, and other industrial deliveries, including to industrial CHP and industrial electricity-only plants also includes the relatively small amount of natural gas consumption for non-combustion use (see Tables 1.13a and 1.13b); "Transportation Sector": pipelines and distribution use, and vehicle fuel use; and "Electric Power Sector": electric utility and independent power producer use.

Final data for series other than "Other Industrial CHP" and "Electric Power Sector" are from EIA's *Natural Gas Annual (NGA)*. Monthly data are considered preliminary until after publication of the NGA. For more detailed information on the methods of estimating preliminary and final monthly data, see EIA's *Natural Gas Monthly*.

Note 7. Natural Gas Consumption, 1989–1992. Prior to 1993, deliveries to nonutility generators were not separately collected from natural gas companies on Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition." As a result, for 1989–1992, those volumes are probably included in both the industrial and electric power

sectors and double-counted in total consumption. In 1993, 0.28 trillion cubic feet was reported as delivered to nonutility generators.

Note 8. Natural Gas Data Adjustments, 1993–2000, 2017, and 2020. For 1993–2000, the original data for natural gas delivered to industrial consumers (now "Other Industrial" in Table 4.3) included deliveries to both industrial users and independent power producers (IPPs). These data were adjusted to remove the estimated consumption at IPPs from "Other Industrial" and include it with electric utilities under "Electric Power Sector." (To estimate the monthly IPP consumption, the monthly pattern for Other Industrial CHP in Table 4.3 was used.)

For 1996–2000, 2017, and 2020, monthly data for several natural gas series shown in EIA's Natural Gas Navigator (see http://www.eia.gov/dnav/ng/ng_cons_sum_dcu_nus_m.htm) were not reconciled and updated to be consistent with the final annual data in EIA's *Natural Gas Annual*. In the *Monthly Energy Review*, monthly data for these series were adjusted so that the monthly data sum to the final annual values. The Table 4.1 data series (and years) that were adjusted are: Gross Withdrawals (1996 and 1997), Marketed Production (1997), NGPL Production (1997, 1998, and 2000), Dry Gas Production (1996 and 1997), Supplemental Gaseous Fuels (1997–2000), Balancing Item (1997–2000), and Total Consumption (1997–2000, 2017, and 2020). The Table 4.3 data series (and years) that were adjusted are: Lease and Plant Fuel (1997–2000, 2017, and 2020), Total Industrial (1997–2000, 2017, and 2020), Pipelines and Distribution (2000, 2017, and 2020), and Total Consumption (1997–2000, 2017, and 2020).

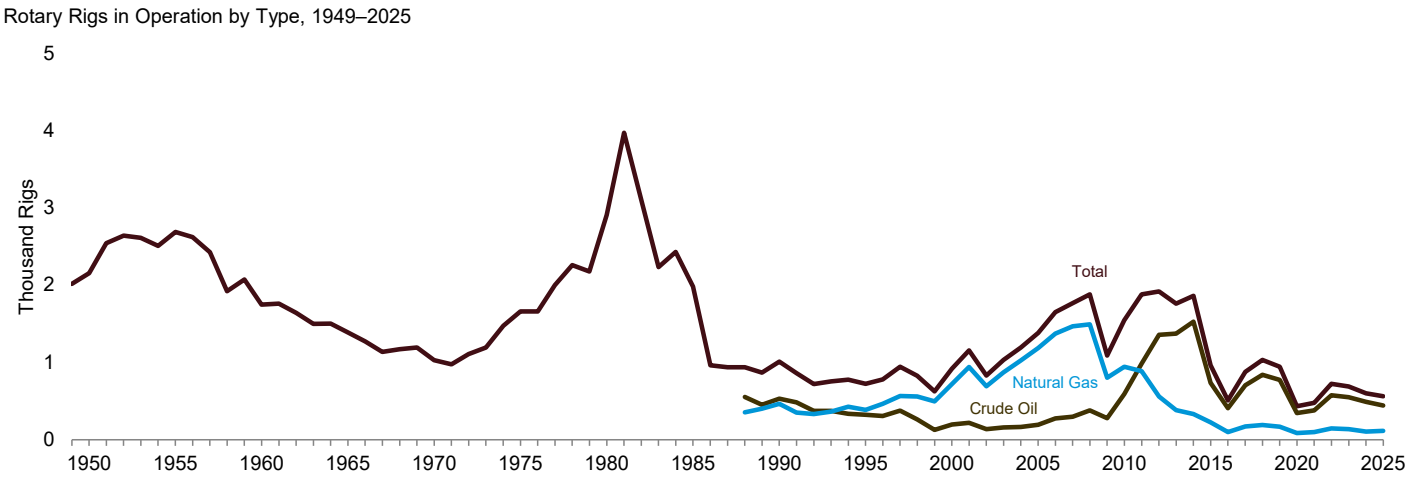
Note 9. Natural Gas Imports and Exports. The United States imports natural gas via pipeline from Canada and Mexico; and imports liquefied natural gas (LNG) via vessel from other countries. In addition, small amounts of LNG arrived from Canada via truck in 1973, 1977, 1981, and 2013 forward. Also, small amounts of compressed natural gas (CNG) were imported from Canada in 2014 forward. The United States exports natural gas via pipeline to Canada and Mexico, and exports LNG via vessel to other countries. Also, small amounts of LNG have gone to Mexico via truck since 1998 and via vessel since 2016, and to Canada via truck in 2007 and 2012 forward. Small amounts of CNG have been exported to Canada since 2013. Natural gas exports include re-exports**.**

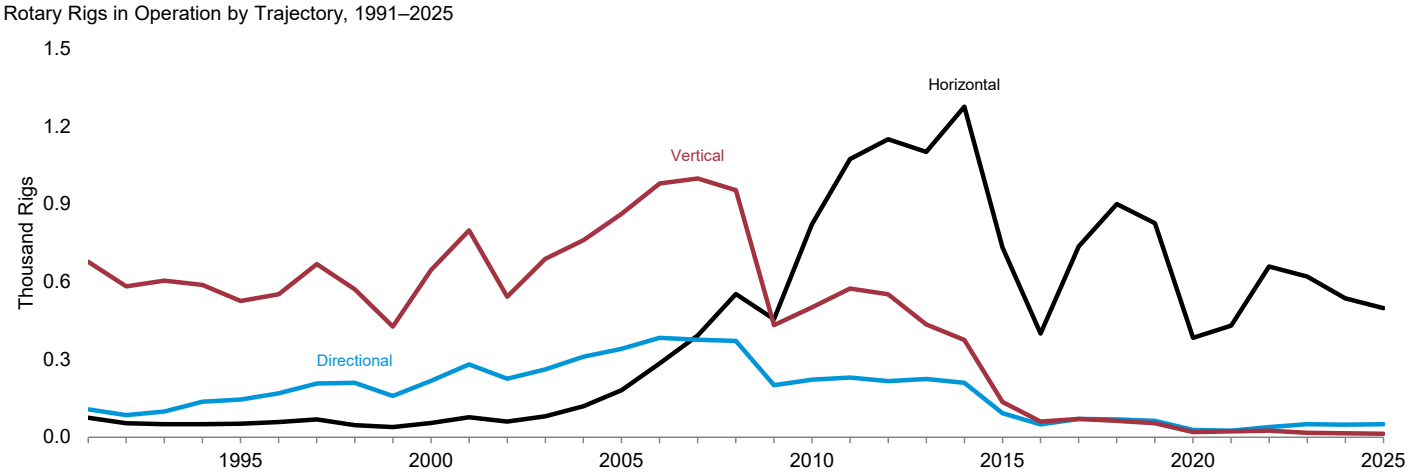
Annual and final monthly data are from the annual EIA Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and FE-746R, "Import and Export of Natural Gas."

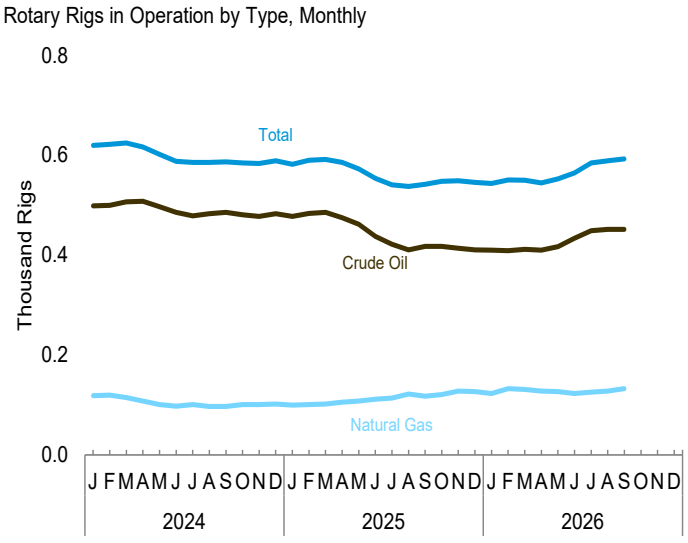
Preliminary monthly data are EIA estimates. For a discussion of estimation procedures, see EIA's *Natural Gas Monthly*. Preliminary data are revised after publication of EIA's *Natural Gas Annual*.

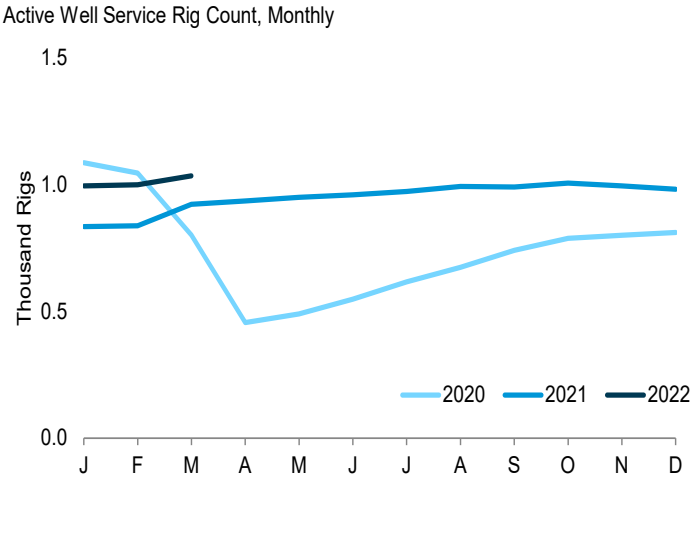
5. Crude Oil and Natural Gas Resource Development

Figure 5.1 Crude Oil and Natural Gas Drilling Activity Measurements









Web Page: http://www.eia.gov/totalenergy/data/monthly/#crude.
Sources: Table 5.1.

Table 5.1 Crude Oil and Natural Gas Drilling Activity Measurements

(Number of Rigs)

	Rotary Rigs in Operation[a,b]								Active Well Service Rig Count[d]
	By Location[c]		By Type[c]		By Trajectory[c]			Total[c]	
	Onshore	Offshore	Crude Oil	Natural Gas	Horizontal	Directional	Vertical		
1950 Average	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**2,154**	**NA**
1955 Average	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**2,686**	**NA**
1960 Average	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**1,748**	**NA**
1965 Average	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**1,388**	**NA**
1970 Average	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**1,028**	**NA**
1975 Average	**1,554**	**106**	**NA**	**NA**	**NA**	**NA**	**NA**	**1,660**	**2,486**
1980 Average	**2,678**	**231**	**NA**	**NA**	**NA**	**NA**	**NA**	**2,909**	**4,089**
1985 Average	**1,774**	**206**	**NA**	**NA**	**NA**	**NA**	**NA**	**1,980**	**4,716**
1990 Average	**902**	**108**	**532**	**464**	**NA**	**NA**	**NA**	**1,010**	**3,658**
1995 Average	**622**	**101**	**323**	**385**	**52**	**145**	**526**	**723**	**3,041**
2000 Average	**778**	**140**	**197**	**720**	**55**	**217**	**645**	**918**	**2,692**
2005 Average	**1,290**	**93**	**194**	**1,186**	**181**	**341**	**862**	**1,383**	**2,222**
2010 Average	**1,514**	**31**	**591**	**943**	**822**	**222**	**501**	**1,546**	**1,854**
2011 Average	**1,846**	**32**	**984**	**887**	**1,074**	**230**	**574**	**1,879**	**2,075**
2012 Average	**1,871**	**48**	**1,357**	**558**	**1,151**	**216**	**552**	**1,919**	**2,113**
2013 Average	**1,705**	**56**	**1,373**	**383**	**1,102**	**225**	**435**	**1,761**	**2,064**
2014 Average	**1,804**	**57**	**1,526**	**333**	**1,276**	**210**	**375**	**1,861**	**2,024**
2015 Average	**927**	**35**	**736**	**224**	**733**	**93**	**136**	**962**	**1,481**
2016 Average	**486**	**23**	**408**	**100**	**400**	**49**	**60**	**509**	**1,061**
2017 Average	**856**	**20**	**703**	**172**	**737**	**70**	**70**	**876**	**1,187**
2018 Average	**1,013**	**19**	**841**	**190**	**900**	**69**	**63**	**1,032**	**1,292**
2019 Average	**920**	**23**	**774**	**169**	**826**	**63**	**54**	**943**	**1,253**
2020 Average	**417**	**15**	**345**	**85**	**384**	**28**	**20**	**433**	**738**
2021 Average	**464**	**14**	**380**	**98**	**431**	**25**	**22**	**478**	**949**
2022 Average	**708**	**15**	**574**	**147**	**659**	**39**	**25**	**723**	**NA**
2023 Average	**669**	**19**	**549**	**135**	**620**	**50**	**17**	**687**	**NA**
2024 January	601	20	499	119	561	48	12	620	NA
February	603	20	500	120	560	50	13	622	NA
March	603	22	507	115	559	53	13	625	NA
April	598	19	508	108	555	50	13	617	NA
May	582	20	497	101	544	42	17	602	NA
June	567	21	486	98	525	44	19	588	NA
July	564	22	479	101	519	49	18	586	NA
August	566	19	483	97	521	48	16	586	NA
September	567	20	486	97	522	50	15	587	NA
October	568	18	481	101	517	53	15	585	NA
November	570	14	478	101	520	48	16	584	NA
December	575	14	483	102	526	49	14	589	NA
Average	**580**	**19**	**491**	**105**	**536**	**48**	**15**	**599**	**NA**
2025 January	568	14	478	100	519	50	13	582	NA
February	576	14	484	101	528	50	13	590	NA
March	578	14	486	102	531	50	12	592	NA
April	573	13	475	106	527	46	14	586	NA
May	561	12	462	108	517	42	14	573	NA
June	542	12	438	112	501	40	13	554	NA
July	528	13	422	114	482	45	15	541	NA
August	525	13	411	122	470	54	14	538	NA
September	529	13	418	118	473	56	13	542	NA
October	531	17	418	121	482	55	12	548	NA
November	530	19	414	128	478	60	11	549	NA
December	529	17	411	127	475	56	15	546	NA
Average	**547**	**14**	**442**	**113**	**498**	**50**	**13**	**561**	**NA**
2026 January	529	15	410	123	476	55	13	544	NA
February	534	17	409	133	483	56	13	551	NA
March	537	13	412	131	485	53	12	550	NA
April	533	12	410	128	484	49	13	545	NA
May	535	18	417	127	482	59	12	553	NA
June	556	9	434	123	481	73	12	565	NA
July	572	13	449	126	522	51	12	585	NA
August	578	11	452	128	532	47	11	589	NA
September	586	8	452	133	539	43	12	593	NA
9-Month Average	**551**	**13**	**427**	**128**	**498**	**54**	**12**	**564**	**NA**
2025 9-Month Average	**553**	**13**	**452**	**109**	**505**	**48**	**13**	**566**	**NA**
2024 9-Month Average	**583**	**20**	**494**	**106**	**541**	**48**	**15**	**604**	**NA**

[a] Data are for rigs drilling for crude oil, rigs drilling for natural gas, and other rigs (not shown separately) drilling for miscellaneous purposes, such as service wells, injection wells, and stratigraphic tests.

[b] Rotary rigs in operation are reported weekly on Fridays. Monthly data are averages of 4- or 5-week reporting periods. Multi-month data are averages of the reported weekly data over the covered months. Annual data are averages of 52- or 53-week reporting periods. Published data are rounded to the nearest whole number.

[c] Not shown under "By Type" are other rigs drilling for miscellaneous purposes, such as service wells, injection wells, and stratigraphic tests. Therefore, the sum of "Crude Oil" and "Natural Gas" may not equal "Total" values. In addition, for "By Location," "By Type," and "By Trajectory," the sum of the components in each category may not equal "Total" values due to independent rounding.

[d] The number of rigs doing true workovers (where tubing is pulled from the well), or doing rod string and pump repair operations, and that are, on average, crewed and working every day of the month.

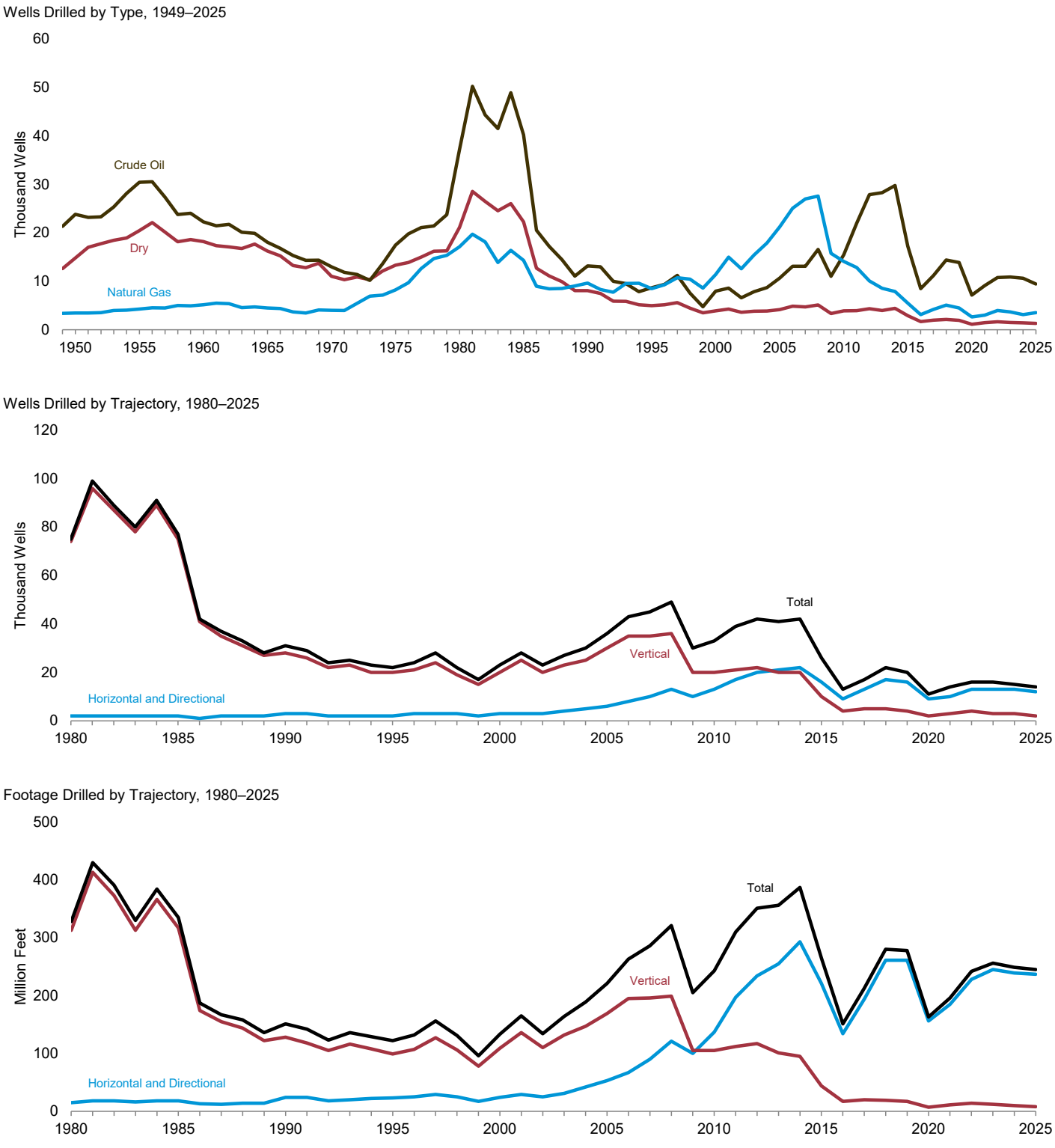
NA=Not available.

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

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

Sources: • **Rotary Rigs in Operation:** Baker Hughes, Inc., Houston, TX, "North America Rig Count," used with permission. See http://phx.corporate-ir.net/phoenix.zhtml?c=79687&p=irol-reportsother. • **Active Well Service Rig Count:** Energy Workforce & Technology Council, Houston, TX.

Figure 5.2 Crude Oil and Natural Gas Wells and Footage Drilled



Web Page: http://www.eia.gov/totalenergy/data/monthly/#crude.
Sources: Table 5.2.

Table 5.2 Crude Oil and Natural Gas Wells and Footage Drilled

	Wells Drilled						Footage Drilled					
	By Type			By Trajectory			By Type			By Trajectory		
	Crude Oil	Natural Gas	Dry	Horizontal and Directional	Vertical	Total	Crude Oil	Natural Gas	Dry	Horizontal and Directional	Vertical	Total
	Number						Thousand Feet					
1950 Total	**23,812**	**3,439**	**14,799**	**NA**	**NA**	**42,050**	**NA**	**NA**	**NA**	**NA**	**NA**	**157,358**
1955 Total	**30,432**	**4,266**	**20,452**	**NA**	**NA**	**55,150**	**NA**	**NA**	**NA**	**NA**	**NA**	**226,182**
1960 Total	**22,258**	**5,149**	**18,212**	**NA**	**NA**	**45,619**	**NA**	**NA**	**NA**	**NA**	**NA**	**192,176**
1965 Total	**18,065**	**4,482**	**16,226**	**NA**	**NA**	**38,773**	**NA**	**NA**	**NA**	**NA**	**NA**	**174,882**
1970 Total	**12,968**	**4,011**	**11,031**	**NA**	**NA**	**28,010**	**NA**	**NA**	**NA**	**NA**	**NA**	**138,556**
1975 Total	**17,449**	**8,200**	**13,321**	**NA**	**NA**	**38,970**	**NA**	**NA**	**NA**	**NA**	**NA**	**182,199**
1980 Total	**37,209**	**17,108**	**21,125**	**1,677**	**73,765**	**75,442**	**137,273**	**92,649**	**98,054**	**14,607**	**313,369**	**327,976**
1985 Total	**40,217**	**14,309**	**22,270**	**2,184**	**74,612**	**76,796**	**152,575**	**77,699**	**104,791**	**17,944**	**317,122**	**335,066**
1990 Total	**13,169**	**9,603**	**8,054**	**2,839**	**27,987**	**30,826**	**57,153**	**52,870**	**41,360**	**23,619**	**127,764**	**151,383**
1995 Total	**8,657**	**8,474**	**4,951**	**2,495**	**19,587**	**22,082**	**41,952**	**53,637**	**26,714**	**23,034**	**99,269**	**122,304**
2000 Total	**7,963**	**11,378**	**3,901**	**2,916**	**20,326**	**23,242**	**34,907**	**75,333**	**22,789**	**24,195**	**108,833**	**133,028**
2005 Total	**10,668**	**21,227**	**4,161**	**5,999**	**30,057**	**36,056**	**49,683**	**148,836**	**22,964**	**52,927**	**168,557**	**221,484**
2010 Total	**15,442**	**14,093**	**3,873**	**12,930**	**20,478**	**33,408**	**93,198**	**130,382**	**19,130**	**137,368**	**105,343**	**242,711**
2011 Total	**21,955**	**12,830**	**3,930**	**17,232**	**21,483**	**38,715**	**154,740**	**135,967**	**18,931**	**197,411**	**112,227**	**309,638**
2012 Total	**27,872**	**10,047**	**4,350**	**19,815**	**22,454**	**42,269**	**218,214**	**111,829**	**20,682**	**233,987**	**116,738**	**350,725**
2013 Total	**28,285**	**8,551**	**3,953**	**20,515**	**20,274**	**40,789**	**235,059**	**100,985**	**19,977**	**254,982**	**101,039**	**356,021**
2014 Total	**29,754**	**7,899**	**4,407**	**22,412**	**19,648**	**42,060**	**266,713**	**97,287**	**23,356**	**292,740**	**94,616**	**387,356**
2015 Total	**17,247**	**5,463**	**2,880**	**16,041**	**9,549**	**25,590**	**175,991**	**72,315**	**16,811**	**221,426**	**43,692**	**265,118**
2016 Total	**8,491**	**3,113**	**1,663**	**9,066**	**4,201**	**13,267**	**97,684**	**44,189**	**9,448**	**134,006**	**17,314**	**151,320**
2017 Total	**11,183**	**4,198**	**1,980**	**12,659**	**4,702**	**17,361**	**136,832**	**63,407**	**12,988**	**193,526**	**19,701**	**213,228**
2018 Total	**14,386**	**5,060**	**2,134**	**16,572**	**5,008**	**21,580**	**185,647**	**80,395**	**14,357**	**261,115**	**19,283**	**280,399**
2019 Total	**13,882**	**4,463**	**1,944**	**15,950**	**4,339**	**20,289**	**188,921**	**74,983**	**13,993**	**260,804**	**17,092**	**277,896**
2020 Total	**7,156**	**2,641**	**1,120**	**8,941**	**1,976**	**10,917**	**106,176**	**48,256**	**8,525**	**155,639**	**7,318**	**162,957**
2021 Total	**9,111**	**3,010**	**1,436**	**10,500**	**3,057**	**13,557**	**131,673**	**55,399**	**9,412**	**185,229**	**11,255**	**196,484**
2022 Total	**10,748**	**3,946**	**1,633**	**12,555**	**3,772**	**16,327**	**158,644**	**71,915**	**11,921**	**228,362**	**14,117**	**242,479**
2023 Total	**10,866**	**3,667**	**1,485**	**13,052**	**2,966**	**16,018**	**175,770**	**70,035**	**10,631**	**244,771**	**11,664**	**256,436**
2024 January	864	276	119	1,077	182	1,259	14,537	5,496	870	20,136	767	20,903
February	865	285	119	1,090	179	1,269	14,858	5,581	886	20,627	699	21,326
March	879	268	119	1,071	195	1,266	14,555	5,153	1,103	20,048	762	20,810
April	948	251	121	1,100	220	1,320	16,130	4,826	837	20,932	860	21,793
May	861	279	115	1,022	233	1,255	13,986	5,566	863	19,503	913	20,415
June	859	255	114	973	255	1,228	13,954	5,113	788	18,855	1,001	19,855
July	971	236	125	1,069	263	1,332	15,886	4,685	1,003	20,548	1,027	21,574
August	894	234	116	1,029	215	1,244	15,150	4,609	818	19,737	839	20,576
September	841	296	112	1,048	201	1,249	13,824	6,126	778	19,943	785	20,727
October	956	261	125	1,116	226	1,342	16,339	5,196	864	21,516	884	22,399
November	836	238	113	970	217	1,187	13,644	4,597	785	18,178	849	19,027
December	840	240	113	1,009	184	1,193	14,018	4,740	824	18,865	718	19,583
Total	**10,614**	**3,119**	**1,411**	**12,574**	**2,570**	**15,144**	**176,882**	**61,689**	**10,419**	**238,887**	**10,102**	**248,989**
2025 January	828	290	111	1,042	187	1,229	13,559	5,823	830	19,482	730	20,212
February	838	255	113	1,030	176	1,206	13,899	5,247	798	19,258	687	19,945
March	841	257	113	1,038	173	1,211	14,822	5,516	782	20,445	675	21,120
April	837	279	112	1,036	192	1,228	14,195	5,827	895	20,169	749	20,918
May	873	261	115	1,061	188	1,249	16,328	5,381	803	21,777	734	22,511
June	779	261	106	978	168	1,146	14,481	5,018	733	19,574	657	20,231
July	777	331	112	1,028	192	1,220	13,913	6,844	785	20,793	749	21,542
August	783	308	112	1,023	180	1,203	13,925	6,561	806	20,589	703	21,292
September	730	305	105	974	166	1,140	13,407	6,031	730	19,520	648	20,168
October	725	284	105	954	160	1,114	12,433	5,682	737	18,226	625	18,851
November	717	379	105	1,042	159	1,201	12,211	7,546	726	19,862	621	20,483
December	711	296	104	911	200	1,111	11,650	5,740	725	17,335	781	18,116
Total	**9,439**	**3,506**	**1,313**	**12,117**	**2,141**	**14,258**	**164,822**	**71,216**	**9,350**	**237,030**	**8,359**	**245,389**
2026 January	711	288	104	927	176	1,103	11,880	5,537	860	17,580	697	18,277
February	709	309	105	949	174	1,123	12,167	5,941	726	18,139	694	18,834
March	713	305	105	960	163	1,123	13,188	5,891	729	19,172	636	19,808
April	710	298	104	935	177	1,112	11,655	5,790	727	17,481	691	18,172
May	723	297	106	961	165	1,126	12,016	5,842	753	17,967	644	18,612
June	752	287	108	988	159	1,147	12,621	5,701	772	18,472	621	19,093
July	778	295	112	1,015	170	1,185	13,007	5,837	797	18,977	664	19,641
August	783	298	113	1,047	147	1,194	13,327	6,003	819	19,575	574	20,149
8-Month Total	**5,879**	**2,377**	**857**	**7,782**	**1,331**	**9,113**	**99,861**	**46,542**	**6,182**	**147,365**	**5,220**	**152,585**
2025 8-Month Total	**6,556**	**2,242**	**894**	**8,236**	**1,456**	**9,692**	**115,122**	**46,218**	**6,432**	**162,087**	**5,685**	**167,771**
2024 8-Month Total	**7,141**	**2,084**	**948**	**8,431**	**1,742**	**10,173**	**119,056**	**41,029**	**7,167**	**160,386**	**6,867**	**167,253**

NA=Not available.

Notes: • Data are estimates. • For 1960–1969, data are for well completion reports received by the American Petroleum Institute during the reporting year; for all other years, data are for well completions in a given year. • Through 1989, these well counts include only the original drilling of a hole intended to discover or further develop already discovered crude oil or natural gas resources. Other drilling activities, such as drilling an old well deeper, drilling of laterals from the original well, drilling of service and injection wells, and drilling for resources other than crude oil or natural gas are excluded. Due to the methodology used to estimate ultimate well counts from the available partially reported data, the counts shown on this page are frequently revised. See Note, "Crude Oil and Natural Gas Wells," at end of section. • Geographic coverage is the 50 states and the District of Columbia.

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

Sources: • **1949–1965:** Gulf Publishing Company, *World Oil*, "Forecast-Review" issue. • **1966–1969:** American Petroleum Institute (API), *Quarterly Review of Drilling Statistics for the United States*, annual summaries and monthly reports. • **1970–1989:** U.S. Energy Information Administration (EIA) computations based on well reports submitted to the API. • **1990 forward:** EIA computations based on well reports submitted to S&P Global.

Beginning with the October 2026 MER, this table is no longer updated.

Crude Oil and Natural Gas Resource Development

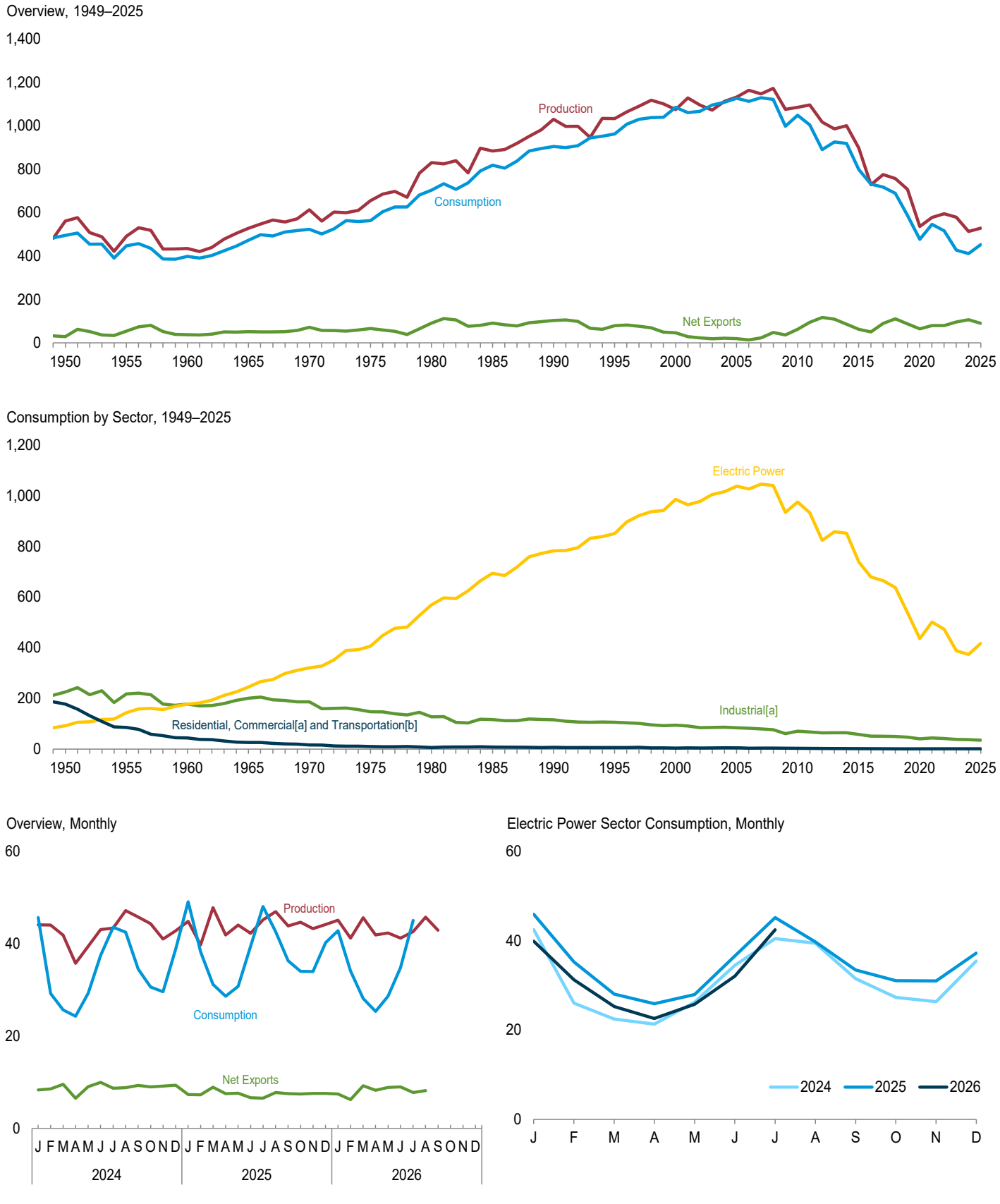
Note. Crude Oil and Natural Gas Wells. The U.S. Energy Information Administration (EIA) considers six well types in the *Monthly Energy Review* (MER): "completed for crude oil," "completed for natural gas," "dry hole," "vertical," "horizontal and directional," and "total." Wells that produce both crude oil and natural gas are categorized by the state. EIA includes both developmental wells and exploratory wells in the six well types, but excludes all other classes of wells drilled in connection with the search for producible hydrocarbons. If a lateral well (such as a service well, stratigraphic test well, observation well, etc.) is drilled at the same time as the original hole, EIA does not separately count the lateral well. However, EIA includes all of the well footage. EIA counts only horizontal wells after the first lateral is drilled and does not count pilot holes.

Prior to the March 1985 MER, drilling statistics consisted of completion data for crude oil, natural gas, and dry wells as reported to the American Petroleum Institute (API) during a given month. Due to time lags between the date of well completion and the date of completion reporting to the API, as-reported well completions were an inaccurate indicator of drilling activity. For example, in 1982, as-reported well completions increased, while the number of actual completions decreased. As a result, for 1973 forward, the data shown in this section are revised estimates based on the partial data available from S&P Global. EIA continuously revises these estimates as new data become available. Each month, EIA estimates the latest 36 months of wells using the rig count and a 3-month average wells per rig ratio. EIA applies three conditions to the result: 1) if the model result is less than the actual reported value, then EIA uses the reported value, and 2) the published total well count is the maximum of the modeled total, or the sum of modeled oil, gas, and dry, or the sum of modeled horizontal and vertical well counts, and 3) the modeled component well counts are prorated so that they add exactly to the total published well count. EIA uses a similar process to estimate drilled footage using a 6-month average footage-per-well ratio. Because there is no reported dry rig count data, EIA estimates the number of dry wells using a 6-month average dry-wells-to-total-wells ratio, which EIA then applies to the modeled total wells. In general, the most recent 12 months of estimated well counts will have the highest errors because they are the farthest from the average well-per-rig ratio used in the model (at least 25 months).

6. Coal

Figure 6.1 Coal

(Million Short Tons)



[a] Includes combined-heat-power (CHP) plants and a small number of electricity-only-plants.
[b] For 1978 forward, small amounts of transportation sector use are included in "Industrial."

Web Page: http://www.eia.gov/totalenergy/data/monthly/#coal.
Sources: Tables 6.1 and 6.2.

Table 6.1 Coal Overview

(Thousand Short Tons)

	Production[a]	Waste Coal Supplied[b]	Trade			Stock Change[d,e]	Losses and Unaccounted for[e,f]	Consumption
			Imports	Exports	Net Imports[c]			
1950 Total	**560,388**	**NA**	**365**	**29,360**	**-28,995**	**27,829**	**9,462**	**494,102**
1955 Total	**490,838**	**NA**	**337**	**54,429**	**-54,092**	**-3,974**	**-6,292**	**447,012**
1960 Total	**434,329**	**NA**	**262**	**37,981**	**-37,719**	**-3,194**	**1,722**	**398,081**
1965 Total	**526,954**	**NA**	**184**	**51,032**	**-50,848**	**1,897**	**2,244**	**471,965**
1970 Total	**612,661**	**NA**	**36**	**71,733**	**-71,697**	**11,100**	**6,633**	**523,231**
1975 Total	**654,641**	**NA**	**940**	**66,309**	**-65,369**	**32,154**	**-5,522**	**562,640**
1980 Total	**829,700**	**NA**	**1,194**	**91,742**	**-90,548**	**25,595**	**10,827**	**702,730**
1985 Total	**883,638**	**NA**	**1,952**	**92,680**	**-90,727**	**-27,934**	**2,796**	**818,049**
1990 Total	**1,029,076**	**3,339**	**2,699**	**105,804**	**-103,104**	**26,542**	**-1,730**	**904,498**
1995 Total	**1,032,974**	**8,561**	**9,473**	**88,547**	**-79,074**	**-275**	**632**	**962,104**
2000 Total	**1,073,612**	**9,089**	**12,513**	**58,489**	**-45,976**	**-48,309**	**938**	**1,084,095**
2005 Total	**1,131,498**	**13,352**	**30,460**	**49,942**	**-19,482**	**-9,702**	**9,092**	**1,125,978**
2010 Total	**1,084,368**	**13,651**	**19,353**	**81,716**	**-62,363**	**-13,039**	**182**	**1,048,514**
2011 Total	**1,095,628**	**13,209**	**13,088**	**107,259**	**-94,171**	**211**	**11,506**	**1,002,948**
2012 Total	**1,016,458**	**11,196**	**9,159**	**125,746**	**-116,586**	**6,902**	**14,980**	**889,185**
2013 Total	**984,842**	**11,279**	**8,906**	**117,659**	**-108,753**	**-38,525**	**1,451**	**924,442**
2014 Total	**1,000,049**	**12,090**	**11,350**	**97,257**	**-85,907**	**-2,601**	**11,101**	**917,731**
2015 Total	**896,941**	**9,969**	**11,318**	**73,958**	**-62,640**	**40,704**	**5,452**	**798,115**
2016 Total	**728,364**	**10,138**	**9,846**	**60,271**	**-50,425**	**-45,441**	**2,449**	**731,071**
2017 Total	**774,609**	**9,951**	**7,803**	**96,945**	**-89,142**	**-26,033**	**4,596**	**716,856**
2018 Total	**756,167**	**10,431**	**5,954**	**116,244**	**-110,290**	**-37,160**	**5,363**	**688,105**
2019 Total	**706,309**	**8,003**	**6,697**	**93,765**	**-87,068**	**35,463**	**5,238**	**586,543**
2020 Total	**535,434**	**6,880**	**5,137**	**69,067**	**-63,929**	**-5,438**	**7,129**	**476,693**
2021 Total	**577,431**	**7,663**	**5,388**	**85,115**	**-79,727**	**-44,466**	**4,154**	**545,679**
2022 Total	**594,155**	**8,934**	**6,313**	**85,956**	**-79,642**	**-1,383**	**9,296**	**515,534**
2023 Total	**577,954**	**8,165**	**4,010**	**100,208**	**-96,198**	**48,493**	**15,533**	**425,895**
2024 January	44,060	780	94	8,429	-8,335	-9,374	229	45,650
February	44,019	783	151	8,680	-8,529	5,115	1,960	29,199
March	41,816	854	85	9,662	-9,578	6,167	1,279	25,646
April	35,764	754	254	6,765	-6,511	3,256	2,474	24,277
May	39,430	579	80	9,123	-9,043	1,006	709	29,251
June	43,069	715	203	10,165	-9,962	-4,709	1,064	37,468
July	43,389	826	185	8,905	-8,720	-7,924	-100	43,519
August	47,160	561	288	9,119	-8,831	-5,695	2,110	42,475
September	45,772	439	248	9,566	-9,319	727	1,679	34,486
October	44,317	436	118	9,118	-8,999	5,022	146	30,587
November	40,984	423	167	9,305	-9,138	3,173	-503	29,599
December	42,759	621	127	9,490	-9,363	-3,435	-1,330	38,782
Total	**512,540**	**7,771**	**1,998**	**108,326**	**-106,329**	**-6,672**	**9,716**	**410,939**
2025 January	44,845	704	245	7,575	-7,330	-14,940	4,099	49,060
February	39,707	830	197	7,501	-7,304	-5,905	902	38,236
March	47,782	812	190	9,121	-8,930	4,795	3,713	31,155
April	41,876	812	264	7,804	-7,540	4,368	2,149	28,631
May	44,020	839	196	7,805	-7,609	3,673	2,815	30,761
June	42,240	852	263	6,916	-6,653	-2,962	-11	39,412
July	45,161	860	191	6,735	-6,544	-8,156	-407	48,039
August	46,958	870	241	8,008	-7,767	-4,835	2,283	42,613
September	43,803	657	196	7,718	-7,522	273	398	36,267
October	44,639	534	358	7,802	-7,445	3,706	6	34,016
November	43,250	739	334	7,916	-7,583	2,788	-344	33,963
December	44,143	824	226	7,805	-7,579	-2,400	-433	40,221
Total	**528,423**	**9,333**	**2,899**	**92,705**	**-89,806**	**-19,595**	**15,171**	**452,375**
2026 January	45,069	845	391	7,855	-7,463	R -5,843	R 1,504	R 42,790
February	41,191	804	254	6,493	-6,239	R 1,274	R 400	R 34,083
March	45,609	761	91	9,340	-9,249	R 6,126	R 2,851	R 28,144
April	41,860	R 590	290	8,554	-8,265	R 5,716	R 3,118	R 25,351
May	42,322	R 742	253	9,133	-8,880	R 3,556	R 2,024	R 28,605
June	41,168	R 762	166	9,160	-8,994	R -1,497	R -394	R 34,827
July	42,607	RF 429	183	7,947	-7,764	R -10,439	R 668	R 45,042
August	45,739	NA	R 219	R 8,394	R -8,174	NA	NA	NA
September	42,879	NA	NA	NA	NA	NA	NA	NA
9-Month Total	**388,444**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
2025 9-Month Total	**396,391**	**7,236**	**1,982**	**69,181**	**-67,200**	**-23,689**	**15,941**	**344,175**
2024 9-Month Total	**384,479**	**6,290**	**1,586**	**80,414**	**-78,828**	**-11,432**	**11,403**	**311,970**

[a] Beginning in 2001, includes a small amount of refuse recovery (coal recaptured from a refuse mine and cleaned to reduce the concentration of noncombustible materials).

[b] Waste coal (including fine coal, coal obtained from a refuse bank or slurry dam, anthracite culm, bituminous gob, and lignite waste) consumed by the electric power and industrial sectors. Beginning in 1989, waste coal supplied is counted as a supply-side item to balance the same amount of waste coal included in "Consumption."

[c] Net imports equal imports minus exports. A minus sign indicates exports are greater than imports.

[d] A negative value indicates a decrease in stocks and a positive value indicates an increase. See Table 6.3 for stocks data coverage.

[e] In 1949, stock change is included in "Losses and Unaccounted for."

[f] The difference between calculated coal supply and disposition, due to coal quantities lost or to data reporting problems.

R=Revised. NA=Not available. F=Forecast.

Notes: • For methodology used to calculate production, consumption, and stocks, see Note 1, "Coal Production," Note 2, "Coal Consumption," and Note 3, "Coal Stocks," at end of section. • Data values preceded by "F" are derived from the U.S. Energy Information Administration's Short-Term Integrated Forecasting System. See Note 4, "Coal Forecast Values," at end of section. • 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/#coal (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

Table 6.2 Coal Consumption by Sector

(Thousand Short Tons)

	End-Use Sectors											
		Commercial			Industrial							
						Other Industrial						
	Resi-dential	CHP[a]	Other[b]	Total	Coke Plants	CHP[c]	Non-CHP[d]	Total	Total	Trans-portation	Electric Power Sector[e,f]	Total
1950 Total	51,562	(g)	63,021	63,021	104,014	(h)	120,623	120,623	224,637	63,011	91,871	494,102
1955 Total	35,590	(g)	32,852	32,852	107,743	(h)	110,096	110,096	217,839	16,972	143,759	447,012
1960 Total	24,159	(g)	16,789	16,789	81,385	(h)	96,017	96,017	177,402	3,046	176,685	398,081
1965 Total	14,635	(g)	11,041	11,041	95,286	(h)	105,560	105,560	200,846	655	244,788	471,965
1970 Total	9,024	(g)	7,090	7,090	96,481	(h)	90,156	90,156	186,637	298	320,182	523,231
1975 Total	2,823	(g)	6,587	6,587	83,598	(h)	63,646	63,646	147,244	24	405,962	562,640
1980 Total	1,355	(g)	5,097	5,097	66,657	(h)	60,347	60,347	127,004	(h)	569,274	702,730
1985 Total	1,711	(g)	6,068	6,068	41,056	(h)	75,372	75,372	116,429	(h)	693,841	818,049
1990 Total	1,345	1,191	4,189	5,379	38,877	27,781	48,549	76,330	115,207	(h)	[f]782,567	904,498
1995 Total	755	1,419	3,633	5,052	33,011	29,363	43,693	73,055	106,067	(h)	850,230	962,104
2000 Total	454	1,547	2,126	3,673	28,939	28,031	37,177	65,208	94,147	(h)	985,821	1,084,095
2005 Total	378	1,922	2,420	4,342	23,434	25,875	34,465	60,340	83,774	(h)	1,037,485	1,125,978
2010 Total	(i)	1,720	1,361	3,081	21,092	24,638	24,650	49,289	70,381	(h)	975,052	1,048,514
2011 Total	(i)	1,668	1,125	2,793	21,434	22,319	23,919	46,238	67,671	(h)	932,484	1,002,948
2012 Total	(i)	1,450	595	2,045	20,751	20,065	22,773	42,838	63,589	(h)	823,551	889,185
2013 Total	(i)	1,356	595	1,951	21,474	19,761	23,294	43,055	64,529	(h)	857,962	924,442
2014 Total	(i)	1,063	824	1,887	21,297	19,076	23,870	42,946	64,243	(h)	851,602	917,731
2015 Total	(i)	798	706	1,503	19,708	16,984	21,475	38,459	58,167	(h)	738,444	798,115
2016 Total	(i)	683	500	1,183	16,485	14,720	20,129	34,849	51,333	(h)	678,554	731,071
2017 Total	(i)	610	451	1,061	17,538	12,975	20,289	33,264	50,801	(h)	664,993	716,856
2018 Total	(i)	577	395	972	18,337	12,233	19,347	31,580	49,917	(h)	637,217	688,105
2019 Total	(i)	519	357	876	17,967	10,892	18,203	29,095	47,062	(h)	538,606	586,543
2020 Total	(i)	473	320	793	14,414	9,453	16,207	25,660	40,073	(h)	435,827	476,693
2021 Total	(i)	534	277	811	17,589	9,700	16,145	25,845	43,434	(h)	501,435	545,679
2022 Total	(i)	535	265	800	16,009	9,563	16,328	25,891	41,900	(h)	472,834	515,534
2023 Total	(i)	400	268	668	15,849	8,384	13,789	22,173	38,022	(h)	387,205	425,895
2024 January	(i)	63	35	98	1,276	794	1,020	1,814	3,089	(h)	42,463	45,650
February	(i)	47	26	73	1,264	671	1,174	1,845	3,109	(h)	26,017	29,199
March	(i)	37	20	57	1,328	733	1,105	1,839	3,167	(h)	22,422	25,646
April	(i)	31	19	49	1,227	595	1,125	1,719	2,946	(h)	21,281	24,277
May	(i)	19	11	30	1,278	632	1,112	1,744	3,023	(h)	26,198	29,251
June	(i)	26	16	42	1,233	622	1,123	1,745	2,978	(h)	34,447	37,468
July	(i)	28	1	29	1,326	684	1,009	1,693	3,019	(h)	40,471	43,519
August	(i)	31	1	31	1,349	664	1,033	1,697	3,046	(h)	39,397	42,475
September	(i)	31	1	31	1,253	652	1,048	1,700	2,953	(h)	31,502	34,486
October	(i)	31	24	55	1,309	663	1,251	1,914	3,224	(h)	27,308	30,587
November	(i)	37	28	66	1,285	692	1,220	1,912	3,197	(h)	26,336	29,599
December	(i)	41	31	71	1,372	731	1,192	1,923	3,295	(h)	35,416	38,782
Total	(i)	422	212	633	15,500	8,134	13,413	21,547	37,047	(h)	373,258	410,939
2025 January	(i)	49	38	87	1,245	765	1,034	1,799	3,045	(h)	45,929	49,060
February	(i)	42	32	74	1,128	671	1,139	1,810	2,938	(h)	35,224	38,236
March	(i)	38	27	66	1,248	743	1,076	1,819	3,067	(h)	28,022	31,155
April	(i)	32	14	46	1,191	685	848	1,532	2,724	(h)	25,861	28,631
May	(i)	30	13	43	1,257	581	950	1,530	2,787	(h)	27,931	30,761
June	(i)	26	11	37	1,268	624	920	1,544	2,812	(h)	36,563	39,412
July	(i)	34	9	43	1,239	673	944	1,617	2,856	(h)	45,140	48,039
August	(i)	32	9	41	1,234	646	970	1,616	2,850	(h)	39,722	42,613
September	(i)	32	9	40	1,202	620	996	1,616	2,818	(h)	33,409	36,267
October	(i)	32	27	59	1,205	621	1,123	1,744	2,950	(h)	31,008	34,016
November	(i)	33	29	62	1,171	629	1,124	1,752	2,923	(h)	30,977	33,963
December	(i)	33	29	62	1,205	668	1,077	1,745	2,950	(h)	37,209	40,221
Total	(i)	413	248	660	14,593	7,926	12,202	20,128	34,720	(h)	416,995	452,375
2026 January	(i)	43	48	91	1,155	695	R 982	R 1,677	R 2,832	(h)	39,867	R 42,790
February	(i)	37	41	78	1,085	633	R 1,063	R 1,696	R 2,781	(h)	31,224	R 34,083
March	(i)	23	26	49	1,167	625	R 1,074	R 1,699	R 2,866	(h)	25,228	R 28,144
April	(i)	27	(s)	R 38	R 1,133	549	R 1,061	R 1,610	R 2,743	(h)	22,570	R 25,351
May	(i)	29	R 11	R 40	R 1,219	561	R 1,028	R 1,590	R 2,808	(h)	25,757	R 28,605
June	(i)	26	RF 10	RF 37	RF 1,162	567	RF 1,033	RF 1,600	RF 2,761	(h)	32,029	R 34,827
July	(i)	33	F 8	F 41	F 1,245	557	F 758	F 1,315	F 2,561	(h)	42,440	45,042
7-Month Total	(i)	219	E 156	E 375	E 8,165	4,188	E 6,999	E 11,186	E 19,352	(h)	219,114	238,841
2025 7-Month Total	(i)	251	145	396	8,576	4,741	6,912	11,653	20,229	(h)	244,670	265,295
2024 7-Month Total	(i)	251	127	378	8,931	4,732	7,669	12,400	21,332	(h)	213,300	235,010

[a] Commercial combined-heat-and-power (CHP) and a small number of commercial electricity-only plants, such as those at hospitals and universities. See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7.

[b] All commercial sector fuel use other than that in "Commercial CHP."

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

[d] All industrial sector fuel use other than that in "Coke Plants" and "Industrial CHP."

[e] The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

[f] Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.

[g] Included in "Commercial Other."

[h] Included in "Industrial Non-CHP."

[i] Beginning in 2008, residential coal consumption data are no longer collected by the U.S. Energy Information Administration (EIA).

R=Revised. E=Estimate. F=Forecast. (s)=Greater than -0.5 or less than 0.5 thousand short tons.

Notes: • CHP monthly values are from Table 7.4c; electric power sector monthly values are from Table 7.4b; all other monthly values are estimates derived from collected quarterly and annual data. See Note 2, "Coal Consumption," at end of section. • Data values preceded by "F" are derived from EIA's Short-Term Integrated Forecasting System. See Note 4, "Coal Forecast Values," at end of section. • 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/#coal (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

Table 6.3 Coal Stocks by Sector

(Thousand Short Tons)

	Producers[a] and Distributors	End-Use Sectors					Electric Power Sector[d,e]	Total
		Residential[b] and Commercial	Industrial			Total		
			Coke Plants	Other[c]	Total			
1950 Year	**NA**	**2,462**	**16,809**	**26,182**	**42,991**	**45,453**	**31,842**	**77,295**
1955 Year	**NA**	**998**	**13,422**	**15,880**	**29,302**	**30,300**	**41,391**	**71,691**
1960 Year	**NA**	**666**	**11,122**	**11,637**	**22,759**	**23,425**	**51,735**	**75,160**
1965 Year	**NA**	**353**	**10,640**	**13,122**	**23,762**	**24,115**	**54,525**	**78,640**
1970 Year	**NA**	**300**	**9,045**	**11,781**	**20,826**	**21,126**	**71,908**	**93,034**
1975 Year	**12,108**	**233**	**8,797**	**8,529**	**17,326**	**17,559**	**110,724**	**140,391**
1980 Year	**24,379**	**NA**	**9,067**	**11,951**	**21,018**	**21,018**	**183,010**	**228,407**
1985 Year	**33,133**	**NA**	**3,420**	**10,438**	**13,857**	**13,857**	**156,376**	**203,367**
1990 Year	**33,418**	**NA**	**3,329**	**8,716**	**12,044**	**12,044**	**156,166**	**201,629**
1995 Year	**34,444**	**NA**	**2,632**	**5,702**	**8,334**	**8,334**	**126,304**	**169,083**
2000 Year	**31,905**	**NA**	**1,494**	**4,587**	**6,081**	**6,081**	**102,296**	**140,282**
2005 Year	**34,971**	**NA**	**2,615**	**5,582**	**8,196**	**8,196**	**101,137**	**144,304**
2010 Year	**49,820**	**552**	**1,925**	**4,525**	**6,451**	**7,003**	**174,917**	**231,740**
2011 Year	**51,897**	**603**	**2,610**	**4,455**	**7,065**	**7,668**	**172,387**	**231,951**
2012 Year	**46,157**	**583**	**2,522**	**4,475**	**6,997**	**7,581**	**185,116**	**238,853**
2013 Year	**45,652**	**495**	**2,200**	**4,097**	**6,297**	**6,792**	**147,884**	**200,328**
2014 Year	**38,894**	**449**	**2,640**	**4,196**	**6,836**	**7,285**	**151,548**	**197,727**
2015 Year	**35,871**	**394**	**2,236**	**4,382**	**6,618**	**7,012**	**195,548**	**238,431**
2016 Year	**25,309**	**360**	**1,675**	**3,637**	**5,312**	**5,672**	**162,009**	**192,990**
2017 Year	**23,999**	**310**	**1,718**	**3,242**	**4,960**	**5,270**	**137,687**	**166,956**
2018 Year	**21,692**	**247**	**1,807**	**3,258**	**5,065**	**5,312**	**102,793**	**129,796**
2019 Year	**31,320**	**246**	**2,333**	**3,258**	**5,591**	**5,838**	**128,102**	**165,260**
2020 Year	**23,640**	**250**	**1,654**	**2,848**	**4,501**	**4,751**	**131,431**	**159,822**
2021 Year	**19,013**	**176**	**1,658**	**2,624**	**4,283**	**4,459**	**91,884**	**115,356**
2022 Year	**20,820**	**167**	**1,627**	**2,499**	**4,126**	**4,293**	**88,861**	**113,973**
2023 Year	**24,874**	**149**	**1,551**	**2,863**	**4,415**	**4,564**	**133,028**	**162,466**
2024 January	24,720	143	1,517	2,857	4,374	4,517	123,854	153,092
February	24,565	137	1,482	2,852	4,334	4,471	129,170	158,206
March	24,411	132	1,447	2,846	4,293	4,425	135,537	164,373
April	24,257	131	1,486	2,916	4,401	4,533	138,839	167,629
May	24,102	131	1,524	2,986	4,510	4,640	139,893	168,635
June	23,948	130	1,562	3,056	4,618	4,748	135,229	163,926
July	23,794	128	1,608	3,094	4,703	4,830	127,378	156,002
August	23,639	126	1,654	3,133	4,787	4,912	121,756	150,307
September	23,485	123	1,700	3,171	4,871	4,994	122,555	151,034
October	23,331	128	1,687	3,163	4,850	4,978	127,747	156,056
November	23,176	133	1,674	3,155	4,829	4,962	131,091	159,229
December	**23,022**	**138**	**1,661**	**3,147**	**4,808**	**4,947**	**127,826**	**155,794**
2025 January	F 22,709	128	1,660	3,066	4,727	4,855	113,290	140,854
February	F 23,375	118	1,655	2,999	4,653	4,772	106,803	134,949
March	F 23,399	108	1,649	2,931	4,580	4,688	111,657	139,745
April	F 23,423	108	1,704	2,958	4,662	4,770	115,919	144,113
May	F 23,446	109	1,759	2,984	4,744	4,852	119,487	147,786
June	F 23,469	109	1,815	3,011	4,825	4,934	116,421	144,824
July	F 23,050	119	1,796	2,971	4,767	4,887	108,731	136,668
August	F 22,389	130	1,778	2,931	4,710	4,839	104,604	131,832
September	F 21,916	140	1,760	2,892	4,652	4,792	105,398	132,106
October	F 21,972	136	1,771	2,867	4,638	4,774	109,066	135,812
November	F 21,997	131	1,782	2,843	4,624	4,756	111,847	138,600
December	**F 22,010**	**127**	**1,792**	**2,818**	**4,610**	**4,738**	**109,452**	**136,199**
2026 January	F 21,743	120	1,660	R 2,815	R 4,475	R 4,595	104,018	R 130,356
February	F 22,445	113	1,527	R 2,824	R 4,351	R 4,464	104,721	R 131,630
March	F 22,494	106	1,394	R 2,834	R 4,228	R 4,333	110,929	R 137,757
April	F 22,536	R 109	R 1,469	R 2,865	R 4,334	R 4,443	116,494	R 143,473
May	F 22,580	R 112	R 1,543	R 2,896	R 4,440	R 4,552	119,897	R 147,028
June	F 22,619	RF 115	RF 1,618	RF 2,928	RF 4,545	RF 4,661	118,252	R 145,532
July	F 22,202	F 125	F 1,279	F 2,682	F 3,961	F 4,086	108,805	135,093

[a] Excludes stocks in transit or held outside of the United States.

[b] Through 1979, data are for the residential and commercial sectors. Beginning in 2008, data are for the commercial sector only.

[c] Through 1979, data are for manufacturing plants and the transportation sector. For 1980–2007, data are for manufacturing plants only. Beginning in 2008, data are for manufacturing plants and coal transformation/processing plants.

[d] The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

[e] Excludes waste coal. Through 1998, data are for electric utilities only. Beginning in 1999, data are for electric utilities and independent power producers.

R=Revised. NA=Not available. F=Forecast.

Notes: • Stocks are at end of period. • Electric power sector monthly values are from Table 7.5; producers and distributors monthly values are estimates derived from collected annual data; all other monthly values are estimates derived from collected quarterly values. • Data values preceded by "F" are derived from the U.S. Energy Information Administration's Short-Term Integrated Forecasting System. See Note 4, "Coal Forecast Values," at end of section. • 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/#coal (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

Note 1. Coal Production. Preliminary monthly estimates of national coal production are the sum of weekly estimates developed by the U.S. Energy Information Administration (EIA) and published in the *Weekly Coal Production* report. When a week extends into a new month, production is allocated on a daily basis and added to the appropriate month. Weekly estimates are based on Association of American Railroads (AAR) data showing the number of railcars loaded with coal during the week by Class I and certain other railroads.

Through 2001, the weekly coal production model converted AAR data into short tons of coal by using the average number of short tons of coal per railcar loaded reported in the "Quarterly Freight Commodity Statistics" from the Surface Transportation Board. If an average coal tonnage per railcar loaded was not available for a specific railroad, the national average was used. To derive the estimate of total weekly production, the total rail tonnage for the week was divided by the ratio of quarterly production shipped by rail and total quarterly production. Data for the corresponding quarter of previous years were used to derive this ratio. This method ensured that the seasonal variations were preserved in the production estimates.

From 2002 through 2014, the weekly coal production model used statistical auto regressive methods to estimate national coal production as a function of railcar loadings of coal, heating degree-days, and cooling degree-days. On Thursday of each week, EIA received from the AAR data for the previous week. The latest weekly national data for heating degree-days and cooling degree-days were obtained from the National Oceanic and Atmospheric Administration's Climate Prediction Center.

Beginning in 2015, the revised weekly coal production model uses statistical auto regressive methods to estimate national coal production as a function of railcar loadings of coal. EIA receives AAR data on Thursday of each week for prior week car loadings. The weekly coal model is run and a national level coal production estimate is obtained. From there, state-level estimates are calculated using historical state production share. The state estimates are then aggregated to various regional-level estimates. The weekly coal model is refit every quarter after preliminary coal data are available.

When preliminary quarterly data become available, the monthly and weekly estimates are adjusted to conform to the quarterly figures. The adjustment procedure uses historical state-level production data, the methodology for which can be seen in the documentation located at http://www.eia.gov/coal/production/weekly/. Initial estimates of annual production published in January of the following year are based on preliminary production data covering the first nine months (three quarters) and weekly/monthly estimates for the fourth quarter. All quarterly, monthly, and weekly production figures are adjusted to conform to the final annual production data published in the *Monthly Energy Review* in the fall of the following year.

Note 2. Coal Consumption. Forecast data (designated by an "F") are derived from forecasted values shown in EIA's *Short-Term Energy Outlook* (DOE/EIA-0202) table titled "U.S. Coal Supply, Consumption, and Inventories." The monthly estimates are based on the quarterly values, which are released in March, June, September, and December. The estimates are revised quarterly as collected data become available from the data sources. Sector-specific information follows.

Residential and Commercial—Through 2007, coal consumption by the residential and commercial sectors is reported to EIA for the two sectors combined; EIA estimates the amount consumed by the sectors individually. To create the estimates, it is first assumed that an occupied coal-heated housing unit consumes fuel at the same Btu rate as an oil-heated housing unit. Then, for the years in which data are available on the number of occupied housing units by heating source (1973–1981 and subsequent odd-numbered years), residential consumption of coal is estimated using the following steps: a ratio is created of the number of occupied housing units heated by coal to the number of occupied housing units heated by oil; that ratio is then multiplied by the Btu quantity of oil consumed by the residential sector to derive an estimate of the Btu quantity of coal consumed by the residential sector; and, finally, the amount estimated as the residential sector consumption is subtracted from the residential and commercial sectors' combined consumption to derive the commercial sector's estimated consumption. Beginning in 2008, residential coal consumption data are not collected by EIA, and commercial coal consumption data are taken directly from reported data.

Industrial Coke Plants—Through 1979, monthly coke plant consumption data were taken directly from reported data. For 1980–1987, coke plant consumption estimates were derived by proportioning reported quarterly data by using the ratios of monthly-to-quarterly consumption data in 1979, the last year in which monthly data were reported. Beginning in 1988, monthly coke plant consumption estimates are derived from the reported quarterly data by using monthly ratios of raw steel production data from the American Iron and Steel Institute. The ratios are the monthly raw steel production from open hearth and basic oxygen process furnaces as a proportion of the quarterly production from those kinds of furnaces. Coal coke consumption values also include the relativity small amount consumed for non-combustion use (See Tables 1.13a and 1.13b).

Industrial Other—Through 1977, monthly consumption data for the other industrial sector (all industrial users minus coke plants) were derived by using reported data to modify baseline consumption figures from the most recent U.S. Census Bureau Annual Survey of Manufactures or Census of Manufactures. For 1978 and 1979, monthly estimates were derived from data reported on Forms EIA-3 and EIA-6. For 1980–1987, monthly figures were estimated by proportioning quarterly data by using the ratios of monthly-to-quarterly consumption data in 1979, the last year in which monthly data were reported on Form EIA-3. Beginning in 1988, monthly consumption for the other industrial sector is estimated from reported quarterly data by using ratios derived from industrial production indices published by the Board of Governors of the Federal Reserve System. Indices for six major industry groups are used as the basis for calculating the ratios: food manufacturing, which is North American Industry Classification System (NAICS) code 311; paper manufacturing, NAICS 322; chemical manufacturing, NAICS 325; petroleum and coal products, NAICS 324; non-metallic mineral products manufacturing, NAICS 327; and primary metal manufacturing, NAICS 331. The monthly ratios are computed as the monthly sum of the weighted indices as a proportion of the quarterly sum of the weighted indices by using the 1977 proportion as the weights. Through 2007, quarterly consumption data for the other industrial sector were derived by adding beginning stocks at manufacturing plants to current receipts and subtracting ending stocks at manufacturing plants. In this calculation, current receipts are the greater of either reported receipts from manufacturing plants (Form EIA-3) or reported shipments to the other industrial sector (Form EIA-6), thereby ensuring that agriculture, forestry, fishing, and construction consumption data were included where appropriate. Beginning in 2008, quarterly consumption totals for other industrial coal include data for manufacturing and mining only. Over time, surveyed coal consumption data for agriculture, forestry, fishing, and construction dwindled to about 20–30 thousand short tons annually. Therefore, in 2008, EIA consolidated its programs by eliminating agriculture, forestry, fishing, and construction as surveyed sectors.

Electric Power Sector—Monthly consumption data for electric power plants are taken directly from reported data.

Note 3. Coal Stocks. Coal stocks data are reported by major end-use sector. Forecast data (designated by an "F") are derived from forecasted values shown in EIA's *Short-Term Energy Outlook* (DOE/EIA-0202) table titled "U.S. Coal Supply, Consumption, and Inventories." The monthly estimates are based on the quarterly values (released in March, June, September, and December) or annual values. The estimates are revised as collected data become available from the data sources. Sector-specific information follows.

Producers and Distributors—Through 1997, quarterly stocks at producers and distributors were taken directly from reported data. Monthly data were estimated by using one-third of the current quarterly change to indicate the monthly change in stocks. Beginning in 1998, end-of-year stocks are taken from reported data. Monthly stocks are estimated by a model.

Residential and Commercial—Through 1979, stock estimates for the residential and commercial sector were taken directly from reported data. For 1980–2007, stock estimates were not collected. Beginning in 2008, quarterly commercial (excluding residential) stocks data are collected on Form EIA-3 (data for "Commercial and Institutional Coal Users").

Industrial Coke Plants—Through 1979, monthly stocks at coke plants were taken directly from reported data. Beginning in 1980, coke plant stocks are estimated by using one-third of the current quarterly change to indicate the monthly change in stocks. Quarterly stocks are taken directly from data reported on Form EIA-5.

Industrial Other—Through 1977, stocks for the other industrial sector were derived by using reported data to modify baseline figures from a one-time Bureau of Mines survey of consumers. For 1978–1982, monthly estimates were derived by judgmentally proportioning reported quarterly data based on representative seasonal patterns of supply and demand. Beginning in 1983, other industrial coal stocks are estimated as indicated above for coke plants. Quarterly stocks are taken directly from data reported on Form EIA-3 and therefore include only manufacturing industries; data for agriculture, forestry, fishing, mining, and construction stocks are not available.

Electric Power Sector—Monthly stocks data at electric power plants are taken directly from reported data.

Note 4. Coal Forecast Values. Data values preceded by "F" in this section are forecast values. They are derived from EIA's Short-Term Integrated Forecasting System (STIFS). The model is driven primarily by data and assumptions about key macroeconomic variables, the world oil price, and weather. The coal forecast relies on other variables as well, such as alternative fuel prices (natural gas and oil) and power generation by sources other than fossil fuels, including nuclear and hydroelectric power. Each month, EIA staff review the model output and make adjustments, if appropriate, based on their knowledge of developments in the coal industry.

The STIFS model results are published monthly in EIA's *Short-Term Energy Outlook*, which is accessible on the Web at http://www.eia.gov/forecasts/steo/.

Table 6.1 Sources

Production

1949–September 1977: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook and Minerals Industry Surveys*.
October 1977 forward: U.S. Energy Information Administration (EIA), *Weekly Coal Production*.

Waste Coal Supplied

1989–1997: EIA, Form EIA-867, "Annual Nonutility Power Producer Report."

1998–2000: EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility."

2001–2003: EIA, Form EIA-906, "Power Plant Report," and Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing Plants," and predecessor forms.

2004–2007: EIA, Form EIA-906, "Power Plant Report," Form EIA-920, "Combined Heat and Power Plant Report," and Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing Plants," and predecessor forms.

2008 forward: EIA, Form EIA-923, "Power Plant Operations Report," and Form EIA-3, "Quarterly Survey of Industrial, Commercial, and Institutional Coal Users" (formerly called, "Quarterly Survey of Non-Electric Sector Coal Data"); and, for forecast values, EIA, Short-Term Integrated Forecasting System.

Imports and Exports

1949 forward: U.S. Department of Commerce, U.S. Census Bureau, Monthly Reports IM 145 (Imports) and EM 545 (Exports).

Stock Change

1950 forward: Calculated from data in Table 6.3.

Losses and Unaccounted for

1949 forward: Calculated as the sum of production, imports, and waste coal supplied, minus exports, stock change, and consumption.

Consumption

1949 forward: Table 6.2.

Table 6.2 Sources

Residential and Commercial Total

Through 2007, coal consumption by the residential and commercial sectors combined is reported to the U.S. Energy Information Administration (EIA). EIA estimates the sectors individually using the method described in Note 2, "Consumption," at the end of Section 6. Data for the residential and commercial sectors combined are from:
1949–1976: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook*.
January–September 1977: DOI, BOM, Form 6-1400, "Monthly Coal Report, Retail Dealers—Upper Lake Docks." October 1977–1979: EIA, Form EIA-2, "Monthly Coal Report, Retail Dealers—Upper Lake Docks."

1980–1997: EIA, Form EIA-6, "Coal Distribution Report," quarterly.

1998–2007: DOI, Mine Safety and Health Administration, Form 7000-2, "Quarterly Coal Consumption and Quality Report—Coke Plants."

Commercial Total

Beginning in 2008, coal consumption by the commercial (excluding residential) sector is reported to EIA. Data for total commercial consumption are from: 2008 forward: EIA, Form EIA-3, "Quarterly Survey of Industrial, Commercial, and Institutional Coal Users" (formerly called, "Quarterly Survey of Non-Electric Sector Coal Data"); and, for forecast values, EIA, Short-Term Integrated Forecasting System (STIFS).

Commercial CHP

1989 forward: Table 7.4c.

Commercial Other

1949 forward: Calculated as "Commercial Total" minus "Commercial CHP."

Industrial Coke Plants

1949–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.
October 1977–1980: EIA, Form EIA-5/5A, "Coke and Coal Chemicals—Monthly/Annual Supplement."

1981–1984: EIA, Form EIA-5/5A, "Coke Plant Report—Quarterly/Annual Supplement."

1985 forward: EIA, Form EIA–5, "Quarterly Coal Consumption and Quality Report—Coke Plants"; and, for forecast values, EIA, STIFS.

Other Industrial Total

1949–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.

October 1977–1979: EIA, Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing Plants," and predecessor forms.

1980–1997: EIA, Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing Plants," and predecessor forms and Form EIA-6, "Coal Distribution Report," quarterly.

1998–2007: EIA, Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing Plants," and predecessor forms, Form EIA-6A, "Coal Distribution Report," annual, and Form EIA-7A, "Coal Production Report," annual.

2008 forward: EIA, Form EIA-3, "Quarterly Survey of Industrial, Commercial, and Institutional Coal Users" (formerly called, "Quarterly Survey of Non-Electric Sector Coal Data") and Form EIA-7A, "Coal Production Report," annual; and, for forecast values, EIA, STIFS.

Other Industrial CHP

1989 forward: Table 7.4c.

Other Industrial Non-CHP

1949 forward: Calculated as "Other Industrial Total" minus "Other Industrial CHP."

Transportation
1949–1976: DOI, BOM, Minerals Yearbook.
January–September 1977: DOI, BOM, Form 6-1400, "Monthly Coal Report, Retail Dealers—Upper Lake Docks." October–December 1977: EIA, Form EIA-6, "Coal Distribution Report," quarterly.

Electric Power
1949 forward: Table 7.4b.

Table 6.3 Sources

Producers and Distributors
1973–1979: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), Form 6-1419Q, "Distribution of Bituminous Coal and Lignite Shipments."

1980–1997: U.S. Energy Information Administration (EIA), Form EIA-6, "Coal Distribution Report," quarterly.

1998–2007: EIA, Form EIA-6A, "Coal Distribution Report," annual.

2008 forward: EIA, Form EIA-3, "Quarterly Survey of Industrial, Commercial, and Institutional Coal Users" (formerly called, "Quarterly Survey of Non-Electric Sector Coal Data"); (data for "Commercial and Institutional Coal Users"); and, for forecast values, EIA, STIFS.

Residential and Commercial
1949–1976: DOI, BOM, *Minerals Yearbook*.

January–September 1977: DOI, BOM, Form 6-1400, "Monthly Coal Report, Retail Dealers—Upper Lake Docks."

October 1977–1979: EIA, Form EIA-2, "Monthly Coal Report, Retail Dealers—Upper Lake Docks."

2008 forward: EIA, Form EIA-3, "Quarterly Survey of Industrial, Commercial, and Institutional Coal Users" (formerly called "Quarterly Survey of Non-Electric Coal Data); and, for forecast values, EIA, STIFS**.**

Industrial Coke Plants
1949–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.

October 1977–1980: EIA, Form EIA-5/5A, "Coke and Coal Chemicals—Monthly/Annual."

1981–1984: EIA, Form EIA-5/5A, "Coke Plant Report—Quarterly/Annual Supplement."

1985 forward: EIA, Form EIA-5, "Quarterly Coal Consumption and Quality Report—Coke Plants" and, for forecast values, EIA, STIFS.

Industrial Other
1949–September 1977: DOI, BOM, *Minerals Yearbook and Minerals Industry Surveys*.

October 1977–2007: EIA, Form EIA-3, "Quarterly Coal Consumption and Quality Report—Manufacturing Plants," and predecessor forms.

2008 forward: EIA, Form EIA-3, "Quarterly Survey of Industrial, Commercial, and Institutional Coal Users" (formerly called, "Quarterly Survey of Non-Electric Sector Coal Data"); and, for forecast values, EIA, STIFS.

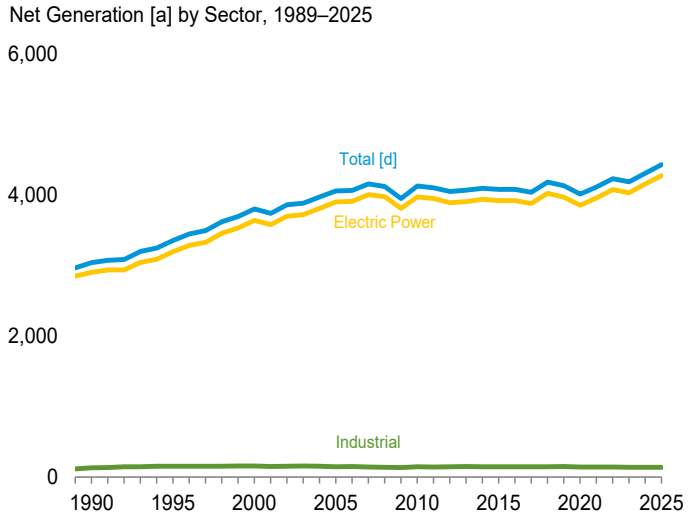
Electric Power
1949 forward: Table 7.5.

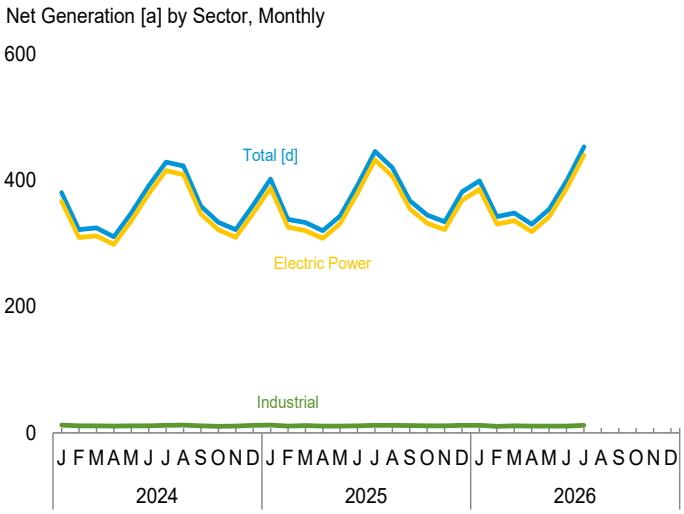
7. Electricity

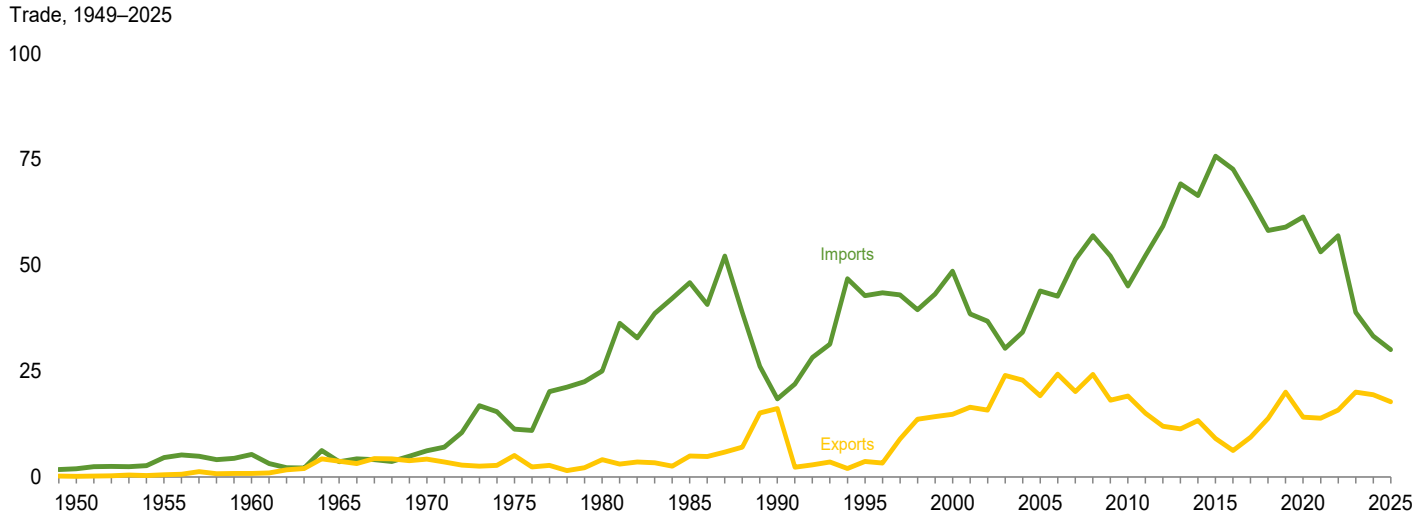
Figure 7.1 Electricity Overview

(Billion Kilowatthours)









[a] Data are for utility-scale facilities.
[b] Electricity sales to ultimate customers reported by electric utilities and other energy service providers.
[c] See "Direct Use" in Glossary.
[d] Includes commercial sector.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#electricity.
Source: Table 7.1.

Table 7.1 Electricity Overview

(Billion Kilowatthours)

	Net Generation[a]				Trade			T&D Losses[f] and Unaccounted for[g]	End Use		
	Electric Power Sector[b]	Commercial Sector[c]	Industrial Sector[d]	Total	Imports[e]	Exports[e]	Net Imports[e]		Sales to Ultimate Customers[h]	Direct Use[i]	Total
1950 Total	**329**	**NA**	**5**	**334**	**2**	**(s)**	**2**	**44**	**291**	**NA**	**291**
1955 Total	**547**	**NA**	**3**	**550**	**5**	**(s)**	**4**	**58**	**497**	**NA**	**497**
1960 Total	**756**	**NA**	**4**	**759**	**5**	**1**	**5**	**76**	**688**	**NA**	**688**
1965 Total	**1,055**	**NA**	**3**	**1,058**	**4**	**4**	**(s)**	**104**	**954**	**NA**	**954**
1970 Total	**1,532**	**NA**	**3**	**1,535**	**6**	**4**	**2**	**145**	**1,392**	**NA**	**1,392**
1975 Total	**1,918**	**NA**	**3**	**1,921**	**11**	**5**	**6**	**180**	**1,747**	**NA**	**1,747**
1980 Total	**2,286**	**NA**	**3**	**2,290**	**25**	**4**	**21**	**216**	**2,094**	**NA**	**2,094**
1985 Total	**2,470**	**NA**	**3**	**2,473**	**46**	**5**	**41**	**190**	**2,324**	**NA**	**2,324**
1990 Total	**2,901**	**6**	**[d] 131**	**3,038**	**18**	**16**	**2**	**203**	**2,713**	**125**	**2,837**
1995 Total	**3,194**	**8**	**151**	**3,353**	**43**	**4**	**39**	**229**	**3,013**	**151**	**3,164**
2000 Total	**3,638**	**8**	**157**	**3,802**	**49**	**15**	**34**	**244**	**3,421**	**171**	**3,592**
2005 Total	**3,902**	**8**	**145**	**4,055**	**44**	**19**	**25**	**269**	**3,661**	**150**	**3,811**
2010 Total	**3,972**	**9**	**144**	**4,125**	**45**	**19**	**26**	**264**	**3,755**	**132**	**3,887**
2011 Total	**3,948**	**10**	**142**	**4,100**	**52**	**15**	**37**	**255**	**3,750**	**133**	**3,883**
2012 Total	**3,890**	**11**	**146**	**4,048**	**59**	**12**	**47**	**263**	**3,695**	**138**	**3,832**
2013 Total	**3,904**	**12**	**150**	**4,066**	**69**	**11**	**58**	**256**	**3,725**	**143**	**3,868**
2014 Total	**3,937**	**13**	**144**	**4,094**	**67**	**13**	**53**	**244**	**3,765**	**139**	**3,903**
2015 Total	**3,920**	**13**	**146**	**4,079**	**76**	**9**	**67**	**245**	**3,759**	**141**	**3,900**
2016 Total	**3,919**	**13**	**146**	**4,078**	**73**	**6**	**67**	**242**	**3,762**	**140**	**3,902**
2017 Total	**3,879**	**13**	**144**	**4,035**	**66**	**9**	**56**	**227**	**3,723**	**141**	**3,864**
2018 Total	**4,021**	**13**	**147**	**4,181**	**58**	**14**	**44**	**222**	**3,859**	**144**	**4,003**
2019 Total	**3,968**	**14**	**149**	**4,131**	**59**	**20**	**39**	**215**	**3,811**	**143**	**3,954**
2020 Total	**3,854**	**13**	**143**	**4,010**	**61**	**14**	**47**	**201**	**3,718**	**139**	**3,856**
2021 Total	**3,957**	**13**	**140**	**4,110**	**53**	**14**	**39**	**204**	**3,806**	**139**	**3,945**
2022 Total	**4,074**	**17**	**140**	**4,231**	**57**	**16**	**41**	**205**	**3,927**	**140**	**4,067**
2023 Total	**4,029**	**16**	**139**	**4,183**	**39**	**20**	**19**	**191**	**3,874**	**137**	**4,011**
2024 January	367	1	12	381	4	2	2	27	344	[E] 12	356
February	310	1	11	322	3	2	(s)	8	303	[E] 11	314
March	312	1	11	325	2	3	(s)	16	297	[E] 11	308
April	299	1	11	311	2	2	(s)	13	286	[E] 11	297
May	336	1	11	348	2	2	(s)	23	314	[E] 11	325
June	379	1	11	392	3	1	1	26	356	[E] 11	367
July	416	1	12	429	4	2	2	22	398	[E] 12	410
August	409	1	12	423	3	1	2	19	394	[E] 12	406
September	347	1	11	359	3	1	2	7	343	[E] 11	354
October	322	1	10	334	3	1	2	10	316	[E] 10	326
November	310	1	11	322	2	1	1	16	296	[E] 11	307
December	348	1	12	361	3	1	2	24	328	[E] 12	340
Total	**4,157**	**15**	**137**	**4,309**	**33**	**19**	**14**	**212**	**3,975**	**135**	**4,110**
2025 January	389	1	12	402	4	1	3	31	362	[E] 12	374
February	326	1	11	339	3	1	2	9	321	[E] 11	331
March	321	1	12	334	2	2	1	16	307	[E] 11	319
April	309	1	11	320	3	1	2	17	295	[E] 11	305
May	332	1	11	344	3	1	2	23	312	[E] 11	323
June	381	1	11	393	3	1	2	27	357	[E] 11	368
July	433	1	12	446	2	1	1	28	408	[E] 12	420
August	407	1	12	420	2	1	1	17	393	[E] 12	405
September	355	1	12	368	2	1	1	12	346	[E] 11	358
October	332	1	11	345	2	2	-1	13	321	[E] 11	332
November	322	1	11	335	1	2	-1	24	299	[E] 11	310
December	369	1	12	382	2	3	-1	32	338	[E] 12	350
Total	**4,275**	**16**	**138**	**4,430**	**30**	**18**	**12**	**247**	**4,058**	**[E] 137**	**4,195**
2026 January	386	1	12	400	2	3	(s)	31	356	[E] 12	368
February	331	1	11	343	2	2	(s)	10	323	[E] 10	333
March	336	1	11	349	2	2	(s)	23	314	[E] 11	325
April	319	1	11	331	3	2	(s)	19	302	[E] 11	313
May	343	1	11	355	4	1	(s)	26	320	[E] 11	331
June	388	1	11	400	4	1	(s)	30	362	[E] 11	373
July	440	1	12	454	[F] 5	[F] 1	[F] (s)	30	415	[E] 12	427
7-Month Total	**2,543**	**9**	**78**	**2,630**	**[E] 22**	**[E] 12**	**[E] (s)**	**170**	**2,393**	**[E] 77**	**2,470**
2025 7-Month Total	**2,490**	**9**	**80**	**2,579**	**21**	**8**	**12**	**150**	**2,362**	**[E] 79**	**2,441**
2024 7-Month Total	**2,419**	**9**	**80**	**2,508**	**19**	**14**	**5**	**136**	**2,298**	**[E] 79**	**2,377**

[a] Electricity net generation at utility-scale facilities. Does not include small-scale solar photovoltaic (PV) generation shown on Table 10.6. See Note 1, "Coverage of Electricity Statistics," at end of section.

[b] Electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 1988, data are for electric utilities only; beginning in 1989, data are for electric utilities and independent power producers.

[c] Commercial combined-heat-and-power (CHP) and commercial electricity-only plants.

[d] Industrial combined-heat-and-power (CHP) and industrial electricity-only plants. Through 1988, data are for industrial hydroelectric power only.

[e] Electricity transmitted across U.S. borders. Net imports equal imports minus exports.

[f] Transmission and distribution losses (electricity losses that occur between the point of generation and delivery to the customer). See Note 1, "Electrical System Energy Losses," at end of Section 2.

[g] Data collection frame differences and nonsampling error.

[h] Electricity sales to ultimate customers by electric utilities and, beginning in 1996, other energy service providers.

[i] Use of electricity that is 1) self-generated, 2) produced by either the same entity that consumes the power or an affiliate, and 3) used in direct support of a service or industrial process located within the same facility or group of facilities that house the generating equipment. Direct use is exclusive of station use.

R=Revised. E=Estimate. F=Forecast. NA=Not available. (s)=Less than 0.5 billion kilowatthours and greater than -0.5 billon kilowatthours.

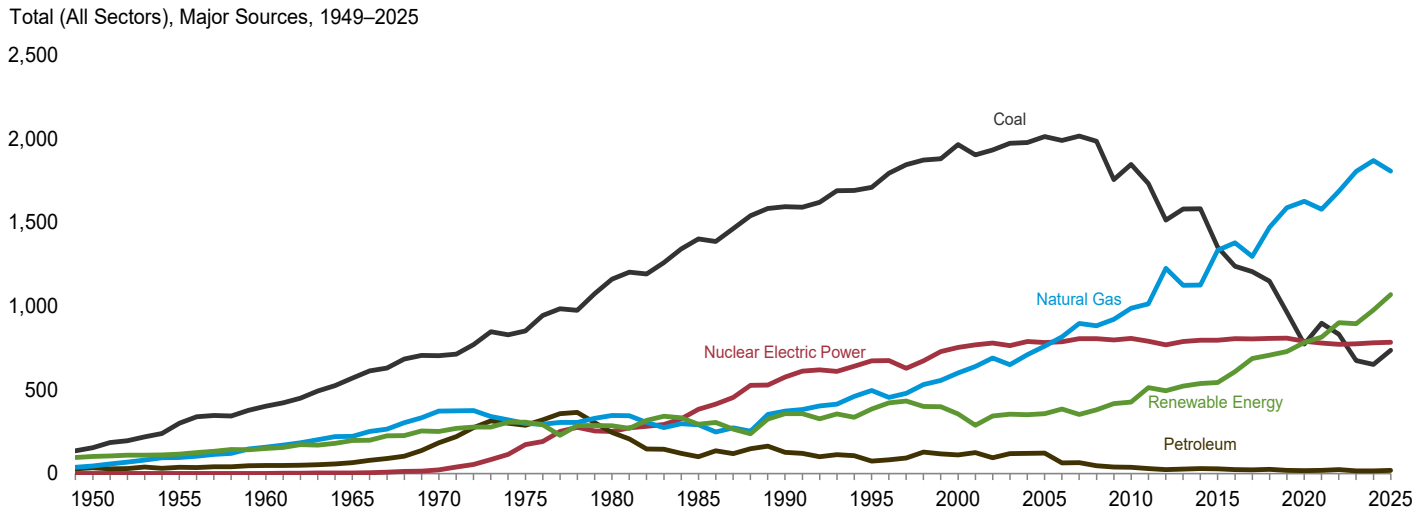
Notes: • See Note 1, "Coverage of Electricity Statistics," and Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Data values preceded by "F" are derived from the U.S. Energy Information Administration's Short-Term Integrated Forecasting System. See Note 3, "Electricity Forecast Values," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

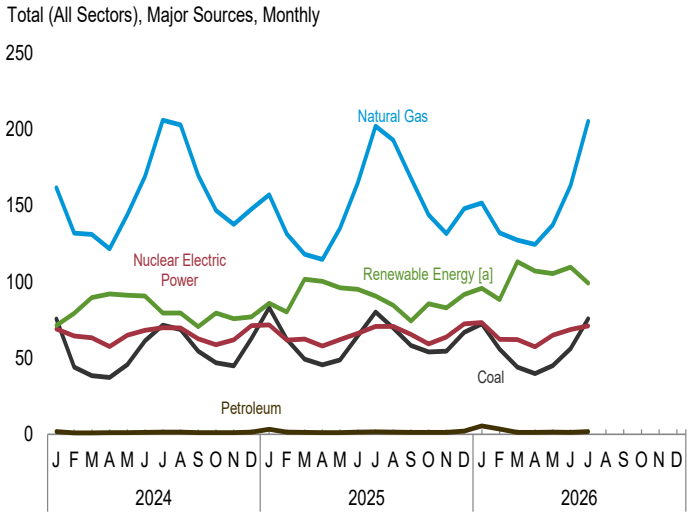
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

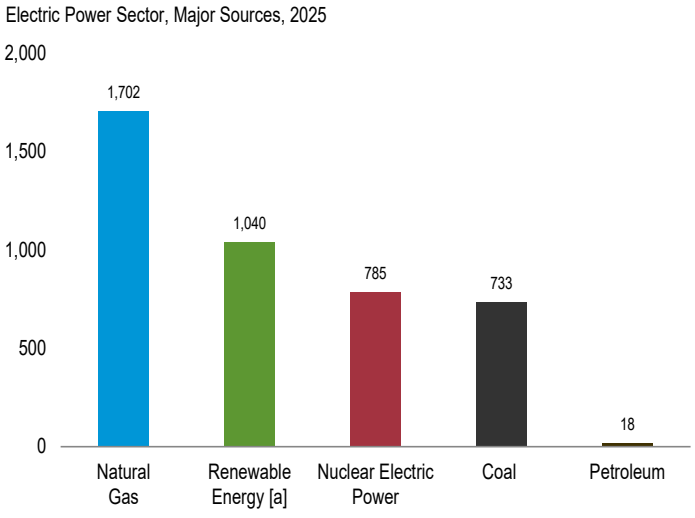
Sources: See end of section.

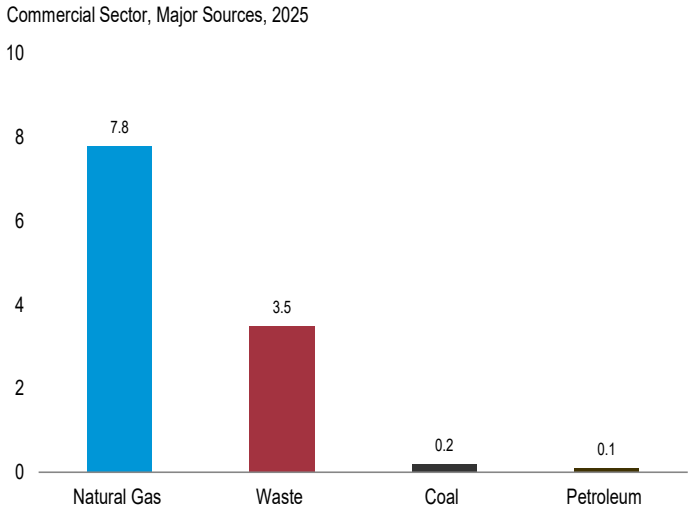
Figure 7.2 Electricity Net Generation

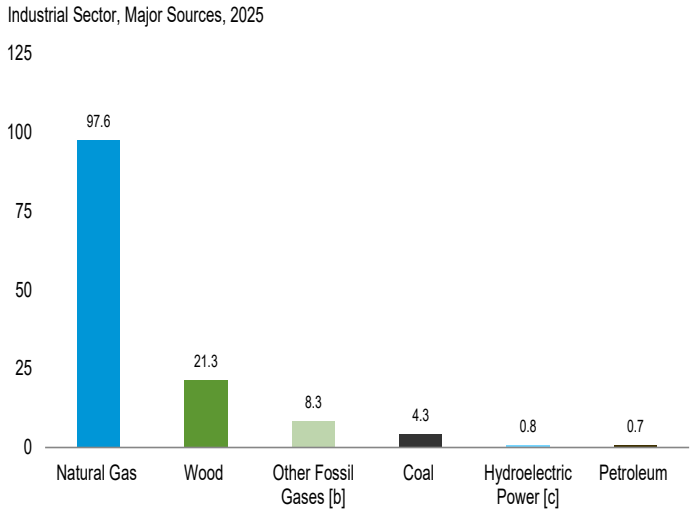
(Billion Kilowatthours)











[a] Conventional hydroelectric power, wood, waste, geothermal, solar, and wind.
[b] Blast furnace gas, and other manufactured and waste gases derived from fossil fuels.
[c] Conventional hydroelectric power.

Note: Data are for utility-scale facilities.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#electricity.
Sources: Tables 7.2a-7.2c.

Table 7.2a Electricity Net Generation: Total (All Sectors)

(Sum of Tables 7.2b and 7.2c; Million Kilowatthours)

	Fossil Fuels						Renewable Energy						
								Biomass					
	Coal[a]	Petroleum[b]	Natural Gas[c]	Other Fossil Gases[d]	Nuclear Electric Power	Hydroelectric Pumped Storage[e]	Conventional Hydroelectric Power[f]	Wood[g]	Waste[h]	Geothermal	Solar[i]	Wind	Total[j]
1950 Total	**154,520**	**33,734**	**44,559**	**NA**	**0**	**(f)**	**100,885**	**390**	**NA**	**NA**	**NA**	**NA**	**334,088**
1955 Total	**301,363**	**37,138**	**95,285**	**NA**	**0**	**(f)**	**116,236**	**276**	**NA**	**NA**	**NA**	**NA**	**550,299**
1960 Total	**403,067**	**47,987**	**157,970**	**NA**	**518**	**(f)**	**149,440**	**140**	**NA**	**33**	**NA**	**NA**	**759,156**
1965 Total	**570,926**	**64,801**	**221,559**	**NA**	**3,657**	**(f)**	**196,984**	**269**	**NA**	**189**	**NA**	**NA**	**1,058,386**
1970 Total	**704,394**	**184,183**	**372,890**	**NA**	**21,804**	**(f)**	**250,957**	**136**	**220**	**525**	**NA**	**NA**	**1,535,111**
1975 Total	**852,786**	**289,095**	**299,778**	**NA**	**172,505**	**(f)**	**303,153**	**18**	**174**	**3,246**	**NA**	**NA**	**1,920,755**
1980 Total	**1,161,562**	**245,994**	**346,240**	**NA**	**251,116**	**(f)**	**279,182**	**275**	**158**	**5,073**	**NA**	**NA**	**2,289,600**
1985 Total	**1,402,128**	**100,202**	**291,946**	**NA**	**383,691**	**(f)**	**284,311**	**743**	**640**	**9,325**	**11**	**6**	**2,473,002**
1990 Total[k]	**1,594,011**	**126,460**	**372,765**	**10,383**	**576,862**	**-3,508**	**292,866**	**32,522**	**13,260**	**15,434**	**367**	**2,789**	**3,037,827**
1995 Total	**1,709,426**	**74,554**	**496,058**	**13,870**	**673,402**	**-2,725**	**310,833**	**36,521**	**20,405**	**13,378**	**497**	**3,164**	**3,353,487**
2000 Total	**1,966,265**	**111,221**	**601,038**	**13,955**	**753,893**	**-5,539**	**275,573**	**37,595**	**23,131**	**14,093**	**493**	**5,593**	**3,802,105**
2005 Total	**2,012,873**	**122,225**	**760,960**	**13,464**	**781,986**	**-6,558**	**270,321**	**38,856**	**15,420**	**14,692**	**550**	**17,811**	**4,055,423**
2010 Total	**1,847,290**	**37,061**	**987,697**	**11,313**	**806,968**	**-5,501**	**260,203**	**37,172**	**18,917**	**15,219**	**1,212**	**94,652**	**4,125,060**
2011 Total	**1,733,430**	**30,182**	**1,013,689**	**11,566**	**790,204**	**-6,421**	**319,355**	**37,449**	**19,222**	**15,316**	**1,818**	**120,177**	**4,100,141**
2012 Total	**1,514,043**	**23,190**	**1,225,894**	**11,898**	**769,331**	**-4,950**	**276,240**	**37,799**	**19,823**	**15,562**	**4,327**	**140,822**	**4,047,765**
2013 Total	**1,581,115**	**27,164**	**1,124,836**	**12,853**	**789,016**	**-4,681**	**268,565**	**40,028**	**20,830**	**15,775**	**9,036**	**167,840**	**4,065,964**
2014 Total	**1,581,710**	**30,232**	**1,126,635**	**12,022**	**797,166**	**-6,174**	**259,367**	**42,340**	**21,650**	**15,877**	**17,691**	**181,655**	**4,093,564**
2015 Total	**1,352,398**	**28,249**	**1,334,668**	**13,117**	**797,178**	**-5,091**	**249,080**	**41,929**	**21,703**	**15,918**	**24,893**	**190,719**	**4,078,714**
2016 Total	**1,239,149**	**24,205**	**1,379,271**	**12,807**	**805,694**	**-6,686**	**267,812**	**40,947**	**21,813**	**15,826**	**36,054**	**226,993**	**4,077,574**
2017 Total	**1,205,835**	**21,390**	**1,297,703**	**12,469**	**804,950**	**-6,495**	**300,333**	**41,124**	**21,610**	**15,927**	**53,287**	**254,303**	**4,035,443**
2018 Total	**1,149,487**	**25,226**	**1,471,843**	**13,463**	**807,084**	**-5,905**	**292,524**	**40,936**	**20,896**	**15,967**	**63,825**	**272,667**	**4,180,988**
2019 Total	**964,957**	**18,341**	**1,588,533**	**12,591**	**809,409**	**-5,261**	**287,874**	**38,543**	**18,964**	**15,473**	**71,937**	**295,882**	**4,130,574**
2020 Total	**773,393**	**17,341**	**1,626,790**	**11,818**	**789,879**	**-5,321**	**285,274**	**36,219**	**18,493**	**15,890**	**89,199**	**337,938**	**4,009,767**
2021 Total	**897,999**	**19,173**	**1,579,190**	**11,397**	**779,645**	**-5,112**	**251,585**	**36,463**	**17,790**	**15,975**	**115,258**	**378,197**	**4,109,699**
2022 Total	**831,512**	**22,931**	**1,687,065**	**11,722**	**771,537**	**-6,028**	**254,789**	**35,466**	**16,383**	**16,087**	**143,792**	**434,297**	**4,230,668**
2023 Total	**675,115**	**16,233**	**1,806,063**	**11,778**	**774,873**	**-5,990**	**245,002**	**31,615**	**15,585**	**16,367**	**165,530**	**421,141**	**4,183,270**
2024 January	75,618	1,828	161,667	1,074	69,080	-414	21,554	2,849	1,295	1,399	9,583	34,791	381,122
February	44,137	957	131,845	931	64,584	-404	20,795	2,621	1,203	1,303	12,540	40,982	322,214
March	38,505	991	131,137	882	63,346	-349	23,363	2,651	1,241	1,359	16,019	45,102	324,938
April	37,246	1,144	121,532	913	57,542	-338	20,916	2,423	1,149	1,280	19,241	47,088	310,780
May	45,812	1,154	143,993	889	64,973	-284	24,477	2,575	1,283	1,246	22,371	39,256	348,485
June	61,339	1,279	169,156	941	68,192	-579	22,397	2,681	1,211	1,202	24,459	38,661	391,632
July	71,565	1,448	205,959	949	69,851	-639	21,384	2,806	1,264	1,218	24,484	28,304	429,317
August	68,760	1,424	202,915	911	69,760	-798	20,491	2,839	1,297	1,227	24,328	29,290	423,127
September	54,559	1,075	169,671	836	62,660	-637	15,911	2,563	1,222	1,201	20,538	29,178	359,397
October	46,890	1,160	146,711	801	58,773	-439	15,352	2,240	1,242	1,261	19,828	39,592	333,980
November	44,924	1,095	137,687	800	61,904	-490	16,723	2,550	1,213	1,317	13,841	40,133	322,351
December	62,800	1,528	147,630	919	71,200	-481	19,533	2,765	1,238	1,393	12,601	39,527	361,292
Total	**652,156**	**15,084**	**1,869,902**	**10,845**	**781,865**	**-5,852**	**242,896**	**31,564**	**14,858**	**15,407**	**219,834**	**451,904**	**4,308,634**
2025 January	83,153	3,289	157,001	1,104	71,739	-467	21,431	2,758	1,255	1,389	15,454	43,600	402,345
February	62,306	1,518	131,374	1,111	61,829	-410	19,543	2,527	1,165	1,252	16,448	39,346	338,592
March	49,215	1,270	118,118	772	62,457	-399	22,451	2,691	1,247	1,388	23,238	50,591	333,629
April	45,526	1,175	114,642	648	57,893	-259	22,839	2,290	1,177	1,306	26,781	45,876	320,478
May	48,778	1,107	135,072	634	62,145	-271	24,356	2,588	1,197	1,253	29,746	36,873	344,034
June	64,502	1,532	164,793	962	66,222	-420	22,159	2,700	1,205	1,278	32,034	35,776	393,285
July	80,260	1,674	201,991	887	70,781	-486	19,982	2,899	1,230	1,285	33,424	31,810	446,320
August	69,728	1,520	192,894	864	70,705	-568	20,098	2,833	1,204	1,349	31,809	27,307	420,242
September	58,302	1,297	167,876	963	65,458	-457	15,285	2,713	1,136	1,284	28,149	25,673	368,145
October	54,019	1,379	143,985	1,086	59,222	-513	16,545	2,467	1,161	1,267	24,605	39,534	345,253
November	54,490	1,315	131,565	867	63,809	-610	18,415	2,581	1,188	1,263	18,592	40,957	334,986
December	66,871	2,183	148,027	800	72,521	-462	23,920	2,762	1,214	1,355	15,392	47,048	382,194
Total	**737,151**	**19,260**	**1,807,338**	**10,697**	**784,781**	**-5,320**	**247,023**	**31,809**	**14,378**	**15,669**	**295,671**	**464,391**	**4,429,502**
2026 January	72,503	5,548	151,630	912	73,251	-515	27,909	2,828	1,165	1,417	17,985	44,434	399,529
February	55,859	3,446	132,089	797	62,384	-539	22,462	2,561	1,076	1,263	21,305	39,707	342,801
March	44,132	1,262	127,375	875	62,096	-591	26,922	2,549	1,160	1,334	29,000	52,219	348,756
April	39,777	1,257	124,449	872	57,373	-463	22,494	2,112	1,070	1,224	31,104	49,136	330,707
May	45,119	1,447	137,271	608	65,001	-409	22,738	2,597	1,125	1,277	36,418	41,157	354,691
June	56,290	1,361	163,237	583	68,786	-468	23,725	2,590	1,170	1,268	38,923	41,888	399,671
July	75,785	1,803	205,294	705	71,172	-524	20,266	2,872	1,179	1,298	41,412	32,184	453,744
7-Month Total	**389,464**	**16,123**	**1,041,345**	**5,353**	**460,063**	**-3,510**	**166,516**	**18,110**	**7,944**	**9,081**	**216,148**	**300,725**	**2,629,899**
2025 7-Month Total	**433,741**	**11,565**	**1,022,991**	**6,118**	**453,065**	**-2,710**	**152,761**	**18,452**	**8,476**	**9,151**	**177,124**	**283,873**	**2,578,682**
2024 7-Month Total	**374,222**	**8,802**	**1,065,289**	**6,579**	**457,567**	**-3,007**	**154,885**	**18,607**	**8,646**	**9,007**	**128,697**	**274,184**	**2,508,488**

[a] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.

[b] Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, waste oil, and, beginning in 2011, propane.

[c] Natural gas, plus a small amount of supplemental gaseous fuels.

[d] Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.

[e] Pumped storage facility production minus energy used for pumping.

[f] Through 1989, hydroelectric pumped storage is included in "Conventional Hydroelectric Power."

[g] Wood and wood-derived fuels.

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

[i] Electricity net generation from solar thermal and photovoltaic (PV) energy at utility-scale facilities. Does not include small-scale solar photovoltaic generation. See Table 10.6.

[j] Includes batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

[k] Through 1988, all data except hydroelectric are for electric utilities only; hydroelectric data through 1988 include industrial plants as well as electric utilities. Beginning in 1989, data are for electric utilities, independent power producers, commercial plants, and industrial plants.

NA=Not available.

Notes: • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section. • 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/#electricity (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: Tables 7.2b and 7.2c.

Table 7.2b Electricity Net Generation: Electric Power Sector

(Subset of Table 7.2a; Million Kilowatthours)

	Fossil Fuels						Renewable Energy						
								Biomass					
	Coal[a]	Petroleum[b]	Natural Gas[c]	Other Fossil Gases[d]	Nuclear Electric Power	Hydroelectric Pumped Storage[e]	Conventional Hydroelectric Power[f]	Wood[g]	Waste[h]	Geothermal	Solar[i]	Wind	Total[j]
1950 Total	154,520	33,734	44,559	NA	0	([f])	95,938	390	NA	NA	NA	NA	329,141
1955 Total	301,363	37,138	95,285	NA	0	([f])	112,975	276	NA	NA	NA	NA	547,038
1960 Total	403,067	47,987	157,970	NA	518	([f])	145,833	140	NA	33	NA	NA	755,549
1965 Total	570,926	64,801	221,559	NA	3,657	([f])	193,851	269	NA	189	NA	NA	1,055,252
1970 Total	704,394	184,183	372,890	NA	21,804	([f])	247,714	136	220	525	NA	NA	1,531,868
1975 Total	852,786	289,095	299,778	NA	172,505	([f])	300,047	18	174	3,246	NA	NA	1,917,649
1980 Total	1,161,562	245,994	346,240	NA	251,116	([f])	276,021	275	158	5,073	NA	NA	2,286,439
1985 Total	1,402,128	100,202	291,946	NA	383,691	([f])	281,149	743	640	9,325	11	6	2,469,841
1990 Total[k]	1,572,109	118,864	309,486	621	576,862	-3,508	289,753	7,032	11,500	15,434	367	2,789	2,901,322
1995 Total	1,686,056	68,146	419,179	1,927	673,402	-2,725	305,410	7,597	17,986	13,378	497	3,164	3,194,230
2000 Total	1,943,111	105,192	517,978	2,028	753,893	-5,539	271,338	8,916	20,307	14,093	493	5,593	3,637,529
2005 Total	1,992,054	116,482	683,829	3,777	781,986	-6,558	267,040	10,570	13,031	14,692	550	17,811	3,902,192
2010 Total	1,827,738	34,679	901,389	2,967	806,968	-5,501	258,455	11,446	16,376	15,219	1,206	94,636	3,972,386
2011 Total	1,717,891	28,202	926,290	2,939	790,204	-6,421	317,531	10,733	15,989	15,316	1,727	120,121	3,948,186
2012 Total	1,500,557	20,072	1,132,791	2,984	769,331	-4,950	273,859	11,050	16,555	15,562	4,164	140,749	3,890,358
2013 Total	1,567,722	24,510	1,028,949	4,322	789,016	-4,681	265,058	12,302	16,918	15,775	8,724	167,742	3,903,715
2014 Total	1,568,774	28,043	1,033,198	3,358	797,166	-6,174	258,046	15,027	17,602	15,877	17,304	181,496	3,936,961
2015 Total	1,340,993	26,505	1,238,842	3,715	797,178	-5,091	247,636	14,563	17,823	15,918	24,456	190,547	3,920,407
2016 Total	1,229,663	22,710	1,280,344	3,912	805,694	-6,686	266,326	13,420	18,183	15,826	35,497	226,790	3,918,977
2017 Total	1,197,838	20,039	1,198,014	4,126	804,950	-6,495	298,711	13,641	18,084	15,927	52,724	254,074	3,878,625
2018 Total	1,142,173	23,928	1,368,532	4,086	807,084	-5,905	291,148	13,385	17,623	15,934	63,253	272,396	4,020,877
2019 Total	958,732	17,220	1,479,858	4,037	809,409	-5,261	286,652	12,020	16,091	15,031	71,265	295,604	3,968,348
2020 Total	767,702	16,333	1,522,299	3,174	789,879	-5,321	284,059	11,211	15,625	15,441	88,511	337,666	3,854,170
2021 Total	892,440	18,308	1,476,603	3,304	779,645	-5,112	250,391	11,897	14,834	15,473	114,523	377,917	3,957,181
2022 Total	826,097	21,827	1,582,687	3,451	771,537	-6,028	253,627	12,002	11,739	16,087	142,847	433,994	4,073,888
2023 Total	670,569	15,388	1,699,855	3,340	774,873	-5,990	243,865	10,187	11,194	16,367	164,590	420,900	4,028,541
2024 January	75,201	1,759	152,122	292	69,080	-414	21,436	979	903	1,399	9,537	34,771	367,315
February	43,768	890	123,418	244	64,584	-404	20,678	841	844	1,303	12,474	40,967	309,830
March	38,107	931	122,719	227	63,346	-349	23,242	796	869	1,359	15,928	45,082	312,454
April	36,939	1,084	113,312	256	57,542	-338	20,796	647	794	1,280	19,133	47,065	298,668
May	45,465	1,104	135,634	210	64,973	-284	24,360	742	893	1,246	22,245	39,236	336,017
June	60,981	1,220	160,747	291	68,192	-579	22,315	861	860	1,202	24,330	38,643	379,202
July	71,163	1,385	196,755	265	69,851	-639	21,312	910	900	1,218	24,359	28,291	415,921
August	68,374	1,373	193,302	224	69,760	-798	20,416	935	925	1,227	24,209	29,276	409,363
September	54,196	1,030	161,042	264	62,660	-637	15,855	777	872	1,201	20,438	29,163	346,986
October	46,532	1,111	138,818	246	58,773	-439	15,269	572	877	1,261	19,738	39,574	322,427
November	44,555	1,042	129,529	217	61,904	-490	16,650	700	847	1,317	13,780	40,106	310,289
December	62,396	1,465	138,574	238	71,200	-481	19,445	891	867	1,393	12,551	39,497	348,153
Total	**647,676**	**14,394**	**1,765,974**	**2,976**	**781,865**	**-5,852**	**241,775**	**9,653**	**10,451**	**15,407**	**218,722**	**451,672**	**4,156,627**
2025 January	82,715	3,188	147,408	299	71,739	-467	21,333	940	894	1,389	15,379	43,571	388,520
February	61,925	1,460	123,177	321	61,829	-410	19,455	848	817	1,252	16,371	39,322	326,482
March	48,811	1,201	109,308	160	62,457	-399	22,347	865	882	1,388	23,126	50,560	320,799
April	45,163	1,122	106,495	128	57,893	-259	22,737	590	832	1,306	26,654	45,847	308,595
May	48,455	1,046	126,691	121	62,145	-271	24,246	791	865	1,253	29,610	36,849	331,852
June	64,126	1,450	156,294	251	66,222	-420	22,059	894	876	1,278	31,774	35,754	380,605
July	79,852	1,624	192,817	235	70,781	-486	19,888	975	886	1,285	33,147	31,791	432,852
August	69,351	1,428	183,662	144	70,705	-568	20,006	965	851	1,349	31,549	27,289	406,689
September	57,947	1,240	159,150	158	65,458	-457	15,211	923	808	1,284	27,870	25,656	355,223
October	53,669	1,312	135,442	204	59,222	-513	16,467	751	788	1,267	24,365	39,506	332,470
November	54,148	1,259	122,758	191	63,809	-610	18,330	829	829	1,263	18,407	40,927	322,201
December	66,517	2,123	138,760	146	72,521	-462	23,824	987	849	1,355	15,245	47,014	368,913
Total	**732,679**	**18,453**	**1,701,962**	**2,357**	**784,781**	**-5,320**	**245,901**	**10,358**	**10,177**	**15,669**	**293,499**	**464,086**	**4,275,202**
2026 January	72,113	5,438	142,522	185	73,251	-515	27,793	1,005	829	1,417	17,795	44,402	386,211
February	55,509	3,351	124,159	129	62,384	-539	22,371	969	791	1,263	21,094	39,681	331,112
March	43,795	1,202	118,939	153	62,096	-591	26,804	891	832	1,334	28,722	52,185	336,288
April	39,486	1,187	116,294	158	57,373	-463	22,393	622	786	1,224	30,814	49,103	318,838
May	44,806	1,373	128,931	89	65,001	-409	22,633	905	825	1,277	36,084	41,130	342,517
June	55,946	1,274	155,001	107	68,786	-468	23,622	947	854	1,268	38,581	41,860	387,616
July	75,423	1,724	196,058	110	71,172	-524	20,180	1,026	857	1,298	41,062	32,162	440,356
7-Month Total	**387,078**	**15,549**	**981,904**	**933**	**460,063**	**-3,510**	**165,796**	**6,367**	**5,774**	**9,081**	**214,153**	**300,524**	**2,542,938**
2025 7-Month Total	**431,047**	**11,091**	**962,191**	**1,514**	**453,065**	**-2,710**	**152,063**	**5,904**	**6,051**	**9,151**	**176,062**	**283,694**	**2,489,705**
2024 7-Month Total	**371,623**	**8,374**	**1,004,709**	**1,786**	**457,567**	**-3,007**	**154,139**	**5,777**	**6,063**	**9,007**	**128,006**	**274,055**	**2,419,408**

[a] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.

[b] Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, waste oil, and, beginning in 2011, propane.

[c] Natural gas, plus a small amount of supplemental gaseous fuels.

[d] Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.

[e] Pumped storage facility production minus energy used for pumping.

[f] Through 1989, hydroelectric pumped storage is included in "Conventional Hydroelectric Power."

[g] Wood and wood-derived fuels.

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

[i] Electricity net generation from solar thermal and photovoltaic (PV) energy at utility-scale facilities. Does not include small-scale solar photovoltaic generation. See Table 10.6.

[j] Includes batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

[k] Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilites and independent power producers.

NA=Not available.

Notes: • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • 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/#electricity (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

Table 7.2c Electricity Net Generation: Commercial and Industrial Sectors

(Subset of Table 7.2a; Million Kilowatthours)

	Commercial Sector[a]					Industrial Sector[b]							
				Biomass							Biomass		
	Coal[c]	Petroleum[d]	Natural Gas[e]	Waste[f]	Total[g]	Coal[c]	Petroleum[d]	Natural Gas[e]	Other Fossil Gases[h]	Hydroelectric Power[i]	Wood[j]	Waste[f]	Total[k]
1950 Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	4,946	NA	NA	4,946
1955 Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	3,261	NA	NA	3,261
1960 Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	3,607	NA	NA	3,607
1965 Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	3,134	NA	NA	3,134
1970 Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	3,244	NA	NA	3,244
1975 Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	3,106	NA	NA	3,106
1980 Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	3,161	NA	NA	3,161
1985 Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	3,161	NA	NA	3,161
1990 Total	796	589	3,272	812	5,837	21,107	7,008	60,007	9,641	2,975	25,379	949	130,830
1995 Total	998	379	5,162	1,519	8,232	22,372	6,030	71,717	11,943	5,304	28,868	900	151,025
2000 Total	1,097	432	4,262	1,985	7,903	22,056	5,597	78,798	11,927	4,135	28,652	839	156,673
2005 Total	1,353	375	4,249	1,657	8,492	19,466	5,368	72,882	9,687	3,195	28,271	733	144,739
2010 Total	1,111	124	4,725	1,672	8,592	18,441	2,258	81,583	8,343	1,668	25,706	869	144,082
2011 Total	1,049	89	5,487	2,315	10,080	14,490	1,891	81,911	8,624	1,799	26,691	917	141,875
2012 Total	883	196	6,603	2,319	11,301	12,603	2,922	86,500	8,913	2,353	26,725	948	146,107
2013 Total	839	124	7,154	2,567	12,234	12,554	2,531	88,733	8,531	3,463	27,691	1,346	150,015
2014 Total	595	255	7,227	2,681	12,520	12,341	1,934	86,209	8,664	1,282	27,239	1,367	144,083
2015 Total	509	191	7,471	2,637	12,595	10,896	1,552	88,355	9,401	1,410	27,318	1,243	145,712
2016 Total	383	82	7,730	2,496	12,706	9,103	1,412	91,197	8,895	1,269	27,458	1,134	145,890
2017 Total	329	112	8,042	2,515	13,060	7,669	1,239	91,647	8,343	1,382	27,412	1,012	143,758
2018 Total	303	140	8,419	2,404	13,312	7,011	1,157	94,892	9,377	1,149	27,475	868	146,798
2019 Total	268	121	8,610	2,129	13,689	5,957	1,000	100,065	8,554	1,033	26,433	743	148,537
2020 Total	240	100	8,110	2,053	13,046	5,451	908	96,381	8,644	1,001	24,916	814	142,551
2021 Total	280	98	7,346	2,156	12,768	5,278	767	95,240	8,093	936	24,413	800	139,750
2022 Total	287	112	7,830	3,838	16,737	5,128	993	96,548	8,271	899	23,289	806	140,043
2023 Total	220	78	7,744	3,693	16,066	4,327	767	98,463	8,438	844	21,320	698	138,664
2024 January	34	1	620	320	1,330	383	68	8,925	782	88	1,854	72	12,477
February	23	(s)	567	289	1,204	346	67	7,860	687	89	1,774	70	11,181
March	19	2	565	295	1,221	380	59	7,853	655	89	1,852	77	11,263
April	15	3	533	288	1,187	293	57	7,687	657	89	1,775	67	10,925
May	7	1	525	320	1,245	341	49	7,834	680	85	1,828	70	11,224
June	10	7	613	302	1,308	348	52	7,795	649	58	1,809	49	11,122
July	14	1	728	309	1,435	388	62	8,475	684	48	1,878	56	11,960
August	15	(s)	699	312	1,409	371	51	8,914	687	51	1,894	59	12,354
September	16	-1	602	293	1,257	346	46	8,027	572	36	1,772	57	11,154
October	14	-2	563	300	1,215	344	52	7,330	555	62	1,662	65	10,338
November	17	2	563	298	1,210	352	51	7,595	583	51	1,837	68	10,852
December	19	2	580	305	1,238	385	61	8,476	681	63	1,863	65	11,900
Total	204	15	7,157	3,631	15,258	4,276	675	96,771	7,870	810	21,800	776	136,749
2025 January	28	NM	656	297	1,351	410	83	8,936	805	67	1,807	64	12,474
February	22	NM	577	287	1,228	359	49	7,620	790	63	1,667	61	10,882
March	16	6	611	299	1,295	388	63	8,199	613	76	1,818	66	11,535
April	14	4	534	286	1,196	349	49	7,613	521	69	1,696	59	10,687
May	15	NM	546	274	1,194	308	58	7,835	513	78	1,792	58	10,989
June	12	6	662	283	1,345	363	76	7,837	710	70	1,785	46	11,335
July	18	5	768	292	1,474	390	45	8,406	652	68	1,905	52	11,993
August	15	14	727	298	1,445	362	78	8,506	720	63	1,854	54	12,107
September	17	4	671	276	1,324	338	53	8,054	805	54	1,774	52	11,598
October	17	4	664	303	1,357	332	63	7,879	882	55	1,707	70	11,426
November	18	5	665	295	1,340	324	51	8,143	676	58	1,738	64	11,445
December	16	NM	685	301	1,369	338	49	8,582	654	62	1,761	64	11,912
Total	210	89	7,765	3,490	15,917	4,262	717	97,611	8,340	783	21,305	712	138,383
2026 January	24	NM	679	276	1,362	366	NM	8,429	727	73	1,809	60	11,956
February	20	NM	618	233	1,188	330	69	7,312	667	58	1,584	52	10,501
March	11	7	672	272	1,318	325	52	7,764	722	80	1,648	56	11,150
April	12	5	588	233	1,163	280	64	7,568	714	66	1,486	51	10,706
May	15	NM	602	251	1,239	298	70	7,738	518	69	1,691	50	10,934
June	10	NM	636	271	1,330	333	82	7,600	476	66	1,635	45	10,725
July	19	8	772	276	1,469	343	72	8,464	595	56	1,829	45	11,919
7-Month Total	110	93	4,567	1,812	9,070	2,276	481	54,874	4,420	469	11,682	359	77,891
2025 7-Month Total	127	51	4,353	2,017	9,082	2,567	423	56,447	4,603	490	12,470	407	79,895
2024 7-Month Total	122	14	4,151	2,123	8,929	2,478	415	56,429	4,792	548	12,771	461	80,151

[a] Commercial combined-heat-and-power (CHP) and commercial electricity-only plants.

[b] Industrial combined-heat-and-power (CHP) and industrial electricity-only plants.

[c] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.

[d] Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, waste oil, and, beginning in 2011, propane.

[e] Natural gas, plus a small amount of supplemental gaseous fuels.

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

[g] Includes a small amount of conventional hydroelectric power, geothermal, other fossil gases, solar photovoltaic (PV) energy, wind, wood, and other, which are not separately displayed. Does not include small-scale solar photovoltaic generation. shown on Table 10.6.

[h] Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.

[i] Conventional hydroelectric power.

[j] Wood and wood-derived fuels.

[k] Includes photovoltaic (PV) energy, wind, batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels). Does not include small-scale solar photovoltaic generation shown on Table 10.6.

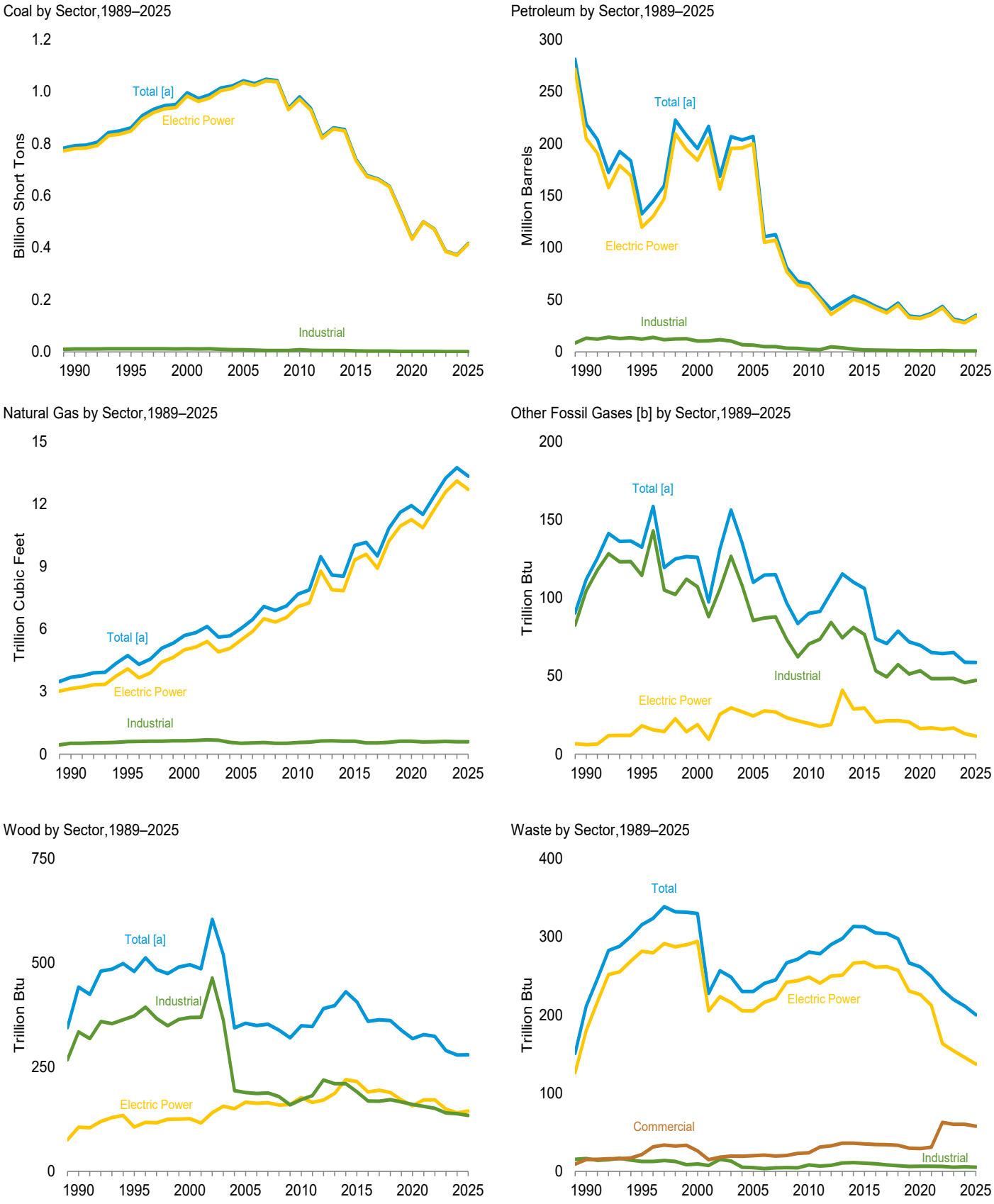
NA=Not available. NM=Not meaningful. (s)=Less than 0.5 million kilowatthours.

Notes: • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section. • See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • 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/#electricity (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

Figure 7.3 Consumption of Selected Combustible Fuels for Electricity Generation



[a] Includes commercial sector.
[b] Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.

Note: Data are for utility-scale facilities.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#electricity.
Sources: Tables 7.3a-7.3c.

Table 7.3a Consumption of Combustible Fuels for Electricity Generation: Total (All Sectors) (Sum of Tables 7.3b and 7.3c)

	Coal[a]	Petroleum					Natural Gas[f]	Other Fossil Gases[g]	Biomass		Other[j]
		Distillate Fuel Oil[b]	Residual Fuel Oil[c]	Other Liquids[d]	Petroleum Coke[e]	Total[e]			Wood[h]	Waste[i]	
	Thousand Short Tons	Thousand Barrels			Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu			
1950 Total	**91,871**	**5,423**	**69,998**	**NA**	**NA**	**75,421**	**629**	**NA**	**5**	**NA**	**NA**
1955 Total	**143,759**	**5,412**	**69,862**	**NA**	**NA**	**75,274**	**1,153**	**NA**	**3**	**NA**	**NA**
1960 Total	**176,685**	**3,824**	**84,371**	**NA**	**NA**	**88,195**	**1,725**	**NA**	**2**	**NA**	**NA**
1965 Total	**244,788**	**4,928**	**110,274**	**NA**	**NA**	**115,203**	**2,321**	**NA**	**3**	**NA**	**NA**
1970 Total	**320,182**	**24,123**	**311,381**	**NA**	**636**	**338,686**	**3,932**	**NA**	**1**	**2**	**NA**
1975 Total	**405,962**	**38,907**	**467,221**	**NA**	**70**	**506,479**	**3,158**	**NA**	**(s)**	**2**	**NA**
1980 Total	**569,274**	**29,051**	**391,163**	**NA**	**179**	**421,110**	**3,682**	**NA**	**3**	**2**	**NA**
1985 Total	**693,841**	**14,635**	**158,779**	**NA**	**231**	**174,571**	**3,044**	**NA**	**8**	**7**	**NA**
1990 Total[k]	**792,457**	**18,143**	**190,652**	**437**	**1,914**	**218,800**	**3,692**	**112**	**442**	**211**	**36**
1995 Total	**860,594**	**19,615**	**95,507**	**680**	**3,355**	**132,578**	**4,738**	**133**	**480**	**316**	**42**
2000 Total	**994,933**	**31,675**	**143,381**	**1,450**	**3,744**	**195,228**	**5,691**	**126**	**496**	**330**	**46**
2005 Total	**1,041,448**	**20,651**	**141,518**	**2,968**	**8,330**	**206,785**	**6,036**	**110**	**355**	**230**	**173**
2010 Total	**979,684**	**14,050**	**23,997**	**2,056**	**4,994**	**65,071**	**7,680**	**90**	**350**	**281**	**184**
2011 Total	**934,938**	**11,231**	**14,251**	**1,844**	**5,012**	**52,387**	**7,884**	**91**	**348**	**279**	**205**
2012 Total	**825,734**	**9,285**	**11,755**	**1,565**	**3,675**	**40,977**	**9,485**	**103**	**390**	**290**	**204**
2013 Total	**860,729**	**9,784**	**11,766**	**1,681**	**4,852**	**47,492**	**8,596**	**115**	**398**	**298**	**200**
2014 Total	**853,634**	**14,465**	**14,704**	**2,363**	**4,412**	**53,593**	**8,544**	**110**	**431**	**314**	**200**
2015 Total	**739,594**	**12,438**	**14,124**	**2,363**	**4,044**	**49,145**	**10,017**	**106**	**407**	**313**	**204**
2016 Total	**677,371**	**9,662**	**11,195**	**1,548**	**4,253**	**43,671**	**10,170**	**74**	**360**	**305**	**199**
2017 Total	**663,911**	**9,707**	**10,442**	**1,547**	**3,490**	**39,144**	**9,508**	**71**	**364**	**304**	**190**
2018 Total	**636,213**	**14,223**	**12,407**	**1,985**	**3,623**	**46,727**	**10,842**	**79**	**362**	**298**	**190**
2019 Total	**537,620**	**9,620**	**9,251**	**1,965**	**2,724**	**34,454**	**11,613**	**72**	**338**	**267**	**199**
2020 Total	**435,351**	**7,991**	**8,299**	**1,719**	**3,077**	**33,391**	**11,928**	**70**	**318**	**262**	**193**
2021 Total	**500,367**	**10,623**	**8,998**	**2,012**	**3,070**	**36,982**	**11,503**	**65**	**328**	**250**	**187**
2022 Total	**471,576**	**14,738**	**11,909**	**2,112**	**2,985**	**43,684**	**12,384**	**64**	**324**	**232**	**157**
2023 Total	**386,626**	**9,431**	**10,068**	**1,836**	**2,028**	**31,474**	**13,245**	**65**	**290**	**220**	**147**
2024 January	42,393	1,546	1,025	186	163	3,573	1,163	6	26	18	13
February	25,982	555	689	141	120	1,983	935	5	23	17	11
March	22,380	599	693	128	89	1,865	942	5	23	18	12
April	21,240	802	680	111	125	2,219	905	5	21	17	11
May	26,178	727	762	87	140	2,275	1,071	5	23	18	12
June	34,428	718	784	112	171	2,468	1,260	5	24	17	12
July	40,450	835	862	135	199	2,828	1,552	5	25	18	13
August	39,364	874	823	116	193	2,775	1,522	5	26	19	13
September	31,493	618	786	80	109	2,031	1,244	5	22	17	11
October	27,312	709	847	96	113	2,218	1,090	4	19	18	12
November	26,333	669	768	97	102	2,046	1,010	4	22	17	12
December	35,378	988	1,007	133	137	2,814	1,062	5	25	17	12
Total	**372,931**	**9,638**	**9,726**	**1,423**	**1,662**	**29,096**	**13,755**	**59**	**279**	**212**	**142**
2025 January	45,882	2,990	1,476	252	210	5,767	1,150	6	24	17	12
February	35,179	1,022	852	147	136	2,700	953	6	22	16	10
March	28,016	659	756	111	162	2,336	856	4	23	17	11
April	25,863	685	713	95	130	2,144	855	4	19	16	11
May	27,925	602	699	71	141	2,077	997	4	23	17	11
June	36,541	984	881	147	174	2,881	1,234	5	24	17	11
July	45,095	905	975	122	207	3,039	1,518	5	26	17	12
August	39,685	884	850	129	204	2,882	1,436	5	25	17	12
September	33,387	690	806	102	167	2,434	1,245	5	25	17	11
October	30,996	689	836	117	173	2,507	1,060	6	21	17	11
November	30,963	918	739	126	141	2,487	972	5	23	16	12
December	37,160	1,459	1,675	169	119	3,901	1,073	4	25	17	12
Total	**416,693**	**12,487**	**11,258**	**1,590**	**1,964**	**35,155**	**13,349**	**59**	**280**	**200**	**137**
2026 January	39,840	5,462	2,497	629	170	9,438	1,118	5	25	16	11
February	31,207	3,263	1,363	260	139	5,582	968	4	24	15	10
March	25,208	969	772	224	119	2,561	942	5	23	17	11
April	22,583	816	713	126	136	2,334	922	5	19	15	11
May	25,772	1,025	740	141	165	2,728	1,029	3	23	16	11
June	32,029	824	810	120	163	2,569	1,222	3	24	16	11
July	42,411	1,325	1,033	203	186	3,490	1,557	4	25	16	12
7-Month Total	**219,051**	**13,685**	**7,927**	**1,703**	**1,077**	**28,702**	**7,758**	**30**	**163**	**111**	**77**
2025 7-Month Total	**244,502**	**7,847**	**6,352**	**946**	**1,160**	**20,944**	**7,562**	**34**	**161**	**117**	**79**
2024 7-Month Total	**213,051**	**5,780**	**5,495**	**901**	**1,007**	**17,212**	**7,827**	**36**	**166**	**123**	**83**

[a] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.

[b] Fuel oil nos. 1, 2, and 4. For 1949–1979, data are for gas turbine and internal combustion plant use of petroleum. For 1980–2000, electric utility data also include small amounts of kerosene and jet fuel.

[c] Fuel oil nos. 5 and 6. For 1949–1979, data are for steam plant use of petroleum. For 1980–2000, electric utility data also include a small amount of fuel oil no. 4.

[d] Jet fuel, kerosene, other petroleum liquids, waste oil, and, beginning in 2011, propane.

[e] Petroleum coke is converted from short tons to barrels by multiplying by 5.

[f] Natural gas, plus a small amount of supplemental gaseous fuels.

[g] Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.

[h] Wood and wood-derived fuels.

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

[j] Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

[k] Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities, independent power producers, commercial plants, and industrial plants.

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

Notes: • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section. • Data are for fuels consumed to produce electricity. Data also include fuels consumed to produce useful thermal output at a small number of electric utility combined-heat-and-power (CHP) plants. • 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/#electricity (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: Tables 7.3b and 7.3c.

Table 7.3b Consumption of Combustible Fuels for Electricity Generation: Electric Power Sector (Subset of Table 7.3a)

	Coal[a]	Petroleum					Natural Gas[f]	Other Fossil Gases[g]	Biomass		Other[j]
		Distillate Fuel Oil[b]	Residual Fuel Oil[c]	Other Liquids[d]	Petroleum Coke[e]	Total[e]			Wood[h]	Waste[i]	
	Thousand Short Tons	Thousand Barrels			Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu			
1950 Total	**91,871**	**5,423**	**69,998**	**NA**	**NA**	**75,421**	**629**	**NA**	**5**	**NA**	**NA**
1955 Total	**143,759**	**5,412**	**69,862**	**NA**	**NA**	**75,274**	**1,153**	**NA**	**3**	**NA**	**NA**
1960 Total	**176,685**	**3,824**	**84,371**	**NA**	**NA**	**88,195**	**1,725**	**NA**	**2**	**NA**	**NA**
1965 Total	**244,788**	**4,928**	**110,274**	**NA**	**NA**	**115,203**	**2,321**	**NA**	**3**	**NA**	**NA**
1970 Total	**320,182**	**24,123**	**311,381**	**NA**	**636**	**338,686**	**3,932**	**NA**	**1**	**2**	**NA**
1975 Total	**405,962**	**38,907**	**467,221**	**NA**	**70**	**506,479**	**3,158**	**NA**	**(s)**	**2**	**NA**
1980 Total	**569,274**	**29,051**	**391,163**	**NA**	**179**	**421,110**	**3,682**	**NA**	**3**	**2**	**NA**
1985 Total	**693,841**	**14,635**	**158,779**	**NA**	**231**	**174,571**	**3,044**	**NA**	**8**	**7**	**NA**
1990 Total[k]	**781,301**	**16,394**	**183,285**	**25**	**1,008**	**204,745**	**3,147**	**6**	**106**	**180**	**(s)**
1995 Total	**847,854**	**18,066**	**88,895**	**441**	**2,452**	**119,663**	**4,094**	**18**	**106**	**282**	**2**
2000 Total	**982,713**	**29,722**	**138,047**	**403**	**3,155**	**183,946**	**5,014**	**19**	**126**	**294**	**1**
2005 Total	**1,033,567**	**19,450**	**138,337**	**2,591**	**7,877**	**199,760**	**5,485**	**24**	**166**	**205**	**116**
2010 Total	**971,245**	**13,677**	**23,560**	**1,848**	**4,679**	**62,477**	**7,085**	**20**	**177**	**249**	**116**
2011 Total	**928,857**	**10,961**	**13,861**	**1,655**	**4,726**	**50,105**	**7,265**	**18**	**166**	**241**	**133**
2012 Total	**820,762**	**9,000**	**11,292**	**1,339**	**2,861**	**35,937**	**8,788**	**19**	**171**	**250**	**132**
2013 Total	**855,546**	**9,511**	**11,322**	**1,488**	**4,189**	**43,265**	**7,888**	**41**	**187**	**251**	**130**
2014 Total	**848,803**	**14,052**	**14,132**	**2,157**	**4,039**	**50,537**	**7,849**	**29**	**220**	**266**	**127**
2015 Total	**735,433**	**12,056**	**13,893**	**2,086**	**3,789**	**46,978**	**9,322**	**29**	**215**	**268**	**127**
2016 Total	**674,239**	**9,421**	**11,056**	**1,284**	**4,018**	**41,853**	**9,590**	**20**	**191**	**261**	**126**
2017 Total	**661,033**	**9,398**	**10,299**	**1,332**	**3,273**	**37,394**	**8,917**	**21**	**195**	**262**	**121**
2018 Total	**633,593**	**13,795**	**12,259**	**1,757**	**3,444**	**45,030**	**10,224**	**21**	**189**	**257**	**125**
2019 Total	**535,382**	**9,254**	**9,163**	**1,724**	**2,545**	**32,868**	**10,939**	**21**	**171**	**231**	**133**
2020 Total	**433,477**	**7,609**	**8,228**	**1,523**	**2,917**	**31,947**	**11,258**	**16**	**157**	**226**	**132**
2021 Total	**498,614**	**10,246**	**8,908**	**1,798**	**2,942**	**35,660**	**10,872**	**17**	**171**	**212**	**124**
2022 Total	**469,833**	**14,325**	**11,687**	**1,836**	**2,849**	**42,096**	**11,740**	**16**	**171**	**163**	**75**
2023 Total	**385,098**	**9,087**	**9,905**	**1,627**	**1,922**	**30,229**	**12,588**	**17**	**149**	**154**	**74**
2024 January	42,255	1,497	1,013	171	154	3,450	1,105	1	14	13	6
February	25,855	526	683	116	111	1,881	883	1	12	12	5
March	22,247	566	687	114	80	1,767	889	1	12	12	6
April	21,138	773	672	96	117	2,125	854	1	10	11	5
May	26,061	699	756	72	132	2,187	1,020	1	11	12	6
June	34,310	683	778	97	162	2,368	1,208	1	13	12	6
July	40,319	816	856	119	189	2,737	1,494	1	13	12	6
August	39,235	852	817	105	184	2,694	1,462	1	14	13	6
September	31,370	603	781	66	102	1,961	1,191	1	11	12	5
October	27,189	689	841	81	105	2,137	1,041	1	8	12	5
November	26,213	650	762	82	94	1,962	960	1	10	12	6
December	35,245	958	997	120	127	2,709	1,007	1	13	12	6
Total	**371,435**	**9,311**	**9,643**	**1,240**	**1,556**	**27,977**	**13,114**	**13**	**140**	**146**	**67**
2025 January	45,734	2,951	1,463	232	199	5,640	1,092	1	13	12	6
February	35,058	990	842	143	130	2,624	904	2	12	11	5
March	27,880	638	749	98	153	2,250	803	1	12	12	5
April	25,745	668	707	81	123	2,072	804	1	8	11	5
May	27,814	561	694	55	131	1,964	945	1	11	12	6
June	36,417	962	876	122	161	2,768	1,181	1	13	12	6
July	44,964	879	970	111	201	2,966	1,461	1	13	12	6
August	39,561	838	846	114	191	2,753	1,379	1	13	12	6
September	33,267	672	803	87	158	2,349	1,192	1	13	11	6
October	30,876	672	831	97	162	2,412	1,008	1	11	11	6
November	30,852	900	736	111	132	2,407	918	1	11	11	6
December	37,052	1,437	1,665	155	113	3,820	1,016	1	14	11	6
Total	**415,222**	**12,167**	**11,181**	**1,406**	**1,855**	**34,027**	**12,704**	**11**	**145**	**137**	**68**
2026 January	39,711	5,393	2,485	621	159	9,294	1,061	1	14	11	6
February	31,089	3,222	1,348	246	128	5,456	919	1	14	11	5
March	25,097	943	767	209	110	2,467	890	1	13	12	6
April	22,481	795	709	112	124	2,234	873	1	9	11	5
May	25,662	1,004	736	128	152	2,627	978	(s)	13	11	6
June	31,911	802	803	110	148	2,454	1,171	1	13	11	6
July	42,289	1,299	1,030	202	176	3,411	1,501	1	14	11	6
7-Month Total	**218,240**	**13,459**	**7,878**	**1,628**	**996**	**27,944**	**7,394**	**5**	**88**	**77**	**40**
2025 7-Month Total	**243,613**	**7,649**	**6,301**	**842**	**1,099**	**20,285**	**7,191**	**7**	**82**	**81**	**39**
2024 7-Month Total	**212,184**	**5,559**	**5,446**	**786**	**945**	**16,515**	**7,453**	**8**	**84**	**85**	**39**

[a] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.

[b] Fuel oil nos. 1, 2, and 4. For 1949–1979, data are for gas turbine and internal combustion plant use of petroleum. For 1980–2000, electric utility data also include small amounts of kerosene and jet fuel.

[c] Fuel oil nos. 5 and 6. For 1949–1979, data are for steam plant use of petroleum. For 1980–2000, electric utility data also include a small amount of fuel oil no. 4.

[d] Jet fuel, kerosene, other petroleum liquids, waste oil, and, beginning in 2011, propane.

[e] Petroleum coke is converted from short tons to barrels by multiplying by 5.

[f] Natural gas, plus a small amount of supplemental gaseous fuels.

[g] Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.

[h] Wood and wood-derived fuels.

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

[j] Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

[k] Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.

NA=Not available. NM=Not meaningful. (s)=Less than 0.5 trillion Btu.

Notes: • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section. • Data are for fuels consumed to produce electricity. Data also include fuels consumed to produce useful thermal output at a small number of electric utility combined-heat-and-power (CHP) plants. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • 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/#electricity (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

Table 7.3c Consumption of Selected Combustible Fuels for Electricity Generation: Commercial and Industrial Sectors (Subset of Table 7.3a)

	Commercial Sector[a]				Industrial Sector[b]						
				Biomass					Biomass		
	Coal[c]	Petroleum[d]	Natural Gas[e]	Waste[f]	Coal[c]	Petroleum[d]	Natural Gas[e]	Other Fossil Gases[g]	Wood[h]	Waste[f]	Other[i]
	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu			
1990 Total	**417**	**953**	**28**	**15**	**10,740**	**13,103**	**517**	**104**	**335**	**16**	**36**
1995 Total	**569**	**649**	**43**	**21**	**12,171**	**12,265**	**601**	**114**	**373**	**13**	**40**
2000 Total	**514**	**823**	**37**	**26**	**11,706**	**10,459**	**640**	**107**	**369**	**10**	**45**
2005 Total	**377**	**585**	**34**	**20**	**7,504**	**6,440**	**518**	**85**	**189**	**5**	**46**
2010 Total	**314**	**172**	**39**	**24**	**8,125**	**2,422**	**555**	**70**	**172**	**8**	**55**
2011 Total	**347**	**137**	**47**	**31**	**5,735**	**2,145**	**572**	**74**	**182**	**7**	**57**
2012 Total	**307**	**279**	**63**	**33**	**4,665**	**4,761**	**633**	**84**	**219**	**8**	**54**
2013 Total	**513**	**335**	**67**	**36**	**4,670**	**3,892**	**642**	**74**	**210**	**11**	**50**
2014 Total	**202**	**462**	**72**	**36**	**4,629**	**2,594**	**623**	**81**	**210**	**11**	**54**
2015 Total	**163**	**260**	**70**	**35**	**3,999**	**1,907**	**625**	**77**	**191**	**10**	**58**
2016 Total	**111**	**116**	**46**	**34**	**3,021**	**1,701**	**534**	**53**	**169**	**10**	**53**
2017 Total	**95**	**204**	**50**	**34**	**2,783**	**1,545**	**541**	**49**	**169**	**8**	**49**
2018 Total	**87**	**279**	**53**	**33**	**2,534**	**1,418**	**565**	**57**	**172**	**7**	**46**
2019 Total	**76**	**257**	**56**	**30**	**2,161**	**1,329**	**618**	**51**	**167**	**6**	**45**
2020 Total	**72**	**242**	**52**	**29**	**1,802**	**1,202**	**619**	**53**	**160**	**6**	**40**
2021 Total	**87**	**256**	**46**	**31**	**1,666**	**1,066**	**585**	**48**	**156**	**6**	**39**
2022 Total	**87**	**269**	**49**	**63**	**1,655**	**1,319**	**595**	**48**	**151**	**6**	**18**
2023 Total	**69**	**203**	**49**	**60**	**1,460**	**1,042**	**608**	**48**	**140**	**5**	**12**
2024 January	10	31	4	5	128	92	54	5	12	1	1
February	7	15	4	5	120	88	48	4	11	1	1
March	6	18	4	5	127	81	49	4	12	1	1
April	5	17	4	5	97	77	47	4	11	(s)	1
May	2	19	4	5	115	70	48	4	12	1	1
June	3	24	4	5	115	76	48	4	12	(s)	1
July	5	8	5	5	126	83	53	4	12	(s)	1
August	5	9	5	5	124	72	55	4	12	(s)	1
September	5	7	4	5	118	64	49	3	11	(s)	1
October	5	7	4	5	119	74	45	3	11	(s)	1
November	5	10	4	5	115	74	46	3	12	1	1
December	6	19	4	5	128	85	51	4	12	(s)	1
Total	**65**	**184**	**48**	**60**	**1,431**	**936**	**592**	**46**	**138**	**6**	**15**
2025 January	9	NM	4	5	139	101	54	4	11	(s)	1
February	7	NM	4	4	113	62	46	4	10	(s)	1
March	5	9	4	5	131	76	50	4	11	(s)	1
April	5	7	3	5	113	65	47	3	10	(s)	1
May	6	34	3	5	106	80	48	3	11	(s)	1
June	4	9	4	5	121	104	49	4	11	(s)	1
July	6	10	5	5	125	63	52	4	12	(s)	1
August	5	33	4	5	119	96	52	4	12	(s)	1
September	6	9	4	5	114	76	49	4	11	(s)	1
October	6	7	4	5	115	88	48	5	11	1	1
November	6	8	4	5	105	72	50	4	11	(s)	1
December	5	NM	4	5	102	66	53	4	11	(s)	1
Total	**69**	**178**	**47**	**58**	**1,403**	**950**	**598**	**47**	**134**	**5**	**11**
2026 January	7	NM	4	5	122	NM	52	4	11	(s)	1
February	6	NM	4	4	113	91	45	4	10	(s)	1
March	3	15	4	5	108	79	48	4	11	(s)	1
April	4	11	3	4	99	90	46	4	10	(s)	1
May	5	NM	4	5	105	91	48	3	11	(s)	1
June	3	NM	4	5	115	106	47	3	10	(s)	1
July	6	13	5	5	115	66	51	3	12	(s)	1
7-Month Total	**34**	**143**	**28**	**32**	**776**	**616**	**337**	**25**	**74**	**3**	**6**
2025 7-Month Total	**41**	**107**	**27**	**33**	**848**	**551**	**345**	**26**	**78**	**3**	**6**
2024 7-Month Total	**39**	**131**	**28**	**35**	**828**	**566**	**346**	**28**	**81**	**3**	**9**

[a] Commercial combined-heat-and-power (CHP) and commercial electricity-only plants.

[b] Industrial combined-heat-and-power (CHP) and industrial electricity-only plants.

[c] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.

[d] Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, waste oil, and, beginning in 2011, propane.

[e] Natural gas, plus a small amount of supplemental gaseous fuels.

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

[g] Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.

[h] Wood and wood-derived fuels.

[i] Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

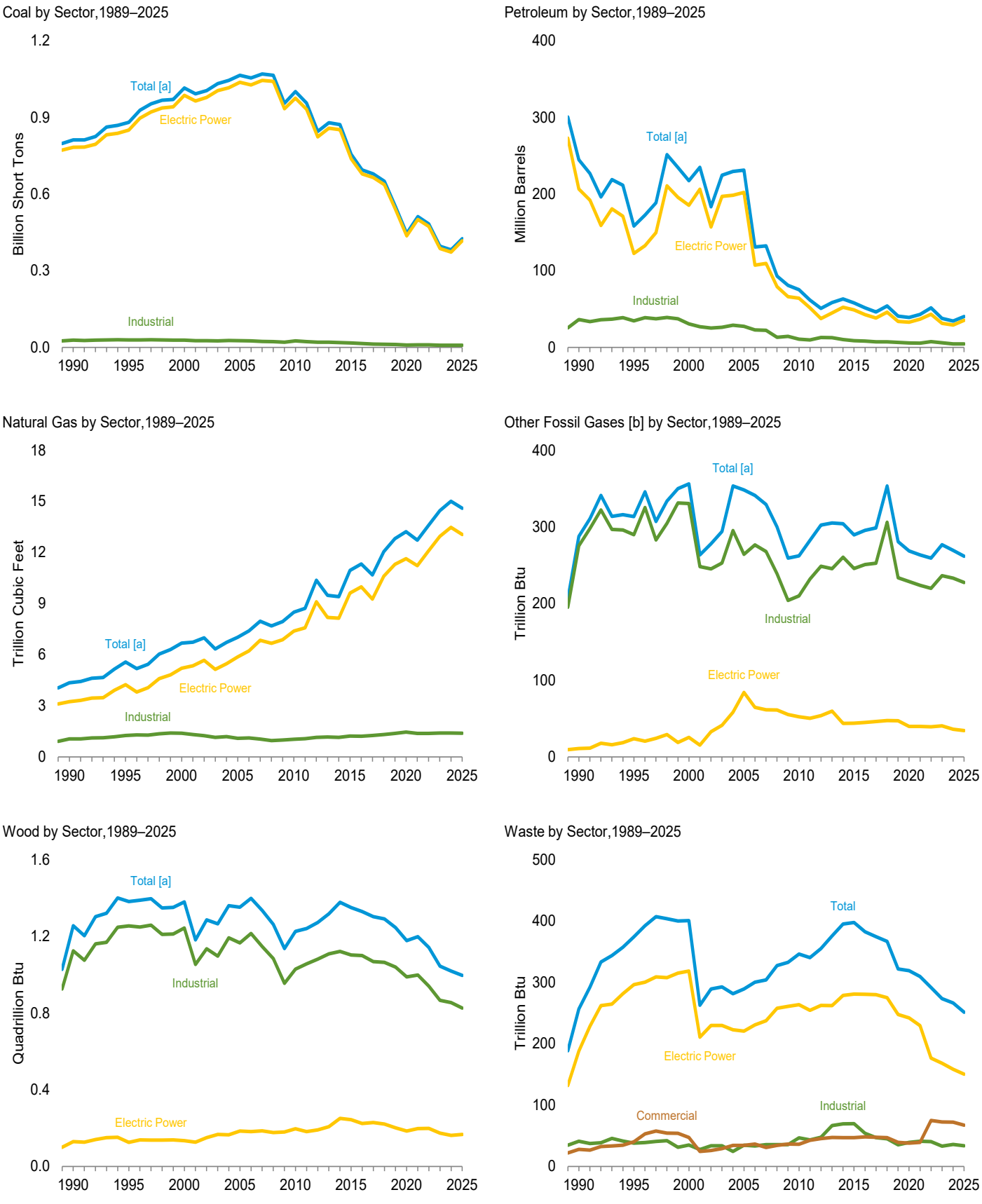
NM=Not meaningful. (s)=Less than 0.5 trillion Btu.

Notes: • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section. • See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Data are for fuels consumed to produce electricity. Through 1988, data are not available. • 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/#electricity (Excel and CSV files) for all available annual and monthly data beginning in 1989.

Sources: • **1989–1997:** U.S. Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • **1998–2000:** EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility." • **2001–2003:** EIA, Form EIA-906, "Power Plant Report." • **2004–2007:** EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report." • **2008 forward:** EIA, Form EIA-923, "Power Plant Operations Report."

Figure 7.4 Consumption of Selected Combustible Fuels for Electricity Generation and Useful Thermal Output



[a] Includes commercial sector.
[b] Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.

Note: Data are for utility-scale facilities.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#electricity.
Sources: Tables 7.4a-7.4c.

Table 7.4a Consumption of Combustible Fuels for Electricity Generation and Useful Thermal Output: Total (All Sectors) (Sum of Tables 7.4b and 7.4c)

	Coal[a]	Petroleum					Natural Gas[f]	Other Fossil Gases[g]	Biomass		Other[j]
		Distillate Fuel Oil[b]	Residual Fuel Oil[c]	Other Liquids[d]	Petroleum Coke[e]	Total[e]			Wood[h]	Waste[i]	
	Thousand Short Tons	Thousand Barrels			Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu			
1950 Total	**91,871**	**5,423**	**69,998**	**NA**	**NA**	**75,421**	**629**	**NA**	**5**	**NA**	**NA**
1955 Total	**143,759**	**5,412**	**69,862**	**NA**	**NA**	**75,274**	**1,153**	**NA**	**3**	**NA**	**NA**
1960 Total	**176,685**	**3,824**	**84,371**	**NA**	**NA**	**88,195**	**1,725**	**NA**	**2**	**NA**	**NA**
1965 Total	**244,788**	**4,928**	**110,274**	**NA**	**NA**	**115,203**	**2,321**	**NA**	**3**	**NA**	**NA**
1970 Total	**320,182**	**24,123**	**311,381**	**NA**	**636**	**338,686**	**3,932**	**NA**	**1**	**2**	**NA**
1975 Total	**405,962**	**38,907**	**467,221**	**NA**	**70**	**506,479**	**3,158**	**NA**	**(s)**	**2**	**NA**
1980 Total	**569,274**	**29,051**	**391,163**	**NA**	**179**	**421,110**	**3,682**	**NA**	**3**	**2**	**NA**
1985 Total	**693,841**	**14,635**	**158,779**	**NA**	**231**	**174,571**	**3,044**	**NA**	**8**	**7**	**NA**
1990 Total[k]	**811,538**	**20,194**	**209,081**	**1,332**	**2,832**	**244,765**	**4,346**	**288**	**1,256**	**257**	**86**
1995 Total	**881,012**	**21,697**	**112,168**	**1,322**	**4,590**	**158,140**	**5,572**	**313**	**1,382**	**374**	**97**
2000 Total	**1,015,398**	**34,572**	**156,673**	**2,904**	**4,669**	**217,494**	**6,677**	**356**	**1,380**	**401**	**109**
2005 Total	**1,065,281**	**24,446**	**156,915**	**4,270**	**9,113**	**231,193**	**7,021**	**348**	**1,353**	**289**	**237**
2010 Total	**1,001,411**	**15,247**	**26,944**	**2,777**	**6,053**	**75,231**	**8,502**	**262**	**1,226**	**346**	**237**
2011 Total	**956,470**	**11,735**	**16,877**	**2,540**	**6,092**	**61,610**	**8,724**	**282**	**1,241**	**340**	**261**
2012 Total	**845,066**	**9,945**	**13,571**	**2,185**	**5,021**	**50,805**	**10,371**	**302**	**1,273**	**355**	**252**
2013 Total	**879,078**	**10,277**	**14,199**	**2,212**	**6,338**	**58,378**	**9,479**	**305**	**1,318**	**376**	**236**
2014 Total	**871,741**	**15,107**	**16,615**	**2,908**	**5,695**	**63,106**	**9,410**	**304**	**1,378**	**395**	**236**
2015 Total	**756,226**	**12,924**	**16,136**	**3,008**	**5,188**	**58,009**	**10,952**	**290**	**1,351**	**398**	**237**
2016 Total	**693,958**	**10,278**	**12,231**	**2,173**	**5,352**	**51,441**	**11,322**	**296**	**1,330**	**383**	**238**
2017 Total	**678,578**	**10,168**	**11,508**	**2,033**	**4,467**	**46,043**	**10,677**	**299**	**1,303**	**375**	**226**
2018 Total	**650,027**	**15,066**	**13,584**	**2,578**	**4,552**	**53,988**	**12,048**	**353**	**1,291**	**367**	**226**
2019 Total	**550,017**	**10,369**	**10,049**	**2,580**	**3,563**	**40,811**	**12,809**	**281**	**1,246**	**322**	**234**
2020 Total	**445,753**	**8,604**	**8,974**	**2,160**	**3,856**	**39,020**	**13,221**	**269**	**1,178**	**319**	**226**
2021 Total	**511,669**	**11,340**	**9,895**	**2,470**	**3,830**	**42,855**	**12,724**	**264**	**1,199**	**310**	**218**
2022 Total	**482,931**	**15,599**	**14,715**	**2,626**	**3,702**	**51,452**	**13,590**	**259**	**1,143**	**292**	**187**
2023 Total	**395,989**	**10,161**	**12,089**	**2,218**	**2,649**	**37,714**	**14,456**	**277**	**1,045**	**274**	**178**
2024 January	43,320	1,731	1,129	220	220	4,181	1,278	24	90	24	15
February	26,736	626	744	185	163	2,370	1,037	22	84	22	14
March	23,193	694	755	160	134	2,279	1,045	23	86	23	14
April	21,907	919	746	141	174	2,678	999	22	82	22	14
May	26,850	829	822	116	187	2,701	1,169	23	83	23	15
June	35,096	834	837	142	223	2,927	1,361	23	84	21	14
July	41,183	933	913	168	256	3,294	1,661	23	86	22	16
August	40,091	930	870	141	248	3,181	1,632	23	88	22	15
September	32,184	640	839	109	156	2,371	1,347	21	84	21	14
October	28,002	745	924	126	156	2,576	1,190	21	77	22	14
November	27,066	703	842	131	153	2,441	1,112	20	84	23	14
December	36,188	1,106	1,111	163	199	3,374	1,173	22	91	23	15
Total	**381,814**	**10,691**	**10,532**	**1,802**	**2,270**	**34,373**	**15,001**	**269**	**1,019**	**266**	**173**
2025 January	46,743	3,236	1,577	294	253	6,372	1,266	24	87	23	14
February	35,937	1,160	942	164	177	3,152	1,054	22	78	21	12
March	28,803	718	821	145	211	2,739	959	22	86	22	13
April	26,578	727	773	126	177	2,513	949	20	75	21	13
May	28,541	642	763	103	196	2,488	1,092	20	81	20	13
June	37,213	1,018	940	193	265	3,475	1,332	22	83	20	13
July	45,847	940	1,035	149	251	3,380	1,622	23	88	20	14
August	40,400	920	907	166	255	3,268	1,538	21	87	20	14
September	34,061	714	849	134	223	2,810	1,344	21	85	19	13
October	31,660	715	891	155	227	2,894	1,158	23	81	21	13
November	31,639	946	785	160	196	2,869	1,083	23	81	21	13
December	37,910	1,512	1,769	204	176	4,365	1,194	22	85	22	14
Total	**425,333**	**13,247**	**12,051**	**1,993**	**2,607**	**40,325**	**14,592**	**262**	**997**	**251**	**160**
2026 January	40,605	5,714	2,593	657	222	10,076	1,251	23	84	21	13
February	31,894	3,377	1,555	294	219	6,321	1,074	20	77	20	12
March	25,877	1,012	821	258	169	2,937	1,042	21	80	22	13
April	23,146	842	760	158	192	2,720	1,016	21	67	20	12
May	26,347	1,061	795	170	207	3,059	1,123	20	82	19	13
June	32,622	853	856	144	259	3,150	1,318	18	78	19	13
July	43,030	1,360	1,078	215	242	3,862	1,659	20	84	19	14
7-Month Total	**223,521**	**14,218**	**8,458**	**1,897**	**1,511**	**32,127**	**8,482**	**143**	**551**	**141**	**91**
2025 7-Month Total	**249,663**	**8,441**	**6,850**	**1,174**	**1,531**	**24,119**	**8,274**	**152**	**579**	**147**	**92**
2024 7-Month Total	**218,283**	**6,566**	**5,945**	**1,132**	**1,357**	**20,430**	**8,549**	**161**	**595**	**156**	**102**

[a] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.

[b] Fuel oil nos. 1, 2, and 4. For 1949–1979, data are for gas turbine and internal combustion plant use of petroleum. For 1980–2000, electric utility data also include small amounts of kerosene and jet fuel.

[c] Fuel oil nos. 5 and 6. For 1949–1979, data are for steam plant use of petroleum. For 1980–2000, electric utility data also include a small amount of fuel oil no. 4.

[d] Jet fuel, kerosene, other petroleum liquids, waste oil, and, beginning in 2011, propane.

[e] Petroleum coke is converted from short tons to barrels by multiplying by 5.

[f] Natural gas, plus a small amount of supplemental gaseous fuels.

[g] Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.

[h] Wood and wood-derived fuels.

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

[j] Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

[k] Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities, independent power producers, commercial plants, and industrial plants.

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

Notes: • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section. • 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/#electricity (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: Tables 7.4b and 7.4c.

Table 7.4b Consumption of Combustible Fuels for Electricity Generation and Useful Thermal Output: Electric Power Sector (Subset of Table 7.4a)

	Coal[a]	Petroleum					Natural Gas[f]	Other Fossil Gases[g]	Biomass		Other[j]
		Distillate Fuel Oil[b]	Residual Fuel Oil[c]	Other Liquids[d]	Petroleum Coke[e]	Total[e]			Wood[h]	Waste[i]	
	Thousand Short Tons	Thousand Barrels			Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu			
1950 Total	**91,871**	**5,423**	**69,998**	**NA**	**NA**	**75,421**	**629**	**NA**	**5**	**NA**	**NA**
1955 Total	**143,759**	**5,412**	**69,862**	**NA**	**NA**	**75,274**	**1,153**	**NA**	**3**	**NA**	**NA**
1960 Total	**176,685**	**3,824**	**84,371**	**NA**	**NA**	**88,195**	**1,725**	**NA**	**2**	**NA**	**NA**
1965 Total	**244,788**	**4,928**	**110,274**	**NA**	**NA**	**115,203**	**2,321**	**NA**	**3**	**NA**	**NA**
1970 Total	**320,182**	**24,123**	**311,381**	**NA**	**636**	**338,686**	**3,932**	**NA**	**1**	**2**	**NA**
1975 Total	**405,962**	**38,907**	**467,221**	**NA**	**70**	**506,479**	**3,158**	**NA**	**(s)**	**2**	**NA**
1980 Total	**569,274**	**29,051**	**391,163**	**NA**	**179**	**421,110**	**3,682**	**NA**	**3**	**2**	**NA**
1985 Total	**693,841**	**14,635**	**158,779**	**NA**	**231**	**174,571**	**3,044**	**NA**	**8**	**7**	**NA**
1990 Total[k]	**782,567**	**16,567**	**184,915**	**26**	**1,008**	**206,550**	**3,245**	**11**	**129**	**188**	**(s)**
1995 Total	**850,230**	**18,553**	**90,023**	**499**	**2,674**	**122,447**	**4,237**	**24**	**125**	**296**	**2**
2000 Total	**985,821**	**30,016**	**138,513**	**454**	**3,275**	**185,358**	**5,206**	**25**	**134**	**318**	**1**
2005 Total	**1,037,485**	**19,675**	**139,409**	**2,685**	**8,083**	**202,184**	**5,869**	**84**	**185**	**221**	**123**
2010 Total	**975,052**	**13,790**	**24,503**	**1,877**	**4,777**	**64,055**	**7,387**	**52**	**196**	**264**	**124**
2011 Total	**932,484**	**11,021**	**14,803**	**1,658**	**4,837**	**51,667**	**7,574**	**50**	**182**	**255**	**143**
2012 Total	**823,551**	**9,080**	**12,203**	**1,339**	**2,974**	**37,495**	**9,111**	**54**	**190**	**262**	**143**
2013 Total	**857,962**	**9,598**	**12,283**	**1,489**	**4,285**	**44,794**	**8,191**	**60**	**207**	**262**	**139**
2014 Total	**851,602**	**14,235**	**15,132**	**2,208**	**4,132**	**52,235**	**8,146**	**44**	**251**	**279**	**137**
2015 Total	**738,444**	**12,193**	**14,929**	**2,131**	**3,907**	**48,787**	**9,613**	**44**	**244**	**281**	**136**
2016 Total	**678,554**	**9,510**	**11,242**	**1,322**	**4,138**	**42,763**	**9,985**	**45**	**224**	**281**	**139**
2017 Total	**664,993**	**9,481**	**10,464**	**1,375**	**3,399**	**38,318**	**9,266**	**46**	**229**	**280**	**132**
2018 Total	**637,217**	**13,967**	**12,446**	**1,855**	**3,549**	**46,013**	**10,599**	**47**	**221**	**275**	**136**
2019 Total	**538,606**	**9,336**	**9,352**	**1,750**	**2,655**	**33,712**	**11,299**	**47**	**201**	**248**	**145**
2020 Total	**435,827**	**7,673**	**8,382**	**1,543**	**3,057**	**32,885**	**11,632**	**40**	**185**	**242**	**144**
2021 Total	**501,435**	**10,359**	**9,115**	**1,835**	**3,075**	**36,686**	**11,229**	**40**	**197**	**229**	**134**
2022 Total	**472,834**	**14,463**	**12,031**	**1,864**	**2,965**	**43,181**	**12,092**	**39**	**198**	**176**	**81**
2023 Total	**387,205**	**9,165**	**10,202**	**1,647**	**2,045**	**31,241**	**12,941**	**40**	**174**	**168**	**80**
2024 January	42,463	1,547	1,038	173	163	3,574	1,137	3	16	14	7
February	26,017	533	701	118	119	1,947	913	3	14	13	6
March	22,422	574	707	116	89	1,844	919	3	14	14	6
April	21,281	832	690	98	124	2,240	880	3	11	12	6
May	26,198	728	780	74	139	2,278	1,048	2	12	13	6
June	34,447	702	801	99	172	2,462	1,238	3	14	13	6
July	40,471	890	879	120	199	2,884	1,528	3	15	13	6
August	39,397	887	837	106	196	2,809	1,496	3	15	14	6
September	31,502	611	799	67	110	2,027	1,223	3	13	13	6
October	27,308	702	866	83	106	2,180	1,071	3	10	13	6
November	26,336	661	790	84	102	2,047	987	3	12	13	6
December	35,416	1,029	1,030	122	140	2,878	1,037	3	15	13	6
Total	**373,258**	**9,695**	**9,916**	**1,260**	**1,660**	**29,171**	**13,476**	**36**	**162**	**158**	**73**
2025 January	45,929	3,112	1,491	233	207	5,874	1,125	4	15	13	6
February	35,224	1,072	870	144	138	2,777	932	4	13	12	6
March	28,022	659	763	99	162	2,332	830	3	14	13	6
April	25,861	686	727	83	132	2,158	830	2	10	12	6
May	27,931	582	720	56	140	2,058	972	2	13	12	6
June	36,563	967	899	124	199	2,983	1,211	3	15	13	6
July	45,140	883	991	113	209	3,029	1,494	3	15	13	7
August	39,722	842	868	118	200	2,827	1,409	2	15	12	7
September	33,409	675	822	89	168	2,426	1,221	2	15	12	6
October	31,008	675	850	100	171	2,480	1,035	3	13	12	6
November	30,977	905	757	115	140	2,476	946	3	13	13	6
December	37,209	1,445	1,689	159	121	3,897	1,047	2	16	13	7
Total	**416,995**	**12,505**	**11,447**	**1,431**	**1,987**	**35,318**	**13,054**	**34**	**167**	**151**	**74**
2026 January	39,867	5,462	2,516	626	167	9,438	1,093	3	16	12	6
February	31,224	3,265	1,368	248	151	5,637	947	2	15	12	6
March	25,228	947	780	213	124	2,560	918	2	14	13	6
April	22,570	798	733	115	132	2,307	898	3	10	12	6
May	25,757	1,007	757	131	161	2,699	1,004	2	14	12	6
June	32,029	805	823	112	194	2,709	1,199	2	15	12	6
July	42,440	1,303	1,051	203	189	3,500	1,531	2	16	12	7
7-Month Total	**219,114**	**13,588**	**8,028**	**1,647**	**1,117**	**28,850**	**7,590**	**17**	**101**	**85**	**43**
2025 7-Month Total	**244,670**	**7,963**	**6,461**	**851**	**1,187**	**21,210**	**7,395**	**21**	**95**	**89**	**43**
2024 7-Month Total	**213,300**	**5,805**	**5,595**	**798**	**1,006**	**17,230**	**7,663**	**21**	**97**	**92**	**43**

[a] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.

[b] Fuel oil nos. 1, 2, and 4. For 1949–1979, data are for gas turbine and internal combustion plant use of petroleum. For 1980–2000, electric utility data also include small amounts of kerosene and jet fuel.

[c] Fuel oil nos. 5 and 6. For 1949–1979, data are for steam plant use of petroleum. For 1980–2000, electric utility data also include a small amount of fuel oil no. 4.

[d] Jet fuel, kerosene, other petroleum liquids, waste oil, and, beginning in 2011, propane.

[e] Petroleum coke is converted from short tons to barrels by multiplying by 5.

[f] Natural gas, plus a small amount of supplemental gaseous fuels.

[g] Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.

[h] Wood and wood-derived fuels.

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

[j] Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

[k] Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.

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

Notes: • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • 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/#electricity (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

Table 7.4c Consumption of Selected Combustible Fuels for Electricity Generation and Useful Thermal Output: Commercial and Industrial Sectors (Subset of Table 7.4a)

	Commercial Sector[a]				Industrial Sector[b]						
				Biomass					Biomass		
	Coal[c]	Petroleum[d]	Natural Gas[e]	Waste[f]	Coal[c]	Petroleum[d]	Natural Gas[e]	Other Fossil Gases[g]	Wood[h]	Waste[f]	Other[i]
	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu			
1990 Total	**1,191**	**2,056**	**46**	**28**	**27,781**	**36,159**	**1,055**	**275**	**1,125**	**41**	**86**
1995 Total	**1,419**	**1,245**	**78**	**40**	**29,363**	**34,448**	**1,258**	**290**	**1,255**	**38**	**95**
2000 Total	**1,547**	**1,615**	**85**	**47**	**28,031**	**30,520**	**1,386**	**331**	**1,244**	**35**	**108**
2005 Total	**1,922**	**1,630**	**68**	**34**	**25,875**	**27,380**	**1,084**	**264**	**1,166**	**34**	**94**
2010 Total	**1,720**	**437**	**86**	**36**	**24,638**	**10,740**	**1,029**	**210**	**1,029**	**47**	**91**
2011 Total	**1,668**	**333**	**87**	**43**	**22,319**	**9,610**	**1,063**	**232**	**1,057**	**43**	**94**
2012 Total	**1,450**	**457**	**111**	**45**	**20,065**	**12,853**	**1,149**	**249**	**1,082**	**47**	**81**
2013 Total	**1,356**	**887**	**118**	**47**	**19,761**	**12,697**	**1,170**	**246**	**1,109**	**67**	**69**
2014 Total	**1,063**	**758**	**119**	**47**	**19,076**	**10,112**	**1,145**	**260**	**1,122**	**70**	**72**
2015 Total	**798**	**622**	**116**	**47**	**16,984**	**8,600**	**1,222**	**246**	**1,103**	**70**	**73**
2016 Total	**683**	**404**	**127**	**48**	**14,720**	**8,273**	**1,209**	**251**	**1,100**	**54**	**70**
2017 Total	**610**	**516**	**154**	**48**	**12,975**	**7,209**	**1,257**	**253**	**1,069**	**47**	**65**
2018 Total	**577**	**681**	**135**	**47**	**12,233**	**7,294**	**1,314**	**306**	**1,065**	**45**	**62**
2019 Total	**519**	**707**	**135**	**39**	**10,892**	**6,393**	**1,374**	**234**	**1,040**	**35**	**61**
2020 Total	**473**	**527**	**131**	**38**	**9,453**	**5,609**	**1,458**	**229**	**989**	**39**	**55**
2021 Total	**534**	**614**	**117**	**39**	**9,700**	**5,555**	**1,379**	**224**	**999**	**41**	**55**
2022 Total	**535**	**830**	**123**	**75**	**9,563**	**7,441**	**1,375**	**220**	**941**	**40**	**32**
2023 Total	**400**	**582**	**119**	**72**	**8,384**	**5,891**	**1,396**	**236**	**867**	**33**	**26**
2024 January	63	124	12	6	794	482	129	21	73	4	2
February	47	63	11	6	671	360	113	20	70	4	2
March	37	81	10	6	733	354	115	20	72	3	2
April	31	58	9	6	595	380	110	19	71	3	3
May	19	83	9	6	632	340	112	21	70	4	2
June	26	116	10	6	622	350	112	20	70	2	2
July	28	14	12	6	684	395	121	20	71	2	3
August	31	14	12	6	664	358	123	20	72	2	2
September	31	11	10	6	652	332	114	18	71	2	2
October	31	14	10	6	663	382	109	18	67	3	2
November	37	22	10	6	692	372	114	18	72	3	2
December	41	49	11	6	731	447	124	19	76	3	2
Total	**422**	**650**	**128**	**72**	**8,134**	**4,553**	**1,397**	**233**	**855**	**36**	**28**
2025 January	49	NM	12	6	765	422	130	20	72	3	2
February	42	NM	11	5	671	332	111	18	64	3	1
March	38	26	10	6	743	382	118	20	72	4	2
April	32	18	9	6	685	337	110	18	65	3	2
May	30	41	9	5	581	390	111	18	68	3	2
June	26	24	10	5	624	468	110	19	68	2	2
July	34	20	11	6	673	331	116	20	72	2	2
August	32	41	11	6	646	400	118	18	72	2	2
September	32	16	10	6	620	367	113	19	69	2	2
October	32	16	10	6	621	397	113	20	68	3	2
November	33	20	21	6	629	373	117	20	67	3	2
December	33	NM	23	6	668	412	124	19	69	3	2
Total	**413**	**397**	**149**	**67**	**7,926**	**4,609**	**1,389**	**227**	**826**	**34**	**19**
2026 January	43	NM	33	5	695	NM	126	20	68	3	2
February	37	NM	19	5	633	601	108	18	61	3	2
March	23	49	11	6	625	329	113	19	65	3	2
April	27	23	10	5	549	391	109	18	57	3	1
May	29	NM	9	6	561	342	109	18	67	2	2
June	26	NM	10	6	567	424	109	16	63	2	2
July	33	26	11	6	557	335	116	17	68	2	1
7-Month Total	**219**	**372**	**103**	**38**	**4,188**	**2,905**	**789**	**126**	**449**	**18**	**11**
2025 7-Month Total	**251**	**248**	**73**	**39**	**4,741**	**2,660**	**806**	**131**	**482**	**20**	**11**
2024 7-Month Total	**251**	**539**	**74**	**42**	**4,732**	**2,662**	**812**	**140**	**496**	**22**	**17**

[a] Commercial combined-heat-and-power (CHP) and commercial electricity-only plants.
[b] Industrial combined-heat-and-power (CHP) and industrial electricity-only plants.
[c] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.
[d] Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, waste oil, and, beginning in 2011, propane.
[e] Natural gas, plus a small amount of supplemental gaseous fuels.
[f] Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).
[g] Blast furnace gas, and other manufactured and waste gases derived from fossil fuels. Through 2010, also includes propane gas.
[h] Wood and wood-derived fuels.
[i] Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

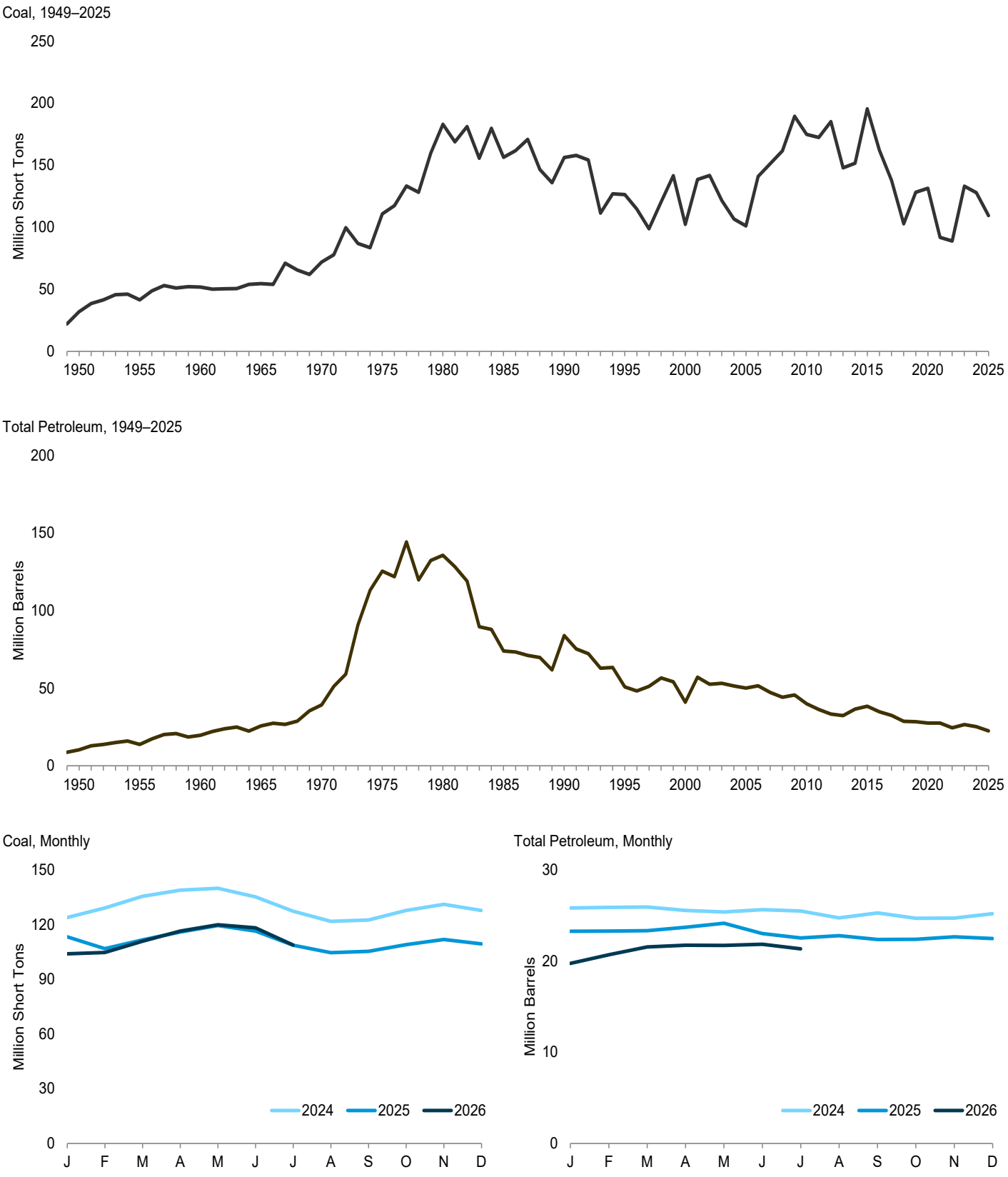
NM=Not meaningful.

Notes: • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section. • See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • 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/#electricity (Excel and CSV files) for all available annual and monthly data beginning in 1989.

Sources: • **1989–1997:** U.S. Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • **1998–2000:** EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility." • **2001–2003:** EIA, Form EIA-906, "Power Plant Report." • **2004–2007:** EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report." • **2008 forward:** EIA, Form EIA-923, "Power Plant Operations Report."

Figure 7.5 Stocks of Coal and Petroleum: Electric Power Sector



Note: Data are for utility-sale facilities.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#electricity.
Source: Table 7.5.

Table 7.5 Stocks of Coal and Petroleum: Electric Power Sector

	Coal[a]	Petroleum				
		Distillate Fuel Oil[b]	Residual Fuel Oil[c]	Other Liquids[d]	Petroleum Coke[e]	Total[e,f]
	Thousand Short Tons	Thousand Barrels			Thousand Short Tons	Thousand Barrels
1950 Year	**31,842**	**NA**	**NA**	**NA**	**NA**	**10,201**
1955 Year	**41,391**	**NA**	**NA**	**NA**	**NA**	**13,671**
1960 Year	**51,735**	**NA**	**NA**	**NA**	**NA**	**19,572**
1965 Year	**54,525**	**NA**	**NA**	**NA**	**NA**	**25,647**
1970 Year	**71,908**	**NA**	**NA**	**NA**	**239**	**39,151**
1975 Year	**110,724**	**16,432**	**108,825**	**NA**	**31**	**125,413**
1980 Year	**183,010**	**30,023**	**105,351**	**NA**	**52**	**135,635**
1985 Year	**156,376**	**16,386**	**57,304**	**NA**	**49**	**73,933**
1990 Year	**156,166**	**16,471**	**67,030**	**NA**	**94**	**83,970**
1995 Year	**126,304**	**15,392**	**35,102**	**NA**	**65**	**50,821**
2000 Year[g]	**102,296**	**15,127**	**24,748**	**NA**	**211**	**40,932**
2005 Year	**101,137**	**18,778**	**27,624**	**NA**	**530**	**50,062**
2010 Year	**174,917**	**16,758**	**16,629**	**1,454**	**1,019**	**39,936**
2011 Year	**172,387**	**16,649**	**15,491**	**1,603**	**508**	**36,282**
2012 Year	**185,116**	**16,433**	**12,999**	**1,430**	**495**	**33,336**
2013 Year	**147,884**	**16,068**	**12,926**	**1,393**	**390**	**32,336**
2014 Year	**151,548**	**18,309**	**12,764**	**1,249**	**827**	**36,459**
2015 Year	**195,548**	**17,955**	**12,566**	**1,173**	**1,340**	**38,396**
2016 Year	**162,009**	**17,855**	**11,789**	**949**	**845**	**34,818**
2017 Year	**137,687**	**16,342**	**10,930**	**816**	**864**	**32,407**
2018 Year	**102,793**	**16,436**	**8,785**	**756**	**539**	**28,674**
2019 Year	**128,102**	**16,733**	**8,549**	**678**	**471**	**28,317**
2020 Year	**131,431**	**17,116**	**8,269**	**678**	**298**	**27,552**
2021 Year	**91,884**	**18,220**	**7,038**	**744**	**302**	**27,513**
2022 Year	**88,861**	**16,521**	**5,777**	**513**	**318**	**24,404**
2023 Year	**133,028**	**17,628**	**6,058**	**717**	**427**	**26,539**
2024 January	123,854	17,609	5,929	737	312	25,834
February	129,170	17,564	6,065	725	308	25,897
March	135,537	17,431	6,118	727	333	25,941
April	138,839	17,099	6,191	721	309	25,554
May	139,893	17,003	6,111	720	311	25,389
June	135,229	17,300	5,974	700	332	25,632
July	127,378	17,040	5,730	673	410	25,494
August	121,756	16,520	5,573	650	399	24,737
September	122,555	16,813	5,465	650	470	25,275
October	127,747	16,490	5,435	642	428	24,705
November	131,091	16,633	5,419	645	404	24,719
December	**127,826**	**17,044**	**5,291**	**678**	**438**	**25,204**
2025 January	113,290	16,040	4,714	532	395	23,261
February	106,803	16,216	4,535	515	405	23,291
March	111,657	16,152	4,833	508	368	23,332
April	115,919	16,455	4,911	566	358	23,721
May	119,487	16,637	5,007	561	390	24,157
June	116,421	15,908	4,852	540	342	23,012
July	108,731	15,688	4,688	524	326	22,528
August	104,604	15,880	4,744	486	334	22,779
September	105,398	15,862	4,620	488	278	22,361
October	109,066	15,866	4,616	482	287	22,396
November	111,847	15,891	4,750	475	311	22,669
December	**109,452**	**16,078**	**4,392**	**463**	**307**	**22,471**
2026 January	104,018	14,458	3,535	313	287	19,740
February	104,721	15,086	3,807	363	289	20,700
March	110,929	15,275	4,183	353	346	21,543
April	116,494	15,252	4,339	351	360	21,740
May	119,897	15,062	4,443	348	371	21,710
June	118,252	15,252	4,542	351	342	21,853
July	108,805	15,153	4,198	332	331	21,338

[a] Anthracite, bituminous coal, subbituminous coal, and lignite. Through 2000, also includes waste coal.

[b] Fuel oil nos. 1, 2 and 4. For 1973–1979, data are for gas turbine and internal combustion plant stocks of petroleum. For 1980–2000, electric utility data also include small amounts of kerosene and jet fuel.

[c] Fuel oil nos. 5 and 6. For 1973–1979, data are for steam plant stocks of petroleum. For 1980–2000, electric utility data also include a small amount of fuel oil no. 4.

[d] Jet fuel and kerosene. Through 2003, data also include a small amount of waste oil.

[e] Petroleum coke is converted from short tons to barrels by multiplying by 5.

[f] Distillate fuel oil and residual fuel oil. Beginning in 1970, also includes petroleum coke. Beginning in 2002, also includes other liquids.

[g] Through 1998, data are for electric utilities only. Beginning in 1999, data are for electric utilities and independent power producers.

NA=Not available.

Notes: • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Stocks are at end of period. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

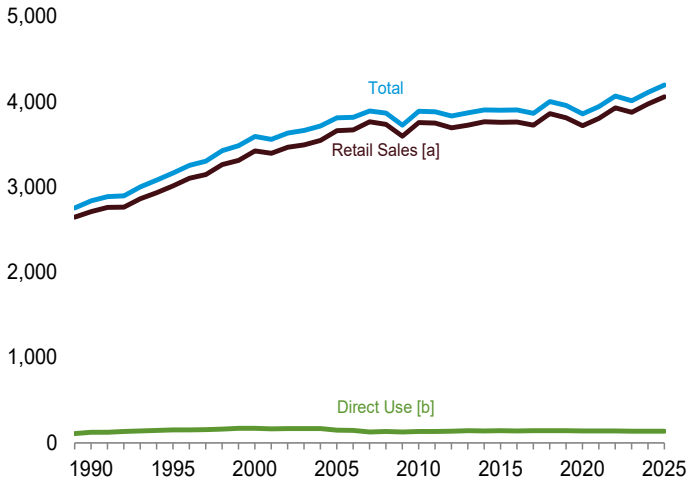
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: • **1949–September 1977:** Federal Power Commission, Form FPC-4, "Monthly Power Plant Report." • **October 1977–1981:** Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report." • **1982–1988:** U.S. Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report." • **1989–1997:** EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-867, "Annual Nonutility Power Producer Report." • **1998–2000:** EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-860B, "Annual Electric Generator Report—Nonutility." • **2001–2003:** EIA, Form EIA-906, "Power Plant Report." • **2004–2007:** EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report." • **2008 forward:** EIA, Form EIA-923, "Power Plant Operations Report."

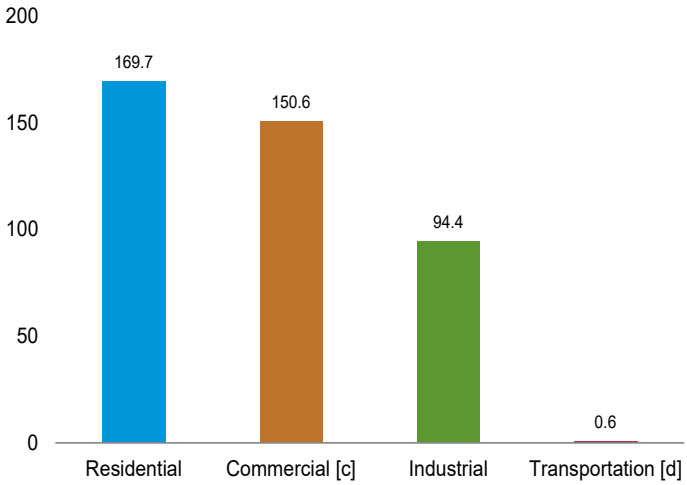
Figure 7.6 Electricity End Use

(Billion Kilowatthours)

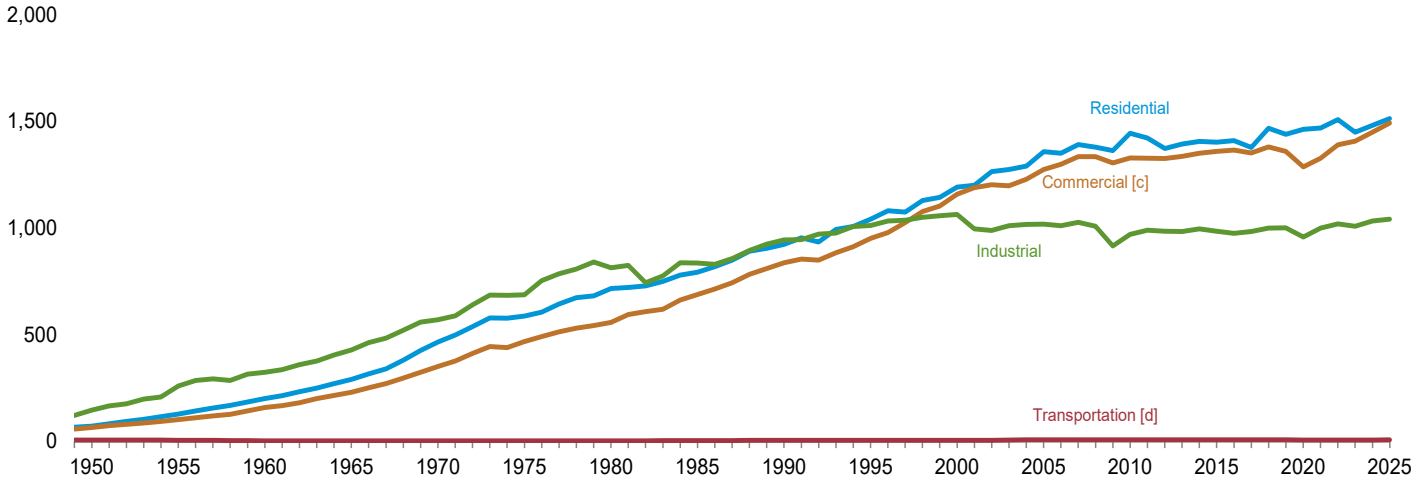
Electricity End Use Overview,1989–2025



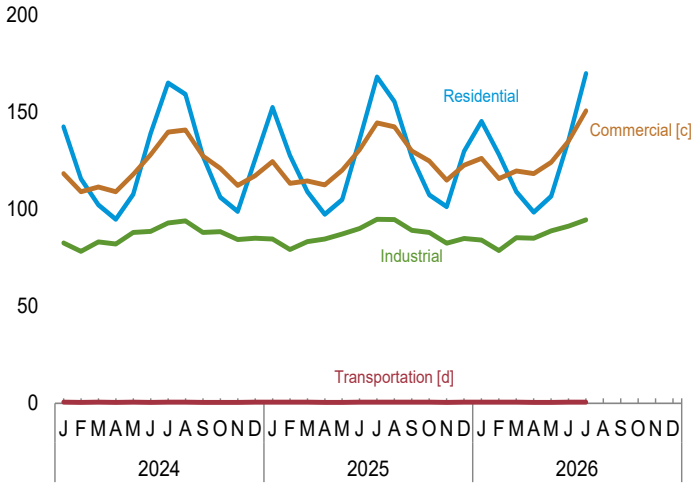
Sales to Ultimate Customers [a] by Sector, July 2026



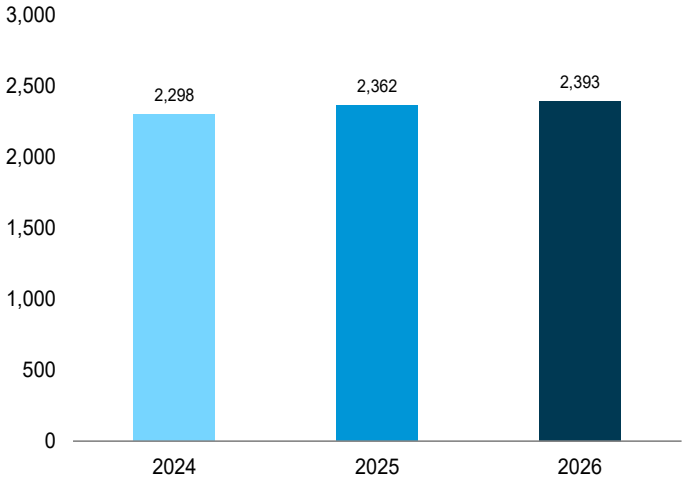
Sales to Ultimate Customers [a] by Sector, 1949–2025



Sales to Ultimate Customers [a] by Sector, Monthly



Sales to Ultimate Customers [a] Total, January–July



[a] Electricity sales to ultimate customers reported by utilities and other energy service providers.
[b] See "Direct Use" in Glossary.
[c] Commercial sector, including public street and highway lighting, inter-departmental sales, and other sales to public authorities.
[d] Transportation sector, including sales to railroads and railways.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#electricity.
Source: Table 7.6.

Table 7.6 Electricity End Use and Electric Vehicle Use

(Million Kilowatthours)

	Sales to Ultimate Customers[a]							
	Residential[b]	Commercial[b,c]	Industrial[b,d]	Transportation[e]	Total Sales[f]	Direct Use[g]	Total End Use[h]	*Electric Vehicle Use*[b,i,j]
1950 Total	**72,200**	E 65,971	**146,479**	E 6,793	**291,443**	**NA**	**291,443**	***NA***
1955 Total	**128,401**	E 102,547	**259,974**	E 5,826	**496,748**	**NA**	**496,748**	***NA***
1960 Total	**201,463**	E 159,144	**324,402**	E 3,066	**688,075**	**NA**	**688,075**	***NA***
1965 Total	**291,013**	E 231,126	**428,727**	E 2,923	**953,789**	**NA**	**953,789**	***NA***
1970 Total	**466,291**	E 352,041	**570,854**	E 3,115	**1,392,300**	**NA**	**1,392,300**	***NA***
1975 Total	**588,140**	E 468,296	**687,680**	E 2,974	**1,747,091**	**NA**	**1,747,091**	***NA***
1980 Total	**717,495**	**558,643**	**815,067**	**3,244**	**2,094,449**	**NA**	**2,094,449**	***NA***
1985 Total	**793,934**	**689,121**	**836,772**	**4,147**	**2,323,974**	**NA**	**2,323,974**	***NA***
1990 Total	**924,019**	**838,263**	**945,522**	**4,751**	**2,712,555**	**124,529**	**2,837,084**	***NA***
1995 Total	**1,042,501**	**953,117**	**1,012,693**	**4,975**	**3,013,287**	**150,677**	**3,163,963**	***NA***
2000 Total	**1,192,446**	**1,159,347**	**1,064,239**	**5,382**	**3,421,414**	**170,943**	**3,592,357**	***NA***
2005 Total	**1,359,227**	**1,275,079**	**1,019,156**	**7,506**	**3,660,969**	**150,016**	**3,810,984**	***NA***
2010 Total	**1,445,708**	**1,330,199**	**971,221**	**7,712**	**3,754,841**	**131,910**	**3,886,752**	***NA***
2011 Total	**1,422,801**	**1,328,057**	**991,316**	**7,672**	**3,749,846**	**132,754**	**3,882,600**	***NA***
2012 Total	**1,374,515**	**1,327,101**	**985,714**	**7,320**	**3,694,650**	**137,657**	**3,832,306**	***NA***
2013 Total	**1,394,812**	**1,337,079**	**985,352**	**7,625**	**3,724,868**	**143,462**	**3,868,330**	***NA***
2014 Total	**1,407,208**	**1,352,158**	**997,576**	**7,758**	**3,764,700**	**138,574**	**3,903,274**	***NA***
2015 Total	**1,404,096**	**1,360,752**	**986,508**	**7,637**	**3,758,992**	**141,168**	**3,900,160**	***NA***
2016 Total	**1,411,058**	**1,367,191**	**976,715**	**7,497**	**3,762,462**	**139,837**	**3,902,298**	***NA***
2017 Total	**1,378,648**	**1,352,888**	**984,298**	**7,523**	**3,723,356**	**140,959**	**3,864,315**	***NA***
2018 Total	**1,469,093**	**1,381,755**	**1,000,673**	**7,665**	**3,859,185**	**143,904**	**4,003,089**	E ***1,582***
2019 Total	**1,440,289**	**1,360,877**	**1,002,353**	**7,632**	**3,811,150**	**143,270**	**3,954,421**	E ***2,060***
2020 Total	**1,464,605**	**1,287,440**	**959,082**	**6,548**	**3,717,674**	**138,703**	**3,856,377**	E ***2,900***
2021 Total	**1,470,487**	**1,328,439**	**1,000,613**	**6,334**	**3,805,874**	**138,915**	**3,944,789**	E ***3,519***
2022 Total	**1,509,233**	**1,390,873**	**1,020,464**	**6,599**	**3,927,169**	**139,726**	**4,066,895**	E ***5,252***
2023 Total	**1,450,025**	**1,408,109**	**1,009,256**	**6,864**	**3,874,253**	**136,918**	**4,011,172**	E ***13,212***
2024 January	142,354	118,234	82,517	612	343,717	E 12,266	355,982	E *1,354*
February	115,477	108,967	78,277	538	303,258	E 11,002	314,260	E *1,246*
March	102,203	111,382	83,100	593	297,278	E 11,090	308,369	E *1,389*
April	94,674	108,972	82,078	532	286,257	E 10,760	297,017	E *1,370*
May	107,605	117,864	87,901	592	313,961	E 11,077	325,038	E *1,434*
June	138,920	127,949	88,446	566	355,882	E 11,042	366,924	E *1,434*
July	164,833	139,551	92,848	641	397,873	E 11,900	409,773	E *1,532*
August	159,098	140,632	93,848	621	394,199	E 12,227	406,427	E *1,547*
September	127,340	127,248	87,920	563	343,071	E 11,025	354,096	E *1,470*
October	106,083	120,899	88,354	566	315,902	E 10,264	326,166	E *1,607*
November	98,782	112,091	84,369	554	295,796	E 10,715	306,511	E *1,599*
December	125,504	117,152	84,927	605	328,188	E 11,672	339,860	E *1,818*
Total	**1,482,874**	**1,450,941**	**1,034,584**	**6,983**	**3,975,382**	**135,041**	**4,110,422**	E ***17,800***
2025 January	152,329	124,447	84,519	686	361,981	E 12,282	374,263	E *1,758*
February	127,517	113,204	79,229	610	320,561	E 10,758	331,319	E *1,622*
March	108,969	114,427	83,210	635	307,241	E 11,398	318,639	E *1,770*
April	97,306	112,436	84,536	569	294,846	E 10,557	305,403	E *1,802*
May	104,856	119,943	87,134	556	312,489	E 10,822	323,311	E *1,937*
June	135,822	130,589	90,022	667	357,100	E 11,264	368,365	E *2,004*
July	168,011	144,363	94,651	605	407,630	E 11,964	419,594	E *2,182*
August	155,204	142,263	94,540	625	392,631	E 12,040	404,671	E *2,173*
September	126,778	129,791	89,041	592	346,202	E 11,479	357,681	E *2,045*
October	107,313	124,680	88,004	590	320,588	E 11,357	331,945	E *2,086*
November	101,222	114,822	82,422	555	299,022	E 11,358	310,379	E *1,967*
December	129,667	122,522	84,907	621	337,716	E 11,799	349,514	E *2,187*
Total	**1,514,993**	**1,493,486**	**1,042,217**	**7,311**	**4,058,007**	E **137,077**	**4,195,085**	E ***23,533***
2026 January	145,115	126,120	84,043	663	355,940	E 11,831	367,771	E *2,246*
February	128,055	115,691	78,653	635	323,035	E 10,384	333,419	E *2,076*
March	108,868	119,622	85,228	591	314,308	E 11,077	325,385	E *2,294*
April	98,322	118,237	85,004	564	302,127	E 10,544	312,670	E *2,219*
May	106,659	124,044	88,821	572	320,096	E 10,815	330,911	E *2,365*
June	135,594	134,994	91,225	588	362,401	E 10,710	373,111	E *2,469*
July	169,666	150,579	94,403	629	415,276	E 11,894	427,171	E *2,481*
7-Month Total	**892,279**	**889,286**	**607,378**	**4,242**	**2,393,184**	E **77,255**	**2,470,438**	E ***16,149***
2025 7-Month Total	**894,810**	**859,409**	**603,302**	**4,327**	**2,361,849**	E **79,045**	**2,440,894**	E ***13,075***
2024 7-Month Total	**866,066**	**832,919**	**595,167**	**4,074**	**2,298,226**	E **79,137**	**2,377,363**	E ***9,760***

[a] Electricity sales to ultimate customers based on classes of service reported by electric utilities and, beginning in 1996, other energy service providers.

[b] Electricity sales to the residential, commercial, and industrial sectors, based on class of service, including sales of electricity to operate and move electric vehicles. See Note 4, "Estimates of Electric Vehicle Use," at end of section.

[c] Commercial sector, including public street and highway lighting, interdepartmental sales, and other sales to public authorities.

[d] Industrial sector. Through 2002, excludes agriculture and irrigation; beginning in 2003, includes agriculture and irrigation.

[e] Sales to public railroads and railway systems only. Excludes the estimated amount of electricity used to operate and move electric vehicles.

[f] The sum of "Residential," "Commercial," "Industrial," and "Transportation."

[g] Use of electricity that is 1) self-generated, 2) produced by either the same entity that consumes the power or an affiliate, and 3) used in direct support of a service or industrial process located within the same facility or group of facilities that house the generating equipment. Direct use is exclusive of station use.

[h] The sum of "Total Sales to Ultimate Customers" and "Direct Use."

[i] Electricity used to operate and move on-road light-duty electric vehicles (less than or equal to 8,500 pounds). Excludes motor gasoline consumption by plug-in hybrid electric vehicles. Electric vehicle use is estimated independently and should not be added to the sales or total end use columns as it will result in double counting. See Note 4, "Estimates of Electric Vehicle Use," at end of section.

[j] Beginning in 2023, the estimates are not strictly comparable with earlier years due to a change in the estimation methodology for vehicle miles traveled. For details see Table 1.9 footnote f.

E=Estimate. NA=Not available.

Notes: • See Note 1, "Coverage of Electricity Statistics," at end of section. • See Note 4, "Estimates of Electric Vehicle Use," at end of section. • 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/#electricity (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

Table 7.7a Electric Net Summer Capacity: Total (All Sectors)

(Sum of Tables 7.7b, 7.7c, and 7.7d; Million Kilowatts)

	Fossil Fuels				Nuclear Electric Power	Hydroelectric Pumped Storage	Renewable Energy							Battery Storage	Total[i]
							Conventional Hydroelectric Power[e]	Biomass		Geothermal	Solar[h]	Wind	Total		
	Coal[a]	Petroleum[b]	Natural Gas[c]	Total[d]				Wood[f]	Waste[g]						
1950 Year	NA	NA	NA	50.0	0.0	(e)	19.2	(s)	(j)	NA	NA	NA	19.2	NA	69.2
1955 Year	NA	NA	NA	86.8	.0	(e)	27.4	(s)	(j)	NA	NA	NA	27.4	NA	114.2
1960 Year	NA	NA	NA	130.8	.4	(e)	35.8	.1	(j)	(s)	NA	NA	35.9	NA	167.1
1965 Year	NA	NA	NA	182.9	.8	(e)	51.0	.1	(j)	(s)	NA	NA	51.1	NA	234.8
1970 Year	NA	NA	NA	265.4	7.0	(e)	63.8	.1	(j)	.1	NA	NA	64.0	NA	336.4
1975 Year	NA	NA	NA	375.1	37.3	(e)	78.4	.1	(j)	.5	NA	NA	79.0	NA	491.3
1980 Year	NA	NA	NA	444.1	51.8	(e)	81.7	.1	(j)	.9	NA	NA	82.7	NA	578.6
1985 Year	NA	NA	NA	485.0	79.4	(e)	88.9	.2	.2	1.6	(k)	(s)	90.8	NA	655.2
1990 Year[l]	307.4	77.9	140.8	527.8	99.6	19.5	73.9	5.5	2.5	2.7	.3	1.8	86.8	NA	734.1
1995 Year	311.4	66.6	174.5	554.2	99.5	21.4	78.6	6.8	3.5	3.0	.3	1.7	93.9	NA	769.5
2000 Year	315.1	61.8	219.6	598.9	97.9	19.5	79.4	6.1	3.9	2.8	.4	2.4	94.9	NA	811.7
2005 Year	313.4	58.5	383.1	757.1	100.0	21.3	77.5	6.2	3.6	2.3	.4	8.7	98.7	NA	978.0
2010 Year	317.3	55.6	405.1	780.3	101.2	22.2	78.8	7.0	4.4	2.4	.9	39.1	132.6	(s)	1,039.1
2011 Year	317.6	51.5	415.2	786.2	101.4	22.3	78.7	7.1	4.5	2.4	1.5	45.7	139.9	.1	1,051.3
2012 Year	309.7	47.2	422.4	781.2	101.9	22.4	78.7	7.5	4.8	2.6	3.2	59.1	155.9	.1	1,063.0
2013 Year	303.3	43.5	425.4	774.3	99.2	22.4	79.2	8.4	5.0	2.6	6.6	60.0	161.8	.1	1,060.1
2014 Year	299.1	41.1	432.2	774.3	98.6	22.5	79.7	8.4	5.2	2.5	10.3	64.2	170.3	.2	1,068.4
2015 Year	279.7	36.8	439.4	758.5	98.7	22.6	79.7	9.0	5.1	2.5	13.7	72.6	182.5	.3	1,064.1
2016 Year	266.6	34.4	446.8	750.3	99.6	22.8	79.9	8.9	5.1	2.5	22.0	81.3	199.7	.6	1,074.3
2017 Year	256.5	33.3	456.0	748.2	99.6	22.8	79.8	8.8	5.1	2.5	27.0	87.6	210.8	.7	1,084.4
2018 Year	242.8	32.2	470.2	747.8	99.4	22.8	79.9	8.7	5.0	2.4	31.9	94.4	222.3	.9	1,094.7
2019 Year	228.7	31.4	476.6	739.1	98.1	22.8	79.8	8.4	4.7	2.6	37.5	103.6	236.5	1.0	1,099.1
2020 Year	215.6	27.6	485.8	731.2	96.5	23.0	79.9	8.3	4.6	2.6	48.1	118.4	261.9	1.5	1,115.7
2021 Year	209.8	28.2	491.9	731.8	95.5	23.0	79.9	7.9	4.5	2.6	61.6	132.8	289.2	4.7	1,145.9
2022 Year	189.3	30.8	502.4	724.2	94.7	23.0	80.1	7.8	4.3	2.6	72.9	141.4	309.1	9.0	1,161.4
2023 Year	178.4	29.4	507.5	717.3	95.7	23.1	80.0	7.7	4.1	2.7	92.0	147.4	334.0	16.0	1,187.6
2024 January	177.5	28.8	507.9	715.9	95.7	23.1	79.9	7.5	4.1	2.7	95.1	147.8	337.1	16.3	1,189.6
February	177.5	28.8	507.9	715.9	95.7	23.1	79.9	7.5	4.1	2.7	95.7	148.0	337.9	16.3	1,190.4
March	177.3	28.8	507.2	715.0	95.7	23.2	79.9	7.5	4.1	2.7	98.6	148.2	341.0	17.4	1,193.8
April	176.7	28.8	506.7	713.9	96.8	23.2	79.9	7.5	4.1	2.7	100.1	149.3	343.5	18.0	1,196.8
May	176.2	28.8	506.9	713.5	96.8	23.2	79.9	7.5	4.1	2.7	102.6	149.4	346.1	19.2	1,200.3
June	176.0	28.7	505.5	711.8	96.8	23.2	79.9	7.5	4.1	2.7	105.3	149.4	348.8	20.4	1,202.5
July	176.0	28.7	506.3	712.7	96.8	23.2	79.9	7.5	4.0	2.7	106.3	150.1	350.5	21.2	1,205.7
August	176.0	28.7	506.3	712.6	96.8	23.2	79.9	7.5	4.0	2.7	107.5	150.5	352.0	22.4	1,208.5
September	175.8	28.7	506.3	712.4	96.8	23.2	79.9	7.5	4.0	2.7	110.0	150.6	354.7	23.2	1,211.7
October	174.6	28.7	506.1	711.0	96.8	23.2	79.9	7.4	4.0	2.7	112.8	150.6	357.4	24.0	1,213.9
November	174.6	28.7	506.2	711.1	96.8	23.2	79.9	7.4	4.0	2.7	117.8	150.6	362.4	24.8	1,219.8
December	**174.2**	**28.6**	**506.4**	**710.9**	**96.8**	**23.2**	**79.9**	**7.4**	**4.0**	**2.7**	**123.5**	**152.1**	**369.6**	**27.0**	**1,228.8**
2025 January	172.9	28.2	507.4	710.3	96.8	23.2	79.9	7.4	4.0	2.7	126.8	153.5	374.3	27.6	1,233.6
February	172.5	28.2	507.5	709.9	96.8	23.2	79.9	7.4	4.0	2.7	128.0	153.9	375.8	28.2	1,235.3
March	172.2	28.2	507.3	709.4	96.8	23.2	79.9	7.4	4.0	2.7	130.6	153.9	378.4	29.2	1,238.5
April	172.2	28.2	507.5	709.5	96.8	23.2	79.9	7.4	4.0	2.7	132.6	154.1	380.7	30.5	1,242.2
May	172.2	28.1	508.0	709.9	96.9	23.2	79.9	7.4	4.0	2.7	134.0	154.3	382.3	32.2	1,246.0
June	172.2	28.1	508.6	710.5	96.9	23.2	79.9	7.4	4.0	2.7	136.5	154.9	385.3	33.8	1,251.1
July	171.8	28.1	509.0	710.5	96.9	23.2	79.9	7.3	4.0	2.7	138.0	155.1	386.9	35.5	1,254.4
August	171.8	28.1	509.6	711.2	96.9	23.2	79.9	7.3	4.0	2.7	140.5	155.3	389.6	36.6	1,258.9
September	171.8	28.1	509.6	711.2	96.9	23.2	79.9	7.3	4.0	2.7	142.4	155.5	391.8	37.5	1,262.1
October	170.9	28.1	510.2	710.9	96.9	23.2	79.9	7.3	4.0	2.7	144.1	155.9	393.8	39.2	1,265.5
November	170.0	28.1	510.4	710.2	96.9	23.2	79.9	7.3	4.0	2.7	146.4	156.3	396.6	40.6	1,268.9
December	**169.8**	**28.1**	**512.1**	**711.6**	**96.9**	**23.2**	**79.9**	**7.3**	**4.0**	**2.7**	**151.2**	**158.3**	**403.3**	**42.8**	**1,279.2**
2026 January	170.0	28.0	511.6	711.2	96.9	23.2	79.9	7.2	4.0	2.7	153.9	159.5	407.3	43.4	1,283.4
February	171.8	27.8	512.3	713.7	96.9	23.2	80.0	7.2	4.0	2.7	155.5	159.5	408.8	44.6	1,288.7
March	168.9	27.9	513.4	712.0	96.9	23.1	79.9	7.2	4.0	2.7	156.7	158.8	409.3	46.5	1,289.2
April	168.7	28.0	515.2	713.7	96.9	23.1	80.0	7.2	4.0	2.7	160.2	160.1	414.1	48.2	1,297.4
May	169.9	28.0	514.3	714.0	96.9	23.1	80.0	7.1	4.0	2.7	162.0	164.6	420.3	48.8	1,304.6
June	168.2	27.6	516.1	713.6	96.9	23.0	80.0	7.1	4.0	2.7	164.6	165.4	423.7	51.7	1,310.4
July	167.8	27.6	516.5	713.6	96.9	23.0	80.0	7.1	4.0	2.7	166.7	165.5	426.0	53.3	1,314.3

[a] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.

[b] Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, waste oil, and, beginning in 2011, propane.

[c] Natural gas, plus a small amount of supplemental gaseous fuels.

[d] Includes other fossil gases (blast furnace gas, other manufactured and waste gases derived from fossil fuels, and, through 2010, propane gas), which are not separately shown.

[e] Through 1988, hydroelectric pumped storage is included in "Conventional Hydroelectric Power."

[f] Wood and wood-derived fuels.

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

[h] Electric net summer capacity from solar thermal and photovoltaic (PV) energy at utility-scale facilities. Does not include small-scale solar photovoltaic capacity.

[i] Includes chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, flywheels, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels), which are not separately shown.

[j] Through 1984, waste is included in "Wood."

[k] Through 1988, solar is included in "Wind."

[l] Through 1988, all data are for electric utilities only. Beginning in 1989, data are for electric utilities, independent power producers, commercial plants, and industrial plants.

NA=Not available. (s)=Less than 0.05 million kilowatts.

Notes: • Data are at end of period. • For plants that use multiple sources of energy, capacity is assigned to the energy source reported as the predominant one. • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section. • See "Net summer capacity" 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/#electricity (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: Tables 7.7b–7.7d.

Table 7.7b Electric Net Summer Capacity: Electric Power Sector

(Subset of Table 7.7a; Million Kilowatts)

	Fossil Fuels						Renewable Energy								
								Biomass							
	Coal[a]	Petroleum[b]	Natural Gas[c]	Total[d]	Nuclear Electric Power	Hydroelectric Pumped Storage	Conventional Hydroelectric Power[e]	Wood[f]	Waste[g]	Geothermal	Solar[h]	Wind	Total	Battery Storage	Total[i]
1950 Year	**NA**	**NA**	**NA**	**50.0**	**0.0**	**(e)**	**19.2**	**(s)**	**(j)**	**NA**	**NA**	**NA**	**19.2**	**NA**	**69.2**
1955 Year	**NA**	**NA**	**NA**	**86.8**	**.0**	**(e)**	**27.4**	**(s)**	**(j)**	**NA**	**NA**	**NA**	**27.4**	**NA**	**114.2**
1960 Year	**NA**	**NA**	**NA**	**130.8**	**.4**	**(e)**	**35.8**	**.1**	**(j)**	**(s)**	**NA**	**NA**	**35.9**	**NA**	**167.1**
1965 Year	**NA**	**NA**	**NA**	**182.9**	**.8**	**(e)**	**51.0**	**.1**	**(j)**	**(s)**	**NA**	**NA**	**51.1**	**NA**	**234.8**
1970 Year	**NA**	**NA**	**NA**	**265.4**	**7.0**	**(e)**	**63.8**	**.1**	**(j)**	**.1**	**NA**	**NA**	**64.0**	**NA**	**336.4**
1975 Year	**NA**	**NA**	**NA**	**375.1**	**37.3**	**(e)**	**78.4**	**.1**	**(j)**	**.5**	**NA**	**NA**	**79.0**	**NA**	**491.3**
1980 Year	**NA**	**NA**	**NA**	**444.1**	**51.8**	**(e)**	**81.7**	**.1**	**(j)**	**.9**	**NA**	**NA**	**82.7**	**NA**	**578.6**
1985 Year	**NA**	**NA**	**NA**	**485.0**	**79.4**	**(e)**	**88.9**	**.2**	**.2**	**1.6**	**(k)**	**(s)**	**90.8**	**NA**	**655.2**
1990 Year[l]	**302.3**	**76.8**	**129.9**	**509.3**	**99.6**	**19.5**	**73.3**	**1.2**	**2.1**	**2.7**	**.3**	**1.8**	**81.4**	**NA**	**709.9**
1995 Year	**306.0**	**65.4**	**161.9**	**533.7**	**99.5**	**21.4**	**77.4**	**1.8**	**3.0**	**3.0**	**.3**	**1.7**	**87.3**	**NA**	**741.8**
2000 Year	**310.2**	**60.7**	**204.7**	**575.9**	**97.9**	**19.5**	**78.2**	**1.7**	**3.3**	**2.8**	**.4**	**2.4**	**88.8**	**NA**	**782.1**
2005 Year	**309.0**	**57.4**	**367.5**	**734.3**	**100.0**	**21.3**	**76.9**	**1.6**	**3.0**	**2.3**	**.4**	**8.7**	**92.9**	**NA**	**948.6**
2010 Year	**312.9**	**54.6**	**389.8**	**757.5**	**101.2**	**22.2**	**78.5**	**2.1**	**3.7**	**2.4**	**.9**	**39.1**	**126.6**	**(s)**	**1,009.2**
2011 Year	**313.7**	**50.4**	**399.7**	**763.8**	**101.4**	**22.3**	**78.3**	**2.0**	**3.8**	**2.4**	**1.5**	**45.6**	**133.6**	**.1**	**1,021.3**
2012 Year	**305.9**	**45.7**	**406.6**	**758.2**	**101.9**	**22.4**	**78.1**	**2.3**	**4.0**	**2.6**	**3.1**	**59.0**	**149.0**	**.1**	**1,032.0**
2013 Year	**299.9**	**42.4**	**409.2**	**751.7**	**99.2**	**22.4**	**78.5**	**2.9**	**4.1**	**2.6**	**6.4**	**59.9**	**154.5**	**.1**	**1,029.0**
2014 Year	**295.9**	**40.1**	**415.6**	**751.7**	**98.6**	**22.5**	**79.4**	**2.9**	**4.2**	**2.5**	**10.1**	**64.2**	**163.3**	**.2**	**1,037.6**
2015 Year	**277.0**	**35.7**	**423.0**	**736.0**	**98.7**	**22.6**	**79.4**	**3.1**	**4.2**	**2.5**	**13.4**	**72.5**	**175.0**	**.3**	**1,032.9**
2016 Year	**264.3**	**33.2**	**430.4**	**728.2**	**99.6**	**22.8**	**79.6**	**3.2**	**4.2**	**2.5**	**21.6**	**81.2**	**192.3**	**.6**	**1,043.6**
2017 Year	**254.4**	**32.1**	**439.5**	**726.3**	**99.6**	**22.8**	**79.4**	**3.0**	**4.2**	**2.5**	**26.6**	**87.5**	**203.3**	**.7**	**1,053.6**
2018 Year	**240.7**	**30.8**	**453.7**	**725.6**	**99.4**	**22.8**	**79.6**	**2.9**	**4.2**	**2.4**	**31.5**	**94.3**	**214.8**	**.8**	**1,063.7**
2019 Year	**226.8**	**30.0**	**459.5**	**716.7**	**98.1**	**22.8**	**79.5**	**2.7**	**3.9**	**2.5**	**37.0**	**103.5**	**229.1**	**1.0**	**1,068.0**
2020 Year	**214.0**	**26.2**	**468.2**	**708.7**	**96.5**	**23.0**	**79.6**	**2.7**	**3.8**	**2.5**	**47.6**	**118.0**	**254.3**	**1.5**	**1,084.2**
2021 Year	**208.3**	**26.8**	**473.5**	**708.9**	**95.5**	**23.0**	**79.6**	**2.4**	**3.7**	**2.5**	**61.0**	**132.6**	**281.9**	**4.7**	**1,114.3**
2022 Year	**187.9**	**29.2**	**483.6**	**701.1**	**94.7**	**23.0**	**79.8**	**2.4**	**2.9**	**2.6**	**72.2**	**141.3**	**301.3**	**8.9**	**1,129.2**
2023 Year	**177.0**	**28.0**	**488.9**	**694.3**	**95.7**	**23.1**	**79.7**	**2.3**	**2.7**	**2.7**	**91.3**	**147.3**	**326.1**	**15.9**	**1,155.4**
2024 January	176.1	27.3	489.2	692.9	95.7	23.1	79.6	2.3	2.7	2.7	94.4	147.7	329.4	16.2	1,157.5
February	176.1	27.3	489.2	692.9	95.7	23.1	79.6	2.3	2.7	2.7	95.0	147.9	330.2	16.3	1,158.4
March	175.9	27.3	488.4	692.0	95.7	23.2	79.6	2.3	2.7	2.7	97.9	148.1	333.3	17.3	1,161.7
April	175.3	27.3	488.0	691.0	96.8	23.2	79.6	2.3	2.7	2.7	99.4	149.2	335.8	18.0	1,165.0
May	174.8	27.3	488.2	690.6	96.8	23.2	79.6	2.3	2.7	2.7	101.9	149.3	338.4	19.1	1,168.3
June	174.6	27.2	486.8	688.9	96.8	23.2	79.6	2.3	2.7	2.7	104.6	149.3	341.1	20.4	1,170.6
July	174.6	27.2	487.6	689.7	96.8	23.2	79.6	2.2	2.7	2.7	105.5	150.0	342.8	21.1	1,173.8
August	174.6	27.2	487.6	689.7	96.8	23.2	79.6	2.2	2.7	2.7	106.7	150.3	344.3	22.4	1,176.6
September	174.4	27.2	487.6	689.4	96.8	23.2	79.6	2.2	2.7	2.7	109.2	150.5	346.9	23.2	1,179.7
October	173.2	27.2	487.4	688.1	96.8	23.2	79.6	2.2	2.7	2.7	112.1	150.5	349.8	23.9	1,182.0
November	173.2	27.2	487.5	688.3	96.8	23.2	79.6	2.2	2.7	2.7	117.1	150.5	354.7	24.8	1,187.9
December	**172.8**	**27.2**	**487.9**	**688.2**	**96.8**	**23.2**	**79.6**	**2.2**	**2.7**	**2.7**	**122.7**	**152.0**	**361.9**	**27.0**	**1,197.2**
2025 January	171.5	26.8	489.0	687.6	96.8	23.2	79.6	2.2	2.7	2.7	126.1	153.3	366.6	27.5	1,201.8
February	171.1	26.7	489.0	687.2	96.8	23.2	79.6	2.2	2.7	2.7	127.2	153.7	368.1	28.1	1,203.5
March	170.8	26.7	488.8	686.7	96.8	23.2	79.6	2.2	2.7	2.7	129.8	153.7	370.7	29.1	1,206.7
April	170.8	26.7	489.0	686.8	96.8	23.2	79.6	2.2	2.7	2.7	131.9	154.0	373.0	30.4	1,210.4
May	170.8	26.6	489.5	687.2	96.9	23.2	79.6	2.2	2.7	2.7	133.2	154.2	374.6	32.1	1,214.1
June	170.8	26.6	490.1	687.7	96.9	23.2	79.6	2.2	2.7	2.7	135.3	154.7	377.1	33.7	1,218.8
July	170.4	26.6	490.5	687.8	96.9	23.2	79.6	2.2	2.7	2.7	136.7	154.9	378.7	35.4	1,222.2
August	170.4	26.6	491.1	688.4	96.9	23.2	79.6	2.2	2.7	2.7	139.2	155.1	381.5	36.5	1,226.7
September	170.4	26.6	491.1	688.5	96.9	23.2	79.6	2.2	2.7	2.7	140.9	155.3	383.4	37.5	1,229.6
October	169.5	26.6	491.8	688.3	96.9	23.2	79.6	2.2	2.7	2.7	142.5	155.8	385.5	39.1	1,233.1
November	168.6	26.6	492.0	687.6	96.9	23.2	79.6	2.2	2.7	2.7	144.9	156.2	388.2	40.5	1,236.6
December	**168.4**	**26.6**	**493.7**	**689.0**	**96.9**	**23.2**	**79.6**	**2.2**	**2.7**	**2.7**	**149.7**	**158.1**	**394.9**	**42.6**	**1,246.7**
2026 January	168.6	26.5	493.2	688.6	96.9	23.2	79.7	2.1	2.6	2.7	152.3	159.4	398.8	43.1	1,250.8
February	170.4	26.3	494.1	691.1	96.9	23.2	79.7	2.1	2.6	2.7	153.8	159.4	400.3	44.3	1,256.0
March	167.5	26.5	495.2	689.5	96.9	23.1	79.7	2.1	2.7	2.7	155.0	158.7	400.8	46.1	1,256.5
April	167.2	26.5	497.0	691.1	96.9	23.1	79.7	2.1	2.7	2.7	158.5	160.0	405.6	47.9	1,264.7
May	168.5	26.5	496.1	691.4	96.9	23.1	79.7	2.1	2.7	2.7	160.3	164.4	411.9	48.4	1,271.9
June	166.7	26.1	497.9	691.1	96.9	23.0	79.7	2.1	2.7	2.7	162.9	165.3	415.3	51.3	1,277.8
July	166.4	26.1	498.2	691.0	96.9	23.0	79.8	2.1	2.7	2.7	165.1	165.3	417.7	53.1	1,281.9

[a] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.

[b] Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, waste oil, and, beginning in 2011, propane.

[c] Natural gas, plus a small amount of supplemental gaseous fuels.

[d] Includes other fossil gases (blast furnace gas, other manufactured and waste gases derived from fossil fuels, and, through 2010, propane gas), which are not separately shown.

[e] Through 1988, hydroelectric pumped storage is included in "Conventional Hydroelectric Power."

[f] Wood and wood-derived fuels.

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

[h] Electric net summer capacity from solar thermal and photovoltaic (PV) energy at utility-scale facilities. Does not include small-scale solar photovoltaic capacity.

[i] Includes chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, flywheels, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels), which are not separately shown.

[j] Through 1984, waste is included in "Wood."

[k] Through 1988, solar is included in "Wind."

[l] Through 1988, all data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.

NA=Not available. (s)=Less than 0.05 million kilowatts.

Notes: • Data are at end of period. • For plants that use multiple sources of energy, capacity is assigned to the energy source reported as the predominant one. • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section. • See "Net summer capacity" in Glossary. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • 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/#electricity (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

Table 7.7c Electric Net Summer Capacity: Commercial Sector

(Subset of Table 7.7a; Million Kilowatts)

	Fossil Fuels				Nuclear Electric Power	Hydro-electric Pumped Storage	Renewable Energy							Battery Storage	Total[h]
							Conventional Hydroelectric Power	Biomass		Geothermal	Solar[g]	Wind	Total		
	Coal[a]	Petroleum[b]	Natural Gas[c]	Total[d]				Wood[e]	Waste[f]						
1990 Year	**0.3**	**0.2**	**0.7**	**1.2**	**–**	**–**	**(s)**	**(s)**	**0.2**	**–**	**–**	**–**	**0.2**	**–**	**1.4**
1995 Year	**.3**	**.2**	**1.2**	**1.8**	**–**	**–**	**(s)**	**(s)**	**.3**	**–**	**–**	**–**	**.3**	**–**	**2.1**
2000 Year	**.3**	**.3**	**1.2**	**1.8**	**–**	**–**	**(s)**	**(s)**	**.4**	**–**	**–**	**–**	**.4**	**–**	**2.2**
2005 Year	**.4**	**.3**	**1.0**	**1.8**	**–**	**–**	**(s)**	**(s)**	**.4**	**–**	**–**	**–**	**.5**	**–**	**2.2**
2010 Year	**.4**	**.4**	**1.2**	**1.9**	**–**	**–**	**(s)**	**(s)**	**.5**	**–**	**(s)**	**(s)**	**.5**	**–**	**2.5**
2011 Year	**.4**	**.4**	**1.3**	**2.1**	**–**	**–**	**(s)**	**(s)**	**.6**	**–**	**.1**	**(s)**	**.7**	**–**	**2.8**
2012 Year	**.4**	**.4**	**1.5**	**2.4**	**–**	**–**	**(s)**	**(s)**	**.6**	**–**	**.1**	**(s)**	**.8**	**–**	**3.2**
2013 Year	**.3**	**.5**	**1.8**	**2.6**	**–**	**–**	**(s)**	**(s)**	**.7**	**–**	**.2**	**(s)**	**1.0**	**–**	**3.6**
2014 Year	**.3**	**.5**	**1.8**	**2.6**	**–**	**–**	**(s)**	**.1**	**.7**	**–**	**.2**	**.1**	**1.1**	**–**	**3.7**
2015 Year	**.2**	**.5**	**1.9**	**2.6**	**–**	**–**	**(s)**	**.1**	**.7**	**–**	**.3**	**.1**	**1.2**	**(s)**	**3.8**
2016 Year	**.2**	**.5**	**2.0**	**2.7**	**–**	**–**	**.1**	**.1**	**.7**	**–**	**.3**	**.1**	**1.2**	**(s)**	**3.9**
2017 Year	**.2**	**.6**	**2.0**	**2.8**	**–**	**–**	**.1**	**.1**	**.7**	**–**	**.3**	**.1**	**1.2**	**(s)**	**4.1**
2018 Year	**.1**	**.8**	**2.2**	**3.1**	**–**	**–**	**.1**	**.1**	**.7**	**(s)**	**.3**	**.1**	**1.3**	**(s)**	**4.5**
2019 Year	**.1**	**.9**	**2.2**	**3.2**	**–**	**–**	**.1**	**.1**	**.7**	**(s)**	**.4**	**.1**	**1.3**	**(s)**	**4.6**
2020 Year	**.1**	**.9**	**2.3**	**3.3**	**–**	**–**	**.1**	**.1**	**.7**	**(s)**	**.4**	**.1**	**1.3**	**(s)**	**4.6**
2021 Year	**.1**	**.9**	**2.3**	**3.3**	**–**	**–**	**.1**	**.1**	**.7**	**(s)**	**.4**	**.1**	**1.5**	**(s)**	**4.8**
2022 Year	**(s)**	**1.0**	**2.4**	**3.4**	**–**	**–**	**.1**	**.1**	**1.3**	**–**	**.4**	**.1**	**2.0**	**(s)**	**5.4**
2023 Year	**(s)**	**1.0**	**2.3**	**3.4**	**–**	**–**	**.1**	**.1**	**1.3**	**–**	**.4**	**.1**	**2.0**	**(s)**	**5.4**
2024 January	(s)	1.0	2.4	3.4	–	–	.1	.1	1.2	–	.4	.1	2.0	(s)	5.4
February	(s)	1.0	2.4	3.4	–	–	.1	.1	1.2	–	.4	.1	2.0	(s)	5.4
March	(s)	1.0	2.4	3.4	–	–	.1	.1	1.2	–	.4	.1	2.0	(s)	5.4
April	(s)	1.0	2.4	3.4	–	–	.1	.1	1.2	–	.4	.1	2.0	(s)	5.4
May	(s)	1.0	2.4	3.5	–	–	.1	.1	1.2	–	.4	.1	2.0	(s)	5.5
June	(s)	1.0	2.4	3.5	–	–	.1	.1	1.2	–	.4	.1	2.0	(s)	5.5
July	(s)	1.0	2.4	3.5	–	–	.1	.1	1.2	–	.4	.1	2.0	(s)	5.5
August	(s)	1.0	2.4	3.5	–	–	.1	.1	1.2	–	.4	.1	2.0	(s)	5.5
September	(s)	1.0	2.4	3.5	–	–	.1	.1	1.2	–	.4	.1	2.0	(s)	5.5
October	(s)	1.0	2.4	3.5	–	–	.1	.1	1.2	–	.4	.1	1.9	(s)	5.5
November	(s)	1.0	2.4	3.5	–	–	.1	.1	1.2	–	.4	.1	1.9	(s)	5.5
December	**(s)**	**1.0**	**2.4**	**3.4**	**–**	**–**	**.1**	**.1**	**1.2**	**–**	**.4**	**.1**	**1.9**	**(s)**	**5.4**
2025 January	(s)	1.0	2.4	3.5	–	–	.1	.1	1.2	–	.4	.1	1.9	(s)	5.5
February	(s)	1.0	2.4	3.5	–	–	.1	.1	1.2	–	.4	.1	1.9	(s)	5.5
March	(s)	1.0	2.4	3.5	–	–	.1	.1	1.2	–	.4	.1	1.9	(s)	5.5
April	(s)	1.0	2.4	3.5	–	–	.1	.1	1.2	–	.4	.1	1.9	(s)	5.5
May	(s)	1.0	2.4	3.5	–	–	.1	.1	1.2	–	.4	.1	1.9	(s)	5.5
June	(s)	1.0	2.4	3.5	–	–	.1	.1	1.2	–	.4	.1	1.9	(s)	5.5
July	(s)	1.0	2.4	3.5	–	–	.1	.1	1.2	–	.4	.1	1.9	(s)	5.5
August	(s)	1.0	2.4	3.5	–	–	.1	.1	1.2	–	.4	.1	1.9	(s)	5.5
September	(s)	1.0	2.4	3.5	–	–	.1	.1	1.2	–	.4	.1	1.9	(s)	5.5
October	(s)	1.0	2.4	3.5	–	–	.1	.1	1.2	–	.4	.1	1.9	(s)	5.5
November	(s)	1.0	2.4	3.5	–	–	.1	.1	1.2	–	.4	.1	1.9	(s)	5.5
December	**(s)**	**1.0**	**2.4**	**3.5**	**–**	**–**	**.1**	**.1**	**1.2**	**–**	**.5**	**.1**	**2.0**	**(s)**	**5.5**
2026 January	(s)	1.0	2.4	3.5	–	–	.1	.1	1.2	–	.5	.1	2.0	(s)	5.5
February	(s)	1.0	2.4	3.5	–	–	.1	.1	1.2	–	.5	.1	1.9	(s)	5.5
March	(s)	1.0	2.4	3.5	–	–	.1	.1	1.2	–	.5	.1	1.9	(s)	5.5
April	(s)	1.0	2.4	3.5	–	–	.1	.1	1.2	–	.5	.1	1.9	(s)	5.5
May	(s)	1.0	2.4	3.5	–	–	.1	.1	1.2	–	.5	.1	2.0	(s)	5.6
June	(s)	1.0	2.4	3.5	–	–	.1	.2	1.2	–	.5	.1	2.0	(s)	5.6
July	(s)	1.0	2.4	3.5	–	–	.1	.2	1.2	–	.5	.1	2.0	(s)	5.6

[a] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.

[b] Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, waste oil, and, beginning in 2011, propane.

[c] Natural gas, plus a small amount of supplemental gaseous fuels.

[d] Includes other fossil gases (blast furnace gas, other manufactured and waste gases derived from fossil fuels, and, through 2010, propane gas), which are not separately shown.

[e] Wood and wood-derived fuels.

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

[g] Electric net summer capacity from solar thermal and photovoltaic (PV) energy at utility-scale facilities. Does not include small-scale solar photovoltaic capacity.

[h] Includes chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, flywheels, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels), which are not separately shown.

– =No data reported. (s)=Less than 0.05 million kilowatts.

Notes: • Data are at end of period. • For plants that use multiple sources of energy, capacity is assigned to the energy source reported as the predominant one. • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section. • See "Net summer capacity" in Glossary. • See Note 2, "Classification of Power Plants Into Energy-Use Sectors,"at end of section. • 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/#electricity (Excel and CSV files) for all available annual data beginning in 1989 and monthly data beginning in 2008.

Sources: • **1989–1997:** U.S. Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • **1998–2000:** EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility." • **2001–2007:** EIA, Form EIA-860, "Annual Electric Generator Report." • **2008 forward:** EIA, Form EIA-860, "Annual Electric Generator Report," and Form EIA-860M, "Monthly Update to the Annual Electric Generator Report."

Table 7.7d Electric Net Summer Capacity: Industrial Sector

(Subset of Table 7.7a; Million Kilowatts)

	Fossil Fuels				Nuclear Electric Power	Hydroelectric Pumped Storage	Renewable Energy								
							Conventional Hydroelectric Power	Biomass		Geothermal	Solar[g]	Wind	Total	Battery Storage	Total[h]
	Coal[a]	Petroleum[b]	Natural Gas[c]	Total[d]				Wood[e]	Waste[f]						
1990 Year	**4.8**	**0.9**	**10.3**	**17.3**	**–**	**–**	**0.6**	**4.3**	**0.2**	**–**	**–**	**–**	**5.1**	**–**	**22.9**
1995 Year	**5.0**	**1.0**	**11.3**	**18.7**	**–**	**–**	**1.1**	**4.9**	**.2**	**–**	**–**	**–**	**6.3**	**–**	**25.5**
2000 Year	**4.6**	**.8**	**13.7**	**21.2**	**–**	**–**	**1.1**	**4.4**	**.2**	**–**	**–**	**–**	**5.7**	**–**	**27.3**
2005 Year	**4.0**	**.8**	**14.5**	**21.0**	**–**	**–**	**.7**	**4.5**	**.2**	**–**	**–**	**–**	**5.4**	**–**	**27.2**
2010 Year	**4.0**	**.7**	**14.2**	**20.8**	**–**	**–**	**.3**	**4.9**	**.2**	**–**	**(s)**	**(s)**	**5.5**	**–**	**27.4**
2011 Year	**3.5**	**.7**	**14.3**	**20.4**	**–**	**–**	**.3**	**5.0**	**.2**	**–**	**(s)**	**(s)**	**5.6**	**–**	**27.1**
2012 Year	**3.3**	**1.0**	**14.3**	**20.5**	**–**	**–**	**.6**	**5.2**	**.2**	**–**	**(s)**	**(s)**	**6.1**	**–**	**27.8**
2013 Year	**3.0**	**.7**	**14.4**	**20.0**	**–**	**–**	**.7**	**5.5**	**.2**	**–**	**(s)**	**(s)**	**6.4**	**–**	**27.5**
2014 Year	**2.9**	**.6**	**14.7**	**20.0**	**–**	**–**	**.3**	**5.4**	**.2**	**–**	**(s)**	**(s)**	**5.9**	**–**	**27.2**
2015 Year	**2.5**	**.7**	**14.5**	**19.8**	**–**	**–**	**.3**	**5.8**	**.2**	**–**	**(s)**	**(s)**	**6.4**	**–**	**27.4**
2016 Year	**2.1**	**.7**	**14.5**	**19.4**	**–**	**–**	**.3**	**5.7**	**.2**	**–**	**(s)**	**(s)**	**6.2**	**–**	**26.8**
2017 Year	**2.0**	**.6**	**14.5**	**19.1**	**–**	**–**	**.3**	**5.7**	**.2**	**–**	**(s)**	**(s)**	**6.3**	**(s)**	**26.7**
2018 Year	**2.0**	**.6**	**14.4**	**19.1**	**–**	**–**	**.2**	**5.8**	**.1**	**–**	**(s)**	**(s)**	**6.2**	**(s)**	**26.6**
2019 Year	**1.7**	**.5**	**14.8**	**19.2**	**–**	**–**	**.2**	**5.6**	**.1**	**–**	**.1**	**(s)**	**6.0**	**(s)**	**26.5**
2020 Year	**1.5**	**.5**	**15.3**	**19.3**	**–**	**–**	**.2**	**5.6**	**.1**	**–**	**.1**	**(s)**	**6.3**	**(s)**	**26.8**
2021 Year	**1.4**	**.5**	**16.1**	**19.6**	**–**	**–**	**.2**	**5.4**	**.1**	**–**	**.1**	**(s)**	**5.9**	**(s)**	**26.8**
2023 Year	**1.4**	**.5**	**16.3**	**19.7**	**–**	**–**	**.2**	**5.2**	**.1**	**–**	**.2**	**.1**	**5.9**	**(s)**	**26.8**
2024 January	1.4	.5	16.4	19.6	–	–	.2	5.1	.1	–	.3	.1	5.7	(s)	26.6
February	1.4	.5	16.4	19.6	–	–	.2	5.1	.1	–	.3	.1	5.7	(s)	26.6
March	1.4	.5	16.4	19.6	–	–	.2	5.1	.1	–	.3	.1	5.8	(s)	26.6
April	1.4	.5	16.3	19.5	–	–	.2	5.1	.1	–	.3	.1	5.8	(s)	26.5
May	1.4	.5	16.3	19.5	–	–	.2	5.1	.1	–	.3	.1	5.8	(s)	26.5
June	1.4	.5	16.3	19.5	–	–	.2	5.1	.1	–	.3	.1	5.8	(s)	26.5
July	1.4	.5	16.3	19.5	–	–	.2	5.1	.1	–	.3	.1	5.8	(s)	26.5
August	1.4	.5	16.3	19.5	–	–	.2	5.1	.1	–	.3	.1	5.8	(s)	26.5
September	1.4	.5	16.3	19.5	–	–	.2	5.1	.1	–	.3	.1	5.8	(s)	26.5
October	1.4	.5	16.2	19.4	–	–	.2	5.0	.1	–	.3	.1	5.7	(s)	26.4
November	1.4	.5	16.2	19.4	–	–	.2	5.0	.1	–	.3	.1	5.7	(s)	26.4
December	**1.4**	**.5**	**16.1**	**19.3**	**–**	**–**	**.2**	**5.1**	**.1**	**–**	**.3**	**.1**	**5.8**	**(s)**	**26.3**
2025 January	1.4	.5	16.1	19.2	–	–	.2	5.1	.1	–	.3	.1	5.8	(s)	26.3
February	1.4	.5	16.1	19.2	–	–	.2	5.1	.1	–	.3	.1	5.8	(s)	26.3
March	1.4	.5	16.1	19.2	–	–	.2	5.1	.1	–	.3	.1	5.8	(s)	26.3
April	1.4	.5	16.1	19.3	–	–	.2	5.1	.1	–	.3	.1	5.8	(s)	26.4
May	1.4	.5	16.1	19.3	–	–	.2	5.1	.1	–	.3	.1	5.8	(s)	26.4
June	1.4	.5	16.1	19.3	–	–	.2	5.1	.1	–	.8	.1	6.3	(s)	26.8
July	1.4	.5	16.1	19.3	–	–	.2	5.0	.1	–	.8	.1	6.2	(s)	26.8
August	1.4	.5	16.1	19.3	–	–	.2	5.0	.1	–	.8	.1	6.2	(s)	26.8
September	1.4	.5	16.1	19.3	–	–	.2	5.0	.1	–	1.1	.1	6.4	(s)	27.0
October	1.4	.5	16.0	19.1	–	–	.2	5.0	.1	–	1.1	.1	6.4	(s)	26.9
November	1.4	.5	16.0	19.1	–	–	.2	5.0	.1	–	1.1	.1	6.4	(s)	26.8
December	**1.4**	**.5**	**16.0**	**19.1**	**–**	**–**	**.2**	**5.0**	**.1**	**–**	**1.1**	**.1**	**6.4**	**(s)**	**27.0**
2026 January	1.4	.5	16.0	19.1	–	–	.2	4.9	.1	–	1.2	.1	6.5	(s)	27.1
February	1.4	.5	15.8	19.1	–	–	.2	4.9	.1	–	1.2	.1	6.5	(s)	27.1
March	1.4	.5	15.8	19.1	–	–	.2	4.9	.1	–	1.2	.1	6.5	(s)	27.1
April	1.4	.5	15.8	19.0	–	–	.2	4.9	.1	–	1.2	.1	6.5	(s)	27.1
May	1.4	.5	15.8	19.1	–	–	.2	4.9	.1	–	1.2	.1	6.5	(s)	27.1
June	1.4	.5	15.8	19.1	–	–	.2	4.8	.1	–	1.2	.1	6.4	(s)	27.0
July	1.4	.5	15.8	19.1	–	–	.2	4.8	.1	–	1.1	.1	6.3	(s)	26.9

[a] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.

[b] Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, waste oil, and, beginning in 2011, propane.

[c] Natural gas, plus a small amount of supplemental gaseous fuels.

[d] Includes other fossil gases (blast furnace gas, other manufactured and waste gases derived from fossil fuels, and, through 2010, propane gas), which are not separately shown.

[e] Wood and wood-derived fuels.

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

[g] Electric net summer capacity from solar thermal and photovoltaic (PV) energy at utility-scale facilities. Does not include small-scale solar photovoltaic capacity.

[h] Includes chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, flywheels, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels), which are not separately shown.

– =No data reported. (s)=Less than 0.05 million kilowatts.

Notes: • Data are at end of period. • For plants that use multiple sources of energy, capacity is assigned to the energy source reported as the predominant one. • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section. • See "Net summer capacity" in Glossary. • See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • 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/#electricity (Excel and CSV files) for all available annual data beginning in 1989 and monthly data beginning in 2008.

Sources: • **1989–1997:** U.S. Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • **1998–2000:** EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility." • **2001–2007:** EIA, Form EIA-860, "Annual Electric Generator Report." • **2008 forward:** EIA, Form EIA-860, "Annual Electric Generator Report," and Form EIA-860M, "Monthly Update to the Annual Electric Generator Report."

Table 7.8a Capacity Factors and Usage Factors at Electric Generators: Total (All Sectors)

(Percent)

	Capacity Factors[a]												Usage Factors[b]	
			Natural Gas[f]							Solar				
	Coal[c,d]	Petroleum[c,e]	Combined Cycle	Gas Turbine	Steam Turbine	Nuclear Electric Power[g]	Conventional Hydroelectric Power	Biomass[c,h]	Geothermal	Photovoltaic[i]	Thermal	Wind[j]	Hydroelectric Pumped Storage	Battery Storage
2008 Average	**72.4**	**9.7**	**40.3**	**7.6**	**12.1**	**91.1**	**37.1**	**64.0**	**74.3**	**19.2**	**19.5**	**31.7**	**–**	**–**
2009 Average	**64.2**	**9.3**	**43.9**	**6.8**	**10.9**	**90.3**	**39.6**	**62.9**	**73.0**	**20.0**	**23.6**	**28.1**	**–**	**–**
2010 Average	**67.1**	**8.4**	**44.3**	**7.8**	**11.1**	**91.1**	**37.5**	**62.5**	**71.6**	**20.2**	**24.5**	**29.7**	**–**	**–**
2011 Average	**62.8**	**7.4**	**44.3**	**7.9**	**11.7**	**89.1**	**45.8**	**61.4**	**71.5**	**19.0**	**23.9**	**32.1**	**–**	**–**
2012 Average	**56.2**	**7.6**	**52.2**	**8.9**	**13.3**	**86.6**	**39.6**	**62.1**	**68.3**	**20.4**	**23.6**	**31.8**	**–**	**–**
2013 Average	**59.4**	**6.6**	**48.8**	**8.3**	**11.2**	**90.8**	**38.8**	**60.3**	**71.8**	**24.5**	**17.4**	**32.4**	**9.8**	**.7**
2014 Average	**60.5**	**6.7**	**48.6**	**8.3**	**10.3**	**91.7**	**37.2**	**61.0**	**72.0**	**25.6**	**18.3**	**34.0**	**10.2**	**1.7**
2015 Average	**54.3**	**6.7**	**55.8**	**9.8**	**11.3**	**92.3**	**35.7**	**60.5**	**71.9**	**25.5**	**21.7**	**32.2**	**10.2**	**3.6**
2016 Average	**52.8**	**5.9**	**55.4**	**11.0**	**12.3**	**92.3**	**38.2**	**59.9**	**71.6**	**25.0**	**22.1**	**34.5**	**11.2**	**3.8**
2017 Average	**53.1**	**6.3**	**51.2**	**9.6**	**10.7**	**92.3**	**43.0**	**60.8**	**73.2**	**25.6**	**21.8**	**34.6**	**11.4**	**6.8**
2018 Average	**53.6**	**6.6**	**55.1**	**11.9**	**12.6**	**92.5**	**41.9**	**61.1**	**76.0**	**25.1**	**23.6**	**34.6**	**10.8**	**5.2**
2019 Average	**47.5**	**5.5**	**57.4**	**11.4**	**14.1**	**93.4**	**41.2**	**60.3**	**69.6**	**24.3**	**21.2**	**34.4**	**10.4**	**5.4**
2020 Average	**40.5**	**5.2**	**57.1**	**11.6**	**14.2**	**92.4**	**40.7**	**59.5**	**69.1**	**24.2**	**20.6**	**35.3**	**10.5**	**5.2**
2021 Average	**49.1**	**5.5**	**55.0**	**11.7**	**12.5**	**92.8**	**36.0**	**61.1**	**69.8**	**24.4**	**20.5**	**34.4**	**10.2**	**6.1**
2022 Average	**48.4**	**5.4**	**56.6**	**12.9**	**15.6**	**92.7**	**36.3**	**58.7**	**69.0**	**24.4**	**23.1**	**35.9**	**11.1**	**6.4**
2023 Average	**42.4**	**4.1**	**59.7**	**12.9**	**17.4**	**93.0**	**35.0**	**55.8**	**69.4**	**23.2**	**22.1**	**33.2**	**10.9**	**6.6**
2024 January	56.8	4.5	64.1	12.9	15.9	95.6	36.3	60.4	69.3	13.4	7.5	31.6	9.5	6.2
February	36.2	3.4	56.6	10.0	10.4	95.4	37.4	58.7	69.0	18.6	12.4	39.6	9.7	7.3
March	29.8	3.3	51.1	10.6	13.0	87.5	39.3	55.9	67.4	21.8	21.0	40.7	7.4	7.9
April	29.9	3.6	46.9	13.1	15.9	81.8	36.4	53.6	65.5	26.3	32.2	43.7	9.1	8.4
May	35.6	3.7	53.9	13.4	20.4	88.8	41.2	56.1	61.9	29.0	38.8	35.2	12.5	8.0
June	49.0	3.9	65.7	15.1	26.3	96.3	38.9	57.5	61.5	31.6	40.1	35.7	15.6	8.1
July	55.0	5.0	75.8	20.9	32.0	95.4	36.0	58.6	60.4	30.3	33.7	25.2	16.8	8.8
August	53.2	4.6	75.3	19.2	32.4	95.3	34.5	59.6	60.8	29.7	33.1	26.1	16.3	9.0
September	43.7	3.5	67.6	14.7	21.6	88.5	27.7	56.4	61.5	25.4	32.7	26.9	13.0	8.3
October	37.0	3.7	55.6	13.1	19.5	80.3	25.8	51.7	62.4	23.1	22.8	35.3	8.3	9.0
November	35.9	3.7	54.9	12.3	16.4	87.4	29.1	57.5	67.3	16.2	13.8	36.9	8.7	8.8
December	48.7	4.2	58.5	11.0	14.2	97.3	32.9	59.1	68.8	13.8	11.7	35.0	9.4	8.6
Average	**42.6**	**3.9**	**60.5**	**13.9**	**19.9**	**90.8**	**34.6**	**57.1**	**64.6**	**23.2**	**25.0**	**34.3**	**11.4**	**8.3**
2025 January	62.7	6.0	61.9	13.5	18.8	98.0	36.1	59.0	68.6	16.4	8.6	38.4	9.8	7.7
February	52.7	4.0	58.0	11.0	15.8	93.5	36.4	60.3	68.5	19.0	15.0	38.0	10.4	7.7
March	37.8	3.6	46.9	9.3	11.8	85.3	37.8	57.6	68.6	23.8	16.5	44.2	8.8	8.4
April	36.5	3.7	44.1	12.0	17.0	81.7	39.7	53.2	66.7	27.9	30.0	41.3	9.7	8.6
May	38.2	3.8	51.9	10.6	17.3	84.9	41.0	55.4	62.0	29.7	32.1	32.1	11.7	8.7
June	51.9	5.3	63.7	16.6	24.2	93.4	38.5	58.2	65.4	32.3	39.2	32.1	15.9	8.2
July	62.7	7.1	71.8	24.9	32.4	96.6	33.6	59.7	63.7	32.4	36.1	27.6	18.5	8.5
August	54.5	5.0	72.3	18.7	26.9	96.5	33.8	59.2	66.9	30.2	32.8	23.6	15.1	10.0
September	47.8	4.4	66.3	14.9	21.3	92.3	26.6	57.9	65.9	27.2	25.7	22.9	13.3	8.7
October	42.8	5.1	53.4	14.3	19.3	80.9	27.8	53.7	62.6	22.8	22.7	34.1	10.0	7.9
November	44.8	4.0	52.1	11.9	15.4	90.0	32.0	57.5	64.5	17.5	13.1	36.4	8.9	7.6
December	52.1	5.1	58.3	11.2	16.4	99.0	40.2	59.1	67.0	13.7	11.5	40.0	10.3	7.3
Average	**48.7**	**4.8**	**58.4**	**14.1**	**19.8**	**91.0**	**35.3**	**57.6**	**65.9**	**24.4**	**23.6**	**34.2**	**11.9**	**8.3**
2026 January	57.6	9.1	58.9	13.5	19.2	100.0	46.9	59.5	69.9	15.7	7.6	37.5	9.8	8.1
February	48.1	6.7	57.0	12.1	17.2	94.3	41.8	59.5	69.3	20.3	12.8	37.0	10.1	8.7
March	34.8	4.2	48.5	10.9	16.4	84.8	45.3	55.9	66.1	24.7	21.6	44.1	11.2	9.0
April	32.5	4.7	46.6	14.1	18.3	81.0	39.1	50.7	62.7	26.3	26.4	42.3	11.7	8.7
May	35.7	4.5	51.3	11.8	19.1	88.8	38.2	55.9	63.6	29.4	34.6	33.6	13.7	8.7
June	46.2	4.6	62.5	15.0	25.3	97.1	41.2	58.4	65.4	31.9	36.8	35.0	15.4	8.7
July	61.2	6.7	72.3	23.3	34.3	97.2	34.0	59.5	64.7	32.4	30.6	26.0	17.7	8.8

[a] Capacity factors are a measure of how often electric generators operate over a specific period of time, using a ratio of actual output (net generation) to the maximum possible output over that same time period (using time-adjusted capacity).

[b] Usage factors are a measure of how often electric generators operate over a specific period of time, using a ratio of actual output (gross generation) to the maximum possible output over that same time period (using time-adjusted capacity).

[c] Steam turbine, gas turbine, internal combustion engine, combined-cycle, and other plants.

[d] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.

[e] Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, waste oil, and, beginning in 2011, propane.

[f] Natural gas, plus a small amount of supplemental gaseous fuels. Capacity factors for natural gas internal combustion engine, energy storage, fuel cell, and other plants are not displayed.

[g] See Table 8.1 for nuclear capacity factors for 1957–2007.

[h] Wood and wood-derived fuels, municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

[i] Solar photovoltaic (PV) energy at utility-scale facilities. Does not include small-scale solar photovoltaic generators.

[j] Onshore wind plants, and, beginning in 2017, offshore wind plants.

– =No data reported.

Notes: • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section. • Monthly factors are based on a time-adjusted total net summer capacity of generators in operation for the entire month. Annual factors are based on a time-weighted average of the monthly time-adjusted capacity. • For plants that use multiple energy sources or technologies, capacity is assigned to the reported combination of predominant energy source and technology. • See EIA's *Electric Power Annual,* "Technical notes," for further information. • See "Capacity factor" in Glossary. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity (Excel and CSV files) for all available annual and monthly data beginning in 2008.

Sources: U.S. Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report"; Form EIA-860M, "Monthly Update to the Annual Electric Generator Report"; and Form EIA-923, "Power Plant Operations Report."

Table 7.8b Capacity Factors and Usage Factors at Electric Generators: Electric Power Sector (Percent)

	Capacity Factors[a]												Usage Factors[b]	
			Natural Gas[f]							Solar				
	Coal[c,d]	Petroleum[c,e]	Combined Cycle	Gas Turbine	Steam Turbine	Nuclear Electric Power[g]	Conventional Hydroelectric Power	Biomass[c,h]	Geothermal	Photovoltaic[i]	Thermal	Wind[j]	Hydroelectric Pumped Storage	Battery Storage
2008 Average	**72.6**	**9.4**	**39.5**	**5.2**	**11.6**	**91.1**	**37.0**	**65.5**	**74.3**	**19.7**	**19.5**	**31.7**	**–**	**–**
2009 Average	**64.4**	**9.1**	**43.5**	**4.4**	**10.4**	**90.3**	**39.5**	**64.6**	**73.0**	**20.3**	**23.6**	**28.1**	**–**	**–**
2010 Average	**67.3**	**8.1**	**43.5**	**5.2**	**10.6**	**91.1**	**37.5**	**63.4**	**71.6**	**20.3**	**24.5**	**29.8**	**–**	**–**
2011 Average	**62.9**	**7.1**	**43.6**	**5.1**	**11.2**	**89.1**	**45.7**	**62.5**	**71.5**	**19.0**	**23.9**	**32.1**	**–**	**–**
2012 Average	**56.4**	**7.1**	**51.7**	**6.0**	**12.7**	**86.6**	**39.5**	**63.4**	**68.3**	**20.4**	**23.6**	**31.8**	**–**	**–**
2013 Average	**59.5**	**6.3**	**48.0**	**5.0**	**10.4**	**90.8**	**38.6**	**60.0**	**71.8**	**24.7**	**17.4**	**32.4**	**9.8**	**.7**
2014 Average	**60.7**	**6.4**	**48.0**	**5.2**	**9.5**	**91.7**	**37.1**	**61.5**	**72.0**	**25.8**	**18.3**	**34.0**	**10.2**	**1.7**
2015 Average	**54.3**	**6.3**	**55.5**	**6.8**	**10.8**	**92.3**	**35.6**	**59.5**	**71.9**	**25.7**	**21.7**	**32.2**	**10.2**	**3.6**
2016 Average	**52.9**	**5.6**	**54.9**	**8.2**	**11.6**	**92.3**	**38.1**	**59.2**	**71.6**	**25.1**	**22.1**	**34.5**	**11.2**	**3.8**
2017 Average	**53.2**	**6.1**	**50.6**	**6.6**	**10.1**	**92.3**	**43.0**	**60.2**	**73.2**	**25.7**	**21.8**	**34.6**	**11.4**	**6.9**
2018 Average	**53.7**	**6.4**	**54.6**	**9.0**	**11.9**	**92.5**	**41.8**	**60.2**	**76.0**	**25.2**	**23.6**	**34.6**	**10.8**	**5.3**
2019 Average	**47.5**	**5.3**	**57.0**	**8.3**	**13.2**	**93.4**	**41.1**	**59.5**	**68.9**	**24.4**	**21.2**	**34.4**	**10.4**	**5.5**
2020 Average	**40.5**	**5.0**	**56.8**	**8.3**	**13.3**	**92.4**	**40.7**	**58.9**	**68.4**	**24.3**	**20.6**	**35.3**	**10.5**	**5.2**
2021 Average	**49.2**	**5.4**	**54.8**	**8.3**	**11.4**	**92.8**	**35.9**	**61.8**	**69.5**	**24.4**	**20.5**	**34.4**	**10.2**	**6.2**
2022 Average	**48.5**	**5.2**	**56.3**	**9.7**	**14.7**	**92.7**	**36.3**	**58.0**	**69.0**	**24.4**	**23.1**	**36.0**	**11.1**	**6.5**
2023 Average	**42.5**	**4.0**	**59.5**	**9.6**	**16.6**	**93.0**	**34.9**	**55.7**	**69.4**	**23.3**	**22.1**	**33.2**	**10.9**	**6.7**
2024 January	57.0	4.5	64.0	9.6	14.7	95.6	36.2	58.5	69.3	13.5	7.5	31.6	9.5	6.2
February	36.2	3.2	56.3	6.9	9.1	95.4	37.3	55.7	69.0	18.7	12.4	39.6	9.7	7.3
March	29.7	3.2	50.8	7.8	11.7	87.5	39.2	52.2	67.4	21.8	21.0	40.7	7.4	7.9
April	29.9	3.5	46.5	10.3	14.9	81.8	36.3	47.3	65.5	26.3	32.2	43.7	9.1	8.4
May	35.6	3.7	53.7	10.5	19.5	88.8	41.1	52.2	61.9	29.0	38.8	35.2	12.5	8.1
June	49.1	3.9	65.9	12.1	25.5	96.3	38.9	55.8	61.5	31.6	40.1	35.7	15.6	8.1
July	55.1	4.9	76.1	17.9	31.5	95.4	36.0	56.7	60.4	30.3	33.7	25.2	16.8	8.8
August	53.3	4.5	75.4	16.1	32.0	95.3	34.5	58.7	60.8	29.7	33.1	26.1	16.3	9.0
September	43.8	3.4	67.7	11.6	20.9	88.5	27.7	54.5	61.5	25.5	32.7	26.9	13.0	8.4
October	37.1	3.6	55.6	10.3	18.9	80.3	25.8	47.0	62.4	23.1	22.8	35.3	8.3	9.0
November	35.8	3.6	54.7	9.3	15.6	87.4	29.1	52.4	67.3	16.3	13.8	36.9	8.7	8.8
December	48.7	4.1	58.3	7.6	13.0	97.3	32.8	56.3	68.8	13.8	11.7	35.0	9.4	8.6
Average	**42.7**	**3.8**	**60.4**	**10.9**	**19.0**	**90.8**	**34.6**	**54.0**	**64.6**	**23.3**	**25.0**	**34.3**	**11.4**	**8.3**
2025 January	62.8	6.0	61.7	10.1	17.8	98.0	36.0	57.7	68.6	16.4	8.6	38.4	9.8	7.7
February	52.8	4.0	57.8	7.6	14.8	93.5	36.4	58.6	68.5	19.0	15.0	38.0	10.4	7.7
March	37.8	3.4	46.3	6.0	10.6	85.3	37.7	56.2	68.6	23.8	16.5	44.2	8.8	8.5
April	36.5	3.6	43.5	9.2	16.0	81.7	39.7	48.8	66.7	27.9	30.0	41.4	9.7	8.6
May	38.2	3.7	51.6	7.8	16.5	84.9	40.9	53.9	62.0	29.7	32.1	32.1	11.7	8.7
June	52.0	5.2	63.6	13.8	23.5	93.4	38.5	58.0	65.4	32.3	39.2	32.2	15.9	8.2
July	62.9	7.2	71.9	22.4	31.9	96.6	33.6	58.9	63.7	32.4	36.1	27.6	18.5	8.6
August	54.6	4.9	72.4	15.8	26.3	96.5	33.8	58.3	66.9	30.2	32.8	23.6	15.1	10.1
September	47.9	4.3	66.3	11.9	20.5	92.3	26.5	57.1	65.9	27.3	25.7	22.9	13.3	8.7
October	42.9	5.1	53.1	11.5	18.6	80.9	27.8	48.9	62.6	22.8	22.7	34.1	10.0	7.9
November	44.9	3.9	51.6	8.9	14.4	90.0	32.0	55.2	64.5	17.5	13.1	36.4	8.9	7.6
December	52.3	5.2	57.9	8.0	15.4	99.0	40.2	58.9	67.0	13.7	11.5	40.0	10.3	7.4
Average	**48.8**	**4.7**	**58.2**	**11.1**	**18.9**	**91.0**	**35.3**	**55.9**	**65.9**	**24.4**	**23.6**	**34.2**	**11.9**	**8.3**
2026 January	57.8	9.2	58.6	10.5	18.3	100.0	46.9	58.9	69.9	15.7	7.6	37.5	9.8	8.1
February	48.2	6.7	56.7	9.2	16.4	94.3	41.8	63.0	69.3	20.3	12.8	37.1	10.1	8.7
March	34.8	4.2	48.1	8.1	15.6	84.8	45.2	57.1	66.1	24.8	21.6	44.1	11.2	9.0
April	32.6	4.6	46.1	11.5	17.6	81.0	39.0	50.0	62.7	26.4	26.4	42.3	11.7	8.7
May	35.7	4.4	50.9	9.2	18.5	88.8	38.2	58.2	63.6	29.5	34.6	33.6	13.7	8.8
June	46.3	4.4	62.5	12.2	24.7	97.1	41.2	61.8	65.4	31.9	36.8	35.0	15.4	8.7
July	61.4	6.7	72.3	20.8	33.9	97.2	34.0	61.5	64.7	32.4	30.6	26.0	17.7	8.8

[a] Capacity factors are a measure of how often electric generators operate over a specific period of time, using a ratio of actual output (net generation) to the maximum possible output over that same time period (using time-adjusted capacity).

[b] Usage factors are a measure of how often electric generators operate over a specific period of time, using a ratio of actual output (gross generation) to the maximum possible output over that same time period (using time-adjusted capacity).

[c] Steam turbine, gas turbine, internal combustion engine, combined-cycle, and other plants.

[d] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.

[e] Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, waste oil, and, beginning in 2011, propane.

[f] Natural gas, plus a small amount of supplemental gaseous fuels. Capacity factors for natural gas internal combustion engine, energy storage, fuel cell, and other plants are not displayed.

[g] See Table 8.1 for nuclear capacity factors for 1957–2007.

[h] Wood and wood-derived fuels, municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

[i] Solar photovoltaic (PV) energy at utility-scale facilities. Does not include small-scale solar photovoltaic generators.

[j] Onshore wind plants, and, beginning in 2017, offshore wind plants.

– =No data reported.

Notes: • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section. • Monthly factors are based on a time-adjusted total net summer capacity of generators in operation for the entire month. Annual factors are based on a time-weighted average of the monthly time-adjusted capacity. • For plants that use multiple energy sources or technologies, capacity is assigned to the reported combination of predominant energy source and technology. • See EIA's *Electric Power Annual,* "Technical notes," for further information. • See "Capacity factor" in Glossary. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity (Excel and CSV files) for all available annual and monthly data beginning in 2008.

Sources: U.S. Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report"; Form EIA-860M, "Monthly Update to the Annual Electric Generator Report"; and Form EIA-923, "Power Plant Operations Report."

Table 7.8c Capacity Factors and Usage Factors at Electric Generators: Commercial Sector

(Percent)

	Capacity Factors[a]												Usage Factors[b]	
			Natural Gas[f]							Solar				
	Coal[c,d]	Petroleum[c,e]	Combined Cycle	Gas Turbine	Steam Turbine	Nuclear Electric Power	Conventional Hydroelectric Power	Biomass[c,g]	Geothermal	Photovoltaic[h]	Thermal	Wind[i]	Hydroelectric Pumped Storage	Battery Storage
2008 Average	**36.5**	**3.6**	**52.2**	**43.9**	**36.8**	**–**	**31.6**	**56.2**	**–**	**9.9**	**–**	**–**	**–**	**–**
2009 Average	**28.1**	**3.6**	**53.6**	**43.1**	**33.6**	**–**	**38.0**	**57.3**	**–**	**4.8**	**–**	**2.0**	**–**	**–**
2010 Average	**34.5**	**3.2**	**54.6**	**53.8**	**32.2**	**–**	**42.7**	**55.7**	**–**	**11.1**	**–**	**17.6**	**–**	**–**
2011 Average	**32.1**	**2.3**	**50.9**	**58.8**	**33.4**	**–**	**17.0**	**60.1**	**–**	**18.7**	**–**	**24.2**	**–**	**–**
2012 Average	**31.8**	**1.9**	**54.5**	**52.2**	**26.7**	**–**	**17.0**	**60.0**	**–**	**19.5**	**–**	**21.1**	**–**	**–**
2013 Average	**31.7**	**1.9**	**52.8**	**51.9**	**33.7**	**–**	**28.2**	**60.3**	**–**	**20.6**	**–**	**22.4**	**–**	**–**
2014 Average	**30.2**	**2.4**	**48.6**	**55.1**	**31.5**	**–**	**20.5**	**57.4**	**–**	**19.9**	**–**	**25.5**	**–**	**–**
2015 Average	**35.0**	**2.6**	**51.7**	**53.2**	**28.6**	**–**	**18.6**	**56.0**	**–**	**18.7**	**–**	**24.4**	**–**	**–**
2016 Average	**29.4**	**1.5**	**53.3**	**49.7**	**32.1**	**–**	**33.3**	**52.5**	**–**	**20.5**	**–**	**26.3**	**–**	**4.8**
2017 Average	**29.8**	**1.3**	**53.4**	**54.0**	**29.5**	**–**	**36.5**	**52.2**	**–**	**19.5**	**–**	**26.8**	**–**	**5.4**
2018 Average	**31.4**	**.7**	**51.5**	**56.2**	**32.0**	**–**	**34.7**	**50.1**	**–**	**18.7**	**–**	**27.5**	**–**	**5.2**
2019 Average	**30.2**	**.7**	**51.0**	**52.6**	**35.1**	**–**	**28.7**	**52.3**	**–**	**18.2**	**–**	**27.8**	**–**	**1.0**
2020 Average	**27.4**	**.4**	**43.3**	**50.1**	**32.2**	**–**	**32.8**	**52.0**	**–**	**17.4**	**–**	**28.3**	**–**	**4.4**
2021 Average	**30.8**	**.4**	**40.7**	**54.2**	**25.5**	**–**	**34.1**	**49.3**	**–**	**17.0**	**–**	**28.3**	**–**	**.7**
2022 Average	**29.7**	**.6**	**44.6**	**55.1**	**24.5**	**–**	**34.7**	**60.8**	**–**	**17.4**	**–**	**28.1**	**–**	**1.1**
2023 Average	**38.7**	**.3**	**46.1**	**54.3**	**22.7**	**–**	**38.2**	**57.3**	**–**	**15.8**	**–**	**21.4**	**–**	**.8**
2024 January	44.9	.6	45.0	53.9	25.6	–	46.1	61.2	–	7.2	–	19.6	–	3.5
February	43.3	.3	46.2	49.9	24.7	–	46.6	57.1	–	11.3	–	21.4	–	3.3
March	43.1	.4	42.7	44.7	24.2	–	47.8	53.7	–	15.2	–	26.5	–	3.3
April	38.5	.3	42.0	42.3	21.3	–	48.2	55.0	–	18.4	–	32.8	–	4.2
May	19.2	.2	42.5	41.4	18.6	–	48.8	59.5	–	20.3	–	25.1	–	4.4
June	28.2	.2	51.3	49.2	20.6	–	36.9	58.9	–	21.5	–	23.5	–	5.1
July	32.8	.2	54.8	59.7	23.5	–	36.9	59.7	–	19.8	–	16.2	–	5.5
August	40.3	.2	54.3	55.0	23.2	–	35.9	60.3	–	19.0	–	16.1	–	4.5
September	37.9	.2	51.5	46.2	22.3	–	31.3	58.1	–	15.6	–	17.8	–	4.7
October	35.7	.2	42.5	44.2	18.8	–	34.6	57.0	–	14.3	–	18.1	–	5.5
November	42.2	.3	42.0	46.5	23.6	–	38.5	58.4	–	9.8	–	21.1	–	4.1
December	42.5	.8	41.5	46.9	25.9	–	41.7	58.5	–	7.6	–	25.2	–	3.2
Average	**37.4**	**.3**	**46.3**	**48.4**	**22.7**	**–**	**41.1**	**58.1**	**–**	**15.0**	**–**	**21.9**	**–**	**4.3**
2025 January	40.4	.4	45.1	50.1	29.1	–	49.1	57.4	–	11.5	–	26.9	–	.4
February	38.3	.3	40.9	50.1	27.3	–	44.5	61.2	–	13.1	–	23.7	–	.3
March	30.3	.3	40.3	47.4	22.5	–	42.6	57.3	–	18.1	–	26.6	–	.2
April	34.1	.3	38.0	39.5	18.8	–	54.5	56.2	–	20.6	–	25.5	–	–
May	42.5	.3	35.7	40.3	18.7	–	50.9	52.5	–	20.8	–	20.0	–	–
June	23.6	.5	49.3	49.1	22.6	–	48.2	57.5	–	23.6	–	16.9	–	.2
July	39.0	.7	51.9	54.3	28.9	–	41.4	57.8	–	23.7	–	14.8	–	.3
August	33.8	.3	51.9	52.6	25.6	–	45.6	59.3	–	22.6	–	15.9	–	–
September	41.0	.3	51.0	49.0	23.6	–	31.6	55.9	–	20.7	–	16.1	–	–
October	40.7	.6	48.4	42.3	25.4	–	34.9	59.0	–	16.9	–	28.7	–	–
November	40.0	.3	46.5	51.2	25.2	–	42.9	59.3	–	14.4	–	29.3	–	–
December	36.6	.3	45.5	50.9	26.2	–	54.2	58.7	–	10.1	–	32.3	–	–
Average	**36.7**	**.4**	**45.4**	**48.1**	**24.5**	**–**	**45.1**	**57.7**	**–**	**18.0**	**–**	**23.1**	**–**	**.1**
2026 January	30.7	.5	47.6	52.9	30.1	–	67.6	53.8	–	11.7	–	31.2	–	–
February	25.5	.4	47.4	50.4	32.2	–	57.2	49.2	–	15.0	–	27.8	–	–
March	21.0	.4	46.2	49.1	24.8	–	59.0	52.4	–	18.7	–	34.1	–	–
April	21.8	.3	41.5	43.1	21.8	–	55.9	46.3	–	21.7	–	32.7	–	–
May	22.5	.3	41.7	42.6	21.5	–	55.7	49.3	–	22.9	–	25.3	–	–
June	17.2	.2	46.8	48.2	21.8	–	59.5	54.1	–	25.0	–	26.7	–	.2
July	30.7	.4	52.1	55.6	27.2	–	46.4	54.3	–	26.0	–	20.3	–	.3

[a] Capacity factors are a measure of how often electric generators operate over a specific period of time, using a ratio of actual output (net generation) to the maximum possible output over that same time period (using time-adjusted capacity).

[b] Usage factors are a measure of how often electric generators operate over a specific period of time, using a ratio of actual output (gross generation) to the maximum possible output over that same time period (using time-adjusted capacity).

[c] Steam turbine, gas turbine, internal combustion engine, combined-cycle, and other plants.

[d] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.

[e] Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, waste oil, and, beginning in 2011, propane.

[f] Natural gas, plus a small amount of supplemental gaseous fuels. Capacity factors for natural gas internal combustion engine, energy storage, fuel cell, and other plants are not displayed.

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

[h] Solar photovoltaic (PV) energy at utility-scale facilities. Does not include small-scale solar photovoltaic generators.

[i] Onshore wind plants, and, beginning in 2017, offshore wind plants.

– =No data reported.

Notes: • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section. • Monthly factors are based on a time-adjusted total net summer capacity of generators in operation for the entire month. Annual factors are based on a time-weighted average of the monthly time-adjusted capacity. • For plants that use multiple energy sources or technologies, capacity is assigned to the reported combination of predominant energy source and technology. • See EIA's *Electric Power Annual,* "Technical notes," for further information. • See "Capacity factor" in Glossary. • See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity (Excel and CSV files) for all available annual and monthly data beginning in 2008.

Sources: U.S. Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report"; Form EIA-860M, "Monthly Update to the Annual Electric Generator Report"; and Form EIA-923, "Power Plant Operations Report."

Table 7.8d Capacity Factors and Usage Factors at Electric Generators: Industrial Sector

(Percent)

	Capacity Factors[a]												Usage Factors[b]	
			Natural Gas[f]							Solar				
	Coal[c,d]	Petroleum[c,e]	Combined Cycle	Gas Turbine	Steam Turbine	Nuclear Electric Power	Conventional Hydroelectric Power	Biomass[c,g]	Geothermal	Photovoltaic[h]	Thermal	Wind[i]	Hydroelectric Pumped Storage	Battery Storage
2008 Average	**51.8**	**32.6**	**55.2**	**53.1**	**45.2**	**–**	**54.9**	**63.1**	**–**	**–**	**–**	**–**	**–**	**–**
2009 Average	**46.6**	**33.4**	**52.9**	**54.3**	**46.9**	**–**	**61.6**	**61.7**	**–**	**–**	**–**	**–**	**–**	**–**
2010 Average	**54.3**	**33.9**	**62.4**	**69.6**	**54.3**	**–**	**55.9**	**62.2**	**–**	**19.3**	**–**	**–**	**–**	**–**
2011 Average	**50.6**	**29.5**	**61.1**	**69.7**	**56.8**	**–**	**61.0**	**60.2**	**–**	**30.3**	**–**	**11.6**	**–**	**–**
2012 Average	**48.8**	**38.2**	**64.5**	**71.0**	**57.0**	**–**	**43.4**	**60.9**	**–**	**25.2**	**–**	**15.3**	**–**	**–**
2013 Average	**49.8**	**30.0**	**70.7**	**75.1**	**50.2**	**–**	**61.1**	**60.7**	**–**	**25.6**	**–**	**25.6**	**–**	**–**
2014 Average	**49.9**	**27.5**	**67.5**	**71.0**	**48.8**	**–**	**52.4**	**60.9**	**–**	**24.3**	**–**	**26.4**	**–**	**–**
2015 Average	**48.2**	**28.1**	**66.1**	**72.7**	**41.2**	**–**	**57.6**	**62.2**	**–**	**20.6**	**–**	**25.1**	**–**	**–**
2016 Average	**46.3**	**25.2**	**69.7**	**73.0**	**40.3**	**–**	**51.4**	**61.7**	**–**	**16.7**	**–**	**25.3**	**–**	**–**
2017 Average	**46.7**	**24.4**	**68.9**	**74.9**	**37.7**	**–**	**55.9**	**62.7**	**–**	**14.8**	**–**	**27.0**	**–**	**.9**
2018 Average	**45.6**	**26.2**	**71.8**	**75.3**	**40.8**	**–**	**62.8**	**63.6**	**–**	**12.1**	**–**	**25.8**	**–**	**.8**
2019 Average	**41.6**	**26.3**	**73.4**	**75.9**	**44.2**	**–**	**55.0**	**62.2**	**–**	**17.2**	**–**	**25.3**	**–**	**15.3**
2020 Average	**41.9**	**23.2**	**67.0**	**74.5**	**44.0**	**–**	**53.2**	**61.2**	**–**	**16.3**	**–**	**39.7**	**–**	**2.4**
2021 Average	**42.0**	**19.6**	**63.8**	**74.1**	**45.1**	**–**	**49.9**	**62.1**	**–**	**16.3**	**–**	**23.2**	**–**	**.4**
2022 Average	**42.0**	**26.3**	**67.0**	**73.2**	**41.7**	**–**	**49.1**	**59.0**	**–**	**19.9**	**–**	**26.2**	**–**	**2.6**
2023 Average	**37.4**	**14.8**	**65.9**	**74.3**	**44.0**	**–**	**46.3**	**55.6**	**–**	**20.7**	**–**	**22.7**	**–**	**4.1**
2024 January	37.3	17.6	71.2	78.8	50.3	–	58.9	62.0	–	11.4	–	23.7	–	.9
February	37.5	19.1	69.4	70.3	49.8	–	64.1	61.9	–	16.8	–	12.3	–	1.0
March	37.7	17.9	63.1	65.8	50.6	–	59.6	60.1	–	20.8	–	15.2	–	1.1
April	31.8	16.2	64.4	68.9	47.0	–	61.7	59.2	–	25.5	–	18.1	–	.9
May	36.1	15.0	60.9	71.0	46.7	–	57.1	59.0	–	29.5	–	16.9	–	.8
June	38.4	16.0	61.2	74.2	51.0	–	40.4	58.8	–	30.4	–	17.9	–	.7
July	39.2	18.6	64.8	80.2	48.2	–	32.4	60.2	–	28.3	–	12.5	–	.7
August	38.0	14.5	71.9	80.8	47.1	–	34.0	60.2	–	27.2	–	12.3	–	.2
September	36.7	13.8	65.1	76.4	42.5	–	25.0	57.7	–	24.3	–	15.8	–	.9
October	36.2	14.8	56.2	68.3	38.0	–	41.5	54.7	–	19.9	–	21.1	–	.7
November	38.7	15.1	62.6	71.1	38.5	–	35.1	62.1	–	14.5	–	27.8	–	.7
December	41.4	16.4	67.6	78.0	46.9	–	42.2	62.0	–	11.1	–	30.2	–	.5
Average	**37.4**	**16.2**	**64.9**	**73.7**	**46.4**	**–**	**46.0**	**59.8**	**–**	**21.6**	**–**	**19.1**	**–**	**.8**
2025 January	40.6	21.8	71.7	82.7	46.7	–	44.8	60.7	–	15.6	–	26.4	–	–
February	40.0	13.9	67.9	77.4	47.1	–	46.7	61.7	–	18.0	–	25.6	–	–
March	38.6	19.4	67.8	73.6	46.2	–	51.1	59.1	–	22.6	–	31.7	–	–
April	34.9	16.5	66.0	68.5	46.5	–	47.5	56.6	–	26.8	–	28.6	–	–
May	33.3	17.8	66.7	66.8	43.2	–	52.0	57.6	–	28.2	–	23.9	–	–
June	40.9	20.2	67.9	70.7	46.1	–	48.5	58.6	–	31.0	–	24.7	–	–
July	41.0	13.5	68.7	75.1	49.6	–	45.4	61.0	–	31.9	–	20.4	–	–
August	39.3	22.3	69.8	76.5	46.0	–	42.4	59.9	–	29.8	–	17.4	–	–
September	36.6	16.5	68.3	76.5	45.1	–	37.6	59.2	–	26.9	–	15.4	–	–
October	36.7	17.4	65.9	72.1	43.1	–	36.9	57.0	–	23.4	–	22.1	–	–
November	36.0	17.0	72.7	73.9	45.3	–	40.2	59.2	–	18.3	–	26.5	–	–
December	34.8	14.1	73.4	76.4	46.1	–	41.5	59.3	–	14.0	–	29.9	–	–
Average	**37.7**	**17.6**	**68.9**	**74.2**	**45.9**	**–**	**44.5**	**59.1**	**–**	**23.5**	**–**	**24.4**	**–**	**–**
2026 January	37.4	19.5	72.4	74.2	45.9	–	48.9	61.6	–	16.8	–	27.1	–	–
February	37.9	19.9	68.6	72.3	42.6	–	42.8	59.0	–	20.4	–	25.3	–	7.4
March	35.6	15.2	64.6	69.3	40.7	–	53.7	55.7	–	24.0	–	33.2	–	5.7
April	31.7	20.1	65.8	68.8	42.5	–	45.9	52.4	–	24.3	–	31.1	–	7.3
May	32.8	20.9	66.9	67.4	40.0	–	46.3	55.4	–	26.1	–	25.0	–	6.4
June	37.4	25.0	64.0	72.5	46.2	–	46.0	56.2	–	26.2	–	26.3	–	5.8
July	37.9	21.5	72.7	74.8	50.6	–	38.9	59.1	–	31.6	–	20.7	–	11.3

[a] Capacity factors are a measure of how often electric generators operate over a specific period of time, using a ratio of actual output (net generation) to the maximum possible output over that same time period (using time-adjusted capacity).

[b] Usage factors are a measure of how often electric generators operate over a specific period of time, using a ratio of actual output (gross generation) to the maximum possible output over that same time period (using time-adjusted capacity).

[c] Steam turbine, gas turbine, internal combustion engine, combined-cycle, and other plants.

[d] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and coal synfuel.

[e] Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, waste oil, and, beginning in 2011, propane.

[f] Natural gas, plus a small amount of supplemental gaseous fuels. Capacity factors for natural gas internal combustion engine, energy storage, fuel cell, and other plants are not displayed.

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

[h] Solar photovoltaic (PV) energy at utility-scale facilities. Does not include small-scale solar photovoltaic generators.

[i] Onshore wind plants, and, beginning in 2017, offshore wind plants.

– =No data reported.

Notes: • Data are for utility-scale facilities. See Note 1, "Coverage of Electricity Statistics," at end of section. • Monthly factors are based on a time-adjusted total net summer capacity of generators in operation for the entire month. Annual factors are based on a time-weighted average of the monthly time-adjusted capacity. • For plants that use multiple energy sources or technologies, capacity is assigned to the reported combination of predominant energy source and technology. • See EIA's *Electric Power Annual,* "Technical notes," for further information. • See "Capacity factor" in Glossary. • See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#electricity (Excel and CSV files) for all available annual and monthly data beginning in 2008.

Sources: U.S. Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report"; Form EIA-860M, "Monthly Update to the Annual Electric Generator Report"; and Form EIA-923, "Power Plant Operations Report."

Electricity

Note 1. Coverage of Electricity Statistics. Data in Section 7 cover the following:

Through 1984, data for electric utilities also include institutions (such as universities) and military facilities that generated electricity primarily for their own use; beginning in 1985, data for electric utilities exclude institutions and military facilities. Beginning in 1989, data for the commercial sector include institutions and military facilities.

The generation, consumption, and stocks data in Section 7 are for utility-scale facilities—those with a combined generation nameplate capacity of 1 megawatt or more. Data exclude small-scale facilities—those with a combined generator nameplate capacity of less than 1 megawatt. For data on small-scale solar photovoltaic (PV) generation in the residential, commercial, and industrial sectors, see Table 10.6.

Note 2. Classification of Power Plants into Energy-Use Sectors. The U.S. Energy Information Administration (EIA) classifies power plants (both electricity-only and combined-heat-and-power plants) into energy-use sectors based on the North American Industry Classification System (NAICS), which replaced the Standard Industrial Classification (SIC) system in 1997. Plants with a NAICS code of 22 are assigned to the Electric Power Sector. Those with NAICS codes beginning with 11 (agriculture, forestry, fishing, and hunting); 21 (mining, including oil and gas extraction); 23 (construction); 31–33 (manufacturing); 2212 (natural gas distribution); and 22131 (water supply and irrigation systems) are assigned to the Industrial Sector. Those with all other codes are assigned to the Commercial Sector. Form EIA-860, "Annual Electric Generator Report," asks respondents to indicate the primary purpose of the facility by assigning a NAICS code from the list at http://www.eia.gov/survey/form/eia_860/instructions.pdf.

Note 3. Electricity Forecast Values. Data values preceded by "F" in this section are forecast values. They are derived from EIA's Short-Term Integrated Forecasting System (STIFS). STIFS is driven primarily by data and assumptions about key macroeconomic variables, energy prices, and weather. The electricity forecast relies on additional variables such as alternative fuel prices (natural gas and oil) and power generation by sources other than fossil fuels, including nuclear, renewables, and hydroelectric power. Each month, EIA staff review the model output and make adjustments, if appropriate, based on their knowledge of developments in the electricity industry.

The STIFS model results are published monthly in EIA's Short-Term Energy Outlook, which is accessible on the Web at http://www.eia.gov/forecasts/steo/.

Note 4. Estimates of Electric Vehicle Use. These are estimates of on-road light-duty electric vehicle (EV) electricity consumption to operate and move the vehicle. These estimates are based on models and are subject to model error. The electricity consumed by light-duty EVs is not identified as a separate class of service by electric utilities. Instead, the electricity consumption by light-duty EVs is accounted for based on the location of where the vehicle is charged. This results in electric utilities reporting light-duty EV consumption as part of the Residential, Commercial, and Industrial Sales to Ultimate Customers. Estimates are for light-duty Battery Electric Vehicles and Plugin Hybrid Electric Vehicles that weigh less than or equal to 8,500 pounds. Estimates exclude plug-in hybrid motor gasoline consumption, on-road medium- and heavy-duty EVs, and off-road EVs such as golf carts and forklifts.

Methodology

The model estimates monthly light-duty electric vehicle (EV)[1] consumption of electricity for each state based on the number of EVs, average number of miles driven on electricity, and EV fuel economy. Adjustments are made based on data availability from various input sources, to bring lagged data up to the current reporting period, and to adjust national and regional data down to state-level estimates.

The modeling methodology is hierarchical and is composed of a top-level model having components that are estimated using sub-models, which are described in the subsequent sections of this report. The top-level model is based on the average electricity consumed by nameplate (vehicle make and model) and model year in a state and month multiplied by the number of EVs for a particular nameplate and model year in that state and month. Lower-level sub-models

[1] Light-duty battery electric vehicles (BEV) and plug-in hybrid electric vehicles (PHEV) are vehicles weighing less than 8,500 lbs including passenger cars and light trucks.

estimate the number of EVs based on EV registrations and sales data and the average monthly EV consumption of electricity by EV nameplate and model year based on average estimated monthly vehicle miles traveled on electricity, a utility factor, EV fuel economy, and a weather correction factor.

The top-level model is defined as follows:

$$kWh_{s,m} = \sum_{np=1}^{NP} \sum_{my=1}^{MY} \left(EV\ stocks_{s,m,np,my} * EV\ kWh_{s,m,np,my} \right)$$

where:

$kWh_{s,m}$ is the total consumption in kilowatt-hours (kWh) by EVs in state s and month m

$EV\ stocks_{s,m,np,my}$ is the number of on-road EVs in state s and month m for EV nameplate np and model year my

$EV\ kWh_{s,m,np,my}$ is the average electricity consumed in kWh by EV nameplate np from model year my in state s and month m

MY is the number of model years for each EV nameplate np

NP is the number of nameplates for light-duty EVs listed on fueleconomy.gov

Vehicle stocks

This sub-model estimates the number of EVs in the top-level model using monthly EV registration and sales data for each state. Registrations rather than cumulative sales are preferred because they account for scrappage and represent the stock of licensed vehicles. Because monthly registration data by state, nameplate, and model year are not available for recent months, estimated monthly sales values by state, nameplate, and model year are cumulatively added to the most recently available end-of-year registration data to create monthly registration estimates for each state, nameplate, and model year.

Specifically, this sub-model is defined as follows:

$$EV\ stocks_{s,m,np,my} =$$

$$EV\ registrations_{s,m_0,np,my} + \sum_{m_t=m_0+1}^{m} (EV\ sales_{m_t,np,my} * sales\ state\ allocation_{s,m_l})$$

where:

$EV\ registrations_{s,m_0,np,my}$ is the number of registered EVs by state s, EV nameplate np, and model year my by the end of the month m_0 (December of the latest available historical year for state registration data)

$EV\ sales_{m_t,np,my}$ is the national-level EV sales in month m_t for EV nameplate np and model year my

$sales\ state\ allocation_{s,m_l}$ is the share of total new EV registrations in state s in the most recently available new EV registration data month m_l

Sales state allocation shares are calculated as follows:

$$sales\ state\ allocation_{s,m_l} = \frac{new\ EV\ registrations_{s,m_l}}{\sum_{s=1}^{S} new\ EV\ registrations_{s,m_l}}$$

where:

$new\ EV\ registrations_{s,m_l}$ is the number of new EVs registered by state s in the most recently available new EV registration data month m_l

S is all fifty U.S. states and the District of Columbia

In more recent months where sales data must be used, monthly EV scrappage and EVs moving between states are not considered in the model.

EV electricity consumed

This sub-model estimates the average electricity consumed by nameplate (vehicle make and model) and model year in a state and month, which is used in the top-level model. It uses the average EV miles travel multiplied by the vehicle's fuel economy and a weather correction. The weather correction is applied because both cold and hot temperatures significantly decrease battery efficiency, increasing electricity consumption per mile traveled.

Specifically, this sub-model is defined as follows:

$$eV\ kWh_{s,m,np,my} = \sum_{d=1}^{D_m} (weather\ correction_{s,d} * kWh_per_mile_{np,my} * avg.eVMT_{s,m,np,my}/D_m)$$

where:

$weather\ correction_{s,d}$ is the vehicle fuel economy correction for state s on day d based on the average daily high and low temperatures recorded at a state representative airport and the effect that average temperature has on the EV range due to decrease in battery efficiency calculated by Geotab

$kWh_per_mile_{np,my}$ is the combined city and highway vehicle fuel economy that is estimated by the U.S. Environmental Protection Agency (EPA) for EV nameplate np and model year my

$avg.eVMT_{s,m,np,my}$ is the average vehicle miles traveled on electricity in state s during month m for EV nameplate np and model year my, which is estimated using the sub-model described in the next section

D_m is the total days in month m

Electric vehicle miles traveled

This sub-model of the EV electricity consumed sub-model estimates the average EV miles traveled on electricity in each state for each month by EV nameplate and model year. Data for EV miles traveled are only available at the census division level and for certain powertrains. To account for these issues, the model uses census-division-level EV travel data assigned to component states for the five powertrain categories, EV100, EV200, EV300, PHEV20, and PHEV50, as used in the EIA National Energy Modeling System (NEMS) Transportation Sector Demand Module[2]. Because data for EV miles traveled are only available on an annual basis, and with a lag, monthly EV miles traveled by state are based on the year-over-year change in total state-level vehicle miles traveled. The EPA combined city and highway utility factor is also applied to include only the portion of travel that uses electricity.

Specifically, this sub-model is defined as follows:

$$avg.eVMT_{s,m,np,my} = adjusted\ avg.VMT_{s,m_r,np,my} * current\ month\ adjustment_{s,m} * utility\ factor_{np,my}$$

with m_r being the same calendar month as m but in the most recent EV odometer data year

where:

$adjusted\ avg.VMT_{s,m_r,np,ny}$ is the adjusted average EV miles traveled in state s in month m_r of the reference year for which the latest odometer data are available for EV nameplate np and model year my

$current\ month\ adjustment_{s,m}$ is a temporal adjustment for state s to the adjusted average VMT from month m_r of the most recent EV odometer data year to the current month m

$utility\ factor_{np,my}$ is the portion of EV miles traveled that uses electricity only for EV nameplate np and model year my; the utility factor equals 1 for BEV and is less than 1 for PHEVs

[2] U.S. Energy Information Administration (July 2022), Transportation Sector Demand Module of the National Energy Modeling System: Model Documentation, pg. 136-137.

Since EV odometer data are only produced annually at the census-division level and can lag by more than one year, the data needs to be adjusted to monthly values for individual states to create monthly estimates. The following adjustment converts the yearly data to an average monthly value in that same reference year and converts it from a census-division-level value to a state-level value. Since EV odometer data are only available by powertrain categories, the model uses these categories to represent their underlying EV nameplates and model years.

$$adjusted\ avg.VMT_{s,m_r,np,my} = avg.VMT_{cd,y_r,pt} * \left(\frac{all\ VMT_{s,m_r}}{\sum_{m_r \in y_r} all\ VMT_{s,m_r}} \right), \forall [s \in cd\ \&\ (np,my) \in pt]$$

where:

$avg.VMT_{cd,y_r,pt}, \forall [s \in cd\ \&\ (np,my) \in pt]$ is the average EV vehicle miles traveled in census division cd, representing all component states s, for the most recent EV odometer data year y_r by powertrain category pt, where this value is constant for all EV nameplates np and model years my in a powertrain category pt

$all\ VMT_{s,m_r}$ is the U.S. Department of Transportation Federal Highway Administration's total vehicle miles traveled in state s during month m_r for the most recent EV odometer data year y_r

The following factor adjusts the average EV miles traveled for the year-over-year change in monthly values since the reference month m_r (the most recent available year $y_r$of average EV odometer data) up through month $(m-12)$ (last available complete year of all VMT data for all months).

$$current\ month\ adjustment_{s,m} = \prod_{m_j=(m_r+\ n*12\ (n=0,1,2\ldots(\frac{(m-m_r)}{12}-1))}^{(m-12)} 1 + \frac{(all\ VMT_{s,m_{j+12}} - all\ VMT_{s,m_j})}{all\ VMT_{s,m_j}}$$

where:

$all\ VMT_{s,m_r}$ is the U.S. Department of Transportation Federal Highway Administration's total vehicle miles traveled in state s during month m_r for the most recent EV odometer data

Potential sources of model error

The following list consists of identified potential sources of error in the model-based estimates:

Vehicle stocks:

- For preliminary monthly estimates, monthly EV scrappage and EVs moving between states are not considered in the model.
- Since state EV registration data are lagged, cumulative EV sales are used to estimate monthly state EV registrations, which could cause an over- or under- estimation of the EV stocks within a state.
- Interstate movement of vehicle sales could cause an over- or under- estimation of the EV stocks within a state.
- EV scrappage is not considered, which could cause an over-estimation of electricity consumption if scrappage increases considerably.

Vehicle miles traveled:

- Average EV miles traveled at the state level are derived from census division level values.
- Average EV miles traveled by nameplate and model year are derived from powertrain categories.
- The utility factor does not account for the possibility that many short trips are taken which could result in only electricity being consumed in PHEVs.
- The utility factor does not account for the possibility a PHEV has not been plugged into an electric power source resulting in only gasoline being consumed.
- Variability in driving patterns within a powertrain category could cause an over- or under-estimation of electricity consumption.

Fuel economy:

- Fuel economy factors do not account for decreasing efficiency due to vehicle age and deferred maintenance.
- Fuel economy factors do not account for non-weather related degradation.

Schedule for preliminary and final published data

The estimates provide preliminary monthly estimates based on available data until various final annual data are received. Preliminary published monthly estimates for a given reference year will be finalized after the following:

- Final annual vehicle registration data, provided by a third-party source, being processed and available for the model to consume, which typically occurs with a 12 or 13-month lag from the end of the reference year.
- Final EV odometer readings, provided by a third-party source, being processed and available for the model to consume, which typically occurs with a 12 or 13-month lag from the end of the reference year.

This schedule is separate from the finalization of Electric Power Monthly numbers in the Electric Power Annual.

Data sources and references

The model relies on the following data sources and types of data to estimate electricity consumption for EVs:

- $EV\ registrations$ are third-party data from S&P Global Mobility Vehicles in Operation dataset based on state vehicle registration administrative data from the end of a calendar year.
- $EV\ sales$ are third-party data from Wards Intelligence.
- $new\ EV\ registrations$ are third party data based on state-level new electric vehicle registration administrative data compiled by the Alliance for Automotive Innovation using Information provided by S&P Global Mobility (2011-2018, November 2019-present) and Hedges & Co (January 2019-October 2019).
- kWh_per_mile are administrative data published by EPA on fueleconomy.gov.
- $weather\ correction$ uses research conducted by Geotab and daily high and low temperature readings at airports from the U.S. National Oceanic and Atmospheric Administration (NOAA).
- $avg.VMT$ are third-party odometer reading data from S&P Global Mobility.
- $all\ VMT$ are based on vehicle miles traveled from the U.S. Department of Transportation Federal Highway Administration's Traffic Volume Trends.
- $utility\ factor$ are administrative data published by EPA on fueleconomy.gov.

A full list of all light-duty electric vehicles can be found at fueleconomy.gov.

Table 7.1 Sources

Net Generation, Electric Power Sector

1949 forward: Table 7.2b.

Net Generation, Commercial and Industrial Sectors

1949 forward: Table 7.2c.

Trade

1949–September 1977: Unpublished Federal Power Commission data.

October 1977–1980: Unpublished Economic Regulatory Administration (ERA) data.

1981: U.S. Department of Energy (DOE), Office of Energy Emergency Operations, "Report on Electric Energy Exchanges with Canada and Mexico for Calendar Year 1981," April 1982 (revised June 1982).

1982 and 1983: DOE, ERA, *Electricity Exchanges Across International Borders*.

1984–1986: DOE, ERA, *Electricity Transactions Across International Borders*.

1987 and 1988: DOE, ERA, Form ERA-781R, "Annual Report of International Electrical Export/Import Data."

1989: DOE, Fossil Energy, Form FE-781R, "Annual Report of International Electrical Export/Import Data."

1990–2000: National Energy Board of Canada; and DOE, Office of Electricity Delivery and Energy Reliability, Form FE-781R, "Annual Report of International Electrical Export/Import Data."

2001–May 2011: National Energy Board of Canada; DOE, Office of Electricity Delivery and Energy Reliability, Form OE-781R, "Monthly Electricity Imports and Exports Report," and predecessor form; and California Independent System Operator.

June 2011–2015: National Energy Board of Canada; California Independent System Operator; and EIA estimates for Texas transfers.

2016 forward: EIA, Form EIA-111, "Quarterly Electricity Imports and Exports Report"; and for forecast values, EIA Short-Term Integrated Forecasting System (STIFS).

T&D Losses and Unaccounted for

1949 forward: Calculated as the sum of total net generation and imports minus end use and exports.

End Use

1949 forward: Table 7.6.

Table 7.2b Sources

1949–September 1977: Federal Power Commission, Form FPC-4, "Monthly Power Plant Report."

October 1977–1981: Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report."

1982–1988: U.S. Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report."

1989–1997: EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-867, "Annual Nonutility Power Producer Report."

1998–2000: EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-860B, "Annual Electric Generator Report—Nonutility."

2001–2003: EIA, Form EIA-906, "Power Plant Report."

2004–2007: EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."

2008 forward: EIA, Form EIA-923, "Power Plant Operations Report".

Table 7.2c Sources

Industrial Sector, Hydroelectric Power, 1949–1988

1949–September 1977: Federal Power Commission (FPC), Form FPC-4, "Monthly Power Plant Report," for plants with generating capacity exceeding 10 megawatts, and FPC, Form FPC-12C, "Industrial Electric Generating Capacity," for all other plants.

October 1977–1978: Federal Energy Regulatory Commission (FERC), Form FPC-4, "Monthly Power Plant Report," for plants with generating capacity exceeding 10 megawatts, and FERC, Form FPC-12C, "Industrial Electric Generating Capacity," for all other plants.

1979: FERC, Form FPC-4, "Monthly Power Plant Report," for plants with generating capacity exceeding 10 megawatts, and U.S. Energy Information Administration (EIA) estimates for all other plants.

1980–1988: Estimated by EIA as the average generation over the 6-year period of 1974–1979.

All Data, 1989 Forward

1989–1997: EIA, Form EIA-867, "Annual Nonutility Power Producer Report."

1998–2000: EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility."

2001–2003: EIA, Form EIA-906, "Power Plant Report."

2004–2007: EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."

2008 forward: EIA, Form EIA-923, "Power Plant Operations Report".

Table 7.3b Sources

1949–September 1977: Federal Power Commission, Form FPC-4, "Monthly Power Plant Report."

October 1977–1981: Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report."

1982–1988: U.S. Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report."

1989–1997: EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-867, "Annual Nonutility Power Producer Report."

1998–2000: EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-860B, "Annual Electric Generator Report—Nonutility."

2001–2003: EIA, Form EIA-906, "Power Plant Report."

2004–2007: EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."

2008 forward: EIA, Form EIA-923, "Power Plant Operations Report".

Table 7.4b Sources

1949–September 1977: Federal Power Commission, Form FPC-4, "Monthly Power Plant Report."

October 1977–1981: Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report."

1982–1988: U.S. Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report."

1989–1997: EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-867, "Annual Nonutility Power Producer Report."

1998–2000: EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-860B, "Annual Electric Generator Report—Nonutility."

2001–2003: EIA, Form EIA-906, "Power Plant Report."

2004–2007: EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."

2008 forward: EIA, Form EIA-923, "Power Plant Operations Report".

Table 7.6 Sources

Sales to Ultimate Customers, Residential and Industrial

1949–September 1977: Federal Power Commission, Form FPC-5, "Monthly Statement of Electric Operating Revenue and Income."

October 1977–February 1980: Federal Energy Regulatory Commission (FERC), Form FPC-5, "Monthly Statement of Electric Operating Revenue and Income."

March 1980–1982: FERC, Form FPC-5, "Electric Utility Company Monthly Statement."

1983: U.S. Energy Information Administration (EIA), Form EIA-826, "Electric Utility Company Monthly Statement."

1984–2003: EIA, Form EIA-861, "Annual Electric Utility Report."

2004 forward: EIA, *Electric Power Monthly* (*EPM*), September 2026, Table 5.1.

Sales to Ultimate Customers, Commercial

1949–2002: Data are estimates. See estimation methodology at http://www.eia.gov/state/seds/sep_use/notes/use_elec.pdf.

2003: EIA, Form EIA-861, "Annual Electric Utility Report."

2004 forward: EIA, EPM, September 2026, Table 5.1.

Sales to Ultimate Customers, Transportation

1949–2002: Data are estimates. See estimation methodology at http://www.eia.gov/state/seds/sep_use/notes/use_elec.pdf.

2003: EIA, Form EIA-861, "Annual Electric Utility Report."

2004 forward: EIA, EPM, September 2026, Table 5.1.

Direct Use, Annual

1989–1997: EIA, Form EIA-867, "Annual Nonutility Power Producer Report."

1998–2000: EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility."

2001–2024: EIA, *Electric Power Annual* 2024, October 2025, Table 2.2.

Direct Use, Monthly

1989 forward: Annual shares are calculated as annual direct use divided by annual commercial and industrial net generation (on Table 7.1). Then monthly direct use estimates are calculated as the annual share multiplied by the monthly commercial and industrial net generation values. For 2025 and 2026, the 2024 annual share is used.

Electric Vehicle Use

2018 forward: EIA, EPM, September 2026, Table D1.

Table 7.7b Sources

Net Summer Capacity, Nuclear Power

1949 forward: Table 8.1.

All Other Data

1949–1984: U.S. Energy Information Administration (EIA) estimates.

1985–1988: EIA, Form EIA-860, "Annual Electric Generator Report."

1989–1997: EIA, Form EIA-860, "Annual Electric Generator Report," and Form EIA-867, "Annual Nonutility Power Producer Report."

1998–2000: EIA, Form EIA-860A, "Annual Electric Generator Report–Utility," and Form EIA-860B, "Annual Electric Generator Report–Nonutility."

2001–2007: EIA, Form EIA-860, "Annual Electric Generator Report."

2008 forward: EIA, Form EIA-860, "Annual Electric Generator Report," and Form EIA-860M, “Monthly Update to the Annual Electric Generator Report.”

Estimating Monthly 1989-2000 Data for Generation, Consumption, and Stocks

For 1989-2000, monthly and annual data were collected for electric utilities; however, during this time period, only annual data were collected for independent power producers, commercial plants, and industrial plants.

To obtain 1989-2000 monthly estimates for the Electric Power, Commercial, and Industrial Sectors, electric utility patterns were used for each energy source (MonthX = MonthUtility * AnnualX / AnnualUtility). For example, to estimate “Electricity Net.

Generation From Coal: Electric Power Sector" in Table 7.2b, the monthly pattern for "Electricity Net Generation From Coal: Electric Utilities" was used. To estimate the distillate fuel oil component of "Consumption of Petroleum for Electricity Generation: Commercial Sector" in Table 7.3c, the monthly pattern for "Consumption of Distillate Fuel Oil: Electric Utilities" was used. To estimate "Consumption of Wood for Electricity Generation and Useful Thermal Output: Industrial Sector" in Table 7.4c, the monthly pattern for "Consumption of Wood for Electricity Generation: Electric Utilities" was used. To estimate "Stocks of Petroleum Coke: Electric Power Sector" in Table 7.5, the monthly pattern for "Stocks of Petroleum Coke: Electric Utilities" was used.

There were, however, these exceptions:

"Other Gases," "Other Liquids," and "Other": Historical monthly electric utility data were not available for these energy sources. For these, monthly estimates were created by dividing the annual values by the number of days in the year and then multiplying by the number of days in the month.

"Coal" and "Natural Gas" series for Industrial Sector generation and consumption: Review of the data indicated that the electric utility patterns were not consistent with the patterns analysts expected for these categories. Instead, for the Coal Industrial Sector series, the Federal Reserve Board Composite Index was used; for the Natural Gas Industrial Sector series, the Federal Reserve Board Industrial Gas Sales Index was used.

"Geothermal": During 1999, one electric utility with a large amount of generation from geothermal energy was reclassified as an independent power producer, distorting the electric utility pattern for that year. To obtain 1999 monthly estimates, the pattern for the other two electric utilities with generation from geothermal energy was used.

Estimating and Presenting Power Sector Fuel Use in EIA Publications and Analyses

I. Background

The Energy Information Administration (EIA) has comprehensively reviewed and revised how it collects, estimates, and reports fuel use for facilities producing electricity. The review addressed inconsistent reporting of the fuels used for electric power and changes in the electric power marketplace that have been inconsistently represented in various EIA survey forms and publications. For example:

- In some cases fuel use by combined-heat-and-power (CHP) plants[1] has been reported as industrial sector fuel use, while in other cases it has been reported as electric power sector fuel use.
- Electricity generation and fuel consumption have been categorized and reported in several different ways, such as (1) utility only; (2) utility and independent power producers; or (3) utility, independent power producers, and CHP plants. The restructuring of the power industry is making some of these categories less meaningful.

The goal of EIA's comprehensive review was to improve the quality and consistency of its electric power data throughout all data and analysis products. Because power facilities operate in all sectors of the economy (e.g., in commercial buildings, such as hospitals and college campuses, and industrial facilities, such as paper mills and refineries) and use many fuels, any change to electric power data affects data series in nearly all fuel areas and causes changes in a wide variety of EIA publications.

As a result of the comprehensive review, EIA has made the following changes:

- EIA has adjusted all presentations of data on electric power to a consistent format and defined the electric power sector to include electricity-only plants and CHP plants whose primary business is to sell electricity, or electricity and heat, to the public.
- EIA is providing detail within the electric power sector, commercial sector, and industrial sector on fuel used by CHP plants in those sectors.
- EIA has changed the sources of data on fuel used by components of the electric power sector. All tabulations and publications will use data obtained from EIA's surveys of electric power generators. This change in data source contributes to changes in total fuel consumption of natural gas.
- EIA has revised its historical data on electric power to resolve data anomalies. The revisions contribute to changes in EIA's electricity series as well as the fuel-use series.

This document provides detail on these changes and describes the reasoning behind the changes and their effects on EIA publications. The *Annual Energy Review (AER) 2001* (November 2002) was the first of EIA's annual publications to be released with the new formats. Since then, EIA has released several other annual reports with the electric power data in parallel formats: *Emissions of Greenhouse Gases in the United States 2001* (December 2002); *Natural Gas Annual 2001* (February 2003); *Electric Power Annual 2001* (March 2003) and *Annual Coal Report 2001* (March 2003). Beginning with the April 2003 *Monthly Energy Review*, EIA's monthly reports are being redesigned to present the electric power statistics in the new formats.

The remainder of this document is organized as follows:

- Section II: an overview of the key changes.
- Section III: the impacts on multi-fuel publications, particularly the *Monthly Energy Review* (*MER*).[2]
- Section IV: specific information on electric power data.
- Section V: specific information for data on natural gas, coal, petroleum, and renewable energy.

[1] Combined-heat-and-power plants (CHP) produce both electricity and useful thermal output. EIA formerly referred to these plants as cogenerators, but has determined that CHP better describes the facilities because some of the plants included in EIA's data do not produce heat and power in a sequential fashion, and as a result do not meet the legal definition of cogeneration specified in the Public Utility Regulatory Policies Act (PURPA).

[2] Multi-fuel publications are those that provide information on multiple fuels and sectors, such as the *Monthly Energy Review* and the *Annual Energy Review*.

Figure D1. Industrial Sector for Natural Gas in March 2003 MER and April 2003 MER

Column Headers from March 2003 MER Table 4.4

	Lease and Plant Fuel	Pipeline Fuel[a]	Delivered to Consumers						Total Consumption[c]
			Residential	Commercial	Industrial[b]	Vehicles	Electric Utilities	Total	

Column Headers from April 2003 MER Table 4.4

	End-Use Sectors										Electric Power Sector[e,f]	Total
			Industrial					Transportation				
	Residential	Commercial[a]	Lease and Plant Fuel	Other Industrial			Total	Pipeline Fuel[d]	Vehicle Fuel	Total		
				CHP[b]	Non-CHP[c]	Total						

II. Overview of Key Changes

The many changes that occur because of the fuel review generally fall into three broad categories; (1) the categorization of electric power facilities, (2) the reporting of combined-heat-and-power plant fuel use; and (3) data series revisions resulting from revised electric power fuel use estimates. Each of these areas is discussed below.

Categorization of Electric Power Facilities

Until the 1990s, most electric power generation and fuel use data could be meaningfully categorized into electric utilities and nonutility power producers.[3] Electric utilities were generally structured as vertically integrated[4] power companies that were responsible for generating, transmitting, and distributing power to consumers within their franchised service territory. Nonutility power producers were generally independent generators (mostly combined-heat-and-power plants) that produced some power for their own use and sold the remainder to utilities for distribution to consumers. However, in recent years, many formerly integrated utilities have split apart, spinning off the generating part of their business into separate companies. Independent developers have built most of the new generating capacity that has been installed in recent years. As a result, the distinction between utility and nonutility power plants has become much less meaningful. In fact, a large portion of the growth in nonutility generation in recent years is due to the reclassification of utility power plants as nonutility power plants.

To reflect the changing industry structure, EIA is now organizing electric power generation and fuel use data into two new categories: electricity-only and combined-heat-and-power (CHP) plants. These categories separate power plants by function; i.e., power only or power plus thermal, rather than by ownership class.

Electricity-only plants represent all plants, whether owned by utilities or nonutilities that produce only electricity. CHP plants represent entities that produce both electricity and some form of thermal energy. Both categories will have some facilities that are owned by traditional utilities and independent companies.

In addition, EIA is now presenting data for an electric power sector that includes electricity-only plants and CHP plants whose primary business is to sell electricity, or electricity and heat, to the public (North American Industry Classification System code 22). This contrasts with some previous data presentations in which the electric power sector included industrial and commercial CHP plants as well.

Reporting of CHP Plant Fuel Use

Historically, fuel consumption in CHP plants has been combined with other uses in many EIA data presentations. For example, in some tables the use of natural gas in commercial and industrial CHP plants was included with other commercial and industrial uses. Further, some of the fuel consumption (the portion associated with electricity production) at these same facilities was also reported under the column labeled "Nonutility Power Producers." Based on questions received from many EIA customers, it became clear that this categorization led to confusion.

Currently, EIA is distinguishing within the industrial, commercial, and electric power sectors what portion of fuel consumption is used in CHP facilities and non-CHP facilities. For example:

- In tabulations of energy use by end-use sector, if a commercial or industrial facility has a CHP unit, the total fuel consumption for that unit will be reported under commercial or industrial, but it will be identified separately from other commercial or industrial consumption. Figure D1 provides an example for

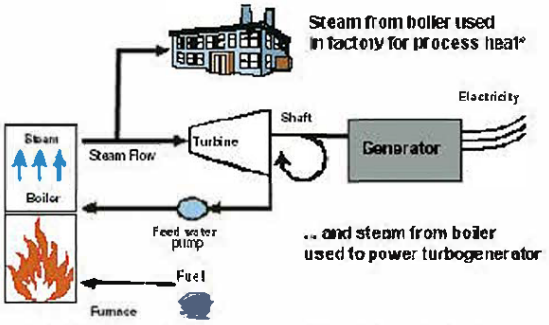
[3] For an example of this, see *Electric Power Annual 1998, Volume II*, DOE/EIA-0348(98)/2, December 1999.
[4] In this context "integrated" means that the company is involved in the three main sectors of the electric power business—generation, transmission, and distribution.

natural gas consumption in the industrial sector. It shows the headings in Table 4.4 of the April 2003 *MER* compared with the headings for the same table in the March 2003 *MER*.

CHP plants reporting that their primary business is generating and selling power to others will be reported in a separate column in the electric power sector, as shown in Figure D1.

- In tabulations of energy use to produce electric power, the total fuel consumption reported by CHP plants will be further separated into that which is used to produce electricity and that which is used to produce thermal energy.[5] Figure D2 shows a schematic for a combined-heat-and-power plant.

Figure D2. Schematic for Combined-Heat-and-Power Plants



*Useful heat may also be recovered as a byproduct of electric power generation.

The separation between electricity and thermal uses is being done because many EIA data users have expressed interest in knowing how much fuel is used to produce electricity in the United States.

Data Series Revisions Resulting From Changes in Electric Power Fuel Use Estimates

The revisions to electric power data affect many areas. For example, to estimate natural gas use, EIA has historically surveyed natural gas pipeline companies and local gas utilities to obtain data on natural gas used by residential, commercial, industrial, and electric utility and nonutility generators.[6] However, EIA also surveyed electric utilities on their natural gas use. The data obtained directly from the end user were generally thought to be more accurate than the data obtained from natural gas suppliers. As a result, total natural gas use was estimated by adding the data from natural gas companies on residential, commercial, industrial, and nonutility power producer use to the amount reported directly by electric utilities. The data collected for nonutility power producers were included with industrial use in previous EIA natural gas data presentations.

With the changing structure of the electricity sector, this reporting approach no longer appears reasonable. EIA has decided to follow the procedure described for electric utilities and use data obtained from its direct surveys of nonutility electric generators rather than the natural gas supplier surveys.[7] More detail on how the various fuel sectors are affected is given in the following sections.

Data changes are also occurring because of the extensive review of reported data that was undertaken in this process. Since it was decided that data reported directly by utilities and nonutility power generators would be the primary source of fuel consumption data for the power sector, an examination of heat rates,[8] capacity factors,[9] and power-to-steam ratios across 13 years of reported data was conducted. As a result, data for nonutility power producers for 1989 through 2002 have been revised. The data review procedure is described in Section IV under the heading "Efforts to Improve Data." As a result of the review by expert EIA analysts, anomalous values have been investigated and resolved and the result is higher quality data at aggregated levels.

[5] For the method used to separate the fuel used at CHP plants between electricity and useful thermal energy production, see Section IV.
[6] Energy Information Administration, Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."
[7] Energy Information Administration, Form EIA-759, "Monthly Power Plant Report" for electric utilities and Forms EIA-867 and EIA-860B, "Annual Electric Generator Report–Nonutility" for nonutilities. Starting with 2001, data for both utilities and nonutilities are collected on a new survey, Form EIA-906, "Power Plant Report."
[8] Heat rates are computed by dividing the heat content of the fuel burned to generate electricity by the resulting net kilowatthour generation.
[9] Capacity factors are the ratio of the electrical energy produced by a generating unit for the period of time considered to the electrical energy that could have been produced at continuous full power operation during the same period.

Table D1. Revisions to Selected Estimates: March 2003 MER and April 2003 MER

Electricity Net Generation: Total (All Sectors)
(Billion Kilowatthours)

Year	March 2003 MER	April 2003 MER	Percent Difference
2000	3,800	3,802	0.1
2001	3,758	3,737	-0.6
2002	3,861	3,836	-0.7

Total Natural Gas Consumption
(Trillion Cubic Feet)

Year	March 2003 MER	April 2003 MER	Percent Difference
2000	22.5	23.5	4.4
2001	20.9	22.3	6.7
2002	20.3	23.2	14.3

Total Coal Consumption
(Million Short Tons)

Year	March 2003 MER	April 2003 MER	Percent Difference
2000	1,081	1,084	0.3
2001	1,053	1,060	0.7
2002	1,063	1,065	0.2

Total Petroleum Consumption
(Thousand Barrels per Day)

Year	March 2003 MER	April 2003 MER	Percent Difference
2000	19,701	19,701	0.0
2001	19,649	19,649	0.0
2002	19,656	19,656	0.0

Total Renewable Energy Consumption
(Trillion Btu)

Year	March 2003 MER	April 2003 MER	Percent Difference
2000	6,868	6,158	-10.3
2001	6,189	5,324	-14.0
2002	6,760	5,891	-12.9

Sources: Electricity Net Generation, Table 7.2 of March 2003 *MER* and Table 7.2a of the April 2003 *MER*. Natural Gas, Consumption, Table 4.4 March 2003 *MER* and April 2003 *MER*. Coal Consumption, Table 6.2 of March 2003 *MER* and April 2003 *MER*. Petroleum Consumption, Table 3.1a of March 2003 *MER* and April 2003 *MER*. Renewable Energy Consumption, Table 10.1 of March 2003 *MER* and April 2003 *MER*.

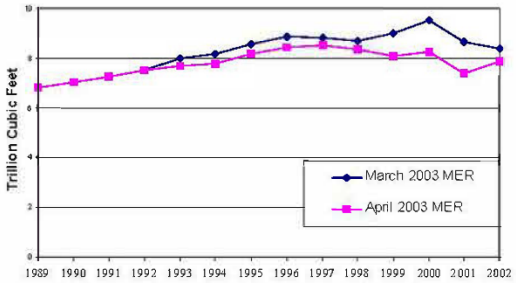
Revisions resulting from changing the source of fuel consumption data for nonutilities and from EIA's data review affect data beyond the category of nonutilities. For example, the revised estimate of natural gas consumption for 2002 is 14 percent higher in the April 2003 *Monthly Energy Review (MER)* than in the March 2003 *MER* (Table D1).

On the other hand, the revised estimate of renewable energy consumption for 2002 is 13 percent lower in the April 2003 *MER* than in the March 2003 *MER* (Table D1), due largely to a downward revision in the estimate of biomass energy consumption particularly wood/wood waste at electric power plants. A smaller revision resulted from the procedure to assign fuel consumption by energy type at some solar and hydroelectric plants. In the April *MER*, the assignment was made at the boiler level while in the March *MER* it was based on aggregate plant-level information. In addition, beginning with the April 2003 *Monthly Energy Review*, electricity net imports derived from hydroelectric power and geothermal energy are no longer included in renewable energy consumption data. They continue to be included in total U.S. energy consumption, with fuel sources unspecified (see Tables 1.3 and 2.6). The change results in a 0.1-to-0.5 quadrillion Btu drop in total renewable energy consumption from 1973 forward.

Estimates for coal and petroleum consumption show little or no change between the March and April *MER's* for the same year. This is also true for electricity net generation.

In addition, as a result of the recategorization of nonutility data, estimates of industrial natural gas consumption have been revised and are lower. For example, in March 2003 *MER*, EIA showed 8.39 trillion cubic feet delivered to industrial facilities in 2002. In April 2003 *MER*, the comparable figure (under the "other industrial" heading) for 2002 is 7.85 trillion cubic feet (Figure D3). This revision is a result of the change in the operational definition of deliveries to the industrial sector, which is explained in Section V.

Figure D3. Industrial Natural Gas Consumption: March 2003 MER and April 2003 MER



To summarize the changes, data for combined-heat-and-power plants are shown separately by end-use sector in the April 2003 *MER* while they were included with the sector totals in the March 2003 *MER*. Independent power producers are excluded from the industrial sector in the April 2003 *MER* and included in the electric power sector. Data are based on a survey of electric generators. By contrast, independent power producers were included in the industrial sector in the March 2003 *MER* for natural gas and data were based on a survey of natural gas suppliers.

III. Multi-Fuel Publications

EIA's multi-fuel publications—i.e., those that report data on numerous energy sources and provide overall energy totals—have been reformatted to incorporate the new approach described in detail in the preceding sections. The *Annual Energy Review* (*AER*) *2001* was the first of the historical multi-fuel publications to be released with the new formats. EIA has now redesigned the *Monthly Energy Review* (*MER*) to make its data and presentations conform to the *AER 2001*. In addition to the *MER*, the State-level consumption, price, and expenditure estimates that have previously been released under the titles *State Energy Data Report* and *State Energy Price and Expenditure Report* will be reformatted beginning with the 2001 update. Coordinated data and presentation changes are also being incorporated into EIA's forecast products—the *Short-Term Energy Outlook* (STEO) and the *Annual Energy Outlook* (AEO).

The April 2003 *MER* includes many redesigned tables (and related graphs) that were adapted to present the new electricity data. Revised tables fall into three groupings: electricity, fuels, and total energy. These tables are interrelated.

Tables 7.3a, 7.3b, and 7.3c provide data on fuel consumption for both electricity generation and useful thermal output. Data on consumption by the electric power sector on Table 7.3b correspond with data for this sector on fuel consumption tables (e.g., Table 4.4 on natural gas, Table 6.2 on coal, and Table 10.2c on renewable energy consumption).

Similarly, data on commercial sector CHP plants on Table 7.3c correspond with the commercial sector CHP columns of the fuel consumption tables and data on industrial sector CHP plants on Table 7.3c correspond with the industrial sector CHP columns of the fuel consumption tables.

Table 7.3d provides data on consumption of combustible fuels for electricity generation. Data on the amount of fossil fuel (such as coal, residual fuel oil, and natural gas) and on the amount of renewable energy used to generate electricity at both electricity-only and CHP plants can be found on this table.

Table 7.3d data on fuel consumed for electricity generation differ from those for the electric power sector on the fuel consumption tables (e.g., Table 4.4 for natural gas) because the electric power sector includes entities that produce thermal energy as well as electricity (CHP plants whose primary business is to sell electricity). In addition, there are entities that generate electricity that are not in the electric power sector (commercial sector CHP plants and industrial sector CHP plants).

Electricity Tables. Most March 2003 *MER* electricity tables were altered in format for presentation in the April 2003 *MER*. Below is a crosswalk of the March 2003 *MER* tables to their closest matches in the April 2003 *MER*:

March 2003 MER	April 2003 MER Table Title
7.1	7.1 Electricity Overview
7.2	7.2a Electricity Net Generation: Total (All Sectors)
7.3	7.2b Electricity Net Generation: Electric Power Sector
7.4	7.2c Electricity Net Generation: Commercial and Industrial Sectors
---	7.3a Consumption of Combustible Fuels for Electricity Generation and Useful Thermal Output: Total (All Sectors)
---	7.3b Consumption of Combustible Fuels for Electricity Generation and Useful Thermal Output: Electric Power Sector
---	7.3c Consumption of Selected Combustible Fuels for Electricity Generation and Useful Thermal Output: Commercial and Industrial Sectors
7.6	7.3d Consumption of Combustible Fuels for Electricity Generation: Total (All Sectors)
7.7	7.3e Consumption of Combustible Fuels for Electricity Generation: Electric Power Sector
7.8	7.3f Estimated Consumption of Selected Combustible Fuels for Electricity Generation: Commercial and Industrial Sectors
7.9	7.4 Stocks of Coal and Petroleum: Electric Power Sector
7.5	7.5 Electricity End Use

Fuel Tables. The following April 2003 *MER* fuel tables were reformatted from the previous year's report to incorporate the new electricity information:

4.4	Natural Gas Consumption by Sector
6.2	Coal Consumption by Sector
6.3	Coal Stocks by Sector
10.2c	Renewable Energy Consumption: End-Use Sectors
A3	Approximate Heat Content of Petroleum Product Weighted Averages
A4	Approximate Heat Content of Natural Gas
A5	Approximate Heat Content of Coal and Coal Coke

Total Energy Tables. The following April 2003 *MER* tables summarize all energy consumption and include format changes that are related to the new electricity information:

2.1	Energy Consumption by Sector
2.3c	Commercial Energy Consumption Sector
2.4d	Industrial Energy Consumption Sector
2.6	Electric Power Sector Energy Consumption

IV. Electric Power Data

Summary of Key Changes

EIA previously presented data on electric power, such as generation and fuel consumption, in the following categories:

- Electric utilities
- Nonutility power producers (independent power producers and combined-heat-and-power plants)
- Electric power industry (sum of electric utilities and nonutility power producers)

Now EIA is organizing data using the following new categories:

- Electricity-only-plants
- Combined-heat-and-power (CHP) plants

Data on CHP plants are disaggregated by the end-use category (commercial, industrial, electric power) that they report as their major line of business. The categorization is based on their North American Industry Classification System code. For example, a CHP plant that is part of a hospital will be classified as "commercial." Similarly, a CHP plant that reports that it is part of a paper mill will be classified as "industrial," and a CHP plant that reports that its primary business is selling power to others will be classified as "electric power." In addition, EIA is defining the electric power sector to include electricity-only plants and CHP plants whose primary business is to sell electricity, or electricity and heat, to the public.

EIA is presenting data for the following categories:

- Electric Power Sector
- Commercial and industrial CHP plants
- Total (sum of Electric Power Sector plus commercial and industrial CHP plants and equal to the prior "electric power industry" category)

Another change is that EIA has estimated and is presenting data on the amount of fuel used to generate electricity and the amount of fuel used for useful thermal output. Furthermore, during the course of recategorizing the data, EIA performed a thorough data quality review and revised data to resolve anomalies.

Efforts to Improve Data

EIA reviewed electric power data from 1989 through 2002 to determine whether there were anomalies. The 1989–2000 data for nonutilities were from Form EIA-860B, "Annual Electric Generator Report-Nonutility," and its predecessor, Form EIA-867, "Annual Nonutility Power Producer Report." The 2001 and 2002 data are from Form EIA-906, "Power Plant Report." These forms are used to collect data on fuel consumption, generation, and, with the exception of 1995 through 1997, useful thermal output. When anomalies were identified in the data for the more recent years (1998–2002), EIA contacted selected respondents to resolve the inconsistencies. For the older data it was not pratical to contact respondents. In this situation EIA made data adjustments to resolve the anomalies.

The review included an examination of both respondent-level data and aggregate-level data. EIA reviewed data for facilities with heat rates greater than 40,000 Btu per kilowatthour and less than 5,000 Btu per kilowatthour. The upper limit was chosen to allow for the heat rates of older non-electricity boilers. In addition, EIA reviewed data for facilities with overall efficiency of greater than 100 percent and identified facilities with thermal output that were not designated as CHP plants. To ensure consistency, EIA compared North American Industry Classification System (NAICS) codes, cogenerator status, fuel consumption, electric generation, and thermal output levels over time.

EIA analysts reviewed and evaluated aggregate-level data by State, NAICS code, fuel type, and generator type. For the historical data (1989–1997), EIA also:

- Estimated a value for useful thermal output for 1995 through 1997 (when useful thermal output was not included on the survey form) that produced a heat rate and an efficiency consistent with that observed in other years (see discussion below on CHP fuel use methodology).
- Corrected errors in units reported for fuel consumption.
- Compared data on fuel consumption with data on electric generation and adjusted data on fuel consumption or generation to maintain a consistent ratio.
- Adjusted data on useful thermal output for those respondents with heat rates outside the 5,000-to-40,000 Btu per kilowatthour range to produce an efficiency consistent with other years.

For the 1998-2000 data, the review also included a comparison for consistency with data reported by manufacturing plants on Form EIA-3, "Quarterly Coal Consumption Manufacturing Plants," since a subset of the EIA-3 manufacturing plants generate electricity and also reported on the electric generator survey Form EIA-860B. In general, there was good correspondence between the data submissions. In situations where there were inconsistencies, selected respondents were contacted to explain the differences.

Allocating CHP Fuel Use

EIA developed the following method for estimating how the total fuel consumed in the boiler is split between electricity generation and useful thermal output:

- First, a steam boiler efficiency rate of 80 percent was assumed[10].
- Then the reported or estimated value for useful thermal output (in Btu) was divided by 0.8 to estimate the fuel used to generate this amount of thermal output.
- Next, this value was subtracted from total fuel consumption and the remainder was assumed to be the amount used for electric generation.

V. Other Energy Data

Natural Gas

A number of changes have been made to natural gas consumption data presentations, definitions, and data sources. As a result of these changes the presentation of natural gas consumption by end-use sector will be consistent with end-use sector presentations and definitions in other EIA publications and the measures of natural gas used by electricity generators will be explicitly presented and identical to the quantities presented in electric power publications.

In prior EIA data publications natural gas consumption was presented for residential, commercial, industrial, transportation, and electric utility sectors. Deliveries of natural gas to independent power producers (called "other nonutility power producers" on the survey form) were included in the data reported for the industrial sector and the measures were collected through natural gas survey forms submitted by gas delivery agents (local distribution companies and pipelines).

Beginning with the April 2003 *Monthly Energy Review* (*MER*) the definition of industrial sector gas consumption for 1993-2002 no longer includes independent power producers. In addition, a new electric power sector is being used that includes independent power producers, utilities, and other electricity generators as described in the previous electricity discussion. The data reported for the electric power sector are derived entirely from data submitted on electricity data collection forms used over the period 1993-2002. These include Forms EIA-759, "Monthly Power Plant Report," and EIA-860B, "Annual Electric Generator Report-Nonutility," through 2000 and Form EIA-906, "Power Plant Report," for 2001 forward.

Compared with past publications, the impact of the definitional change for the industrial sector is to reduce measured natural gas consumption by the industrial sector. For example, in the March 2003 *MER* EIA showed 8.39 trillion cubic feet delivered to industrial facilities in 2002. In the April 2003 *MER*, the comparable figure (under the "other industrial" heading) for 2002 is 7.85 trillion cubic feet. This revision is a result of the change in the operational definition of deliveries to the industrial sector.

Compared with past publications, the impact of the definitional change and the new data sources for the electric power sector is to increase measured natural gas consumption compared to the previous electric utility data series. As a result of the changes in data sources (predominantly new electric power data sources), total natural gas consumption is higher than previously published, i.e., total natural gas consumption has increased by 4, 7, and 14 percent in 2000, 2001, and 2002, respectively.

Also new detail is available about gas consumption in the commercial, industrial and electric power sectors that distinguishes deliveries of natural gas to combined-heat-and-power (CHP) plants in these sectors from deliveries to other facilities within these sectors. "Deliveries to industrial consumers" includes deliveries to industrial consumers that are CHP plants, such as paper mills, as well as other industrial users. Included with the CHP plant data are a small number of industrial firms that report using natural gas only to generate electricity (most likely for their own use). "Deliveries to commercial consumers" also include deliveries to CHP plants, such as hospitals. Similarly, a small number of plants that report natural gas use for only electricity generation are included with the data on commercial CHP plants.

The sources for total commercial and industrial sector data are natural gas survey forms while the sources of the subcomponent CHP data series are electric power survey forms. The sources of all electric power data series, including the CHP subcomponent, are electric power survey forms.

Coal

Data on coal consumed by the commercial and industrial sectors will now be separated into coal consumed by combined-heat-and-power (CHP) plants and coal consumed by the other plants in the commercial and industrial sector (referred to as "other" or "non-CHP").[11]

Consumption by electric utilities and independent power producers, shown separately in the past, will be combined and called "electric power sector." Note that "independent power producers" were previously called "other power producers" in the coal publications and tabulations. Both

[10] Arthur D. Little, Report to the Energy Information Administration, *Industrial Model: Update on Energy Use and Industrial Characteristics*, (September 2001), Appendix C, "Average Boiler Efficiencies."

[11] A small number of commercial and industrial plants that use coal only to generate electricity are included with the data on commercial and industrial CHP plants.

terms refer to the same entities, i.e., generating facilities with a North American Industry Classification System (NAICS) code of 22.

The sources for total coal consumption remain unchanged for the residential and commercial sectors and for coke plants. They are:

- Residential and Commercial–Form EIA-6A, "Coal Distribution Report."
- Coke Form EIA-5, "Coke Plant Report."

For the industrial sector excluding coke plants (referred to as "other industrial") the data sources remain the same for the following categories:

- Manufacturing Form EIA-3, "Quarterly Coal Consumption Manufacturing Plants."
- Mines Form EIA-7A, "Coal Production Report."
- Agriculture, Mining, Construction, and Transportation–Form EIA-6A, "Coal Distribution Report."

For the portion of coal consumed by CHP plants in the commercial and industrial sectors through 2000, data were obtained from Form EIA-860B, "Annual Electric Generator Report-Nonutility," and beginning in 2001, Form EIA-906, "Power Plant Report."

Data for the electric power sector for the years 1989 through 2000 were from Form EIA-759 and Form EIA-860B. Beginning in 2001, data from Form EIA-906 are used.

Petroleum

Data on sales to independent power producers (that may have been previously reported in the industrial sector) are now included in the sales for electric power generation category in the "adjusted sales" tables of the *Fuel Oil and Kerosene Sales Report*, Tables 13-24. These data are presented in Table 2.6 of the April 2003 MER for the electric power sector. This category includes data on electric utilities and data on independent power producers. The data on electric utilities are obtained from Form EIA-759, "Monthly Power Plant Report," and FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and Form EIA-906, "Power Plant Reports." The data on independent power producers are from Form EIA-860B, "Annual Electric Generator Report-Nonutility," through 2000, and Form EIA-906, "Power Plant Report," for 2001 forward. Previously, some data on sales of kerosene, distillate, and residual fuel oils to independent power producers were obtained from Form EIA-821, "Fuel Oil and Kerosene Sales Report," but coverage may not have been complete or data for independent power producers may have been included in the end-use sectors.

Renewable Energy

For the first time EIA is presenting data on biomass energy consumption that were obtained by aggregating individual power plant data for nonutilities rather than by applying a generalized heat rate to the aggregate net generation figure. All new renewable energy publications also reflect changes in EIA definitions of the energy use sectors described earlier.

Methodology for Allocating Municipal Solid Waste to Biogenic and Non-Biogenic Energy

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This report was prepared by the Energy Information Administration, the independent statistical and analytical agency within the U.S. Department of Energy. The information contained herein should be attributed to the Energy Information Administration and should not be construed as advocating or reflecting any policy of the Department of Energy or any other organization.

1. Introduction

Heightened interest in renewable energy has prompted the Energy Information Administration (EIA) to examine some aspects of how it classifies energy sources as renewable. EIA employs the following definition of renewable energy sources: "Energy resources that are naturally replenishing but flow-limited. They are virtually inexhaustible in duration but limited in the amount of energy that is available per unit of time. Renewable energy resources include: biomass, hydro, geothermal, solar, wind, ocean thermal, wave action, and tidal action." Note that this definition defines renewable energy according to its primary source, which contrasts with other definitions that define any recurring waste stream as renewable.[1]

One concern in defining renewable energy fuels is how municipal solid waste (MSW) should be classified. Historically, because MSW has widely been viewed as principally composed of biomass, EIA has classified all consumption at MSW combustion plants as a renewable portion of "Waste Energy."[2] However, according to EIA's definition above, MSW clearly contains non-renewable components, raising a concern that EIA has been overstating the renewable content of MSW.

EIA recognizes that definitions of renewable energy used for State and federal energy policy purposes differ widely as to whether and to what extent MSW is included. For example, some States renewable portfolio standard (RPS) programs include all or part of MSW-fueled generation as an RPS-eligible generation source, while others do not. At the federal level, the treatment of MSW as a form of renewable energy varies across programs, laws, and even across sections of a given statute. For example, the definition of renewable energy in Section 203 of the Energy Policy Act of 2005 explicitly includes MSW-derived electricity as a "renewable energy" resource eligible to satisfy the federal renewable energy purchase requirement established in that section. Yet, many other sections of the same bill do not include MSW as an eligible renewable energy source for purposes of programs that aim to develop, assess, or support renewable energy.

To address this issue, EIA investigated whether sufficient information exists to reasonably divide MSW into its biogenic and non-biogenic portions. As a result, EIA has concluded that sufficient information does exist to reasonably estimate the split of energy produced from biogenic and non-biogenic components of MSW.

As a source of policy-neutral energy data, it is important for EIA to apply a consistent approach to defining renewable energy in its standard data reports. EIA will now include MSW in renewable energy only to the extent that the energy content of the MSW source stream is biogenic. This approach is more consistent with the definition of renewable energy used by EIA than alternatives that would either include or exclude all MSW from renewable energy. EIA's treatment of MSW's contribution to an aggregate

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[1] Webster's Online Dictionary, for example, defines renewable as "Capable of being replaced by ecological cycles or sound management practices."

[2] Energy Information Administration, *Annual Energy Review*, Table 10.1, Renewable Energy Consumption by Source, http://www.eia.doe.gov/emeu/aer/pdf/pages/sec10_3.pdf

measure of renewable energy is not intended to infringe on the prerogative of policymakers at the federal and/or State level to adopt one or more definitions of renewable energy that use a different approach to classifying MSW for their distinct policy purposes. Rather, our aim is to present energy data in a clear and consistent way, with enough detail that others can develop data consistent with whatever definition suits their objective.

MSW is primarily composed of residential solid waste but also includes some types of non-hazardous commercial, institutional and industrial wastes. MSW can be problematic to discard because of its large volume: one commonly adopted solution is to combust the MSW, which both decreases the volume of material and creates energy that can be recovered in the form of heat or steam. Because some materials have higher heat content than others, the amount of energy that can be produced by combusting MSW is a function of the composition of the waste stream.[3] For example, certain types of plastics have more than three times the heat content of yard trimmings or organic textiles. In general, combustible non-biogenic materials are characterized by higher heat contents per unit weight than combustible biogenic materials. Thus, the ratio of biogenic to non-biogenic material volumes can have a considerable effect on the heat content of the waste stream.

2. Summary of Activities

Using data from EIA, the Environmental Protection Agency (EPA), and fuel-specific Btu values, EIA determined two interrelated trends in the composition of the MSW stream. First, the heat content (per unit weight) of the waste stream has been steadily increasing over time. Second, the shares of energy contributed to the waste stream by biogenic and non-biogenic components have been changing over time. In 1989, biogenic materials contributed two-thirds of the heat content of the waste stream. By 2005, that number had dropped to 56 percent (see Table 1 and Figure 1). This change can likely be attributed to the changing composition of the MSW stream, as increasingly more plastics are being discarded at the same time that decreasing amounts of paper and paper products are entering the waste stream.

Based on this historical information, EIA has developed estimates of biogenic and non-biogenic MSW energy consumption (Table 2) to aid EIA in predicting the change in MSW composition over time. In keeping with the above trends, EIA estimates that non-biogenic MSW energy consumption grew slightly faster than total MSW energy consumption over the period from 1989-2005.

EIA is applying these results beginning with data for 2006, reporting only the biogenic portion of MSW as renewable energy for purposes of the National Energy Information System. The non-biogenic portion will be reported as a component of Other Non-Renewable Waste.[4] That is, MSW consumption data will be divided into renewable and non-renewable energy based on the estimated heat content of the biogenic and non-biogenic portions of MSW (Table 1). MSW data will be revised back to 2001 in the

[3] Heat content is measured in British thermal units (Btu) by weight
[4] This renewable component of MSW will also be reflected in restatements of prior data back to 2001.

Electric Power Monthly (*EPM*) (Table 2). EIA is publishing MSW generation and consumption split into its biogenic (renewable) and non-biogenic (non-renewable) portions in the March 2007 publications of the *Monthly Energy Review* and the *EPM*, which publish December 2006 preliminary data for the first time, and revises 2001 through November 2006 data.

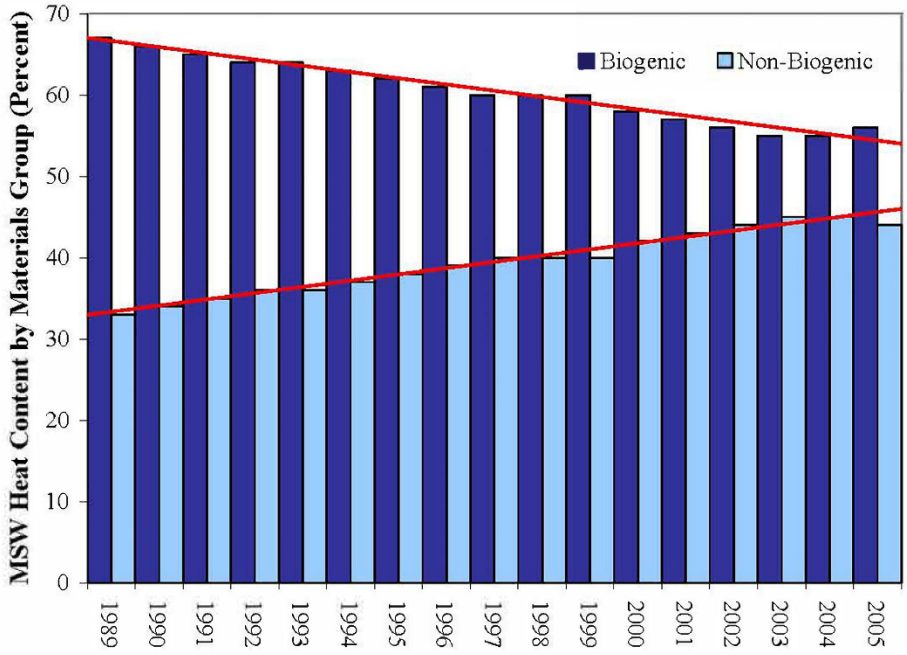
The remainder of this article describes the history of MSW and the methodology EIA will use to estimate the portions of energy derived from biogenic and non-biogenic MSW.

Table 1. Municipal Solid Waste (MSW) Heat Content and Biogenic/Non-Biogenic Shares, 1989-2005

Year	Heat Content (Million Btu/Ton)	Shares of Total MSW Energy	
		Biogenic	Non-Biogenic
1989	10.08	0.67	0.33
1990	10.21	0.66	0.34
1991	10.40	0.65	0.35
1992	10.61	0.64	0.36
1993	10.94	0.64	0.36
1994	11.15	0.63	0.37
1995	11.11	0.62	0.38
1996	10.94	0.61	0.39
1997	11.17	0.60	0.40
1998	11.06	0.60	0.40
1999	10.95	0.60	0.40
2000	11.33	0.58	0.42
2001	11.21	0.57	0.43
2002	11.19	0.56	0.44
2003	11.17	0.55	0.45
2004	11.45	0.55	0.45
2005	11.73	0.56	0.44

Note: Years in bold are EPA data collection years. Non-bolded years have been linearly interpolated at the materials group level between immediately surrounding bolded years.
Sources: Heat Content (Million Btu/ton) is derived from Environmental Protection Agency, *Municipal Solid Waste in the United States: 2005 Facts and Figures*, Table 4. http://www.epa.gov/msw/msw99.htm
Biogenic and non-biogenic percentages are EIA estimates.

Figure 1. Trends in Municipal Solid Waste (MSW) Composition



Source: Table 1 and Environmental Protection Agency, *Municipal Solid Waste in the United States: 2005 Facts and Figures.* http://www.epa.gov/msw/msw99.htm

Table 2. Municipal Solid Waste (MSW) Consumption: Biogenic (Renewable) and Non-Biogenic Energy (Non-Renewable)
(Trillion Btu)

	2001	2002	2003	2004	2005
Total	289	325	293	299	299
Biogenic (Renewable)	165	182	161	164	167
Non-Biogenic (Non-Renewable)	124	143	132	135	132

Sources: Total MSW consumption: Form EIA-906, "Power Plant Report" and Form EIA-920, "Combined Heat and Power Plant." Biogenic (Renewable) and non-biogenic (non-renewable) shares: EIA estimate.

3. History

Although the first facility that combusted MSW for energy came on line in New York City in 1898, the industry did not experience rapid growth until 1978 with the enactment of the Public Utility Regulatory Policy Act (PURPA).[5] This legislation made it mandatory for utilities to purchase electricity from qualifying facilities (QFs), which were defined as "cogeneration or small power production facilities that meet certain ownership, operating, and efficiency criteria established by the Federal Energy Regulatory Commission pursuant to (PURPA)." This new law improved the economics

[5] Public Law 95-617, Public Utility Regulatory Policies Act of 1978.

of the many MSW waste-to-energy plants that qualified as QFs. PURPA mandated the price paid for electricity be equal to the utility's avoided cost of energy and capacity, and this resulted in MSW QFs receiving a higher price for their power than they might otherwise have received.[6] MSW plants also benefited from the increased cost of landfilling due to increases in "tipping fees" (the cost to dump waste at a landfill), making disposing of MSW at a waste-to-energy plant less expensive than at a landfill in many cases.

MSW waste-to-energy plants have high capital costs, and in order to make these plants financially viable, project financers required the plant to obtain a reliable stream of low-cost fuel. Usually, a plant would enter into a "flow contract" in which a municipality delivered its waste stream to a specific plant. Thus, certain facilities held a *de facto* monopoly over a certain locality's MSW. In some cases, these contracts were seen as restricting interstate commerce in municipal wastes, and in 1994 the U.S. Supreme Court upheld a challenge to flow control, finding that it violated the interstate commerce clause of the Constitution. This ruling partially or fully voided many flow supply contracts and created an added constraint on the waste-to-energy industry. Subsequent to this ruling, few plants have been able to come on line.

EIA tracks all electricity-generating plants with a capacity greater than 1 megawatt on survey forms EIA-906 "Power Plant Report" and EIA-920 "Combined Heat and Power Plant Report", including information on all MSW combustion facilities that meet this minimum capacity requirement. Historically, MSW and landfill gas (LFG) have been reported as the same fuel code on these surveys, but starting in 2001, MSW and LFG were reported as separate fuels. Therefore EIA has data that depict total MSW consumption from the year 2001 onward.

EPA maintains historical data on MSW (Table 3 below).

Table 3. Municipal Solid Waste (MSW) Disposal
(Percent by Weight)

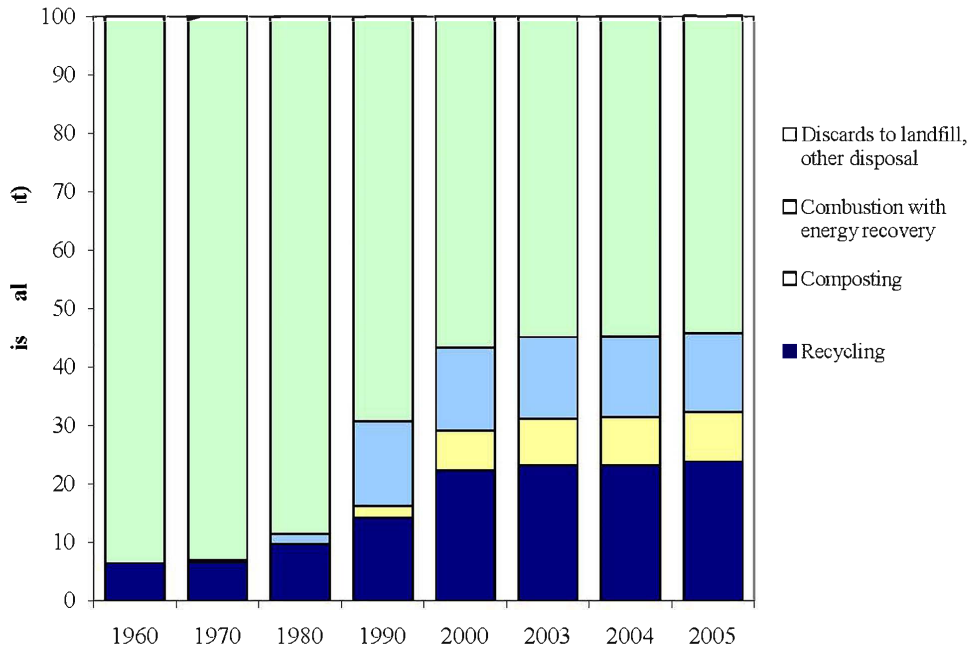
Year	1960	1970	1980	1990	2000	2003	2004	2005
Total materials recovery	6.4	6.6	9.6	16.2	29.1	31.1	31.4	32.1
Recycling	6.4	6.6	9.6	14.2	22.2	23.2	23.1	23.8
Composting [a]	s	s	s	2	6.9	7.9	8.3	8.4
Combustion with energy recovery [b]	0	0.3	1.8	14.5	14.2	14	13.8	13.6
Discards to landfill, other disposal [c]	93.6	93.1	88.6	69.3	56.7	54.9	54.8	54.3

[a] Composting of yard trimmings, food scraps, and other MSW organic material. Does not include backyard composting.
[b] Includes combustion of MSW in mass burn, modular, and refuse-derived fuel plants.
[c] Includes all other MSW that is not recovered for recycling, composting or combustion (with energy recovery). These discards are generally disposed of in landfills.
Note: Details may not add to totals due to rounding.

[6] The incremental cost to the electric utility of alternative electric energy which the utility would have generated or purchased from another source

Source: Environmental Protection Agency, Municipal *Solid Waste in the United States: 2005 Facts and Figures.* http://www.epa.gov/msw/msw99.htm
s=value less than 0.01 percent of total.

Figure 2. Municipal Solid Waste Disposal (MSW)



Source: Table 3 and Environmental Protection Agency, *Municipal Solid Waste in the United States: 2005 Facts and Figures.* http://www.epa.gov/msw/msw99.htm

4. Data Sources

Splitting MSW energy inputs into biogenic and non-biogenic components required three categories of data. First, the total amount of energy input to MSW combustion plants was obtained from EIA Forms EIA-906 and EIA-920 (Table 2). Second, data concerning the composition of the MSW stream were obtained from EPA's publication *Municipal Solid Waste in the United States*, which has been published yearly or bi-annually since 1995 (see Appendix, Table A1 for data from 1989-2005). Third, the energy content applicable to each of the combustible materials in the MSW plant input stream was obtained from the best sources EIA could identify. For most biomass fuels, EIA used Btu values published in Table B6 of the *Renewable Energy Annual* (Average Heat Content of Selected Biomass Fuels), http://www.eia.doe.gov/cneaf/solar.renewables/page/rea_data/tableb6.html. The heat content values for the remaining biomass fuels and all non-renewable fuels were obtained from various non-EIA sources. Table 4 lists the Btu content used for each component of the waste stream and the sources for that data. In some cases, the Btu value calculated was an average of several sources.

Table 4. Typical Heat Content of Materials in Municipal Solid Waste (MSW)
(Million Btu Per Ton)

Materials	Million Btu per ton
Plastics	
Polyethylene terephthalate [c, e] (PET)	20.5
High density polyethylene [e] (HDPE)	38.0
Polyvinyl chloride [c] (PVC)	16.5
Low density polyethylene/ Linear low density polyethylene [e] (LDPE/LLDPE)	24.1
Polypropylene [c] (PP)	38.0
Polystyrene [c] (PS)	35.6
Other [e]	20.5
Rubber [b]	26.9
Leather [d]	14.4
Textiles [c]	13.8
Wood [b]	10.0
Food [a, c]	5.2
Yard trimmings [b]	6.0
Newspaper [c]	16.0
Corrugated Cardboard [c, d]	16.5
Mixed paper [e]	6.7

a Includes recovery of other MSW organics for composting.
b Energy Information Administration, Renewable Energy Annual 2004, "Average Heat Content of Selected Biomass Fuels," (Washington, DC, 2005).
c Penn State Agricultural College Agricultural and Biological Engineering and Council for Solid Waste Solutions, Garth, J. and Kowal, P. Resource Recovery, Turning Waste into Energy, University Park, PA, 1993.
d Bahillo, A. et al. Journal of Energy Resources Technology, "NOx and N2O Emissions During Fluidized Bed Combustion of Leather Wastes," Volume 128, Issue 2, June 2006. pp. 99-103.
e Utah State University Recycling Center Frequently Asked Questions. http://www.usu.edu/recycle/faq.htm

5. Methodology Used to Estimate Biogenic and Non-Biogenic-Sourced MSW

Beginning in 1989 and for each year that EPA data exist, the potential quantities of combustible MSW discards (which include all MSW material available for combustion with energy recovery, discards to landfill, and other disposal) shown in Table A1 were multiplied by their respective Btu contents (Table 4). These EPA-based categories of MSW were then classified into biogenic and non-biogenic groupings (Table 5). From this, EIA was able to calculate how much of the energy potentially consumed from MSW should be attributed to renewables (biogenic) and how much should be put in the category of "other, non-renewable (non-biogenic) fuels."

Table 5. Municipal Solid Waste (MSW) Material Categories in Biogenic and Non-Biogenic Groups

Biogenic	Non-Biogenic
Newsprint	Plastics
Paper	PET
Containers & packaging	HDPE
Textiles	PVC
Yard trimmings	LDPE/LLDPE
Food wastes	PP
Wood	PS
Other biogenic	Other plastics
Leather	Rubber
	Other non-biogenic

Note: For explanation of plastics abbreviations, see Appendix C.

Specifically, the procedure to calculate the division is as follows:
(For calculations with 2005 as an example, see Appendix B)

1. Obtain the total weight of MSW discarded in a data year (Table A1).
2. For materials that are not combusted, set Btu values to zero, (e.g., glass and metals).[7]
3. Separate the remaining MSW weights into biogenic and non-biogenic fuel groups (Table 5). These two groups represent the weight of biogenic and non-biogenic materials that are theoretically available to MSW plants for combustion.
4. Multiply the Btu per ton factors from Table 4 by the total number of tons of each materials group estimated to be available for combustion. This provides both a weighted average estimate of the total Btu available to MSW plants for each EPA fuel group and a total weighted Btu per ton value for an average ton of MSW.
5. Calculate the biogenic and non-biogenic percentages of the estimated waste stream input to MSW combustion facilities.
6. Multiply these percentages by the MSW consumption data (in Btu) to estimate the total Btus available from biogenic versus non-biogenic sources (Table 2).
7. Repeat for all data years, and interpolate linearly between years to obtain the final estimates of shares of biogenic and non-biogenic MSW energy consumption (Table 1).

5.1. Caveats and Assumptions

1. The data provided by EPA are available only at the national level. Therefore, the assumed rates of recycling or MSW generation may not hold true for all States and regions.

[7] This does not mean that recycling such materials has no net effect on energy use. Rather, it reflects the fact that waste-to-energy facilities do not derive any energy from these sources.

2. The composite MSW HHV by year (Table 1) is not representative of the MSW HHV reported by EIA respondents. This is because respondent data did not include MSW composition information, which was necessary to divide MSW into biogenic and non-biogenic shares. For the purposes of determining a split, the small difference (between EIA respondent MSW HHV and calculated MSW HHV) most likely does not affect the results.
3. Discards available for combustion represent the average mixture of MSW available on a national level, which may or may not be representative of the mixture of MSW obtained by any particular MSW combustion facility.
4. Btu values were obtained from best available sources and may have been developed using different procedures.
5. All fuels have a range of Btu values from lower heating value (LHV) to higher heating value (HHV).[8] If the source did not specify which of these the value represented, it was assumed to represent HHV.
6. The EPA data divide categories of materials into sub-groups (for example, plastics are divided into seven sub-groups), each of which has a specific Btu content. However, in some cases, it is not clear what is included in the "other" category within a fuel group. Because of this, "other plastics" was assigned a heat content equal to the value of the average of all plastics groups not in the "other" category.
7. Unassigned "Other" is divided evenly between the renewable and non-renewable groups.
8. MSW input materials were classified as biogenic or non-biogenic according to their predominant composition.
    a. All rubber is assumed to be tires with the metals, fiber, and other material removed. Therefore, the rubber is assumed to be synthetic, and is treated as a non- biogenic material.[9]
    b. Textiles are all assumed to be composed of biogenic materials and are thus treated as biogenic.
9. Depending on plant design, some MSW plants may need to remove glass and metals prior to combustion. Because of their poor combustion characteristics, these materials do not produce significant heat when combusted, and may in fact reduce the net heat output of a plant. In order to allow for uniform analysis of waste stream heat contents, the Btu values of glass and metal were set at zero.
10. For the years EPA did not collect data, values for Btu content and the biogenic/non-biogenic split were interpolated linearly between the nearest prior and subsequent survey years.

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[8] The heat content rates (i.e., thermal conversion factors) can either represent the gross (HHV) energy content of the fuels, or the net (LHV) energy content. HHV rates are applied in all Btu calculations for EIA's *Annual Energy Review* and are commonly used in energy calculations in the United States; LHV rates are typically used in European energy calculations. The difference between the two rates is the amount of energy that is consumed to vaporize water created during the combustion process. Generally, the difference rages from 2 percent to 10 percent, depending on the specific fuel and its hydrogen content. Some fuels, such as unseasoned wood, can be more than 40 percent different in their gross and net heat contents.

[9] Rubber Manufacturer's Association, Scrap Tire Characteristics, http://www.rma.org/scrap_tires/scrap_tire_markets/scrap_tire_characteristics/, accessed February 2007.

6. Results

As a result of this analysis, EIA has decided to split MSW into biogenic and non-biogenic components for its future data releases. This biogenic component of MSW will also be reflected in restatements of prior data back to 2001 when EIA began to collect MSW as a separate fuel.

In standard energy data reports, EIA will now include MSW in renewable energy only to the extent that the energy content of the MSW source stream is biogenic. This approach is more consistent with the definition of renewable energy used by EIA than alternatives that would either include or exclude all MSW from renewable energy. EIA's treatment of MSW's contribution to an aggregate measure of renewable energy is not intended to infringe on the prerogative of policymakers at the federal and/or State level to adopt one or more definitions of renewable energy that use a different approach to classifying MSW for their distinct policy purposes. Rather, our aim is to present energy data in a clear and consistent way, with enough detail that others can develop data consistent with whatever definition suits their objective.

As discussed above, the calculations performed revealed two trends.

1. The Btu content per ton of MSW is steadily increasing over time (Table 1).
2. The percentage of MSW's total energy content that comes from biogenic resources is decreasing, while the percentage of energy content from non-biogenic resources is increasing (Figure 1).

These trends are clearly interrelated and are most likely attributable to two factors. First, the percentage of paper and paperboard recycled has increased from 40 percent by weight in 1996 (the first year for which complete data are available) to 50 percent in 2005, while the amount combusted rose by only 3 percent (from 81.5 million tons to 84 million tons). Second, the amount of plastic combusted has increased dramatically, from 19 million tons in 1996 to 28.9 million tons in 2005, while the recycling rate grew only half of 1 percent (from 5.2 percent to 5.7 percent). These two factors have combined to decrease the amount of biogenic material in the waste stream while increasing the amount of non-biogenic material, mainly plastics, which have one of the highest Btu contents of any fuel group in MSW.

The historical trends observed in biogenic/non-biogenic MSW composition and energy content may change as a result of EPA's national policy designed to increase the recycling rates of all materials in MSW. However, it is difficult to predict if this policy will have differing effects on the biogenic and non-biogenic components of MSW and therefore EIA cannot forecast what effect this policy will have on the heat content of the waste stream. Until the effect of EPA's policy becomes clear, EIA expects that the energy content of MSW will continue to grow over time. EIA will continue to update its estimates of the biogenic and non-biogenic portions of MSW as revised EPA data become available. For purposes of standard EIA data reports, only the biogenic portion of MSW will be included in aggregate measures of renewable energy.

Appendix A. Data by Materials Category

Table A1. Municipal Solid Waste (MSW) Weights by Category, 1989-2005
(Million Tons)

Discards	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Textiles	4.87	5.15	5.30	5.48	5.64	5.80	6.50	6.70	7.10	7.50	7.90	8.10	8.40	8.74	9.08	9.24	9.40
Yard Trimmings	30.47	30.80	29.00	27.20	25.40	23.60	20.80	17.20	16.20	15.65	15.10	11.90	12.20	12.35	12.50	12.37	12.23
Food Wastes	20.02	20.80	19.00	17.20	15.40	13.60	13.40	21.40	21.30	22.95	24.60	25.20	25.50	26.18	26.85	27.68	28.50
Wood	11.57	12.08	12.36	12.64	12.92	13.20	13.50	10.30	11.00	11.30	11.60	12.20	11.90	12.11	12.32	12.46	12.59
Other	5.30	5.40	5.53	5.65	5.78	5.90	6.00	6.10	6.30	6.40	6.50	8.60	6.80	6.88	6.96	7.63	8.30
Glass	10.86	10.47	10.40	10.34	10.34	10.20	9.70	9.20	9.10	9.40	9.70	9.90	10.20	10.18	10.15	10.09	10.02
Rubber	4.13	4.24	4.34	4.43	4.53	4.63	4.73	4.90	5.01	5.09	5.17	4.77	4.49	4.66	4.83	4.85	4.88
Leather	1.15	1.18	1.21	1.24	1.26	1.29	0.77	0.80	0.80	0.82	0.83	0.83	0.88	0.89	0.90	0.88	0.86
Metals	12.75	12.58	11.91	11.24	11.24	9.90	9.60	9.70	9.90	10.70	11.50	11.66	11.80	11.88	11.96	11.85	11.74
Paper & Paperboard																	
Newsprint	7.27	7.40	7.40	7.41	7.41	7.41	6.17	5.64	6.12	6.03	5.94	6.28	4.85	3.54	2.23	4.13	6.03
Paper Containers & Packaging	23.99	24.41	24.42	24.42	24.43	24.44	24.58	23.78	24.49	25.11	25.72	23.78	23.00	23.48	23.96	20.20	16.44
	20.33	20.69	20.70	20.71	20.71	20.72	18.17	17.90	18.31	17.91	17.51	17.31	17.27	17.11	16.94	18.24	19.53
Plastics																	
PET	1.17	1.24	1.28	1.32	1.36	1.40	1.33	1.35	1.54	1.69	1.84	2.06	2.11	2.29	2.46	2.58	2.70
HDPE	2.76	2.93	3.03	3.12	3.22	3.31	3.15	3.17	4.21	4.37	4.52	4.41	4.49	4.58	4.67	5.11	5.55
PVC	1.31	1.40	1.44	1.49	1.53	1.58	1.50	1.23	1.32	1.35	1.37	1.39	1.42	1.45	1.47	1.51	1.55
LDPE/LLDPE	4.42	4.70	4.85	5.00	5.15	5.29	5.04	4.90	5.28	5.24	5.20	5.59	5.73	5.90	6.06	6.07	6.08
PP	2.44	2.59	2.67	2.76	2.84	2.92	2.78	2.45	2.67	2.67	2.67	3.34	3.45	3.53	3.60	3.69	3.77
PS	1.95	2.08	2.14	2.21	2.28	2.34	2.23	1.96	2.09	2.12	2.15	2.28	2.29	2.28	2.27	2.36	2.44
Other	1.72	1.83	1.88	1.94	2.00	2.06	1.96	3.10	3.24	3.33	3.41	4.30	4.50	4.62	4.73	4.95	5.17
Total	168.49	172	168.9	165.8	163.4	159.6	151.9	151.8	156	159.6	163.2	163.9	161.3	162.6	163.9	165.9	167.8

Notes: Totals may not equal the sum of all components due to independent rounding. Discards includes all MSW material available for combustion with energy recovery, discards to landfill, and other disposal. For explanation of plastics abbreviations, see Appendix C.
Source: Environmental Protection Agency, *Municipal Solid Waste in the United States*, 2005. http://www.epa.gov/msw/msw99.htm

Table A2. Paper and Paperboard Products Weights in Municipal Solid Waste (MSW) by Category, 2005
(Thousand Tons)

Material	Generation	Recovery	Discards
Newsprint	9,790	8,730	1,060
Groundwood Inserts	2,260	1,980	280
Books	1,120	260	860
Magazines	2,520	970	1,550
Office Papers [a]	6,580	4,120	2,460
Telephone Directories	660	120	540
Standard Mail [b]	5,830	2,090	3,740
Other Commercial Printing	7,340	760	6,580
Tissue Paper and Towels	3,430	s	3,430
Paper Plates and Cups	970	s	970
Other Non-Packaging Paper [c]	4,410	s	4,410
Corrugated Boxes	30,930	22,100	8,830
Milk Cartons	420	s	420
Folding Cartons	4,970	590	4,380
Other Paperboard Packaging	150	s	150
Bags and Sacks	1,190	250	940
Other Paper Packaging	1,370	s	1,370
Total Paper and Paperboard	83,940	41,970	41,970

[a] High-grade papers such as copy paper and printer paper.
[b] Formerly called Third Class Mail by the U.S. Postal Service.
[c] Includes tissue in disposable diapers, paper in games and novelties, cards, etc.
s=value less than 5,000 tons.
Notes: Details may not add to totals due to rounding. Discards includes all MSW material available for combustion with energy recovery, discards to landfill, and other disposal.
Source: Environmental Protection Agency, *Municipal Solid Waste in the United States*, 2005.
http://www.epa.gov/msw/msw99.htm

Table A3. Plastic Products Weights in Municipal Solid Waste (MSW) by Category, 2005
(Thousand Tons)

Resin	Generation	Recovery	Discards
PET	2,860	540	2,320
HDPE	5,890	520	5,370
PVC	1,640	NA	1,640
LDPE/LLDPE	6,450	190	6,260
PP	4,000	10	3,990
PS	2,590	NA	2,590
Other resins	5,480	390	5,090
Total Plastics in MSW	28,910	1,650	27,260

Notes: Some detail of recovery by resin omitted due to lack of data. This table understates the recovery of plastics due to the dispersed nature of plastics recycling activities. Discards includes all MSW material available for combustion with energy recovery, discards to landfill, and other disposal. For explanation of

plastics abbreviations see Appendix C.
Source: Environmental Protection Agency, *Municipal Solid Waste in the United States*, 2005. http://www.epa.gov/msw/msw99.htm

Table A4. Rubber and Leather Products Weights in Municipal Solid Waste (MSW) by Category, 2005
(Thousand Tons)

Material	Generation	Recovery	Discards
Rubber in Tires [a]	2,760	960	1,800
Other Durables [b]	2,920	s	2,920
Clothing and Footwear	700	s	700
Other Non-durables	290	s	290
Containers and Packaging	30	s	30
Total Rubber & Leather	6,700	960	5,740

[a] Automobile and truck tires. Does not include other material in tires.
[b] Includes carpets, rugs, and other miscellaneous durables.
s=value less than 5,000 tons.
Notes: Details may not add to totals due to independent rounding. Discards include all MSW material available for combustion with energy recovery, discards to landfill, and other disposal.
Source: Environmental Protection Agency, *Municipal Solid Waste in the United States*, 2005. http://www.epa.gov/msw/msw99.htm

Appendix B. Calculations for 2005 as an Example

Table B1. Calculations to Obtain Average Million Btu Per Ton for Municipal Solid Waste (MSW)

Material Group	Discards (million tons)[a]	Heat Content (million Btu per ton)[b]	Heat Contributed (trillion Btu)
Newsprint	6.03	16.00	96.48
Paper	16.44	6.70	110.15
Containers & Packaging	19.53	16.50	322.25
Plastics			
PET	2.70	20.45	55.22
HDPE	5.55	19.00	105.45
PVC	1.55	16.50	25.58
LDPE/LLDPE	6.08	24.10	146.53
PP	3.77	38.00	143.26
PS	2.44	35.60	86.86
Other	5.17	20.50	105.99
Rubber	4.88	26.86	131.08
Leather	0.86	14.40	12.38
Textiles	9.40	13.80	129.72
Yard Trimmings	12.23	6.00	73.38

Food Wastes	28.50	5.20	148.20
Wood	12.59	9.96	125.40
Other	8.30	18.10	150.23
Glass	10.02	0.00	0.00
Metals	11.74	0.00	0.00
Total	167.78	11.73	1968.14

Total Btu/Total Tons → 1968.14 : 167.78 = 11.73 Million Btu/Ton of MSW

[a] Table A1.
[b] Table 4.
Notes: Discards includes all MSW material available for combustion with energy recovery, discards to landfill, and other disposal. For explanation of plastics abbreviations, see Appendix C.
Source: Environmental Protection Agency, Municipal Solid Waste in the United States, 2005. http://www.epa.gov/msw/msw99.htm

Table B2. Biogenic and Non-Biogenic Contributions to Total Million Btu/Million Ton of Municipal Solid Waste (MSW)

Biogenic	Share	Non-Biogenic	Share
Newsprint	0.05	Plastics	
Paper	0.06	PET	0.03
Containers & Packaging	0.16	HDPE	0.05
Leather	0.01	PVC	0.01
Textiles	0.07	LDPE/LLDPE	0.07
Yard Trimmings	0.04	PP	0.07
Food Wastes	0.08	PS	0.04
Wood	0.06	Other plastics	0.05
Other Biogenic	0.04	Rubber	0.07
		Other Non-Biogenic	0.04
Total	0.56	Total	0.44

Note: For explanation of plastics abbreviations, see Appendix C.
Source: Biogenic and non-biogenic estimation methodology documented in this report.

Appendix C. Abbreviations

Btu – British Thermal Units
EIA – Energy Information Administration
EPA – Environmental Protection Agency
HDPE - High density polyethylene
HHV – Higher heating value
LDPE/LLDPE - Low density polyethylene/ Linear low density polyethylene
LFG – Landfill gas
LHV – Lower heating value
MSW – Municipal solid waste
PET - Polyethylene terephthalate
PVC - Polyvinyl chloride
PP - Polypropylene
PS - Polystyrene
RDF – Refuse derived fuel

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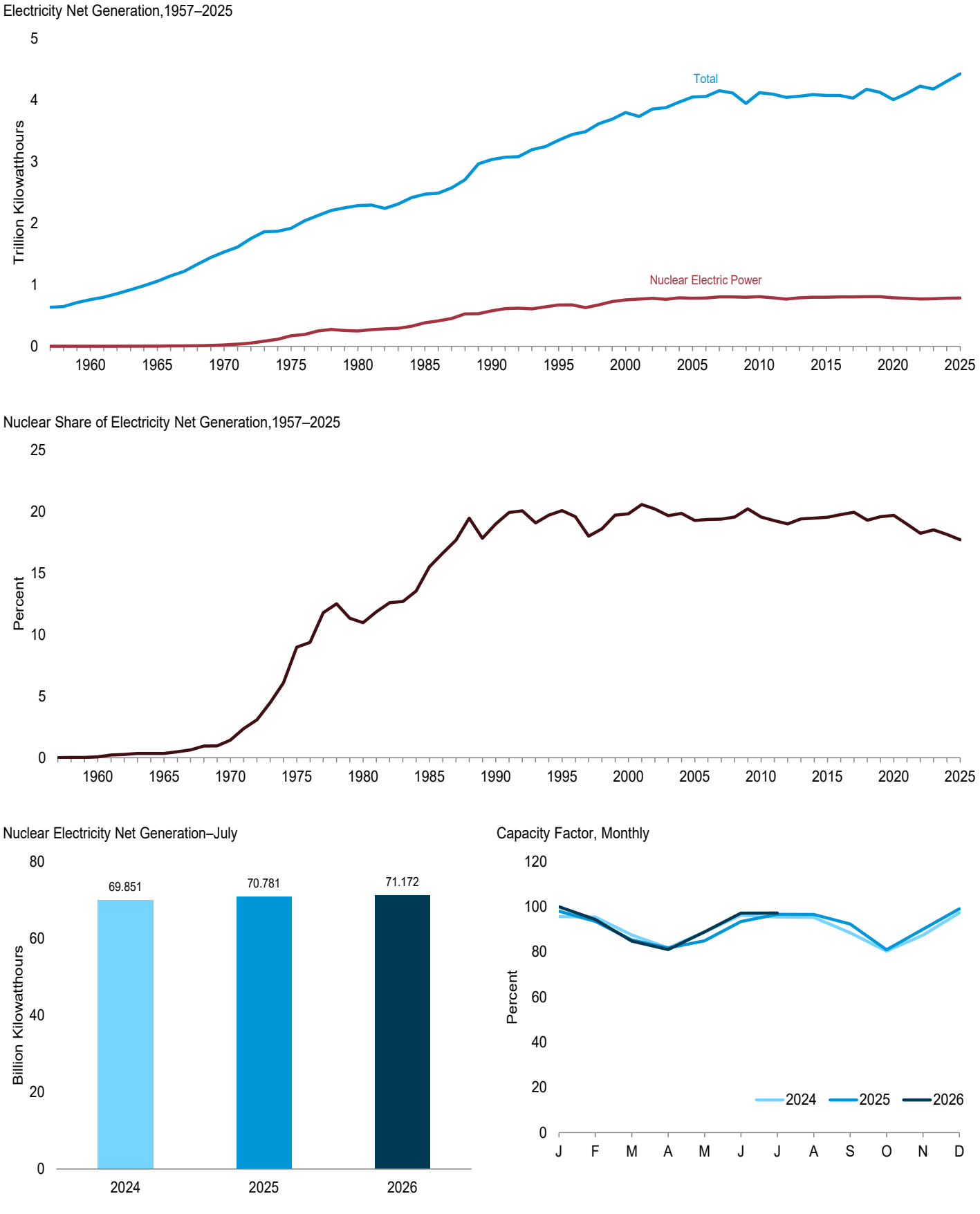
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8. Nuclear Energy

Figure 8.1 Nuclear Energy Overview



Web Page: http://www.eia.gov/totalenergy/data/monthly/#nuclear.
Sources: Tables 7.2a and 8.1.

Table 8.1 Nuclear Energy Overview

	Total Operable Units[a,b]	Net Summer Capacity of Operable Units[b,c]	Nuclear Electricity Net Generation	Nuclear Share of Electricity Net Generation	Capacity Factor[d]
	Number	Million Kilowatts	Million Kilowatthours	Percent	
1957 Total	**1**	**0.055**	**10**	**(s)**	**NA**
1960 Total	**3**	**.411**	**518**	**.1**	**NA**
1965 Total	**13**	**.793**	**3,657**	**.3**	**NA**
1970 Total	**20**	**7.004**	**21,804**	**1.4**	**NA**
1975 Total	**57**	**37.267**	**172,505**	**9.0**	**55.9**
1980 Total	**71**	**51.810**	**251,116**	**11.0**	**56.3**
1985 Total	**96**	**79.397**	**383,691**	**15.5**	**58.0**
1990 Total	**112**	**99.624**	**576,862**	**19.0**	**66.0**
1995 Total	**109**	**99.515**	**673,402**	**20.1**	**77.4**
2000 Total	**104**	**97.860**	**753,893**	**19.8**	**88.1**
2005 Total	**104**	**99.988**	**781,986**	**19.3**	**89.3**
2010 Total	**104**	**101.167**	**806,968**	**19.6**	**91.1**
2011 Total	**104**	**[c] 101.419**	**790,204**	**19.3**	**89.1**
2012 Total	**104**	**101.885**	**769,331**	**19.0**	**86.6**
2013 Total	**100**	**99.240**	**789,016**	**19.4**	**90.8**
2014 Total	**99**	**98.569**	**797,166**	**19.5**	**91.7**
2015 Total	**99**	**98.672**	**797,178**	**19.5**	**92.3**
2016 Total	**99**	**99.565**	**805,694**	**19.8**	**92.3**
2017 Total	**99**	**99.629**	**804,950**	**19.9**	**92.3**
2018 Total	**98**	**99.433**	**807,084**	**19.3**	**92.5**
2019 Total	**96**	**98.119**	**809,409**	**19.6**	**93.4**
2020 Total	**94**	**96.501**	**789,879**	**19.7**	**92.4**
2021 Total	**93**	**95.546**	**779,645**	**19.0**	**92.8**
2022 Total	**92**	**94.659**	**771,537**	**18.2**	**92.7**
2023 Total	**93**	**95.712**	**774,873**	**18.5**	**93.0**
2024 January	93	95.706	69,080	18.1	95.6
February	93	95.706	64,584	20.0	95.4
March	93	95.706	63,346	19.5	87.5
April	93	96.820	57,542	18.5	81.8
May	94	96.820	64,973	18.6	88.8
June	94	96.820	68,192	17.4	96.3
July	94	96.820	69,851	16.3	95.4
August	94	96.820	69,760	16.5	95.3
September	94	96.820	62,660	17.4	88.5
October	94	96.820	58,773	17.6	80.3
November	94	96.820	61,904	19.2	87.4
December	94	96.820	71,200	19.7	97.3
Total	**94**	**96.820**	**781,865**	**18.1**	**90.8**
2025 January	94	96.834	71,739	17.8	98.0
February	94	96.834	61,829	18.3	93.5
March	94	96.834	62,457	18.7	85.3
April	94	96.834	57,893	18.1	81.7
May	94	96.880	62,145	18.1	84.9
June	94	96.880	66,222	16.8	93.4
July	94	96.880	70,781	15.9	96.6
August	94	96.880	70,705	16.8	96.5
September	94	96.880	65,458	17.8	92.3
October	94	96.880	59,222	17.2	80.9
November	94	96.880	63,809	19.0	90.0
December	94	96.880	72,521	19.0	99.0
Total	**94**	**96.880**	**784,781**	**17.7**	**91.0**
2026 January	94	96.867	73,251	18.3	100.0
February	94	96.870	62,384	18.2	94.3
March	94	96.853	62,096	17.8	84.8
April	94	96.853	57,373	17.3	81.0
May	94	96.853	65,001	18.3	88.8
June	94	96.852	68,786	17.2	97.1
July	94	96.852	71,172	15.7	97.2
7-Month Total	**94**	**96.852**	**460,063**	**17.5**	**91.9**
2025 7-Month Total	**94**	**96.880**	**453,065**	**17.6**	**90.5**
2024 7-Month Total	**94**	**96.820**	**457,567**	**18.2**	**91.5**

[a] Total of nuclear generating units holding full-power licenses, or equivalent permission to operate, at end of period. See Note 1, "Operable Nuclear Reactors," at end of section.

[b] At end of period.

[c] For the definition of "Net Summer Capacity," see Note 2, "Nuclear Capacity," at end of section. Beginning in 2011, monthly capacity values are estimated in two steps: 1) uprates and derates reported on Form EIA-860M are added to specific months; and 2) the difference between the resulting year-end capacity (from data reported on Form EIA-860M) and final capacity (reported on Form EIA-860) is allocated to the month of January.

[d] Beginning in 2008, capacity factor data are calculated using a new methodology. For an explanation of the method of calculating the capacity factor, see Note 2, "Nuclear Capacity," at end of section.

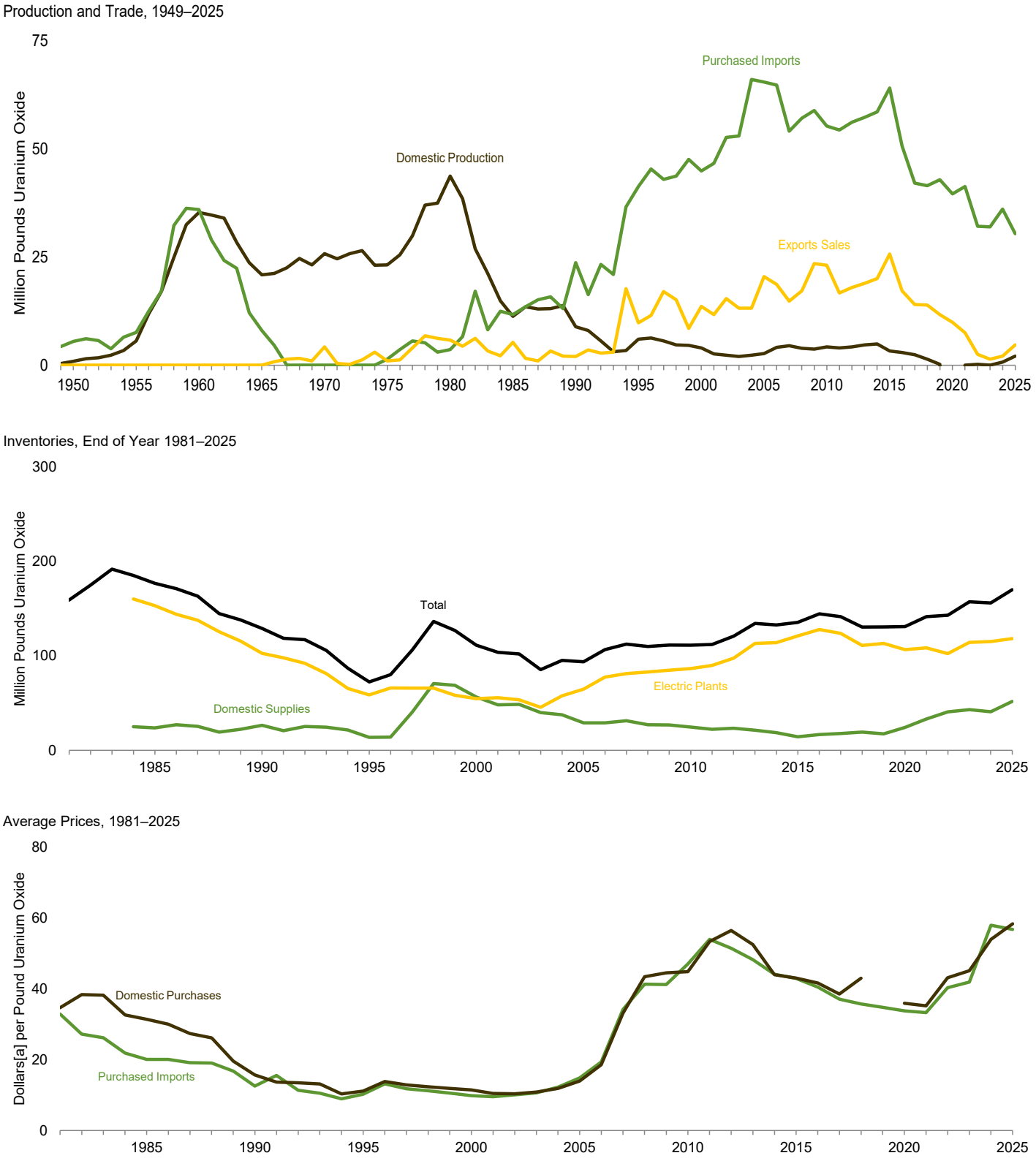
E=Estimate. NA=Not available. (s)=Less than 0.05%.

Notes: • For a discussion of nuclear reactor unit coverage, see Note 1, "Operable Nuclear Reactors," at end of section. • Nuclear electricity net generation 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/#nuclear (Excel and CSV files) for all available annual data beginning in 1957 and monthly data beginning in 1973.

Sources: See end of section.

Figure 8.2 Uranium Overview



[a] Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.
Note: See "Uranium Oxide" in Glossary.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#nuclear.
Source: Table 8.2.

Table 8.2 Uranium Overview

	Domestic Concentrate Production[a]	Purchased Imports[b]	Export[b] Sales	Electric Plant Purchases From Domestic Suppliers	Loaded Into U.S. Nuclear Reactors[c]	Inventories			Average Price	
						Domestic Suppliers	Electric Plants	Total	Purchased Imports	Domestic Purchases
	Million Pounds Uranium Oxide								Dollars[d] per Pound Uranium Oxide	
1950	0.92	5.5	0.0	NA	NA	NA	NA	NA	NA	NA
1955	5.56	7.6	.0	NA	NA	NA	NA	NA	NA	NA
1960	35.28	36.0	.0	NA	NA	NA	NA	NA	NA	NA
1965	20.88	8.0	.0	NA	NA	NA	NA	NA	NA	NA
1970	25.81	.0	4.2	NA	NA	NA	NA	NA	--	NA
1975	23.20	1.4	1.0	NA	NA	NA	NA	NA	NA	NA
1980	43.70	3.6	5.8	NA	NA	NA	NA	NA	NA	NA
1981	38.47	6.6	4.4	32.6	NA	NA	NA	159.2	32.90	34.65
1982	26.87	17.1	6.2	27.1	NA	NA	NA	174.8	27.23	38.37
1983	21.16	8.2	3.3	24.2	NA	NA	NA	191.8	26.16	38.21
1984	14.88	12.5	2.2	22.5	NA	25.0	160.2	185.2	21.86	32.65
1985	11.31	11.7	5.3	21.7	NA	23.7	153.2	176.9	20.08	31.43
1986	13.51	13.5	1.6	18.9	NA	27.0	144.1	171.1	20.07	30.01
1987	12.99	15.1	1.0	20.8	NA	25.4	137.8	163.2	19.14	27.37
1988	13.13	15.8	3.3	17.6	NA	19.3	125.5	144.8	19.03	26.15
1989	13.84	13.1	2.1	18.4	NA	22.2	115.8	138.1	16.75	19.56
1990	8.89	23.7	2.0	20.5	NA	26.4	102.7	129.1	12.55	15.70
1991	7.95	16.3	3.5	26.8	34.6	20.7	98.0	118.7	15.55	13.66
1992	5.65	23.3	2.8	23.4	43.0	25.2	92.1	117.3	11.34	13.45
1993	3.06	21.0	3.0	15.5	45.1	24.5	81.2	105.7	10.53	13.14
1994	3.35	36.6	17.7	22.7	40.4	21.5	65.4	86.9	8.95	10.30
1995	6.04	41.3	9.8	22.3	51.1	13.7	58.7	72.5	10.20	11.11
1996	6.32	45.4	11.5	23.7	46.2	13.9	66.1	80.0	13.15	13.81
1997	5.64	43.0	17.0	19.4	48.2	40.4	65.9	106.2	11.81	12.87
1998	4.70	43.7	15.1	21.6	38.2	70.7	65.8	136.5	11.19	12.31
1999	4.61	47.6	8.5	21.4	58.8	68.8	58.3	127.1	10.55	11.88
2000	3.98	44.9	13.6	24.3	51.5	56.5	54.8	111.3	9.84	11.45
2001	2.64	46.7	11.7	27.5	52.7	48.1	55.6	103.8	9.51	10.45
2002	[e,E]2.34	52.7	15.4	22.7	57.2	48.7	53.5	102.1	10.05	10.35
2003	[e,E]2.00	53.0	13.2	21.7	62.3	39.9	45.6	85.5	10.59	10.84
2004	2.28	66.1	13.2	28.2	50.1	37.5	57.7	95.2	12.25	11.91
2005	2.69	65.5	20.5	27.3	58.3	29.1	64.7	93.8	14.83	13.98
2006	4.11	64.8	18.7	27.9	51.7	29.1	77.5	106.6	19.31	18.54
2007	4.53	54.1	14.8	18.5	45.5	31.2	81.2	112.4	34.18	33.13
2008	3.90	57.1	17.2	20.4	51.3	27.0	83.0	110.0	41.30	43.43
2009	3.71	58.9	23.5	17.6	49.4	26.8	84.8	111.5	41.23	44.53
2010	4.23	55.3	23.1	16.2	44.3	24.7	86.5	111.3	47.01	44.88
2011	3.99	54.4	16.7	19.8	50.9	22.3	89.8	112.1	54.00	53.41
2012	4.15	56.2	18.0	21.5	49.5	23.3	97.6	120.9	51.44	56.51
2013	4.66	57.3	18.9	23.3	42.6	21.3	113.1	134.4	48.24	52.51
2014	4.89	58.6	20.0	20.5	50.5	18.7	114.0	132.7	44.11	43.99
2015	3.34	64.1	25.7	19.6	47.4	14.3	121.1	135.5	42.96	43.03
2016	2.92	50.7	17.2	18.8	42.5	16.7	128.0	144.6	40.45	41.64
2017	2.44	42.1	14.0	14.0	45.5	17.8	123.9	141.7	37.09	38.57
2018	1.45	41.5	13.9	11.1	50.4	19.3	111.2	130.5	35.73	42.98
2019	.17	42.9	11.7	W	43.2	17.5	113.1	130.7	34.77	W
2020	W	39.6	9.9	10.5	48.6	24.2	106.7	131.0	33.79	35.92
2021	.02	41.3	7.5	8.2	44.4	33.2	108.5	141.7	33.26	35.18
2022	.19	32.1	2.5	4.4	44.4	40.7	102.4	143.1	40.31	43.15
2023	.05	32.0	1.4	5.9	46.1	43.1	114.3	157.4	41.88	45.09
2024	.66	36.1	2.1	7.2	48.1	40.8	115.1	156.0	57.99	53.99
2025	2.11	30.4	4.7	7.3	40.9	51.7	118.3	170.0	56.80	58.34

[a] See "Uranium Concentrate" in Glossary.

[b] Import quantities through 1970 are reported for fiscal years. Prior to 1968, the Atomic Energy Commission was the sole purchaser of all imported uranium oxide. Trade data prior to 1982 were for transactions conducted by uranium suppliers only. For 1982 forward, transactions by uranium buyers (consumers) have been included. Buyer imports and exports prior to 1982 are believed to be small.

[c] Does not include any fuel rods removed from reactors and later reloaded.

[d] Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.

[e] Value has been rounded to avoid disclosure of individual company data.

R=Revised. E=Estimate. NA=Not available. W=Value withheld to avoid disclosure of individual company data. -- =Not applicable.

Note: See "Uranium Oxide" in Glossary.

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

Sources: • **1949–1966:** U.S. Department of Energy, Grand Junction Office, *Statistical Data of the Uranium Industry*, Report No. GJO-100, annual reports. • **1967–2001:** U.S. Energy Information Administration (EIA), *Uranium Industry Annual*, annual reports. • **2003–2023:** EIA, "Domestic Uranium Production Report," annual reports; and EIA, "Uranium Marketing Annual Report," annual reports. • **2024 forward:** EIA, "2025 Domestic Uranium Production Report" (July 2026), Table 3; and EIA, "2025 Uranium Marketing Annual Report" (June 2026), Tables 5, 18, 19, 21, and 22.

Note 1. Operable Nuclear Reactors. A reactor is defined as operable when it possesses a full-power license from the Nuclear Regulatory Commission or its predecessor, the Atomic Energy Commission, or equivalent permission to operate, at the end of the year or month shown. The definition includes units retaining full-power licenses during long, non-routine shutdowns that for a time rendered them unable to generate electricity.

Note 2. Nuclear Capacity. Nuclear generating units may have more than one type of net capacity rating, including the following:

(a) Net Summer Capacity—The steady hourly output that generating equipment is expected to supply to system load, exclusive of auxiliary power, as demonstrated by test at the time of summer peak demand. Auxiliary power of a typical nuclear power plant is about 5% of gross generation.

(b) Net Design Capacity or Net Design Electrical Rating (DER)—The nominal net electrical output of a unit, specified by the utility and used for plant design.

Through 2007, the monthly capacity factors are calculated as the monthly nuclear electricity net generation divided by the maximum possible nuclear electricity net generation for that month. The maximum possible nuclear electricity net generation is the number of hours in the month (assuming 24-hour days, with no adjustment for changes to or from Daylight Savings Time) multiplied by the net summer capacity of operable nuclear generating units at the end of the month. That fraction is then multiplied by 100 to obtain a percentage. Annual capacity factors are calculated as the annual nuclear electricity net generation divided by the annual maximum possible nuclear electricity net generation (the sum of the monthly values for maximum possible nuclear electricity net generation). For the methodology used to calculate capacity factors beginning in 2008, see U.S. Energy Information Administration, *Electric Power Annual*, Appendix technical notes on "Capacity Factors and Usage Factors."

Table 8.1 Sources

Total Operable Units and Net Summer Capacity of Operable Units

1957–1982: Compiled from various sources, primarily U.S. Department of Energy, Office of Nuclear Reactor Programs, "U.S. Central Station Nuclear Electric Generating Units: Significant Milestones."

1983 forward: U.S. Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report," and predecessor forms; Form EIA-860M, "Monthly Update to the Annual Electric Generator Report"; and monthly updates as appropriate. See https://www.eia.gov/nuclear/generation/index.html for a list of operable units.

Nuclear Electricity Net Generation and Nuclear Share of Electricity Net Generation

1957 forward: Table 7.2a.

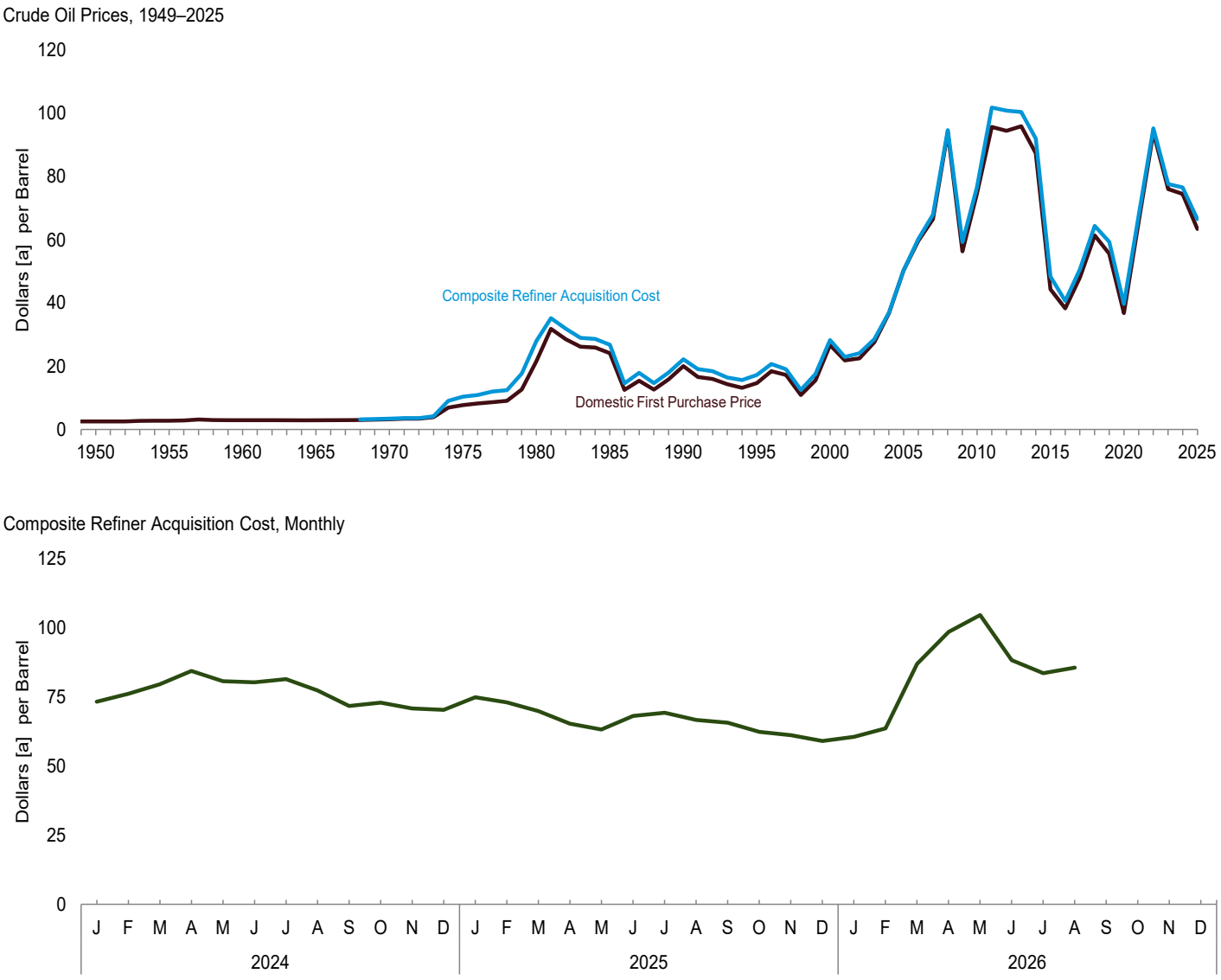
Capacity Factor

1973–2007: Calculated by EIA using the method described above in Note 2.

2008 forward: Table 7.8a.

9. Energy Prices

Figure 9.1 Petroleum Prices



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

Web Page: http://www.eia.gov/totalenergy/data/monthly/#prices.
Sources: Tables 9.1, 9.5, and 9.7.

"Refiner Prices to End Users" has not been updated due to the suspension of Forms EIA-782A and EIA-782C.

Table 9.1 Crude Oil Price Summary

(Dollars[a] per Barrel)

	Domestic First Purchase Price[c]	F.O.B. Cost of Imports[d]	Landed Cost of Imports[e]	Refiner Acquisition Cost[b]		
				Domestic	Imported	Composite
1950 Average	**2.51**	**NA**	**NA**	**NA**	**NA**	**NA**
1955 Average	**2.77**	**NA**	**NA**	**NA**	**NA**	**NA**
1960 Average	**2.88**	**NA**	**NA**	**NA**	**NA**	**NA**
1965 Average	**2.86**	**NA**	**NA**	**NA**	**NA**	**NA**
1970 Average	**3.18**	**NA**	**NA**	**E 3.46**	**E 2.96**	**E 3.40**
1975 Average	**7.67**	**11.18**	**12.70**	**8.39**	**13.93**	**10.38**
1980 Average	**21.59**	**32.37**	**33.67**	**24.23**	**33.89**	**28.07**
1985 Average	**24.09**	**25.84**	**26.67**	**26.66**	**26.99**	**26.75**
1990 Average	**20.03**	**20.37**	**21.13**	**22.59**	**21.76**	**22.22**
1995 Average	**14.62**	**15.69**	**16.78**	**17.33**	**17.14**	**17.23**
2000 Average	**26.72**	**26.27**	**27.53**	**29.11**	**27.70**	**28.26**
2005 Average	**50.28**	**47.60**	**49.29**	**52.94**	**48.86**	**50.24**
2010 Average	**74.71**	**74.19**	**76.50**	**78.01**	**75.86**	**76.69**
2011 Average	**95.73**	**101.66**	**102.92**	**100.71**	**102.63**	**101.87**
2012 Average	**94.52**	**99.78**	**101.00**	**100.72**	**101.09**	**100.93**
2013 Average	**95.99**	**96.56**	**96.99**	**102.91**	**98.11**	**100.49**
2014 Average	**87.39**	**85.65**	**88.16**	**94.05**	**89.56**	**92.02**
2015 Average	**44.39**	**41.91**	**45.38**	**49.94**	**46.38**	**48.39**
2016 Average	**38.29**	**36.37**	**38.56**	**42.41**	**38.75**	**40.66**
2017 Average	**48.05**	**45.58**	**48.50**	**52.05**	**49.12**	**50.68**
2018 Average	**61.40**	**56.31**	**58.89**	**67.05**	**60.95**	**64.38**
2019 Average	**55.59**	**54.27**	**56.60**	**60.31**	**57.94**	**59.38**
2020 Average	**36.86**	**33.66**	**36.42**	**41.23**	**37.41**	**39.75**
2021 Average	**65.84**	**62.04**	**65.05**	**69.07**	**65.85**	**67.83**
2022 Average	**93.97**	**85.98**	**89.62**	**97.45**	**91.83**	**95.29**
2023 Average	**76.10**	**67.65**	**71.82**	**79.71**	**74.53**	**77.67**
2024 January	72.30	62.90	66.82	75.98	69.28	73.28
February	75.02	67.35	71.59	78.28	72.91	76.20
March	79.04	70.54	73.35	82.26	75.88	79.67
April	83.21	75.76	79.29	86.36	81.87	84.47
May	78.21	71.89	76.25	82.29	78.34	80.70
June	77.38	73.02	75.93	81.33	78.79	80.28
July	79.11	72.20	76.80	82.64	79.67	81.50
August	75.00	69.38	72.83	79.15	74.67	77.39
September	68.75	63.80	67.58	73.08	69.61	71.75
October	70.45	65.17	67.92	74.15	70.91	72.95
November	68.24	63.37	67.21	72.05	69.08	70.89
December	68.10	63.96	66.69	71.67	68.21	70.37
Average	**74.52**	**68.48**	**71.91**	**78.20**	**74.24**	**76.64**
2025 January	73.16	66.53	69.38	76.31	72.65	74.93
February	70.11	64.08	67.96	74.18	71.14	73.04
March	67.07	60.70	65.06	71.24	67.48	69.94
April	62.01	57.96	62.11	66.38	63.53	65.38
May	59.91	57.96	60.63	64.02	61.82	63.26
June	65.33	62.45	65.28	68.47	67.40	68.11
July	65.97	62.05	66.77	69.78	68.42	69.30
August	63.37	58.35	62.85	67.35	65.55	66.73
September	62.23	57.17	61.31	66.14	64.66	65.66
October	58.89	54.00	57.81	63.12	60.95	62.40
November	58.11	53.27	57.22	61.98	59.82	61.22
December	56.31	51.10	55.58	60.01	57.26	59.09
Average	**63.41**	**58.74**	**62.68**	**67.28**	**65.13**	**66.54**
2026 January	58.44	51.81	56.24	61.47	59.05	60.60
February	62.44	56.20	60.41	65.03	61.43	63.69
March	88.15	77.86	80.13	88.09	84.81	86.95
April	97.99	88.31	90.99	100.01	95.97	98.52
May	105.01	R 90.26	R 94.68	107.86	99.01	104.62
June	86.23	R 74.62	R 81.30	90.66	83.77	88.30
July	R 79.79	R 73.36	R 77.87	R 84.93	R 81.24	R 83.65
August	NA	NA	NA	E 86.61	E 83.93	E 85.65

[a] Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.
[b] See Note 1, "Crude Oil Refinery Acquisition Costs," at end of section.
[c] See Note 2, "Crude Oil Domestic First Purchase Prices," at end of section.
[d] See Note 3, "Crude Oil F.O.B. Costs," at end of section.
[e] See Note 4, "Crude Oil Landed Costs," at end of section.

R=Revised. NA=Not available. E=Estimate.

Notes: • Domestic first purchase prices and refinery acquisition costs for the current two months are preliminary. F.O.B. and landed costs for the current three months are preliminary. • Through 1980, F.O.B. and landed costs reflect the period of reporting; beginning in 1981, they reflect the period of loading. • Annual averages are the averages of the monthly prices, weighted by volume. • Geographic coverage is the 50 states, the District of Columbia, Puerto Rico, the Virgin Islands, and all U.S. Territories and Possessions.

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

Sources: See end of section.

Table 9.2 F.O.B. Costs of Crude Oil Imports From Selected Countries

(Dollars[a] per Barrel)

	Selected Countries							Persian Gulf Nations[b]	Total OPEC[c]	Total Non-OPEC[c]
	Angola	Colombia	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela			
1973 Average[d]	W	W	–	7.81	3.25	–	5.39	3.68	5.43	4.80
1975 Average	10.97	–	11.44	11.82	10.87	–	11.04	10.88	11.34	10.62
1980 Average	33.45	W	31.06	35.93	28.17	34.36	24.81	28.92	32.21	32.85
1985 Average	26.30	–	25.33	28.04	22.04	27.64	23.64	23.31	25.67	25.96
1990 Average	20.23	20.75	19.26	22.46	20.36	23.43	19.55	18.54	20.40	20.32
1995 Average	16.58	16.73	15.64	17.40	W	16.94	13.86	W	15.36	16.02
2000 Average	27.90	29.04	25.39	28.70	24.62	27.21	24.45	24.72	25.56	26.77
2005 Average	52.48	51.89	43.00	55.95	47.96	54.48	46.39	47.21	49.60	45.79
2010 Average	78.18	72.56	72.46	80.83	76.44	W	70.30	75.65	75.23	73.24
2011 Average	111.82	100.21	100.90	115.35	107.08	–	97.23	106.47	105.34	98.49
2012 Average	111.23	106.43	101.84	114.51	106.65	–	100.15	105.45	104.39	95.71
2013 Average	107.71	101.24	98.40	110.06	101.16	W	97.52	100.62	100.57	93.67
2014 Average	W	80.75	86.55	W	95.60	–	84.51	94.03	89.76	82.95
2015 Average	W	47.52	44.90	W	47.53	–	40.73	46.95	43.25	41.19
2016 Average	42.68	35.28	36.22	46.20	39.30	W	34.71	38.76	38.51	34.81
2017 Average	W	48.34	46.66	54.77	51.30	W	45.60	50.16	49.55	43.30
2018 Average	74.44	62.51	62.75	71.41	68.23	71.65	61.25	66.55	65.61	51.41
2019 Average	66.97	60.61	56.72	67.21	63.48	65.20	48.57	61.43	62.11	52.36
2020 Average	W	36.03	36.00	W	35.35	43.39	–	36.06	38.34	33.22
2021 Average	75.02	66.15	64.42	73.83	68.43	W	–	66.72	69.18	60.93
2022 Average	W	93.57	89.32	W	95.58	–	–	92.34	99.69	83.86
2023 Average	W	W	70.27	W	W	–	W	79.77	82.32	65.91
2024 January	–	–	69.74	W	W	–	–	W	W	61.10
February	–	–	71.87	W	W	–	W	W	77.03	65.77
March	W	W	74.14	W	W	–	W	W	83.20	68.03
April	W	W	76.72	W	–	–	W	W	82.72	74.92
May	W	W	73.86	W	–	–	W	–	79.97	71.25
June	W	W	73.52	W	–	–	W	W	83.04	71.54
July	W	W	74.33	W	–	–	W	–	78.50	71.72
August	W	73.54	72.95	W	–	–	W	–	81.14	67.62
September	–	W	66.37	W	–	–	W	–	70.59	63.07
October	W	W	67.18	W	–	–	W	W	71.44	64.09
November	W	W	64.78	W	–	–	W	–	71.65	62.18
December	W	–	64.27	W	–	–	W	W	71.07	62.76
Average	82.00	73.28	71.05	W	W	–	60.35	W	78.12	67.21
2025 January	–	W	67.55	W	–	–	–	W	W	66.15
February	–	W	68.74	W	–	–	–	W	74.78	63.12
March	–	68.09	64.97	W	–	–	–	W	74.49	59.97
April	–	61.81	61.24	W	–	–	–	W	67.41	56.82
May	W	W	57.87	W	–	–	–	W	67.16	56.36
June	W	64.66	63.63	W	–	–	–	W	71.12	61.48
July	–	66.71	63.76	W	–	–	–	W	W	61.21
August	–	62.45	62.86	–	–	–	–	–	–	58.35
September	–	64.49	60.79	W	–	–	–	–	W	56.77
October	–	W	56.25	W	–	–	W	W	63.46	53.17
November	–	60.97	56.26	W	–	–	–	W	64.13	52.73
December	W	W	W	W	–	–	–	W	62.24	50.34
Average	65.70	64.14	61.67	W	–	–	W	W	68.81	58.01
2026 January	–	W	54.12	W	–	–	–	W	W	51.51
February	–	W	W	W	–	–	–	W	W	55.00
March	–	W	85.75	W	–	–	–	W	110.65	76.01
April	–	W	W	W	–	–	–	W	116.50	86.13
May	–	W	W	W	–	–	–	W	R 124.85	R 88.77
June	–	W	W	W	–	–	–	W	R 88.67	R 73.94
July	–	W	W	W	–	–	–	W	W	73.53

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

[b] Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, United Arab Emirates, and the Neutral Zone (between Kuwait and Saudi Arabia).

[c] See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary for exact years of each country's membership. On this table, "Total OPEC" for all years includes Algeria, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela; Angola is included in "Total OPEC" 2007 forward; Gabon is included in "Total OPEC" 1974–1995 and July 2016 forward; Ecuador is included in "Total OPEC" 1973–1992 and 2008 forward; Indonesia is included in "Total OPEC" 1973–2008 and 2016.

[d] Based on October, November, and December data only.

R=Revised. – =No data reported. W=Value withheld to avoid disclosure of individual company data.

Notes: • The Free on Board (F.O.B.) cost at the country of origin excludes all costs related to insurance and transportation. See "F.O.B. (Free on Board)" in Glossary, and Note 3, "Crude Oil F.O.B. Costs," at end of section. • Values for the current two months are preliminary. • Through 1980, prices reflect the period of reporting; beginning in 1981, prices reflect the period of loading. • Annual averages are averages of the monthly prices, including prices not published, weighted by volume. • Cargoes that are purchased on a "netback" basis, or under similar contractual arrangements whereby the actual purchase price is not established at the time the crude oil is acquired for importation into the United States, are not included in the published data until the actual prices have been determined and reported. • U.S. geographic coverage is the 50 states and the District of Columbia.

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

Sources: See end of section.

Table 9.3 Landed Costs of Crude Oil Imports From Selected Countries

(Dollars[a] per Barrel)

	Selected Countries								Persian Gulf Nations[b]	Total OPEC[c]	Total Non-OPEC[c]
	Angola	Canada	Colombia	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela			
1973 Average[d]	W	5.33	W	–	9.08	5.37	–	5.99	5.91	6.85	5.64
1975 Average	11.81	12.84	–	12.61	12.70	12.50	–	12.36	12.64	12.70	12.70
1980 Average	34.76	30.11	W	31.77	37.15	29.80	35.68	25.92	30.59	33.56	33.99
1985 Average	27.39	25.71	–	25.63	28.96	24.72	28.36	24.43	25.50	26.86	26.53
1990 Average	21.51	20.48	22.34	19.64	23.33	21.82	22.65	20.31	20.55	21.23	20.98
1995 Average	17.66	16.65	17.45	16.19	18.25	16.84	17.91	14.81	16.78	16.61	16.95
2000 Average	29.57	26.69	29.68	26.03	30.04	26.58	29.26	26.05	26.77	27.29	27.80
2005 Average	54.31	44.73	53.42	43.47	57.55	50.31	55.28	47.87	49.68	51.36	47.31
2010 Average	80.61	72.80	74.25	72.86	83.14	79.29	80.29	72.43	78.60	78.28	74.68
2011 Average	114.05	89.92	102.57	101.21	116.43	108.83	118.45	100.14	108.01	107.84	98.64
2012 Average	114.95	84.24	107.07	102.45	116.88	108.15	W	101.58	107.74	107.56	95.05
2013 Average	110.81	84.41	103.00	99.06	112.87	102.60	111.23	99.34	102.53	102.98	91.99
2014 Average	99.25	81.30	88.29	87.48	102.16	94.91	W	86.88	95.30	93.10	84.67
2015 Average	51.73	41.99	49.53	45.51	54.70	49.78	W	42.87	49.43	47.44	44.09
2016 Average	44.65	36.27	38.86	36.64	48.11	42.14	W	35.50	41.20	40.54	37.09
2017 Average	54.17	44.93	50.60	47.73	56.48	52.56	56.11	47.02	51.42	51.26	46.67
2018 Average	73.42	48.34	66.75	63.48	71.93	69.40	73.28	62.46	67.55	67.22	54.27
2019 Average	68.58	51.10	62.83	57.96	68.78	64.86	66.65	52.36	63.27	63.41	54.65
2020 Average	41.03	33.81	41.04	37.18	46.24	35.84	44.51	–	37.98	39.28	35.95
2021 Average	75.50	61.30	69.25	65.48	73.90	72.69	74.71	–	71.39	71.90	63.87
2022 Average	–	84.39	95.19	91.18	108.45	97.51	105.28	–	95.41	98.71	87.89
2023 Average	86.06	67.09	76.70	72.44	88.85	84.19	84.43	67.63	80.46	80.93	70.23
2024 January	W	60.82	76.43	70.25	W	W	W	W	85.13	81.48	65.11
February	–	65.98	77.38	73.85	91.51	88.34	–	W	80.15	80.12	69.88
March	W	68.48	79.39	75.73	W	W	–	W	81.35	83.12	71.71
April	W	74.88	85.04	78.00	W	W	–	71.73	87.55	85.53	78.27
May	W	72.67	78.74	75.60	W	W	W	68.31	84.05	83.16	75.15
June	W	72.34	79.75	74.56	88.56	85.07	–	70.20	81.81	82.97	74.59
July	W	73.67	79.98	75.36	85.73	W	W	73.73	82.33	80.98	76.05
August	W	68.77	75.77	73.72	85.80	83.39	–	68.06	78.85	79.51	71.28
September	W	65.09	68.53	67.03	W	W	78.16	64.45	71.88	71.59	66.72
October	W	64.60	68.79	67.86	W	76.62	W	64.09	71.37	71.88	67.10
November	W	63.73	68.92	66.05	W	74.47	W	63.24	71.12	71.33	66.24
December	W	63.85	70.08	65.66	W	74.72	W	65.04	74.05	72.11	65.58
Average	**84.08**	**67.91**	**75.48**	**72.08**	**86.44**	**82.76**	**80.15**	**66.97**	**78.57**	**78.25**	**70.72**
2025 January	–	67.08	72.02	68.93	W	80.34	W	68.51	78.95	74.66	68.61
February	–	65.20	72.11	69.02	81.35	W	W	66.13	76.58	74.18	67.05
March	W	60.95	69.20	66.39	77.39	74.32	–	63.17	71.86	71.10	63.81
April	W	57.95	64.41	62.39	74.29	69.65	W	60.06	65.61	67.59	61.05
May	W	57.43	63.77	59.12	71.14	67.76	W	W	63.10	66.13	59.72
June	W	62.10	67.20	64.85	77.89	73.75	–	W	69.21	70.95	64.32
July	–	63.55	68.35	65.00	W	73.43	W	–	71.02	73.17	65.81
August	W	60.08	66.00	63.71	W	70.25	W	W	68.23	68.36	62.17
September	–	58.00	65.87	62.56	W	69.88	W	59.19	67.44	66.09	60.84
October	–	54.99	62.01	58.25	W	W	W	W	62.80	62.75	57.10
November	W	54.37	64.97	57.97	W	66.21	W	58.31	63.15	63.30	56.42
December	W	52.78	59.55	55.80	W	64.08	–	55.12	59.79	60.80	54.70
Average	**71.55**	**59.51**	**66.44**	**62.92**	**74.53**	**71.23**	**71.63**	**61.65**	**67.72**	**68.38**	**61.81**
2026 January	–	52.98	61.72	55.70	W	64.17	W	W	62.52	62.49	55.37
February	–	55.73	64.58	59.21	W	68.76	W	W	66.59	66.19	59.03
March	–	77.07	88.70	89.67	W	72.77	W	84.73	79.20	84.56	79.30
April	–	87.97	97.54	98.27	W	86.65	W	89.24	88.21	93.90	90.54
May	–	89.86	91.87	103.67	W	W	W	95.02	W	R 101.43	R 93.88
June	–	R 77.32	R 83.74	86.06	W	W	W	77.39	W	R 80.69	R 81.38
July	–	75.34	82.87	78.59	W	W	W	71.28	W	71.28	78.70

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

[b] Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, United Arab Emirates, and the Neutral Zone (between Kuwait and Saudi Arabia).

[c] See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary for exact years of each country's membership. On this table, "Total OPEC" for all years includes Algeria, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela; Angola is included in "Total OPEC" 2007 forward; Gabon is included in "Total OPEC" 1974–1995 and July 2016 forward; Ecuador is included in "Total OPEC" 1973–1992 and 2008 forward; Indonesia is included in "Total OPEC" 1973–2008 and 2016.

[d] Based on October, November, and December data only.

R=Revised. – =No data reported. W=Value withheld to avoid disclosure of individual company data.

Notes: • See "Landed Costs" in Glossary, and Note 4, "Crude Oil Landed Costs," at end of section. • Values for the current two months are preliminary. • Through 1980, prices reflect the period of reporting; beginning in 1981, prices reflect the period of loading. • Annual averages are averages of the monthly prices, including prices not published, weighted by volume. • Cargoes that are purchased on a "netback" basis, or under similar contractual arrangements whereby the actual purchase price is not established at the time the crude oil is acquired for importation into the United States, are not included in the published data until the actual prices have been determined and reported. • U.S. geographic coverage is the 50 states and the District of Columbia.

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

Sources: • **October 1973–September 1977:** Federal Energy Administration, Form FEA-F701-M-0, "Transfer Pricing Report." • **October 1977–December 1977:** U.S. Energy Information Administration (EIA), Form FEA-F701-M-0, "Transfer Pricing Report." • **1978–2007:** EIA, *Petroleum Marketing Annual 2008,* Table 22. • **2008 forward:** EIA, *Petroleum Marketing Monthly,* December 2025, Table 22, and EIA, Petroleum Data Tables.

Table 9.4 Retail Motor Gasoline and On-Highway Diesel Fuel Prices

(Dollars[a] per Gallon, Including Taxes)

	Platt's / Bureau of Labor Statistics Data				U.S. Energy Information Administration Data			
	Motor Gasoline by Grade				Regular Motor Gasoline by Area Type			
	Leaded Regular	Unleaded Regular	Unleaded Premium[b]	All Grades[c]	Conventional Gasoline Areas[d]	Reformulated Gasoline Areas[e]	All Areas	On-Highway Diesel Fuel
1950 Average	**0.268**	**NA**	**NA**	**NA**	– –	– –	– –	– –
1955 Average	**.291**	**NA**	**NA**	**NA**	– –	– –	– –	– –
1960 Average	**.311**	**NA**	**NA**	**NA**	– –	– –	– –	– –
1965 Average	**.312**	**NA**	**NA**	**NA**	– –	– –	– –	– –
1970 Average	**.357**	**NA**	**NA**	**NA**	– –	– –	– –	– –
1975 Average	**.567**	**NA**	**NA**	**NA**	– –	– –	– –	– –
1980 Average	**1.191**	**1.245**	**NA**	**1.221**	– –	– –	– –	– –
1985 Average	**1.115**	**1.202**	**1.340**	**1.196**	– –	– –	– –	– –
1990 Average	**1.149**	**1.164**	**1.349**	**1.217**	**NA**	**NA**	**NA**	**NA**
1995 Average	**– –**	**1.147**	**1.336**	**1.205**	**1.103**	**1.163**	**1.111**	**1.109**
2000 Average	**– –**	**1.510**	**1.693**	**1.563**	**1.462**	**1.543**	**1.484**	**1.491**
2005 Average	**– –**	**2.295**	**2.491**	**2.338**	**2.240**	**2.335**	**2.270**	**2.402**
2010 Average	**– –**	**2.788**	**3.047**	**2.836**	**2.742**	**2.864**	**2.782**	**2.992**
2011 Average	**– –**	**3.527**	**3.792**	**3.577**	**3.476**	**3.616**	**3.521**	**3.840**
2012 Average	**– –**	**3.644**	**3.922**	**3.695**	**3.552**	**3.757**	**3.618**	**3.968**
2013 Average	**– –**	**3.526**	**3.843**	**3.584**	**3.443**	**3.635**	**3.505**	**3.922**
2014 Average	**– –**	**3.367**	**3.713**	**3.425**	**3.299**	**3.481**	**3.358**	**3.825**
2015 Average	**– –**	**2.448**	**2.866**	**2.510**	**2.334**	**2.629**	**2.429**	**2.707**
2016 Average	**– –**	**2.142**	**2.610**	**2.204**	**2.070**	**2.296**	**2.143**	**2.304**
2017 Average	**– –**	**2.408**	**2.911**	**2.469**	**2.333**	**2.586**	**2.415**	**2.650**
2018 Average	**– –**	**2.735**	**3.270**	**2.794**	**2.631**	**2.904**	**2.719**	**3.178**
2019 Average	**– –**	**2.636**	**3.212**	**2.698**	**2.501**	**2.827**	**2.604**	**3.056**
2020 Average	**– –**	**2.174**	**2.791**	**2.242**	**2.074**	**2.370**	**2.168**	**2.551**
2021 Average	**– –**	**3.051**	**3.692**	**3.133**	**2.908**	**3.224**	**3.008**	**3.287**
2022 Average	**– –**	**4.094**	**4.863**	**4.192**	**3.803**	**4.274**	**3.951**	**4.989**
2023 Average	**– –**	**3.658**	**4.469**	**3.771**	**3.397**	**3.783**	**3.519**	**4.214**
2024 January	– –	3.221	4.053	3.353	2.957	3.331	3.075	3.854
February	– –	3.359	4.162	3.486	3.102	3.446	3.212	4.044
March	– –	3.581	4.379	3.707	3.318	3.657	3.426	4.022
April	– –	3.776	4.604	3.907	3.466	3.922	3.611	4.002
May	– –	3.755	4.580	3.885	3.459	3.916	3.603	3.822
June	– –	3.601	4.413	3.729	3.326	3.730	3.455	3.722
July	– –	3.622	4.411	3.747	3.378	3.713	3.484	3.810
August	– –	3.521	4.322	3.648	3.295	3.594	3.389	3.700
September	– –	3.344	4.189	3.478	3.106	3.450	3.214	3.558
October	– –	3.279	4.122	3.412	3.036	3.357	3.137	3.585
November	– –	3.181	4.026	3.315	2.958	3.255	3.053	3.522
December	– –	3.145	3.980	3.277	2.926	3.214	3.018	3.494
Average	**– –**	**3.449**	**4.270**	**3.579**	**3.191**	**3.547**	**3.304**	**3.760**
2025 January	– –	3.211	4.035	3.342	2.981	3.279	3.076	3.634
February	– –	3.261	4.110	3.396	3.003	3.375	3.121	3.675
March	– –	3.232	4.085	3.368	2.976	3.354	3.096	3.585
April	– –	3.330	4.184	3.465	3.049	3.434	3.171	3.567
May	– –	3.306	4.171	3.443	3.022	3.422	3.150	3.499
June	– –	3.306	4.164	3.442	3.034	3.397	3.150	3.599
July	– –	3.285	4.149	3.422	3.018	3.352	3.125	3.779
August	– –	3.295	4.163	3.433	3.027	3.356	3.133	3.744
September	– –	3.339	4.231	3.481	3.041	3.430	3.166	3.748
October	– –	3.239	4.157	NA	2.938	3.320	3.060	3.679
November	– –	3.228	4.139	3.373	2.925	3.317	3.050	3.822
December	– –	3.050	3.958	3.195	2.771	3.158	2.894	3.615
Average	**– –**	**3.257**	**4.129**	**3.396**	**2.980**	**3.348**	**3.097**	**3.660**
2026 January	– –	2.961	3.861	3.104	2.698	3.046	2.809	3.523
February	– –	3.065	3.983	3.211	2.776	3.187	2.908	3.722
March	– –	3.988	4.757	3.843	3.483	3.964	3.638	4.921
April	– –	4.409	5.190	4.263	3.936	4.456	4.103	5.501
May	– –	4.793	5.550	4.651	4.330	4.794	4.479	5.600
June	– –	4.346	5.150	4.195	3.901	4.368	4.050	5.024
July	– –	4.242	5.027	4.094	3.797	4.221	3.932	4.955
August	– –	4.348	5.134	4.200	3.917	4.360	4.058	5.462
September	– –	4.631	5.426	4.482	4.203	4.679	4.355	6.291

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

[b] The 1981 average (available in Web file) is based on September through December data only.

[c] Also includes grades of motor gasoline not shown separately.

[d] Any area that does not require the sale of reformulated gasoline.

[e] "Reformulated Gasoline Areas" are ozone nonattainment areas designated by the U.S. Environmental Protection Agency that require the use of reformulated gasoline (RFG). Areas are reclassified each time a shift in or out of an RFG program occurs due to federal or state regulations.

NA=Not available. – – =Not applicable.

Notes: • See Note 5, "Motor Gasoline Prices," at end of section. • See "Motor Gasoline Grades," "Motor Gasoline, Conventional," "Motor Gasoline, Oxygenated," and "Motor Gasoline, Reformulated" in Glossary. • Geographic coverage: for columns 1–4, current coverage is 85 urban areas; for columns 5–7, coverage is the 50 states and the District of Columbia; for column 8, coverage is the 48 contiguous states and the District of Columbia.

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

Sources: • **Motor Gasoline by Grade, Monthly Data: October 1973 forward**—U.S. Department of Labor, Bureau of Labor Statistics (BLS), *U.S. City Average Gasoline Prices.* • **Motor Gasoline by Grade, Annual Data: 1949–1973**—*Platt's Oil Price Handbook and Oilmanac, 1974,* 51st Edition. **1974 forward**—calculated by the U.S. Energy Information Administration (EIA) as simple averages of the BLS monthly data. • **Regular Motor Gasoline by Area Type:** EIA, calculated as simple averages of weighted weekly estimates from "Weekly U.S. Retail Gasoline Prices, Regular Grade." • **On-Highway Diesel Fuel:** EIA, calculated as simple averages of weighted weekly estimates from "Weekly Retail On-Highway Diesel Prices."

Table 9.5 Refiner Prices of Residual Fuel Oil

(Dollars[a] per Gallon, Excluding Taxes)

	Residual Fuel Oil Sulfur Content Less Than or Equal to 1%		Residual Fuel Oil Sulfur Content Greater Than 1%		Average	
	Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users
1978 Average	**0.293**	**0.314**	**0.245**	**0.275**	**0.263**	**0.298**
1980 Average	**.608**	**.675**	**.479**	**.523**	**.528**	**.607**
1985 Average	**.610**	**.644**	**.560**	**.582**	**.577**	**.610**
1990 Average	**.472**	**.505**	**.372**	**.400**	**.413**	**.444**
1995 Average	**.383**	**.436**	**.338**	**.377**	**.363**	**.392**
2000 Average	**.627**	**.708**	**.512**	**.566**	**.566**	**.602**
2005 Average	**1.115**	**1.168**	**.842**	**.974**	**.971**	**1.048**
2006 Average	**1.202**	**1.342**	**1.085**	**1.173**	**1.136**	**1.218**
2007 Average	**1.406**	**1.436**	**1.314**	**1.350**	**1.350**	**1.374**
2008 Average	**1.918**	**2.144**	**1.843**	**1.889**	**1.866**	**1.964**
2009 Average	**1.337**	**1.413**	**1.344**	**1.306**	**1.342**	**1.341**
2010 Average	**1.756**	**1.920**	**1.679**	**1.619**	**1.697**	**1.713**
2011 Average	**2.389**	**2.736**	**2.316**	**2.257**	**2.336**	**2.401**
2012 Average	**2.548**	**3.025**	**2.429**	**2.433**	**2.457**	**2.592**
2013 Average	**2.363**	**2.883**	**2.249**	**2.353**	**2.278**	**2.482**
2014 Average	**2.153**	**2.694**	**1.996**	**2.221**	**2.044**	**2.325**
2015 Average	**.971**	**1.529**	**.999**	**1.227**	**.996**	**1.285**
2016 Average	**.736**	**1.138**	**.746**	**.897**	**.745**	**.945**
2017 Average	**1.112**	**W**	**1.117**	**1.237**	**1.116**	**1.287**
2018 Average	**1.397**	**W**	**1.466**	**1.587**	**1.463**	**1.662**
2019 Average	**1.649**	**W**	**1.391**	**1.510**	**1.428**	**1.584**
2020 January	1.788	W	1.526	1.634	1.675	1.939
February	1.673	W	1.336	1.557	1.540	1.735
March	1.188	W	.993	1.146	1.121	1.371
April	.796	W	.639	.942	.733	.976
May	.792	W	NA	.727	.775	.817
June	1.018	W	1.013	.894	1.017	.949
July	1.153	W	1.089	.981	1.137	1.071
August	1.189	W	1.068	1.026	1.135	1.224
September	1.098	W	1.000	1.035	1.066	1.200
October	1.078	W	.996	1.071	1.041	1.151
November	1.164	W	1.098	1.068	1.145	1.145
December	1.351	W	1.266	1.193	1.320	1.290
Average	**1.186**	**W**	**1.066**	**1.090**	**1.143**	**1.246**
2021 January	1.491	W	1.352	1.344	1.432	1.462
February	1.583	W	1.429	1.469	1.518	1.617
March	1.780	W	1.558	1.590	1.683	1.766
April	1.780	W	1.534	1.556	1.686	1.756
May	1.828	W	1.628	1.552	1.736	1.760
June	1.909	W	1.650	1.608	1.783	1.867
July	1.852	W	1.766	1.721	1.818	1.969
August	1.842	W	1.674	1.666	1.776	1.901
September	1.913	W	1.768	1.748	1.845	1.950
October	2.124	W	1.964	1.876	2.069	2.091
November	2.065	W	1.834	1.827	1.927	2.141
December	1.940	2.282	1.766	1.726	1.861	2.090
Average	**1.849**	**W**	**1.669**	**1.650**	**1.770**	**1.864**
2022 January	2.210	2.342	1.966	1.871	2.085	2.160
February	2.415	NA	2.085	2.106	2.274	2.432
March	2.932	NA	2.423	2.478	2.689	2.867

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

NA=Not available. W=Value withheld to avoid disclosure of individual company data.

Notes: • Sales for resale are those made to purchasers other than ultimate consumers. Sales to end users are those made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and commercial consumers. • Values for the current month are preliminary. • Through 1982, prices are U.S. Energy Information Administration (EIA) estimates. See Note 6, "Historical Petroleum Prices," at end of section. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices (Excel and CSV files) for all available annual data beginning in 1978 and monthly data beginning in 1982.

Sources: • **1978–2007:** EIA, *Petroleum Marketing Annual 2007*, Table 17. • **2008 forward:** EIA, *Petroleum Marketing Monthly*, July 2022, Table 16.

This table has not been updated due to the suspension of Forms EIA-782A and EIA-782C.

Table 9.6 Refiner Prices of Petroleum Products for Resale

(Dollars[a] per Gallon, Excluding Taxes)

	Finished Motor Gasoline[b]	Finished Aviation Gasoline	Kerosene-Type Jet Fuel	Kerosene	No. 2 Fuel Oil	No. 2 Diesel Fuel	Propane (Consumer Grade)
1978 Average	**0.434**	**0.537**	**0.386**	**0.404**	**0.369**	**0.365**	**0.237**
1980 Average	**.941**	**1.128**	**.868**	**.864**	**.803**	**.801**	**.415**
1985 Average	**.835**	**1.130**	**.794**	**.874**	**.776**	**.772**	**.398**
1990 Average	**.786**	**1.063**	**.773**	**.839**	**.697**	**.694**	**.386**
1995 Average	**.626**	**.975**	**.539**	**.580**	**.511**	**.538**	**.344**
2000 Average	**.963**	**1.330**	**.880**	**.969**	**.886**	**.898**	**.595**
2005 Average	**1.670**	**2.076**	**1.723**	**1.757**	**1.623**	**1.737**	**.933**
2006 Average	**1.969**	**2.490**	**1.961**	**2.007**	**1.834**	**2.012**	**1.031**
2007 Average	**2.182**	**2.758**	**2.171**	**2.249**	**2.072**	**2.203**	**1.194**
2008 Average	**2.586**	**3.342**	**3.020**	**2.851**	**2.745**	**2.994**	**1.437**
2009 Average	**1.767**	**2.480**	**1.719**	**1.844**	**1.657**	**1.713**	**.921**
2010 Average	**2.165**	**2.874**	**2.185**	**2.299**	**2.147**	**2.214**	**1.212**
2011 Average	**2.867**	**3.739**	**3.014**	**3.065**	**2.907**	**3.034**	**1.467**
2012 Average	**2.929**	**3.919**	**3.080**	**3.163**	**3.031**	**3.109**	**1.033**
2013 Average	**2.812**	**3.869**	**2.953**	**3.084**	**2.966**	**3.028**	**1.048**
2014 Average	**2.618**	**3.687**	**2.763**	**2.882**	**2.741**	**2.812**	**1.165**
2015 Average	**1.726**	**2.764**	**1.592**	**1.735**	**1.565**	**1.667**	**.555**
2016 Average	**1.454**	**2.404**	**1.295**	**1.383**	**1.239**	**1.378**	**.523**
2017 Average	**1.689**	**2.682**	**1.603**	**1.730**	**1.600**	**1.691**	**.800**
2018 Average	**1.980**	**3.006**	**2.073**	**2.160**	**2.002**	**2.130**	**.877**
2019 Average	**1.858**	**2.842**	**1.929**	**2.017**	**1.895**	**1.958**	**.622**
2020 January	1.743	2.752	1.891	2.008	1.863	1.858	.557
February	1.669	2.698	1.613	1.802	1.627	1.671	.530
March	1.127	2.279	1.189	1.115	1.238	1.278	.410
April	.645	1.590	.703	.837	.872	.908	.378
May	1.049	1.869	.690	.848	.795	.878	.454
June	1.311	2.134	1.002	1.099	1.002	1.135	.514
July	1.380	2.253	1.144	1.172	1.152	1.254	.507
August	1.389	2.219	1.162	1.250	1.179	1.275	.536
September	1.354	2.246	1.076	1.215	1.091	1.195	.516
October	1.312	2.217	1.107	1.293	1.089	1.215	.597
November	1.287	2.123	1.180	1.322	1.156	1.315	.630
December	1.394	2.289	1.353	1.585	1.341	1.475	.725
Average	**1.330**	**2.233**	**1.295**	**1.310**	**1.246**	**1.286**	**.535**
2021 January	1.575	2.482	1.456	1.688	1.481	1.580	.922
February	1.784	2.659	1.599	1.939	1.667	1.806	1.032
March	2.011	2.978	1.720	1.854	1.726	1.956	.985
April	2.055	3.018	1.688	1.816	1.700	1.911	.849
May	2.181	3.107	1.790	1.800	1.806	2.072	.824
June	2.252	3.190	1.871	1.907	1.927	2.147	.950
July	2.337	3.337	1.946	1.940	1.931	2.182	1.075
August	2.302	3.299	1.922	1.899	1.885	2.146	1.110
September	2.310	3.248	2.008	2.109	2.041	2.240	1.280
October	2.494	3.367	2.281	2.434	2.356	2.504	1.460
November	2.484	3.410	2.283	2.405	2.267	2.454	1.329
December	2.304	3.154	2.145	2.272	2.111	2.273	1.140
Average	**2.193**	**3.133**	**1.914**	**2.069**	**1.876**	**2.116**	**1.087**
2022 January	2.423	3.373	2.422	2.655	2.438	2.550	1.249
February	2.639	3.684	2.655	2.916	2.742	2.830	1.376
March	3.232	4.088	3.285	3.612	3.479	3.582	1.483

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

[b] See Note 5, "Motor Gasoline Prices," at end of section.

Notes: • Sales for resale are those made to purchasers other than ultimate consumers. Sales to end users are shown in Table 9.7; they are sales made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and residential and commercial consumers. • Values for the current month are preliminary. • Through 1982, prices are U.S. Energy Information Administration (EIA) estimates. See Note 6, "Historical Petroleum Prices," at end of section. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices (Excel and CSV files) for all available annual data beginning in 1978 and monthly data beginning in 1982.

Sources: • **1978–2007:** EIA, *Petroleum Marketing Annual 2007,* Table 4. • **2008 forward:** EIA, *Petroleum Marketing Monthly,* July 2022, Table 4.

This table has not been updated due to the suspension of Forms EIA-782A and EIA-782C.

Table 9.7 Refiner Prices of Petroleum Products to End Users

(Dollars[a] per Gallon, Excluding Taxes)

	Finished Motor Gasoline[b]	Finished Aviation Gasoline	Kerosene-Type Jet Fuel	Kerosene	No. 2 Fuel Oil	No. 2 Diesel Fuel	Propane (Consumer Grade)
1978 Average	**0.484**	**0.516**	**0.387**	**0.421**	**0.400**	**0.377**	**0.335**
1980 Average	**1.035**	**1.084**	**.868**	**.902**	**.788**	**.818**	**.482**
1985 Average	**.912**	**1.201**	**.796**	**1.030**	**.849**	**.789**	**.717**
1990 Average	**.883**	**1.120**	**.766**	**.923**	**.734**	**.725**	**.745**
1995 Average	**.765**	**1.005**	**.540**	**.589**	**.562**	**.560**	**.492**
2000 Average	**1.106**	**1.306**	**.899**	**1.123**	**.927**	**.935**	**.603**
2005 Average	**1.829**	**2.231**	**1.735**	**1.957**	**1.705**	**1.786**	**1.089**
2006 Average	**2.128**	**2.682**	**1.998**	**2.244**	**1.982**	**2.096**	**1.358**
2007 Average	**2.345**	**2.849**	**2.165**	**2.263**	**2.241**	**2.267**	**1.489**
2008 Average	**2.775**	**3.273**	**3.052**	**3.283**	**2.986**	**3.150**	**1.892**
2009 Average	**1.888**	**2.442**	**1.704**	**2.675**	**1.962**	**1.834**	**1.220**
2010 Average	**2.301**	**3.028**	**2.201**	**3.063**	**2.462**	**2.314**	**1.481**
2011 Average	**3.050**	**3.803**	**3.054**	**3.616**	**3.193**	**3.117**	**1.709**
2012 Average	**3.154**	**3.971**	**3.104**	**3.843**	**3.358**	**3.202**	**1.139**
2013 Average	**3.049**	**3.932**	**2.979**	**3.842**	**3.335**	**3.122**	**1.028**
2014 Average	**2.855**	**3.986**	**2.772**	**W**	**3.329**	**2.923**	**1.097**
2015 Average	**2.003**	**W**	**1.629**	**W**	**2.016**	**1.819**	**.481**
2016 Average	**1.730**	**W**	**1.319**	**W**	**1.716**	**1.511**	**.498**
2017 Average	**1.976**	**W**	**1.629**	**W**	**2.010**	**1.811**	**.772**
2018 Average	**2.303**	**W**	**2.119**	**3.113**	**2.380**	**2.256**	**.925**
2019 Average	**2.245**	**W**	**1.970**	**W**	**2.269**	**2.114**	**.603**
2020 January	2.150	W	1.958	W	2.328	2.002	.502
February	2.060	W	1.667	W	2.113	1.835	.469
March	1.862	W	1.257	W	1.813	1.486	.378
April	1.490	W	.740	W	1.220	1.137	.368
May	1.598	W	.728	W	1.162	1.130	.421
June	1.768	W	1.046	3.321	1.338	1.354	.515
July	1.806	2.761	1.175	3.059	1.394	1.431	.518
August	1.814	2.805	1.188	3.163	1.464	1.456	.541
September	1.804	2.613	1.110	W	1.411	1.386	.508
October	1.773	2.495	1.134	W	1.360	1.400	.548
November	1.736	2.485	1.216	W	1.760	1.482	.577
December	1.828	2.674	1.395	W	2.004	1.624	.697
Average	**1.829**	**2.685**	**1.293**	**W**	**1.660**	**1.486**	**.502**
2021 January	1.986	2.829	1.485	W	2.103	1.713	.908
February	2.201	3.148	1.642	W	2.173	1.933	.972
March	2.442	3.364	1.763	W	2.323	2.111	.964
April	2.493	3.363	1.724	W	2.185	2.090	.851
May	2.683	3.447	1.822	W	2.291	2.177	.833
June	3.000	3.492	1.906	W	2.341	2.228	.966
July	3.105	W	1.981	2.860	2.505	2.282	1.096
August	3.146	W	1.965	W	2.395	2.266	1.122
September	3.143	W	2.032	2.817	2.387	2.323	1.296
October	3.201	3.783	2.303	3.425	2.678	2.561	1.459
November	3.318	3.778	2.309	3.799	2.651	2.542	1.292
December	3.283	W	2.168	3.279	2.760	2.374	1.098
Average	**2.569**	**3.469**	**1.954**	**W**	**2.413**	**2.203**	**1.088**
2022 January	3.145	3.689	2.451	3.822	3.169	2.648	1.225
February	3.313	W	2.653	4.042	3.269	2.900	1.365
March	3.991	4.581	3.326	4.689	3.924	3.689	1.442

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

[b] See Note 5, "Motor Gasoline Prices," at end of section.

W=Value withheld to avoid disclosure of individual company data.

Notes: • Sales to end users are those made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and residential and commercial consumers. Sales for resale are shown in Table 9.6; they are sales made to purchasers other than ultimate consumers. • Values for the current month are preliminary. • Through 1982, prices are U.S. Energy Information Administration (EIA) estimates. See Note 6, "Historical Petroleum Prices," at end of section. • Geographic coverage is the 50 states and the District of Columbia.

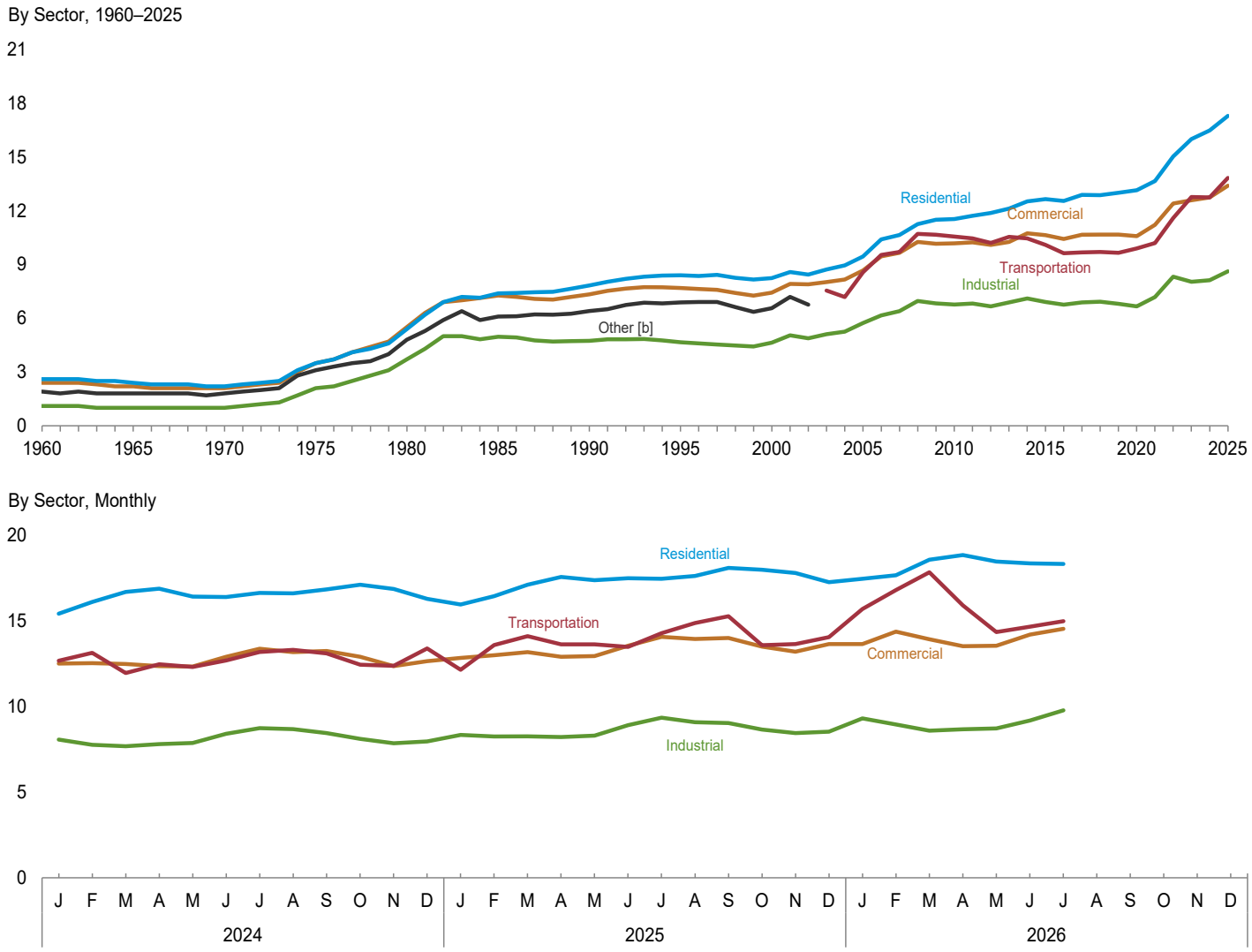
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices (Excel and CSV files) for all available annual data beginning in 1978 and monthly data beginning in 1982.

Sources: • **1978–2007:** EIA, *Petroleum Marketing Annual 2007,* Table 2. • **2008 forward:** EIA, *Petroleum Marketing Monthly,* July 2022, Table 2.

This table has not been updated due to the suspension of Forms EIA-782A and EIA-782C.

Figure 9.2 Average Prices of Electricity to Ultimate Customers

(Cents [a] per Kilowatthour)



[a] Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.
[b] Public street and highway lighting, interdepartmental sales, other sales to public authorities, agricultural and irrigation, and transportation including railroads and railways.

Note: Includes taxes.
Web Page: http://www.eia.gov/totalenergy/data/monthly/#prices.
Source: Table 9.8.

Table 9.8 Average Prices of Electricity to Ultimate Customers

(Cents[a] per Kilowatthour, Including Taxes)

	Residential	Commercial[b]	Industrial[c]	Transportation[d]	Other[e]	Total
1960 Average	**2.60**	**2.40**	**1.10**	**NA**	**1.90**	**1.80**
1965 Average	**2.40**	**2.20**	**1.00**	**NA**	**1.80**	**1.70**
1970 Average	**2.20**	**2.10**	**1.00**	**NA**	**1.80**	**1.70**
1975 Average	**3.50**	**3.50**	**2.10**	**NA**	**3.10**	**2.90**
1980 Average	**5.40**	**5.50**	**3.70**	**NA**	**4.80**	**4.70**
1985 Average	**7.39**	**7.27**	**4.97**	**NA**	**6.09**	**6.44**
1990 Average	**7.83**	**7.34**	**4.74**	**NA**	**6.40**	**6.57**
1995 Average	**8.40**	**7.69**	**4.66**	**NA**	**6.88**	**6.89**
2000 Average	**8.24**	**7.43**	**4.64**	**NA**	**6.56**	**6.81**
2005 Average	**9.45**	**8.67**	**5.73**	**8.57**	**– –**	**8.14**
2010 Average	**11.54**	**10.19**	**6.77**	**10.56**	**– –**	**9.83**
2011 Average	**11.72**	**10.24**	**6.82**	**10.46**	**– –**	**9.90**
2012 Average	**11.88**	**10.09**	**6.67**	**10.21**	**– –**	**9.84**
2013 Average	**12.13**	**10.26**	**6.89**	**10.55**	**– –**	**10.07**
2014 Average	**12.52**	**10.74**	**7.10**	**10.45**	**– –**	**10.44**
2015 Average	**12.65**	**10.64**	**6.91**	**10.09**	**– –**	**10.41**
2016 Average	**12.55**	**10.43**	**6.76**	**9.63**	**– –**	**10.27**
2017 Average	**12.89**	**10.66**	**6.88**	**9.68**	**– –**	**10.48**
2018 Average	**12.87**	**10.67**	**6.92**	**9.70**	**– –**	**10.53**
2019 Average	**13.01**	**10.68**	**6.81**	**9.66**	**– –**	**10.54**
2020 Average	**13.15**	**10.59**	**6.67**	**9.90**	**– –**	**10.59**
2021 Average	**13.66**	**11.22**	**7.18**	**10.20**	**– –**	**11.10**
2022 Average	**15.04**	**12.41**	**8.32**	**11.59**	**– –**	**12.36**
2023 Average	**16.00**	**12.59**	**8.04**	**12.77**	**– –**	**12.68**
2024 January	15.41	12.50	8.07	12.66	– –	12.65
February	16.10	12.53	7.76	13.12	– –	12.66
March	16.67	12.47	7.68	11.95	– –	12.57
April	16.86	12.35	7.79	12.46	– –	12.54
May	16.40	12.32	7.87	12.29	– –	12.47
June	16.38	12.89	8.41	12.68	– –	13.14
July	16.62	13.37	8.73	13.18	– –	13.63
August	16.60	13.16	8.67	13.30	– –	13.48
September	16.82	13.23	8.45	13.09	– –	13.34
October	17.09	12.89	8.11	12.43	– –	12.96
November	16.85	12.35	7.85	12.37	– –	12.57
December	16.27	12.64	7.96	13.38	– –	12.82
Average	**16.48**	**12.75**	**8.13**	**12.75**	**– –**	**12.94**
2025 January	15.94	12.82	8.34	12.13	– –	13.09
February	16.43	12.98	8.24	13.58	– –	13.18
March	17.09	13.16	8.26	14.10	– –	13.23
April	17.55	12.89	8.21	13.62	– –	13.09
May	17.37	12.93	8.29	13.62	– –	13.13
June	17.47	13.54	8.90	13.47	– –	13.86
July	17.45	14.05	9.33	14.27	– –	14.36
August	17.61	13.93	9.08	14.86	– –	14.22
September	18.08	13.99	9.02	15.25	– –	14.21
October	17.97	13.49	8.65	13.56	– –	13.66
November	17.78	13.19	8.44	13.64	– –	13.43
December	17.24	13.63	8.53	14.04	– –	13.73
Average	**17.30**	**13.41**	**8.62**	**13.83**	**– –**	**13.63**
2026 January	17.45	13.64	9.29	15.68	– –	14.17
February	17.65	14.37	8.95	16.78	– –	14.36
March	18.56	13.92	8.58	17.83	– –	14.08
April	18.83	13.51	8.66	15.89	– –	13.88
May	18.44	13.54	8.71	14.34	– –	13.83
June	18.34	14.19	9.17	14.65	– –	14.48
July	18.31	14.53	9.77	14.97	– –	14.99
7-Month Average	**18.19**	**13.97**	**9.03**	**15.75**	**– –**	**14.29**
2025 7-Month Average	**17.01**	**13.23**	**8.53**	**13.52**	**– –**	**13.46**
2024 7-Month Average	**16.32**	**12.66**	**8.06**	**12.62**	**– –**	**12.85**

[a] Prices are not adjusted for inflation. See "Nominal Price" in Glossary.

[b] Commercial sector. For 1960–2002, prices exclude public street and highway lighting, interdepartmental sales, and other sales to public authorities.

[c] Industrial sector. For 1960–2002, prices exclude agriculture and irrigation.

[d] Prices for public railroads and railway systems only.

[e] Public street and highway lighting, interdepartmental sales, other sales to public authorities, agriculture and irrigation, and transportation including railroads and railways.

NA=Not available. – –=Not applicable.

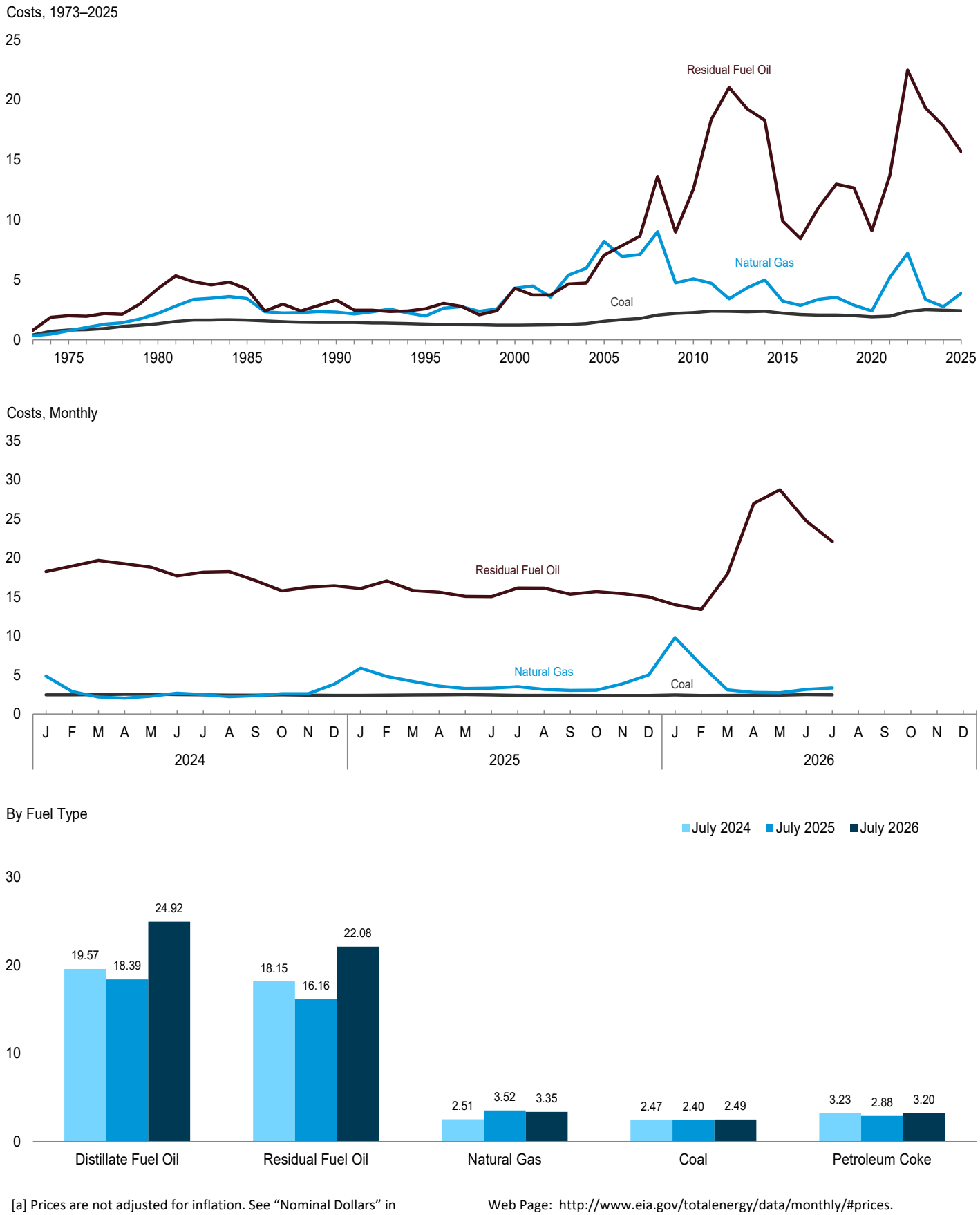
Notes: • Beginning in 2003, the category "Other" has been replaced by "Transportation," and the categories "Commercial" and "Industrial" have been redefined. • Prices are calculated by dividing revenue by sales. Revenue may not correspond to sales for a particular month because of energy service provider billing and accounting procedures. That lack of correspondence could result in uncharacteristic increases or decreases in the monthly prices. • Prices include state and local taxes, energy or demand charges, customer service charges, environmental surcharges, franchise fees, fuel adjustments, and other miscellaneous charges applied to end-use customers during normal billing operations. Prices do not include deferred charges, credits, or other adjustments, such as fuel or revenue from purchased power, from previous reporting periods. • Through 1979, data are for Classes A and B privately owned electric utilities only. (Class A utilities are those with operating revenues of $2.5 million or more; Class B utilities are those with operating revenues between $1 million and $2.5 million.) For 1980–1982, data are for selected Class A utilities whose electric operating revenues were $100 million or more during the previous year. For 1983, data are for a selected sample of electric utilities. Beginning in 1984, data are for a census of electric utilities. Beginning in 1996, data also include energy service providers selling to retail customers. • See Note 7, "Electricity Prices to Ultimate Customers," at end of section for plant coverage, and for information on preliminary and final values. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices (Excel and CSV files) for all available annual data beginning in 1960 and monthly data beginning in 1976.

Sources: • **1960–September 1977:** Federal Power Commission, Form FPC-5, "Monthly Statement of Electric Operating Revenues and Income." • **October 1977–February 1980:** Federal Energy Regulatory Commission (FERC), Form FPC-5, "Monthly Statement of Electric Operating Revenues and Income." • **March 1980–1982:** FERC, Form FERC-5, "Electric Utility Company Monthly Statement." • **1983:** U.S. Energy Information Administration (EIA), Form EIA-826, "Electric Utility Company Monthly Statement." • **1984–2010:** EIA, Form EIA-861, "Annual Electric Power Industry Report." • **2011 forward:** EIA, *Electric Power Monthly,* December 2025, Table 5.3.

Figure 9.3 Cost of Fossil-Fuel Receipts at Electric Generating Plants

(Dollars [a] per Million Btu, Including Taxes)



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

Web Page: http://www.eia.gov/totalenergy/data/monthly/#prices.
Source: Table 9.9.

Table 9.9 Cost of Fossil-Fuel Receipts at Electric Generating Plants

(Dollars[a] per Million Btu, Including Taxes)

	Coal	Petroleum				Natural Gas[e]	All Fossil Fuels[f]
		Residual Fuel Oil[b]	Distillate Fuel Oil[c]	Petroleum Coke	Total[d]		
1973 Average	**0.41**	**0.79**	**NA**	**NA**	**0.80**	**0.34**	**0.48**
1975 Average	**.81**	**2.01**	**NA**	**NA**	**2.02**	**.75**	**1.04**
1980 Average	**1.35**	**4.27**	**NA**	**NA**	**4.35**	**2.20**	**1.93**
1985 Average	**1.65**	**4.24**	**NA**	**NA**	**4.32**	**3.44**	**2.09**
1990 Average	**1.45**	**3.32**	**5.38**	**.80**	**3.35**	**2.32**	**1.69**
1995 Average	**1.32**	**2.59**	**3.99**	**.65**	**2.57**	**1.98**	**1.45**
2000 Average	**1.25**	**3.73**	**5.34**	**.78**	**3.34**	**3.56**	**1.86**
2005 Average[g]	**1.54**	**7.06**	**11.72**	**1.11**	**6.44**	**8.21**	**3.25**
2006 Average	**1.69**	**7.85**	**13.28**	**1.33**	**6.23**	**6.94**	**3.02**
2007 Average	**1.77**	**8.64**	**14.85**	**1.51**	**7.17**	**7.11**	**3.23**
2008 Average	**2.07**	**13.62**	**21.46**	**2.11**	**10.87**	**9.01**	**4.12**
2009 Average	**2.21**	**8.98**	**13.22**	**1.61**	**7.02**	**4.74**	**3.04**
2014 Average	**2.37**	**18.30**	**21.88**	**1.98**	**11.60**	**5.00**	**3.31**
2015 Average	**2.22**	**9.89**	**14.06**	**1.84**	**6.74**	**3.23**	**2.65**
2016 Average	**2.11**	**8.45**	**10.90**	**1.65**	**5.24**	**2.87**	**2.47**
2017 Average	**2.06**	**11.00**	**13.22**	**2.13**	**7.10**	**3.37**	**2.65**
2018 Average	**2.06**	**12.97**	**16.16**	**2.54**	**9.68**	**3.55**	**2.83**
2019 Average	**2.02**	**12.66**	**15.19**	**1.91**	**9.07**	**2.88**	**2.50**
2020 Average	**1.92**	**9.09**	**10.73**	**1.70**	**5.98**	**2.40**	**2.22**
2021 Average	**1.98**	**13.70**	**15.89**	**3.16**	**10.08**	**5.20**	**3.82**
2022 Average	**2.36**	**22.48**	**25.64**	**4.35**	**16.53**	**7.21**	**5.22**
2023 Average	**2.51**	**19.32**	**22.09**	**4.05**	**15.98**	**3.36**	**3.12**
2024 January	2.48	18.22	19.64	2.65	17.72	4.86	4.10
February	2.48	18.94	20.84	2.63	16.67	2.90	2.81
March	2.50	19.67	20.60	2.63	17.42	2.19	2.38
April	2.54	19.24	20.84	2.62	17.30	2.05	2.30
May	2.56	18.81	19.44	2.86	15.18	2.29	2.45
June	2.51	17.68	18.62	3.11	13.02	2.68	2.69
July	2.47	18.15	19.57	3.23	11.42	2.51	2.55
August	2.44	18.23	18.37	3.08	12.94	2.25	2.37
September	2.42	17.08	17.79	3.09	12.23	2.37	2.44
October	2.47	15.76	17.32	2.63	14.89	2.61	2.63
November	2.42	16.25	18.85	2.64	14.90	2.63	2.62
December	2.40	16.43	17.67	2.66	14.60	3.85	3.38
Average	**2.47**	**17.82**	**19.05**	**2.96**	**14.70**	**2.76**	**2.73**
2025 January	2.41	16.07	18.90	2.81	14.11	5.88	4.69
February	2.42	17.06	18.42	2.90	14.77	4.81	3.96
March	2.45	15.83	17.42	2.99	13.61	4.17	3.49
April	2.48	15.60	17.90	2.54	13.87	3.58	3.18
May	2.50	15.05	16.75	2.55	12.50	3.28	3.03
June	2.46	15.04	17.64	3.09	12.13	3.34	3.05
July	2.40	16.16	18.39	2.88	11.95	3.52	3.19
August	2.41	16.12	17.81	2.90	13.00	3.17	2.96
September	2.41	15.34	18.13	2.73	12.51	3.04	2.85
October	2.39	15.67	18.07	2.66	11.65	3.08	2.85
November	2.39	15.41	18.30	2.51	13.35	3.89	3.33
December	2.38	15.02	17.33	2.85	14.03	5.04	4.07
Average	**2.42**	**15.68**	**18.01**	**2.80**	**13.18**	**3.87**	**3.37**
2026 January	2.45	13.99	17.73	2.81	13.81	9.81	6.93
February	2.39	13.38	17.69	2.69	14.24	6.28	4.86
March	2.41	17.93	23.17	2.92	15.68	3.11	2.95
April	2.42	26.96	31.50	3.31	22.42	2.78	2.78
May	2.43	28.72	32.26	2.86	22.70	2.75	2.77
June	2.51	24.72	24.92	3.25	19.61	3.17	3.07
July	2.49	22.08	24.92	3.20	15.62	3.35	3.17
7-Month Average	**2.44**	**19.53**	**21.90**	**3.02**	**16.78**	**4.44**	**3.82**
2025 7-Month Average	**2.44**	**15.83**	**18.15**	**2.85**	**13.31**	**4.07**	**3.50**
2024 7-Month Average	**2.50**	**18.68**	**19.78**	**2.98**	**15.32**	**2.80**	**2.77**

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

[b] For 1973–2001, electric utility data are for heavy oil (fuel oil nos. 5 and 6, and small amounts of fuel oil no. 4).

[c] For 1973–2001, electric utility data are for light oil (fuel oil nos. 1 and 2).

[d] For all years, includes residual fuel oil and distillate fuel oil. For 1990 forward, also includes petroleum coke. For 1973–2012, also includes jet fuel, kerosene, and waste oil. For 1983–2012, also includes other petroleum, such as propane and refined motor oil.

[e] Natural gas, plus a small amount of supplemental gaseous fuels. For 1973–2000, data also include a small amount of blast furnace gas and other fossil gases derived from fossil fuels.

[f] Weighted average of costs shown under "Coal," "Petroleum," and "Natural Gas."

[g] Through 2001, data are for electric utilities only. Beginning in 2002, data also include independent power producers, and electric generating plants in the commercial and industrial sectors.

NA=Not available.

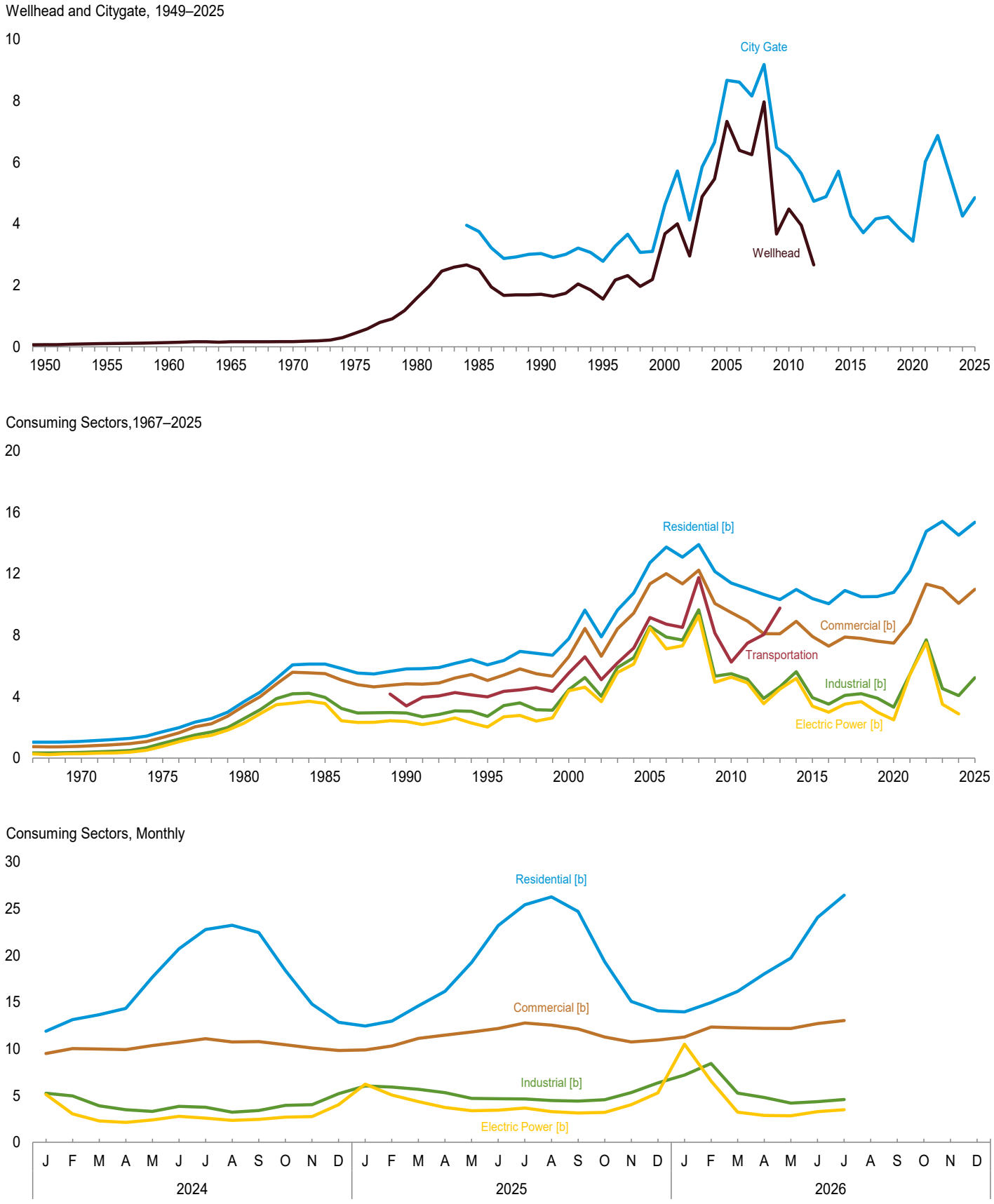
Notes: • Receipts are purchases of fuel. • Yearly costs are averages of monthly values, weighted by quantities in Btu. • For this table, there are several breaks in the data series related to what plants and fuels are covered. Beginning in 2013, data cover all regulated generating plants; plus unregulated plants whose total fossil-fueled nameplate generating capacity is 50 megawatts or more for coal, and 200 megawatts or more for natural gas, residual fuel oil, distillate fuel oil, and petroleum coke. For data coverage before 2013, see EIA, *Electric Power Monthly*, Appendix C, Form EIA-923 notes, "Receipts and cost and quality of fossil fuels" section. • Geographic coverage is the 50 states and the District of Columbia.

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

Sources: See end of section.

Figure 9.4 Natural Gas Prices

(Dollars [a] per Thousand Cubic Feet)



[a] Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.
[b] Includes taxes.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#prices.
Source: Table 9.10.

Table 9.10 Natural Gas Prices

(Dollars[a] per Thousand Cubic Feet)

	Wellhead Price[f]	City-gate Price[g]	Consuming Sectors[b]								
			Residential		Commercial[c]		Industrial[d]		Transportation	Electric Power[e]	
			Price[h]	Percentage of Sector[i]	Price[h]	Percentage of Sector[i]	Price[h]	Percentage of Sector[i]	Vehicle Fuel[j] Price[h]	Price[h]	Percentage of Sector[i,k]
1950 Average	**0.07**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
1955 Average	**.10**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
1960 Average	**.14**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
1965 Average	**.16**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
1970 Average	**.17**	**NA**	**1.09**	**NA**	**.77**	**NA**	**.37**	**NA**	**NA**	**.29**	**NA**
1975 Average	**.44**	**NA**	**1.71**	**NA**	**1.35**	**NA**	**.96**	**NA**	**NA**	**.77**	**96.1**
1980 Average	**1.59**	**NA**	**3.68**	**NA**	**3.39**	**NA**	**2.56**	**NA**	**NA**	**2.27**	**96.9**
1985 Average	**2.51**	**3.75**	**6.12**	**NA**	**5.50**	**NA**	**3.95**	**68.8**	**NA**	**3.55**	**94.0**
1990 Average	**1.71**	**3.03**	**5.80**	**99.2**	**4.83**	**86.6**	**2.93**	**35.2**	**3.39**	**2.38**	**76.8**
1995 Average	**1.55**	**2.78**	**6.06**	**99.0**	**5.05**	**76.7**	**2.71**	**24.5**	**3.98**	**2.02**	**71.4**
2000 Average	**3.68**	**4.62**	**7.76**	**92.6**	**6.59**	**63.9**	**4.45**	**19.8**	**5.54**	**4.38**	**50.5**
2005 Average	**7.33**	**8.67**	**12.70**	**98.1**	**11.34**	**82.1**	**8.56**	**24.0**	**9.14**	**8.47**	**91.3**
2010 Average	**4.48**	**6.18**	**11.39**	**97.4**	**9.47**	**77.5**	**5.49**	**18.0**	**6.25**	**5.27**	**100.8**
2011 Average	**3.95**	**5.63**	**11.03**	**96.3**	**8.91**	**67.3**	**5.13**	**16.3**	**7.48**	**4.89**	**101.2**
2012 Average	**E 2.66**	**4.73**	**10.65**	**95.8**	**8.10**	**65.2**	**3.88**	**16.2**	**8.04**	**3.54**	**95.5**
2013 Average	**NA**	**4.88**	**10.32**	**95.7**	**8.08**	**65.8**	**4.64**	**16.6**	**9.76**	**4.49**	**94.9**
2014 Average	**NA**	**5.71**	**10.97**	**95.5**	**8.90**	**65.8**	**5.62**	**15.9**	**NA**	**5.19**	**94.6**
2015 Average	**NA**	**4.26**	**10.38**	**95.6**	**7.91**	**65.7**	**3.93**	**14.8**	**NA**	**3.38**	**94.6**
2016 Average	**NA**	**3.71**	**10.05**	**95.8**	**7.28**	**64.8**	**3.51**	**14.9**	**NA**	**2.99**	**95.6**
2017 Average	**NA**	**4.16**	**10.91**	**95.9**	**7.88**	**65.4**	**4.08**	**14.8**	**NA**	**3.51**	**95.4**
2018 Average	**NA**	**4.23**	**10.50**	**96.0**	**7.79**	**65.8**	**4.19**	**14.5**	**NA**	**3.68**	**95.4**
2019 Average	**NA**	**3.81**	**10.51**	**96.2**	**7.61**	**65.5**	**3.90**	**13.0**	**NA**	**2.99**	**96.5**
2020 Average	**NA**	**3.43**	**10.78**	**96.3**	**7.48**	**64.6**	**3.32**	**13.2**	**NA**	**2.49**	**96.2**
2021 Average	**NA**	**6.02**	**12.18**	**96.6**	**8.79**	**65.1**	**5.44**	**13.4**	**NA**	**5.43**	**96.1**
2022 Average	**NA**	**6.87**	**14.75**	**96.7**	**11.32**	**65.8**	**7.69**	**13.4**	**NA**	**7.51**	**96.1**
2023 Average	**NA**	**5.56**	**15.40**	**96.9**	**11.04**	**65.3**	**4.53**	**13.3**	**NA**	**3.50**	**96.1**
2024 January	NA	4.77	11.89	96.9	9.50	71.1	5.24	13.9	NA	5.13	95.8
February	NA	4.52	13.14	97.1	10.03	69.2	4.97	14.1	NA	3.03	96.2
March	NA	3.99	13.66	97.0	9.99	67.8	3.90	14.0	NA	2.29	96.3
April	NA	3.36	14.32	96.6	9.93	63.7	3.48	13.5	NA	2.12	95.5
May	NA	3.68	17.67	96.6	10.35	58.8	3.31	13.4	NA	2.38	96.1
June	NA	4.22	20.72	96.9	10.70	56.6	3.85	12.9	NA	2.78	96.3
July	NA	4.47	22.78	96.9	11.08	53.7	3.74	13.4	NA	2.60	95.9
August	NA	4.17	23.22	96.8	10.75	54.1	3.22	13.6	NA	2.34	95.2
September	NA	4.16	22.46	97.0	10.78	53.1	3.40	13.2	NA	2.45	96.5
October	NA	4.10	18.38	97.1	10.43	57.9	3.94	13.1	NA	2.70	96.4
November	NA	4.01	14.79	97.3	10.10	63.2	4.04	13.5	NA	2.75	96.9
December	NA	4.40	12.85	97.2	9.82	68.3	5.21	14.1	NA	4.03	95.6
Average	**NA**	**4.25**	**14.50**	**97.0**	**10.07**	**64.3**	**4.07**	**13.6**	**NA**	**2.87**	**96.0**
2025 January	NA	4.86	12.44	97.1	9.88	70.6	6.03	13.8	NA	6.21	87.7
February	NA	4.84	12.97	96.7	10.32	70.3	5.92	14.1	NA	5.06	88.0
March	NA	4.87	14.62	97.1	11.12	67.3	R 5.68	14.3	NA	4.35	88.4
April	NA	R 4.50	16.17	96.9	11.48	R 63.9	5.31	13.4	NA	3.72	86.4
May	NA	4.62	R 19.26	96.7	R 11.82	R 58.8	4.69	12.8	NA	3.39	89.1
June	NA	R 4.86	R 23.21	96.8	R 12.18	R 54.9	R 4.66	13.2	NA	3.45	86.4
July	NA	R 5.20	R 25.44	97.0	R 12.77	R 53.4	R 4.64	13.2	NA	3.66	85.1
August	NA	R 5.16	R 26.26	97.0	R 12.55	R 52.9	R 4.47	R 13.4	NA	3.28	87.0
September	NA	5.07	24.70	97.2	12.13	R 53.9	R 4.42	12.8	NA	3.14	87.0
October	NA	4.34	R 19.34	97.4	R 11.27	R 58.5	4.55	R 12.8	NA	3.19	87.7
November	NA	4.76	15.07	97.4	10.75	R 64.4	5.33	R 13.2	NA	4.04	88.1
December	NA	R 5.11	14.09	97.4	10.95	69.1	6.37	R 13.6	NA	5.28	88.7
Average	**NA**	**4.85**	**15.34**	**97.1**	**R 10.98**	**R 64.7**	**5.23**	**13.4**	**NA**	**4.02**	**87.3**
2026 January	NA	6.74	13.96	97.4	11.26	70.7	7.20	13.9	NA	10.50	87.2
February	NA	6.55	14.95	97.2	12.34	69.9	8.43	14.1	NA	6.57	87.2
March	NA	4.80	16.16	97.1	12.26	67.1	5.27	13.5	NA	3.22	88.2
April	NA	R 4.34	18.04	96.9	12.21	63.3	R 4.80	R 13.6	NA	2.87	87.9
May	NA	R 4.35	19.73	96.8	12.17	59.5	R 4.19	12.8	NA	2.84	87.2
June	NA	R 5.36	24.09	97.1	12.71	55.2	R 4.36	R 12.6	NA	3.28	88.0
July	NA	5.43	26.45	97.1	13.03	54.4	4.58	13.3	NA	3.48	85.6
7-Month Average	**NA**	**5.82**	**16.34**	**97.2**	**12.07**	**65.7**	**5.64**	**13.4**	**NA**	**4.65**	**87.2**
2025 7-Month Average	**NA**	**4.82**	**14.75**	**96.9**	**10.85**	**65.8**	**5.33**	**13.6**	**NA**	**4.24**	**87.1**
2024 7-Month Average	**NA**	**4.28**	**14.02**	**96.9**	**10.00**	**65.6**	**4.11**	**13.6**	**NA**	**2.92**	**96.0**

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

[b] See Note 8, "Natural Gas Prices," at end of section.

[c] Commercial sector, including commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7.

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

[e] The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 2001, data are for electric utilities only; beginning in 2002, data also include independent power producers.

[f] See "Natural Gas Wellhead Price" in Glossary.

[g] See "Citygate" in Glossary.

[h] Includes taxes.

[i] The percentage of the sector's consumption in Table 4.3 for which price data are available. For details on how the percentages are derived, see Table 9.10 sources at end of section.

[j] Much of the natural gas delivered for vehicle fuel represents deliveries to fueling stations that are used primarily or exclusively by fleet vehicles. Thus, the prices are often those associated with the cost of gas in the operation of fleet vehicles.

[k] Percentages exceed 100% when reported natural gas receipts are greater than reported natural gas consumption—this can occur when combined-heat-and-power plants report fuel receipts related to non-electric generating activities.

R=Revised. NA=Not available. E=Estimate.

Notes: • Prices are for natural gas, plus a small amount of supplemental gaseous fuels. • Prices are intended to include all taxes. See Note 8, "Natural Gas Prices," at end of section. • Wellhead annual and year-to-date prices are simple averages of the monthly prices; all other annual and year-to-date prices are volume-weighted averages of the monthly prices. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#prices (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1976.

Sources: See end of section.

Note 1. Crude Oil Refinery Acquisition Costs. Beginning with January 1981, refiner acquisition costs of crude oil are from data collected on U.S. Energy Information Administration (EIA) Form EIA-14, "Refiners' Monthly Cost Report." Those costs were previously published from data collected on Economic Regulatory Administration (ERA) Form ERA-49, "Domestic Crude Oil Entitlements Program Refiners Monthly Report." Form ERA-49 was discontinued with the decontrol of crude oil on January 28, 1981. Crude oil purchases and costs are defined for Form EIA-14 in accordance with conventions used for Form ERA-49. The respondents for the two forms are also essentially the same. However, due to possible different interpretations of the filing requirements and a different method for handling prior period adjustments, care must be taken when comparing the data collected on the two forms.

The refiner acquisition cost of crude oil is the average price paid by refiners for crude oil booked into their refineries in accordance with accounting procedures generally accepted and consistently and historically applied by the refiners concerned. Domestic crude oil is that oil produced in the United States or from the outer continental shelf as defined in 43 USC Section 1331. Imported crude oil is either that oil reported on Form ERA-51, "Transfer Pricing Report," or any crude oil that is not domestic oil. The composite cost is the weighted average of domestic and imported crude oil costs.

Crude oil costs and volumes reported on Form ERA-49 excluded unfinished oils but included the Strategic Petroleum Reserve (SPR). Crude oil costs and volumes reported on Federal Energy Administration (FEA) Form FEA-P110-M-1, "Refiners' Monthly Cost Allocation Report," included unfinished oils but excluded SPR. Imported averages derived from Form ERA-49 exclude oil purchased for SPR, whereas the composite averages derived from Form ERA-49 include SPR. None of the prices derived from Form EIA-14 include either unfinished oils or SPR.

Note 2. Crude Oil Domestic First Purchase Prices. The average domestic first purchase price represents the average price at which all domestic crude oil is purchased. Crude oil domestic first purchase prices were derived as follows: for 1949–1973, weighted average domestic first purchase values as reported by state agencies and calculated by the Bureau of Mines; for 1974 and 1975, weighted averages of a sample survey of major first purchasers' purchases; for 1976 forward, weighted averages of all first purchasers' purchases. The data series was previously called "Actual Domestic Wellhead Price."

Note 3. Crude Oil F.O.B. Costs. F.O.B. literally means "Free on Board." It denotes a transaction whereby the seller makes the product available with an agreement on a given port at a given price; it is the responsibility of the buyer to arrange for the transportation and insurance.

Note 4. Crude Oil Landed Costs. The landed cost of imported crude oil from selected countries does not represent the total cost of all imported crude. Prior to April 1975, imported crude costs to U.S. company-owned refineries in the Caribbean were not included in the landed cost, and costs of crude oil from countries that export only small amounts to the United States were also excluded. Beginning in April 1975, however, coverage was expanded to include U.S. company-owned refineries in the Caribbean. Landed costs do not include supplemental fees.

Note 5. Motor Gasoline Prices. Several different series of motor gasoline prices are published in this section. U.S. city average retail prices of motor gasoline by grade are calculated monthly by the Bureau of Labor Statistics during the development of the Consumer Price Index (CPI). These prices include all federal, state, and local taxes paid at the time of sale. Prior to 1977, prices were collected in 56 urban areas. From 1978 forward, prices are collected from a new sample of service stations in 85 urban areas selected to represent all urban consumers—about 80 percent of the total U.S. population. The service stations are selected initially, and on a replacement basis, in such a way that they represent the purchasing habits of the CPI population. Service stations in the current sample include those providing all types of service (i.e., full-, mini-, and self-serve).

Regular motor gasoline prices by area type are determined by EIA in a weekly survey of retail motor gasoline outlets (Form EIA-878, "Motor Gasoline Price Survey"). Prices include all federal, state, and local taxes paid at the time of sale. A representative sample of outlets by geographic area and size is randomly selected from a sampling frame of approximately 115,000 retail motor gasoline outlets. Monthly and annual prices are simple averages of weighted

weekly estimates from "Weekly U.S. Retail Gasoline Prices, Regular Grade." For more information on the survey methodology, see EIA, *Weekly Petroleum Status Report*, Appendix B, "Weekly Petroleum Price Surveys" section.

Refiner prices of finished motor gasoline for resale and to end users are determined by EIA in a monthly survey of refiners and gas plant operators (Form EIA-782A). The prices do not include any federal, state, or local taxes paid at the time of sale. Estimates of prices prior to January 1983 are based on Form FEA-P302-M-1/EIA-460, "Petroleum Industry Monthly Report for Product Prices," and also exclude all federal, state, or local taxes paid at the time of sale. Sales for resale are those made to purchasers who are other-than-ultimate consumers. Sales to end users are sales made directly to the consumer of the product, including bulk consumers (such as agriculture, industry, and utilities) and residential and commercial consumers.

Note 6. Historical Petroleum Prices. Starting in January 1983, Form EIA-782, "Monthly Petroleum Product Sales Report," replaced 10 previous surveys. Every attempt was made to continue the most important price series. However, prices published through December 1982 and those published since January 1983 do not necessarily form continuous data series due to changes in survey forms, definitions, instructions, populations, samples, processing systems, and statistical procedures. To provide historical data, continuous series were generated for annual data 1978–1982 and for monthly data 1981 and 1982 by estimating the prices that would have been published had Form EIA-782 survey and system been in operation at that time. This form of estimation was performed after detailed adjustment was made for product and sales type matching and for discontinuity due to other factors. An important difference between the previous and present prices is the distinction between wholesale and resale and between retail and end user. The resale category continues to include sales among resellers. However, sales to bulk consumers, such as utility, industrial, and commercial accounts previously included in the wholesale category, are now counted as made to end users. The end-user category continues to include retail sales through company-owned and operated outlets but also includes sales to the bulk consumers such as agriculture, industry, and electric utilities. Additional information may be found in "Estimated Historic Time Series for the EIA-782," a feature article by Paula Weir, printed in the December 1983 [3] *Petroleum Marketing Monthly*, published by EIA.

Note 7. Electricity Prices to Ultimate Customers. Average annual prices of electricity to ultimate customers have the following plant coverage: Through 1979, annual data are for Classes A and B privately owned electric utilities only. For 1980–1982, annual data are for selected Class A utilities whose electric operating revenues were $100 million or more during the previous year. For 1983, annual data are for a selected sample of electric utilities. Beginning in 1984, data are for a census of electric utilities. Beginning in 1996, annual data also include energy service providers selling to retail customers.

Average monthly prices of electricity to ultimate customers have the following plant coverage: Through 1985, monthly data are derived from selected privately owned electric utilities and, therefore, are not national averages. Beginning in 1986, monthly data are based on a sample of publicly and privately owned electric utilities. Beginning in 1996, monthly data also include energy service providers selling to retail customers.

Preliminary monthly data are from Form EIA-861M (formerly Form EIA-826), "Monthly Electric Power Industry Report," which is a monthly collection of data from approximately 450 of the largest publicly and privately owned electric utilities as well as a census of energy service providers with retail sales in deregulated states; a model is then applied to the collected data to estimate for the entire universe of U.S. electric utilities. Preliminary annual data are the sum of the monthly revenues divided by the sum of the monthly sales. When final annual data become available each year from Form EIA-861, "Annual Electric Power Industry Report," their ratios to the preliminary Form EIA-861M values are used to derive adjusted final monthly values.

Note 8. Natural Gas Prices. Natural gas prices are intended to include all taxes. Instructions on the data collection forms specifically direct that all federal, state, and local taxes, surcharges, and/or adjustments billed to consumers are to be included. However, sales and other taxes itemized on more than 3,000 consumers' bills are sometimes excluded by the reporting utilities. Delivered-to-consumers prices for 1987 forward represent natural gas delivered and sold to residential, commercial, industrial, vehicle fuel, and electric power consumers. They do not include the price of natural

gas delivered on behalf of third parties to residential, commercial, industrial, and vehicle fuel customers except for certain states in the residential and commercial sectors for 2002 forward. Volumes of natural gas delivered on behalf of third parties are included in the consumption data shown in Table 4.3. Additional information is available in EIA, *Natural Gas Monthly*, Appendix C.

Table 9.1 Sources

Domestic First Purchase Price

1949–1976: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), Minerals Yearbook, "Crude Petroleum and Petroleum Products" chapter.

1977: Federal Energy Administration, based on Form FEA-P124, "Domestic Crude Oil Purchaser's Monthly Report."

1978–2009: U.S. Energy Information Administration (EIA), *Petroleum Marketing Annual* 2009, Table 1.

2010 forward: EIA, *Petroleum Marketing Monthly,* October 2026, Table 1, and EIA, Petroleum Data Tables.

F.O.B. and Landed Cost of Imports

October 1973–September 1977: Federal Energy Administration, Form FEA-F701-M-0, "Transfer Pricing Report."

October–December 1977: EIA, Form FEA-F701-M-0, "Transfer Pricing Report."

1978–2009: EIA, *Petroleum Marketing Annual* 2009, Table 1.

2010 forward: EIA, *Petroleum Marketing Monthly*, October 2026 Table 1, and EIA, Petroleum Data Tables.

Refiner Acquisition Cost

1968–1973: EIA estimates. The cost of domestic crude oil was derived by adding estimated transportation costs to the reported average domestic first purchase price. The cost of imported crude oil was derived by adding an estimated ocean transport cost based on the published "Average Freight Rate Assessment" to the average "Free Alongside Ship" value published by the U.S. Census Bureau.

1974–1976: DOI, BOM, *Minerals Yearbook*, "Crude Petroleum and Petroleum Products" chapter.

1977: January–September, FEA, based on Form FEA-P110-M-1, "Refiners' Monthly Cost Allocation Report."

1977: October–December, EIA, based on Form FEA-P110-M-1, "Refiners' Monthly Cost Allocation Report."

1978–2009: EIA, *Petroleum Marketing Annual* 2009, Table 1.

2010 forward: EIA, *Petroleum Marketing Monthly*, October 2026, Table 1, and EIA, Petroleum Data Tables.

Table 9.2 Sources

October 1973–September 1977: Federal Energy Administration, Form FEA-F701-M-0, "Transfer Pricing Report."

October 1977–December 1977: U.S. Energy Information Administration (EIA), Form FEA-F701-M-0, "Transfer Pricing Report."

1978–2009: EIA, *Petroleum Marketing Annual* 2009, Table 21.

2010 forward: EIA, *Petroleum Marketing Monthly* October 2026, Table 21, and EIA, Petroleum Data Tables

Table 9.9 Sources

1973–September 1977: Federal Power Commission, Form FPC-423, "Monthly Report of Cost and Quality of Fuels for

Electric Utility Plants." October 1977–December 1977: Federal Energy Regulatory Commission, Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Utility Plants."

1978 and 1979: U.S. Energy Information Administration (EIA), Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Utility Plants."

1980–1989: EIA, *Electric Power Monthly*, August issues.

1990–2000: EIA, *Electric Power Monthly*, June 2003, Table 26.

2001–2007: EIA, *Electric Power Monthly*, October 2008, Table 4.1; Federal Energy Regulatory Commission, Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Utility Plants"; and EIA, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report."

2008 forward: EIA, *Electric Power Monthly*, September 2026, Table 4.1; and Form EIA-923, "Power Plant Operations Report."

Table 9.10 Sources

All Prices Except Vehicle Fuel and Electric Power

1949–2015: U.S. Energy Information Administration (EIA), *Natural Gas Annual* (NGA), annual reports and unpublished revisions.

2016 forward: EIA, *Natural Gas Monthly* (NGM), September 2026, Table 3.

Vehicle Fuel Price

1989–2013: EIA, NGA, annual reports.

Electric Power Sector Price

1967–1972: EIA, NGA, annual reports.

1973–1998: EIA, NGA 2000, Table 96.

1999–2002: EIA, NGM, November 2004, Table 4.

2003–2007: Federal Energy Regulatory Commission, Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Utility Plants," and EIA, Form EIA-423 "Monthly Cost and Quality of Fuels for Electric Plants Report."

2008 forward: Form EIA-923, "Power Plant Operations Report."

Percentage of Residential Sector

1989–2013: EIA, Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition." Calculated as the total amount of natural gas delivered to residential consumers minus the amount delivered for the account of others, and then divided by the total amount delivered to residential consumers.

2014 forward: EIA, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Percentage of Commercial Sector

1987–2015: EIA, NGA, annual reports. Calculated as the total amount of natural gas delivered to commercial consumers minus the amount delivered for the account of others, and then divided by the total amount delivered to commercial consumers.

2016 forward: EIA, NGM, September 2026, Table 3.

Percentage of Industrial Sector

1982–2015: EIA, NGA, annual reports. Calculated as the total amount of natural gas delivered to industrial consumers minus the amount delivered for the account of others, and then divided by the total amount delivered to industrial consumers.

2016 forward: EIA, NGM, September 2026, Table 3.

Percentage of Electric Power Sector

1973–2001: Calculated by EIA as the quantity of natural gas receipts by electric utilities reported on Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Utility Plants" (and predecessor forms) divided by the quantity of natural gas consumed by the electric power sector (for 1973 –1988, see *Monthly Energy Review* (*MER*), Table 7.3b; for 1989–2001, see MER, Table 7.4b).

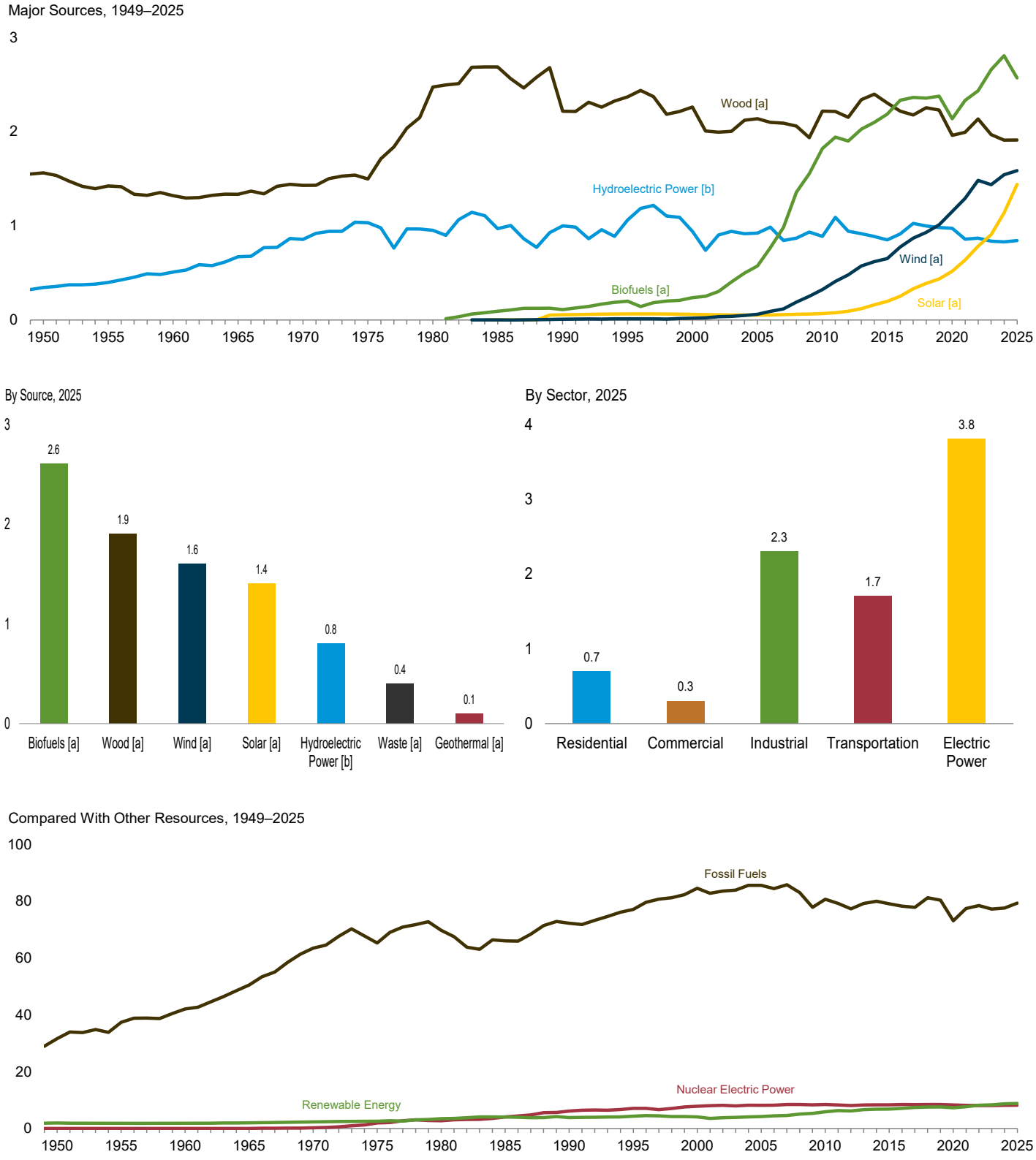
2002–2007: Calculated by EIA as the quantity of natural gas receipts by electric utilities and independent power producers reported on Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Utility Plants," and EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report," divided by the quantity of natural gas consumed by the electric power sector (see MER, Table 7.4b).

2008 forward: Calculated by EIA as the quantity of natural gas receipts by electric utilities and independent power producers reported on Form EIA-923, "Power Plant Operations Report," divided by the quantity of natural gas consumed by the electric power sector (see MER, Table 7.4b).

10. Renewable Energy

Figure 10.1 Renewable Energy Consumption

(Quadrillion Btu)



[a] See Table 10.1 for definition.
[b] Conventional hydroelectric power.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#renewable.
Sources: Tables 1.3 and 10.1–10.2c.

Table 10.1 Renewable Energy Production and Consumption by Source

(Trillion Btu)

	Production[a]				Consumption								
	Biomass			Total Renewable Energy[e]	Hydroelectric Power[f]	Geothermal[g]	Solar[h]	Wind[i]	Biomass				Total Renewable Energy
	Wood[b]	Biofuels[c]	Total[d]						Wood[j]	Waste[k]	Biofuels[l]	Total	
1950 Total	1,562	NA	1,562	1,907	344	NA	NA	NA	1,562	NA	NA	1,562	1,907
1955 Total	1,424	NA	1,424	1,821	397	NA	NA	NA	1,424	NA	NA	1,424	1,821
1960 Total	1,320	NA	1,320	1,830	510	(s)	NA	NA	1,320	NA	NA	1,320	1,830
1965 Total	1,335	NA	1,335	2,008	672	1	NA	NA	1,335	NA	NA	1,335	2,008
1970 Total	1,429	NA	1,431	2,289	856	2	NA	NA	1,429	2	NA	1,431	2,289
1975 Total	1,497	NA	1,499	2,544	1,034	11	NA	NA	1,497	2	NA	1,499	2,544
1980 Total	2,474	NA	2,475	3,445	953	17	NA	NA	2,474	2	NA	2,475	3,445
1985 Total	2,687	93	3,016	4,018	970	32	(s)	(s)	2,687	236	93	3,016	4,018
1990 Total	2,216	111	2,735	3,863	999	63	56	10	2,216	408	111	2,735	3,863
1995 Total	2,370	198	3,099	4,295	1,061	60	64	11	2,370	531	200	3,101	4,297
2000 Total	2,262	233	3,006	4,093	940	69	59	19	2,262	511	236	3,008	4,096
2005 Total	2,137	561	3,101	4,220	922	84	52	61	2,137	403	574	3,114	4,233
2010 Total	2,217	1,868	4,553	5,943	888	111	68	323	2,217	468	1,821	4,506	5,896
2011 Total	2,213	2,037	4,712	6,404	1,090	116	76	410	2,213	462	1,941	4,616	6,308
2012 Total	2,151	1,936	4,554	6,187	943	117	94	480	2,151	467	1,899	4,517	6,151
2013 Total	2,338	2,000	4,835	6,561	916	117	120	573	2,338	496	2,026	4,861	6,587
2014 Total	2,398	2,135	5,049	6,833	885	118	161	620	2,398	516	2,099	5,013	6,796
2015 Total	2,305	2,201	5,025	6,840	850	118	197	651	2,305	518	2,185	5,008	6,823
2016 Total	2,290	2,329	5,122	7,180	914	117	252	774	2,217	503	2,333	5,053	7,112
2017 Total	2,254	2,407	5,156	7,498	1,025	118	331	868	2,176	495	2,364	5,035	7,377
2018 Total	2,348	2,471	5,306	7,740	998	118	388	930	2,254	487	2,355	5,096	7,530
2019 Total	2,333	2,432	5,207	7,750	982	116	435	1,010	2,229	442	2,376	5,048	7,591
2020 Total	2,066	2,194	4,700	7,460	973	118	516	1,153	1,960	440	2,136	4,535	7,296
2021 Total	2,111	2,374	4,916	7,819	858	118	636	1,290	1,992	430	2,331	4,753	7,656
2022 Total	2,273	2,511	5,196	8,450	869	118	784	1,482	2,135	412	2,433	4,980	8,233
2023 Total	2,103	2,705	5,202	8,501	836	119	907	1,437	1,968	394	2,659	5,021	8,320
2024 January	173	226	434	691	74	10	55	119	165	35	212	411	668
February	166	227	425	713	71	9	67	140	154	32	223	410	698
March	174	241	448	779	80	10	88	154	161	33	232	427	758
April	166	223	420	764	71	10	102	161	155	31	222	408	752
May	170	232	435	778	84	10	116	134	158	33	242	433	776
June	169	238	437	778	76	9	123	132	157	30	235	422	763
July	173	252	457	760	73	10	124	97	162	32	252	446	749
August	176	250	458	759	70	10	122	100	163	32	242	437	738
September	169	236	435	703	54	9	105	100	157	31	231	418	686
October	164	245	441	737	52	10	99	135	153	32	243	428	724
November	169	251	452	727	57	10	72	137	157	32	235	425	701
December	178	255	465	743	67	10	66	135	166	33	236	435	713
Total	2,046	2,875	5,308	8,933	829	116	1,138	1,542	1,909	387	2,806	5,101	8,726
2025 January	177	234	444	753	73	10	78	149	165	33	206	403	713
February	160	213	402	695	67	9	83	134	148	30	199	377	670
March	176	233	442	817	77	10	116	173	163	33	213	409	784
April	162	220	413	789	78	10	132	157	151	31	214	396	772
May	170	235	436	799	83	10	144	126	158	31	215	404	767
June	170	236	435	795	76	10	153	122	158	30	210	398	758
July	180	243	453	799	68	10	159	109	166	30	219	416	762
August	177	238	445	768	69	10	151	93	165	30	217	412	736
September	172	233	434	717	52	10	134	88	160	29	210	399	682
October	171	248	450	770	56	10	119	135	158	31	227	417	737
November	169	243	443	746	63	10	91	140	156	31	212	399	702
December	175	249	457	787	82	10	78	161	163	32	228	423	753
Total	2,058	2,824	5,254	9,236	843	117	1,438	1,585	1,912	372	2,569	4,853	8,835
2026 January	172	232	436	781	95	10	88	152	159	31	199	390	735
February	154	220	403	726	77	9	101	135	145	29	194	368	690
March	166	248	446	865	92	10	139	178	155	32	225	412	831
April	154	233	416	820	77	9	150	168	140	30	216	386	790
May	169	257	456	856	78	10	172	140	157	30	234	420	820
June	164	255	448	862	81	10	180	143	151	29	236	416	830
July	173	262	465	844	69	10	190	110	159	30	241	430	809
7-Month Total	1,152	1,707	3,071	5,753	568	68	1,020	1,026	1,066	211	1,546	2,822	5,505
2025 7-Month Total	1,195	1,613	3,025	5,447	521	68	864	969	1,110	217	1,475	2,803	5,225
2024 7-Month Total	1,191	1,640	3,057	5,263	528	68	674	936	1,113	227	1,618	2,957	5,163

[a] For hydroelectric power, geothermal, solar, wind, and biomass waste, production equals consumption.

[b] Wood and wood-derived fuels. Through 2015, wood production equals consumption. Beginning in 2016, wood production equals consumption plus densified biomass exports.

[c] Total biomass inputs to the production of fuel ethanol and biodiesel. Beginning in 2011, also includes production of renewable diesel fuel. Beginning in 2014, also includes production of other biofuels.

[d] Includes biomass waste.

[e] Hydroelectric power, geothermal, solar, wind, and biomass.

[f] Conventional hydroelectricity net generation (converted to Btu by multiplying by the heat content of electricity).

[g] Geothermal electricity net generation (converted to Btu by multiplying by the heat content of electricity), and geothermal heat pump and direct use energy.

[h] Solar photovoltaic (PV) and solar thermal electricity net generation (converted to Btu by multiplying by the heat content of electricity), and solar thermal direct use energy.

[i] Wind electricity net generation (converted to Btu by multiplying by the heat content of electricity).

[j] Wood and wood-derived fuels.

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

[l] Fuel ethanol (minus denaturant), biodiesel, renewable diesel fuel, and other biofuels consumption; plus losses and co-products from the production of fuel ethanol and biodiesel.

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

Notes: • Production data are estimates. Consumption data are estimates, except for hydroelectric power in 1949–1978 and 1989 forward, and wind. • See Note, "Renewable Energy Production and Consumption," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

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

Sources: • **Production:** Tables 10.2a–10.4c and U.S. Energy Information Administration, Form EIA-63C, "Densified Biomass Fuel Report." • **Consumption:** Tables 10.2a–10.2c.

Table 10.2a Renewable Energy Consumption: Residential and Commercial Sectors

(Trillion Btu)

	Residential Sector				Commercial Sector[a]								
			Biomass						Biomass				
	Geo-thermal[b]	Solar[c]	Wood[d]	Total	Hydro-electric Power[e]	Geo-thermal[f]	Solar[g]	Wind[h]	Wood[d]	Waste[i]	Fuel Ethanol[j,k]	Total	Total
1950 Total	NA	NA	1,006	1,006	NA	NA	NA	NA	19	NA	NA	19	19
1955 Total	NA	NA	775	775	NA	NA	NA	NA	15	NA	NA	15	15
1960 Total	NA	NA	627	627	NA	NA	NA	NA	12	NA	NA	12	12
1965 Total	NA	NA	468	468	NA	NA	NA	NA	9	NA	NA	9	9
1970 Total	NA	NA	401	401	NA	NA	NA	NA	8	NA	NA	8	8
1975 Total	NA	NA	425	425	NA	NA	NA	NA	8	NA	NA	8	8
1980 Total	NA	NA	850	850	NA	NA	NA	NA	21	NA	NA	21	21
1985 Total	NA	NA	1,010	1,010	NA	NA	NA	NA	24	NA	(s)	24	24
1990 Total	6	55	580	640	(s)	3	(s)	–	66	28	(s)	94	97
1995 Total	7	63	520	589	(s)	5	(s)	–	72	40	(s)	113	118
2000 Total	9	57	420	486	(s)	8	(s)	–	71	47	(s)	119	127
2005 Total	16	49	430	495	(s)	14	1	–	70	34	1	105	120
2010 Total	37	59	541	636	(s)	19	4	(s)	72	36	3	111	134
2011 Total	40	62	524	626	(s)	20	7	(s)	69	43	3	115	141
2012 Total	40	66	438	544	(s)	20	11	(s)	61	45	3	108	139
2013 Total	40	72	572	683	(s)	20	15	(s)	70	47	3	120	155
2014 Total	40	80	579	698	(s)	20	19	(s)	73	47	4	124	163
2015 Total	40	87	513	640	(s)	20	21	(s)	73	47	[k] 26	146	187
2016 Total	40	101	445	586	1	20	23	(s)	74	48	26	148	191
2017 Total	40	115	430	585	1	20	28	(s)	74	48	25	146	195
2018 Total	40	127	526	693	1	20	35	1	74	47	25	146	203
2019 Total	40	141	547	728	1	21	40	1	74	39	26	139	201
2020 Total	40	156	345	541	1	21	46	1	73	38	26	137	205
2021 Total	40	178	356	574	1	21	54	1	73	39	27	139	215
2022 Total	40	219	449	708	1	20	63	1	73	75	32	180	263
2023 Total	40	260	381	681	1	20	69	(s)	72	72	28	172	263
2024 January	3	17	29	50	(s)	2	4	(s)	6	6	2	14	20
February	3	19	28	50	(s)	2	5	(s)	6	6	2	13	20
March	3	25	29	58	(s)	2	6	(s)	6	6	2	14	22
April	3	28	28	60	(s)	2	7	(s)	6	6	2	13	22
May	3	30	29	63	(s)	2	8	(s)	6	6	2	14	24
June	3	30	28	62	(s)	2	8	(s)	6	6	2	14	23
July	3	31	29	64	(s)	2	8	(s)	6	6	2	14	24
August	3	30	29	63	(s)	2	8	(s)	6	6	2	14	24
September	3	27	28	58	(s)	2	7	(s)	6	6	2	14	22
October	3	24	29	57	(s)	2	6	(s)	6	6	2	14	22
November	3	19	28	51	(s)	2	5	(s)	6	6	2	14	20
December	3	18	29	51	(s)	2	4	(s)	6	6	2	14	20
Total	40	298	347	685	1	20	76	(s)	72	72	23	167	264
2025 January	3	19	32	54	(s)	2	5	(s)	6	6	2	14	21
February	3	20	29	52	NM	2	5	(s)	6	5	2	13	20
March	3	28	32	63	NM	2	7	(s)	6	6	2	14	23
April	3	31	31	65	(s)	2	8	(s)	6	6	2	13	23
May	3	32	32	67	(s)	2	9	(s)	6	5	2	13	24
June	3	33	31	67	(s)	2	9	(s)	6	5	2	14	24
July	3	35	32	70	NM	2	9	(s)	6	6	2	14	25
August	3	33	32	67	(s)	2	9	(s)	6	6	2	14	24
September	3	28	31	62	(s)	2	8	(s)	6	6	2	13	23
October	3	27	32	62	(s)	2	7	(s)	6	6	2	14	22
November	3	21	31	55	(s)	2	5	(s)	6	6	2	13	21
December	3	20	32	55	NM	2	5	(s)	6	6	2	14	21
Total	40	327	372	738	1	20	87	(s)	72	67	23	163	271
2026 January	3	20	29	53	NM	2	6	(s)	6	5	2	13	21
February	3	22	26	51	NM	2	6	(s)	6	5	2	12	20
March	3	30	29	62	NM	2	8	(s)	6	6	2	14	24
April	3	33	28	64	(s)	2	9	(s)	6	5	2	13	24
May	3	35	29	68	NM	2	10	(s)	6	6	2	14	26
June	3	36	28	67	NM	2	10	(s)	6	6	2	13	26
July	3	36	29	69	(s)	2	11	(s)	6	6	2	14	26
7-Month Total	23	212	200	434	1	11	61	(s)	42	38	13	93	166
2025 7-Month Total	23	198	216	438	1	11	53	(s)	42	39	13	94	160
2024 7-Month Total	23	181	202	406	1	11	46	(s)	42	42	13	97	156

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

[b] Geothermal heat pump and direct use energy.

[c] Small-scale solar photovoltaic (PV) electricity generation in the residential sector (converted to Btu by multiplying by the heat content of electricity) and small-scale solar thermal energy in the residential, commercial, and industrial sectors. See Table 10.5.

[d] Wood and wood-derived fuels.

[e] Conventional hydroelectricity net generation (converted to Btu by multiplying by the heat content of electricity).

[f] Geothermal heat pump and direct use energy. Beginning in December 2018, also includes geothermal electricity net generation (converted to Btu by multiplying by the heat content of electricity).

[g] Solar photovoltaic (PV) electricity net generation in the commercial sector (converted to Btu by multiplying by the heat content of electricity), both utility-scale and small-scale. See Table 10.5.

[h] Wind electricity net generation (converted to Btu by multiplying by the heat content of electricity).

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

[j] The fuel ethanol (minus denaturant) portion of motor fuels, such as E10, consumed by the commercial sector.

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

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

Notes: • Residential sector data are estimates. Commercial sector data are estimates, except for hydroelectric power, wind, and biomass waste. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

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

Sources: See end of section.

Table 10.2b Renewable Energy Consumption: Industrial Sector

(Trillion Btu)

	Industrial Sector[a]									
					Biomass					
	Hydro-electric Power[b]	Geo-thermal[c]	Solar[d]	Wind[e]	Wood[f]	Waste[g]	Fuel Ethanol[h,i]	Losses and Co-products[j]	Total	Total
1950 Total	**17**	**NA**	**NA**	**NA**	**532**	**NA**	**NA**	**NA**	**532**	**549**
1955 Total	**11**	**NA**	**NA**	**NA**	**631**	**NA**	**NA**	**NA**	**631**	**642**
1960 Total	**12**	**NA**	**NA**	**NA**	**680**	**NA**	**NA**	**NA**	**680**	**692**
1965 Total	**11**	**NA**	**NA**	**NA**	**855**	**NA**	**NA**	**NA**	**855**	**866**
1970 Total	**11**	**NA**	**NA**	**NA**	**1,019**	**NA**	**NA**	**NA**	**1,019**	**1,030**
1975 Total	**11**	**NA**	**NA**	**NA**	**1,063**	**NA**	**NA**	**NA**	**1,063**	**1,074**
1980 Total	**11**	**NA**	**NA**	**NA**	**1,600**	**NA**	**NA**	**NA**	**1,600**	**1,611**
1985 Total	**11**	**NA**	**NA**	**NA**	**1,645**	**230**	**1**	**42**	**1,918**	**1,928**
1990 Total	**10**	**2**	**(s)**	**–**	**1,442**	**192**	**1**	**49**	**1,684**	**1,696**
1995 Total	**18**	**3**	**(s)**	**–**	**1,652**	**195**	**2**	**86**	**1,934**	**1,955**
2000 Total	**14**	**4**	**(s)**	**–**	**1,636**	**145**	**1**	**99**	**1,881**	**1,900**
2005 Total	**11**	**4**	**(s)**	**–**	**1,452**	**148**	**7**	**227**	**1,834**	**1,849**
2010 Total	**6**	**4**	**1**	**–**	**1,409**	**168**	**17**	**727**	**2,320**	**2,331**
2011 Total	**6**	**4**	**1**	**(s)**	**1,438**	**165**	**17**	**756**	**2,375**	**2,387**
2012 Total	**8**	**4**	**2**	**(s)**	**1,462**	**159**	**17**	**711**	**2,349**	**2,363**
2013 Total	**12**	**4**	**3**	**(s)**	**1,489**	**187**	**18**	**714**	**2,407**	**2,427**
2014 Total	**4**	**4**	**4**	**(s)**	**1,495**	**190**	**14**	**766**	**2,466**	**2,478**
2015 Total	**5**	**4**	**5**	**(s)**	**1,476**	**190**	**[i] 18**	**791**	**2,474**	**2,489**
2016 Total	**4**	**4**	**7**	**(s)**	**1,474**	**174**	**18**	**821**	**2,487**	**2,503**
2017 Total	**5**	**4**	**8**	**(s)**	**1,442**	**168**	**18**	**847**	**2,475**	**2,493**
2018 Total	**4**	**4**	**9**	**(s)**	**1,432**	**165**	**19**	**855**	**2,471**	**2,489**
2019 Total	**4**	**4**	**11**	**(s)**	**1,407**	**156**	**19**	**835**	**2,416**	**2,435**
2020 Total	**3**	**4**	**12**	**(s)**	**1,356**	**160**	**19**	**735**	**2,270**	**2,290**
2021 Total	**3**	**4**	**14**	**(s)**	**1,366**	**161**	**19**	**789**	**2,336**	**2,357**
2022 Total	**3**	**4**	**15**	**(s)**	**1,415**	**161**	**20**	**808**	**2,404**	**2,426**
2023 Total	**3**	**4**	**16**	**(s)**	**1,341**	**153**	**20**	**819**	**2,334**	**2,357**
2024 January	(s)	(s)	1	(s)	113	14	1	68	196	198
February	(s)	(s)	1	(s)	107	13	2	69	190	192
March	(s)	(s)	2	(s)	112	14	2	73	201	203
April	(s)	(s)	2	(s)	110	13	1	65	190	192
May	(s)	(s)	2	(s)	110	14	2	70	196	198
June	(s)	(s)	2	(s)	109	12	2	69	191	194
July	(s)	(s)	2	(s)	111	12	2	75	200	202
August	(s)	(s)	2	(s)	112	12	2	74	200	203
September	(s)	(s)	2	(s)	110	12	2	69	192	195
October	(s)	(s)	1	(s)	107	13	2	72	194	196
November	(s)	(s)	1	(s)	111	13	2	74	200	201
December	(s)	(s)	1	(s)	116	14	2	76	206	208
Total	**3**	**4**	**18**	**(s)**	**1,328**	**156**	**19**	**854**	**2,358**	**2,383**
2025 January	(s)	(s)	1	(s)	112	14	2	72	199	201
February	(s)	(s)	1	(s)	101	12	1	65	180	182
March	(s)	(s)	2	(s)	112	14	2	70	197	200
April	(s)	(s)	2	(s)	104	13	2	66	185	188
May	(s)	(s)	2	(s)	108	13	2	69	192	195
June	(s)	(s)	2	(s)	107	12	2	70	190	193
July	(s)	(s)	2	(s)	113	12	2	72	198	201
August	(s)	(s)	2	(s)	112	12	2	72	198	201
September	(s)	(s)	2	(s)	108	12	2	68	189	192
October	(s)	(s)	2	(s)	108	14	2	73	197	199
November	(s)	(s)	2	(s)	106	13	2	72	193	195
December	(s)	(s)	1	(s)	109	14	2	75	199	201
Total	**3**	**4**	**22**	**1**	**1,300**	**154**	**19**	**844**	**2,318**	**2,347**
2026 January	(s)	(s)	2	(s)	108	14	1	72	195	197
February	(s)	(s)	2	(s)	97	12	1	67	178	181
March	(s)	(s)	2	(s)	105	13	2	73	193	197
April	(s)	(s)	2	(s)	95	13	2	66	176	179
May	(s)	(s)	3	(s)	108	13	2	74	195	199
June	(s)	(s)	3	(s)	102	12	2	72	187	191
July	(s)	(s)	3	(s)	108	12	2	74	196	199
7-Month Total	**2**	**2**	**16**	**(s)**	**724**	**88**	**11**	**499**	**1,322**	**1,343**
2025 7-Month Total	**2**	**2**	**13**	**(s)**	**757**	**90**	**11**	**484**	**1,342**	**1,359**
2024 7-Month Total	**2**	**2**	**11**	**(s)**	**772**	**92**	**11**	**490**	**1,364**	**1,380**

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

[b] Conventional hydroelectricity net generation (converted to Btu by multiplying by the heat content of electricity).

[c] Geothermal heat pump and direct use energy.

[d] Solar photovoltaic (PV) electricity net generation in the industrial sector (converted to Btu by multiplying by the heat content of electricity), both utility-scale and small-scale. See Table 10.5.

[e] Wind electricity net generation (converted to Btu by multiplying by the heat content of electricity).

[f] Wood and wood-derived fuels.

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

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

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

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

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

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

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

Sources: See end of section.

Table 10.2c Renewable Energy Consumption: Transportation and Electric Power Sectors

(Trillion Btu)

	Transportation Sector					Electric Power Sector[a]							
	Biomass									Biomass			
	Fuel Ethanol[b,c]	Bio-diesel[d]	Renewable Diesel Fuel[e]	Other Biofuels[f]	Total	Hydro-electric Power[g]	Geo-thermal[h]	Solar[i]	Wind[j]	Wood[k]	Waste[l]	Total	Total
1950 Total	**NA**	**NA**	**NA**	**NA**	**NA**	**327**	**NA**	**NA**	**NA**	**5**	**NA**	**5**	**333**
1955 Total	**NA**	**NA**	**NA**	**NA**	**NA**	**385**	**NA**	**NA**	**NA**	**3**	**NA**	**3**	**389**
1960 Total	**NA**	**NA**	**NA**	**NA**	**NA**	**498**	**(s)**	**NA**	**NA**	**2**	**NA**	**2**	**499**
1965 Total	**NA**	**NA**	**NA**	**NA**	**NA**	**661**	**1**	**NA**	**NA**	**3**	**NA**	**3**	**665**
1970 Total	**NA**	**NA**	**NA**	**NA**	**NA**	**845**	**2**	**NA**	**NA**	**1**	**2**	**4**	**851**
1975 Total	**NA**	**NA**	**NA**	**NA**	**NA**	**1,024**	**11**	**NA**	**NA**	**(s)**	**2**	**2**	**1,037**
1980 Total	**NA**	**NA**	**NA**	**NA**	**NA**	**942**	**17**	**NA**	**NA**	**3**	**2**	**4**	**964**
1985 Total	**50**	**NA**	**NA**	**NA**	**50**	**959**	**32**	**(s)**	**(s)**	**8**	**7**	**14**	**1,006**
1990 Total	**60**	**NA**	**NA**	**NA**	**60**	**989**	**53**	**1**	**10**	**129**	**188**	**317**	**1,369**
1995 Total	**112**	**NA**	**NA**	**NA**	**112**	**1,042**	**46**	**2**	**11**	**125**	**296**	**422**	**1,522**
2000 Total	**135**	**NA**	**NA**	**NA**	**135**	**926**	**48**	**2**	**19**	**134**	**318**	**453**	**1,447**
2005 Total	**327**	**12**	**NA**	**NA**	**339**	**911**	**50**	**2**	**61**	**185**	**221**	**406**	**1,430**
2010 Total	**1,041**	**33**	**NA**	**NA**	**1,075**	**882**	**52**	**4**	**323**	**196**	**264**	**459**	**1,720**
2011 Total	**1,045**	**113**	**8**	**NA**	**1,166**	**1,083**	**52**	**6**	**410**	**182**	**255**	**437**	**1,988**
2012 Total	**1,045**	**115**	**10**	**NA**	**1,169**	**934**	**53**	**14**	**480**	**190**	**262**	**453**	**1,935**
2013 Total	**1,072**	**182**	**39**	**NA**	**1,292**	**904**	**54**	**30**	**572**	**207**	**262**	**470**	**2,030**
2014 Total	**1,093**	**181**	**38**	**2**	**1,314**	**880**	**54**	**59**	**619**	**251**	**279**	**530**	**2,143**
2015 Total	[c] **1,110**	**191**	**48**	**2**	**1,351**	**845**	**54**	**83**	**650**	**244**	**281**	**525**	**2,158**
2016 Total	**1,143**	**266**	**57**	**2**	**1,469**	**909**	**54**	**121**	**774**	**224**	**281**	**505**	**2,363**
2017 Total	**1,156**	**253**	**62**	**3**	**1,474**	**1,019**	**54**	**180**	**867**	**229**	**280**	**510**	**2,630**
2018 Total	**1,152**	**243**	**57**	**3**	**1,456**	**993**	**54**	**216**	**929**	**221**	**275**	**496**	**2,689**
2019 Total	**1,162**	**231**	**99**	**4**	**1,497**	**978**	**51**	**243**	**1,009**	**201**	**248**	**448**	**2,729**
2020 Total	**1,004**	**239**	**107**	**4**	**1,355**	**969**	**53**	**302**	**1,152**	**185**	**242**	**428**	**2,904**
2021 Total	**1,110**	**218**	**158**	**10**	**1,496**	**854**	**53**	**391**	**1,289**	**197**	**229**	**426**	**3,014**
2022 Total	**1,111**	**212**	**225**	**25**	**1,573**	**865**	**55**	**487**	**1,481**	**198**	**176**	**374**	**3,263**
2023 Total	**1,132**	**246**	**376**	**38**	**1,792**	**832**	**56**	**562**	**1,436**	**174**	**168**	**342**	**3,228**
2024 January	87	20	30	3	141	73	5	33	119	16	14	31	260
February	89	22	37	3	151	71	4	43	140	14	13	27	285
March	96	20	36	3	155	79	5	54	154	14	14	27	319
April	88	22	39	4	153	71	4	65	161	11	12	24	325
May	103	21	42	2	168	83	4	76	134	12	13	26	323
June	95	22	42	3	162	76	4	83	132	14	13	27	322
July	101	20	50	3	174	73	4	83	97	15	13	28	285
August	99	19	43	3	164	70	4	83	100	15	14	29	285
September	93	19	42	4	158	54	4	70	100	13	13	26	253
October	101	21	41	5	168	52	4	67	135	10	13	23	282
November	94	18	40	6	158	57	4	47	137	12	13	25	270
December	94	20	38	4	157	66	5	43	135	15	13	28	277
Total	**1,139**	**246**	**480**	**44**	**1,909**	**825**	**53**	**746**	**1,541**	**162**	**158**	**320**	**3,485**
2025 January	91	12	23	4	130	73	5	52	149	15	13	29	307
February	85	11	28	5	130	66	4	56	134	13	12	25	286
March	94	13	28	5	139	76	5	79	173	14	13	27	359
April	96	14	30	5	145	78	4	91	156	10	12	22	351
May	96	13	28	5	142	83	4	101	126	13	12	25	339
June	99	11	19	7	137	75	4	108	122	15	13	27	337
July	99	11	28	6	144	68	4	113	108	15	13	28	322
August	98	10	29	5	141	68	5	108	93	15	12	28	301
September	94	13	26	6	139	52	4	95	88	15	12	27	266
October	102	11	31	6	150	56	4	83	135	13	12	25	303
November	91	11	24	10	136	63	4	63	140	13	13	26	295
December	100	12	30	8	150	81	5	52	160	16	13	29	327
Total	**1,145**	**142**	**323**	**73**	**1,683**	**839**	**53**	**1,001**	**1,583**	**167**	**151**	**318**	**3,795**
2026 January	88	12	18	5	124	95	5	61	152	16	12	28	340
February	82	13	24	5	124	76	4	72	135	15	12	27	315
March	99	14	30	6	148	91	5	98	178	14	13	28	400
April	94	16	31	6	147	76	4	105	168	10	12	22	376
May	102	17	30	7	156	77	4	123	140	14	12	26	371
June	99	18	39	5	160	81	4	132	143	15	12	27	386
July	99	17	39	8	163	69	4	140	110	16	12	28	351
7-Month Total	**663**	**106**	**210**	**42**	**1,022**	**566**	**31**	**731**	**1,025**	**101**	**85**	**186**	**2,539**
2025 7-Month Total	**661**	**84**	**183**	**38**	**966**	**519**	**31**	**601**	**968**	**95**	**89**	**183**	**2,302**
2024 7-Month Total	**659**	**148**	**275**	**22**	**1,104**	**526**	**31**	**437**	**935**	**97**	**92**	**189**	**2,118**

[a] Electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 1988, data are for electric utilities only; beginning in 1989, data are for electric utilities and independent power producers.

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

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

[d] "Biodiesel" is primarily fatty acid methyl esters (FAME). See "Biodiesel" in Glossary. Although there is use of biodiesel in other sectors, all consumption is assigned to the transportation sector.

[e] "Renewable diesel fuel," which is commonly called "non-ester renewable diesel" and "green diesel," is chemically similar to petroleum diesel fuel. Although there is use of renewable diesel fuel in other sectors, all consumption is assigned to the transportation sector.

[f] Renewable heating oil, renewable jet fuel (sustainable aviation fuel), renewable naphtha and gasoline, biobutanol, and other biofuels and biointermediates. Although there is use of these biofuels in other sectors, all consumption is assigned to the transportation sector.

[g] Conventional hydroelectricity net generation (converted to Btu by multiplying by the heat content of electricity).

[h] Geothermal electricity net generation (converted to Btu by multiplying by the heat content of electricity).

[i] Solar photovoltaic (PV) and solar thermal electricity net generation in the electric power sector (converted to Btu by multiplying by the heat content of electricity). See Table 10.5.

[j] Wind electricity net generation (converted to Btu by multiplying by the heat content of electricity).

[k] Wood and wood-derived fuels.

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

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

Notes: • Transportation sector data are estimates, except for biodiesel beginning in 2012, and renewable diesel fuel and other biofuels beginning in 2021. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

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

Sources: See end of section.

Table 10.3 Fuel Ethanol Overview

	Feedstock[b]	Losses and Co-products[c]	Denaturant[d]	Production[a]			Trade[a] Net Imports[e]	Stocks[a,f]	Stock Change[a,g]	Consumption[a]			*Consumption Minus Denaturant*[h]
	TBtu	TBtu	Mbbl	Mbbl	MMgal	TBtu	Mbbl	Mbbl	Mbbl	Mbbl	MMgal	TBtu	*TBtu*
1981 Total	**13**	**6**	**40**	**1,978**	**83**	**7**	**NA**	**NA**	**NA**	**1,978**	**83**	**7**	***7***
1985 Total	**93**	**42**	**294**	**14,693**	**617**	**52**	**NA**	**NA**	**NA**	**14,693**	**617**	**52**	***51***
1990 Total	**111**	**49**	**356**	**17,802**	**748**	**63**	**NA**	**NA**	**NA**	**17,802**	**748**	**63**	***62***
1995 Total	**198**	**86**	**647**	**32,325**	**1,358**	**115**	**387**	**2,186**	**-207**	**32,919**	**1,383**	**117**	***114***
2000 Total	**233**	**99**	**773**	**38,627**	**1,622**	**138**	**116**	**3,400**	**-624**	**39,367**	**1,653**	**140**	***137***
2005 Total	**550**	**227**	**1,859**	**92,961**	**3,904**	**331**	**3,234**	**5,563**	**-439**	**96,634**	**4,059**	**344**	***335***
2010 Total	**1,823**	**726**	**6,506**	**316,617**	**13,298**	**1,128**	**-9,115**	**17,941**	**1,347**	**306,155**	**12,858**	**1,091**	***1,061***
2011 Total	**1,904**	**754**	**6,649**	**331,646**	**13,929**	**1,181**	**-24,365**	**18,238**	**297**	**306,984**	**12,893**	**1,093**	***1,065***
2012 Total	**1,801**	**709**	**6,264**	**314,714**	**13,218**	**1,120**	**-5,891**	**20,350**	**2,112**	**306,711**	**12,882**	**1,092**	***1,064***
2013 Total	**1,809**	**711**	**6,181**	**316,493**	**13,293**	**1,127**	**-5,761**	**16,424**	**-3,926**	**314,658**	**13,216**	**1,120**	***1,092***
2014 Total	**1,947**	**764**	**6,476**	**340,781**	**14,313**	**1,213**	**-18,371**	**18,739**	**2,315**	**320,095**	**13,444**	**1,139**	***1,111***
2015 Total	**2,013**	**788**	**6,636**	**352,553**	**14,807**	**1,254**	**-17,632**	**21,596**	**2,857**	**332,064**	**13,947**	**1,181**	***1,153***
2016 Total	**2,092**	**818**	**6,920**	**366,981**	**15,413**	**1,306**	**-27,002**	**19,758**	**-1,838**	**341,817**	**14,356**	**1,216**	***1,187***
2017 Total	**2,164**	**844**	**6,657**	**379,435**	**15,936**	**1,349**	**-31,268**	**23,043**	**3,285**	**344,882**	**14,485**	**1,226**	***1,199***
2018 Total	**2,187**	**852**	**5,819**	**383,127**	**16,091**	**1,361**	**-39,410**	**23,418**	**375**	**343,342**	**14,420**	**1,220**	***1,197***
2019 Total	**2,140**	**832**	**6,089**	**375,678**	**15,778**	**1,336**	**-30,276**	**22,352**	**-1,066**	**346,468**	**14,552**	**1,232**	***1,206***
2020 Total	**1,886**	**732**	**5,892**	**331,928**	**13,941**	**1,181**	**-27,692**	**24,663**	**2,311**	**301,925**	**12,681**	**1,074**	***1,050***
2021 Total	**2,030**	**786**	**6,094**	**357,517**	**15,016**	**1,271**	**-28,135**	**22,036**	**-2,627**	**332,010**	**13,944**	**1,180**	***1,155***
2022 Total	**2,079**	**805**	**5,869**	**365,731**	**15,361**	**1,299**	**-29,631**	**24,245**	**2,209**	**333,891**	**14,023**	**1,186**	***1,163***
2023 Total	**2,107**	**816**	**6,211**	**370,957**	**15,580**	**1,318**	**-32,895**	**23,498**	**-747**	**338,808**	**14,230**	**1,204**	***1,179***
2024 January	175	68	508	30,843	1,295	110	-3,564	24,781	1,283	25,997	1,092	92	*90*
February	177	69	524	31,149	1,308	111	-3,273	26,027	1,246	26,629	1,118	95	*93*
March	188	73	503	33,129	1,391	118	-3,986	26,741	714	28,430	1,194	101	*99*
April	168	65	437	29,466	1,238	105	-4,468	25,466	-1,274	26,272	1,103	93	*92*
May	181	70	471	31,783	1,335	113	-4,002	22,750	-2,717	30,499	1,281	108	*106*
June	178	69	499	31,304	1,315	111	-3,194	22,655	-95	28,205	1,185	100	*98*
July	192	74	541	33,810	1,420	120	-3,067	23,328	673	30,070	1,263	107	*105*
August	191	74	526	33,506	1,407	119	-3,644	23,782	454	29,408	1,235	104	*102*
September	178	69	476	31,220	1,311	111	-3,905	23,462	-319	27,634	1,161	98	*96*
October	185	72	518	32,539	1,367	116	-3,891	22,124	-1,339	29,986	1,259	107	*104*
November	190	74	519	33,383	1,402	119	-4,549	22,973	849	27,985	1,175	99	*97*
December	194	75	544	34,184	1,436	121	-4,680	24,418	1,445	28,059	1,178	100	*98*
Total	**2,197**	**851**	**6,067**	**386,316**	**16,225**	**1,373**	**-46,223**	**24,418**	**920**	**339,173**	**14,245**	**1,205**	***1,181***
2025 January	188	72	576	33,523	1,408	119	-4,972	25,728	1,309	27,242	1,144	97	*95*
February	171	65	479	30,389	1,276	108	-3,450	27,301	1,574	25,366	1,065	90	*88*
March	184	70	525	32,731	1,375	116	-4,732	27,387	86	27,913	1,172	99	*97*
April	172	66	500	30,652	1,287	109	-4,038	25,262	-2,125	28,740	1,207	102	*100*
May	182	69	538	32,289	1,356	115	-4,334	24,669	-593	28,548	1,199	101	*99*
June	183	70	530	32,496	1,365	115	-4,122	23,589	-1,081	29,455	1,237	105	*103*
July	188	72	551	33,459	1,405	119	-4,041	23,425	-164	29,582	1,242	105	*103*
August	189	72	550	33,552	1,409	119	-4,791	22,914	-510	29,272	1,229	104	*102*
September	177	67	551	31,523	1,324	112	-3,663	22,829	-85	27,945	1,174	99	*97*
October	192	73	595	34,130	1,433	121	-4,221	22,441	-387	30,297	1,272	108	*105*
November	188	72	575	33,531	1,408	119	-5,081	23,780	1,338	27,113	1,139	96	*94*
December	196	75	663	34,934	1,467	124	-5,207	23,531	-248	29,975	1,259	107	*104*
Total	**2,210**	**842**	**R 6,631**	**393,210**	**16,515**	**1,397**	**-52,652**	**23,531**	**-887**	**341,446**	**14,341**	**1,213**	***1,188***
2026 January	189	72	647	33,738	1,417	120	-5,056	25,851	[i] 2,321	26,362	1,107	94	*92*
February	176	67	587	31,399	1,319	112	-5,007	27,698	1,847	24,545	1,031	87	*85*
March	192	73	603	34,174	1,435	121	-5,194	27,168	-530	29,510	1,239	105	*103*
April	174	66	518	30,925	1,299	110	-4,100	26,082	-1,086	27,911	1,172	99	*97*
May	193	73	544	34,220	1,437	122	-4,531	25,375	-707	30,396	1,277	108	*106*
June	188	72	553	33,510	1,407	119	-4,924	24,415	-959	29,546	1,241	105	*103*
July	193	74	560	34,400	1,445	122	-4,763	24,458	43	29,593	1,243	105	*103*
7-Month Total	**1,305**	**497**	**4,012**	**232,365**	**9,759**	**826**	**-33,574**	**24,458**	**928**	**197,864**	**8,310**	**703**	***688***
2025 7-Month Total	**1,268**	**483**	**3,698**	**225,540**	**9,473**	**802**	**-29,689**	**23,425**	**-994**	**196,845**	**8,267**	**700**	***685***
2024 7-Month Total	**1,259**	**488**	**3,482**	**221,485**	**9,302**	**787**	**-25,554**	**23,328**	**-170**	**196,101**	**8,236**	**697**	***683***

[a] Includes denaturant.
[b] Total corn and other biomass inputs to the production of undenatured ethanol used for fuel ethanol.
[c] Losses and co-products from the production of fuel ethanol. Does not include natural gas, electricity, and other non-biomass energy used in the production of fuel ethanol—these are included in the industrial sector consumption statistics for the appropriate energy source.
[d] The amount of denaturant in fuel ethanol produced.
[e] Through 2009, data are for fuel ethanol imports only; data for fuel ethanol exports are not available. Beginning in 2010, data are for fuel ethanol imports minus fuel ethanol (including industrial alcohol) exports.
[f] Stocks are at end of period.
[g] A negative value indicates a decrease in stocks and a positive value indicates an increase.
[h] Consumption of fuel ethanol minus denaturant. Data for fuel ethanol minus denaturant are used to develop data for "Renewable Energy/Biomass" in Tables 10.1–10.2b, as well as in Sections 1 and 2.
[i] Derived from the preliminary 2025 stocks value (23,530 thousand barrels), not the final 2025 value (23,531 thousand barrels) that is shown under "Stocks."
R=Revised. NA=Not available.

Notes: • Mbbl = thousand barrels. MMgal = million U.S. gallons. TBtu = trillion Btu. • Fuel ethanol data in thousand barrels are converted to million gallons by multiplying by 0.042, and are converted to Btu by multiplying by the approximate heat content of fuel ethanol. • Through 1980, data are not available. For 1981–1992, data are estimates. For 1993–2008, only data for feedstock, losses and co-products, and denaturant are estimates. Beginning in 2009, only data for feedstock, and losses and co-products, are estimates. • See "Denaturant," "Ethanol," "Fuel Ethanol," and "Fuel Ethanol Minus Denaturant" in Glossary.
• Totals may not equal sum of components due to independent rounding.
• Geographic coverage is the 50 states and the District of Columbia.
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#renewable (Excel and CSV files) for all available annual and monthly data beginning in 1981.
Sources: See end of section.

Table 10.4a Biodiesel Overview

	Feed-stock[b]	Losses and Co-prod-ucts[c]	Production[a]			Trade[a]			Stocks[a,e]	Stock Change[a,f]	Consumption[a,g]		
						Imports	Exports	Net Imports[d]					
	TBtu	TBtu	Mbbl	MMgal	TBtu	Mbbl	Mbbl	Mbbl	Mbbl	Mbbl	Mbbl	MMgal	TBtu
2001 Total	**1**	**(s)**	**204**	**9**	**1**	**81**	**41**	**40**	**NA**	**NA**	**244**	**10**	**1**
2005 Total	**12**	**(s)**	**2,162**	**91**	**12**	**214**	**213**	**1**	**NA**	**NA**	**2,163**	**91**	**12**
2010 Total	**44**	**1**	**8,177**	**343**	**44**	**564**	**2,588**	**-2,024**	**672**	**-39**	**6,192**	**260**	**33**
2011 Total	**125**	**2**	**23,035**	**967**	**123**	**890**	**1,799**	**-908**	**2,005**	**[h] 1,028**	**21,099**	**886**	**113**
2012 Total	**128**	**2**	**23,588**	**991**	**126**	**853**	**3,056**	**-2,203**	**1,984**	**-20**	**21,406**	**899**	**115**
2013 Total	**176**	**2**	**32,368**	**1,359**	**173**	**8,152**	**4,675**	**3,477**	**3,810**	**1,825**	**34,020**	**1,429**	**182**
2014 Total	**165**	**2**	**30,452**	**1,279**	**163**	**4,578**	**1,974**	**2,604**	**3,131**	**-679**	**33,735**	**1,417**	**181**
2015 Total	**163**	**2**	**30,080**	**1,263**	**161**	**8,399**	**2,091**	**6,308**	**3,943**	**813**	**35,575**	**1,494**	**191**
2016 Total	**203**	**3**	**37,327**	**1,568**	**200**	**16,879**	**2,098**	**14,781**	**6,398**	**2,454**	**49,653**	**2,085**	**266**
2017 Total	**206**	**3**	**37,993**	**1,596**	**204**	**9,374**	**2,228**	**7,146**	**4,268**	**-2,130**	**47,269**	**1,985**	**253**
2018 Total	**240**	**3**	**44,222**	**1,857**	**237**	**3,969**	**2,470**	**1,499**	**4,662**	**394**	**45,326**	**1,904**	**243**
2019 Total	**223**	**3**	**41,060**	**1,725**	**220**	**4,078**	**2,730**	**1,348**	**3,907**	**-756**	**43,163**	**1,813**	**231**
2020 Total	**235**	**3**	**43,207**	**1,815**	**232**	**4,684**	**3,458**	**1,226**	**3,665**	**-241**	**44,675**	**1,876**	**239**
2021 Total	**221**	**3**	**40,686**	**1,709**	**218**	**5,005**	**4,452**	**553**	**4,187**	**522**	**40,717**	**1,710**	**218**
2022 Total	**210**	**3**	**38,620**	**1,622**	**207**	**5,950**	**5,671**	**279**	**3,608**	**-580**	**39,478**	**1,658**	**212**
2023 Total	**219**	**3**	**40,401**	**1,697**	**217**	**11,929**	**6,169**	**5,760**	**3,813**	**206**	**45,955**	**1,930**	**246**
2024 January	16	(s)	3,026	127	16	1,251	105	1,146	4,179	365	3,806	160	20
February	16	(s)	2,987	125	16	1,714	213	1,501	4,553	374	4,114	173	22
March	18	(s)	3,232	136	17	729	316	413	4,392	-161	3,806	160	20
April	17	(s)	3,178	133	17	1,454	428	1,026	4,440	48	4,155	175	22
May	19	(s)	3,407	143	18	789	504	285	4,177	-263	3,955	166	21
June	18	(s)	3,370	142	18	721	480	241	3,720	-457	4,069	171	22
July	19	(s)	3,477	146	19	599	627	-28	3,445	-274	3,724	156	20
August	19	(s)	3,482	146	19	551	581	-30	3,267	-178	3,630	152	19
September	18	(s)	3,361	141	18	604	483	121	3,164	-103	3,585	151	19
October	19	(s)	3,449	145	18	505	136	369	3,007	-157	3,975	167	21
November	19	(s)	3,446	145	18	537	293	244	3,309	302	3,389	142	18
December	18	(s)	3,381	142	18	777	137	640	3,555	247	3,775	159	20
Total	**216**	**3**	**39,795**	**1,671**	**213**	**10,231**	**4,303**	**5,928**	**3,555**	**-258**	**45,982**	**1,931**	**246**
2025 January	10	(s)	1,861	78	10	78	203	-125	3,146	-409	2,146	90	12
February	11	(s)	1,936	81	10	165	56	109	3,085	-61	2,106	88	11
March	13	(s)	2,371	100	13	111	108	3	3,106	21	2,353	99	13
April	13	(s)	2,479	104	13	32	153	-121	2,940	-166	2,524	106	14
May	13	(s)	2,384	100	13	14	222	-208	2,716	-224	2,400	101	13
June	13	(s)	2,351	99	13	14	249	-235	2,687	-29	2,145	90	11
July	14	(s)	2,492	105	13	–	307	-307	2,787	100	2,085	88	11
August	14	(s)	2,582	108	14	–	255	-255	3,257	470	1,857	78	10
September	13	(s)	2,468	104	13	1	176	-175	3,124	-134	2,427	102	13
October	13	(s)	2,371	100	13	176	81	95	3,454	331	2,135	90	11
November	11	(s)	2,085	88	11	135	5	130	3,524	69	2,145	90	11
December	11	(s)	2,022	85	11	95	54	41	3,414	-110	2,174	91	12
Total	**149**	**2**	**27,402**	**1,151**	**147**	**821**	**1,868**	**-1,047**	**3,414**	**-142**	**26,497**	**1,113**	**142**
2026 January	12	(s)	2,157	91	12	27	27	(s)	3,334	[i] -83	2,239	94	12
February	13	(s)	2,342	98	13	2	51	-49	3,265	-69	2,361	99	13
March	15	(s)	2,726	114	15	6	201	-195	3,192	-72	2,603	109	14
April	16	(s)	2,861	120	15	–	141	-141	2,875	-317	3,038	128	16
May	17	(s)	3,082	129	17	40	138	-98	2,699	-176	3,160	133	17
June	18	(s)	3,330	140	18	191	245	-54	2,664	-34	3,311	139	18
July	18	(s)	3,397	143	18	199	252	-53	2,879	215	3,129	131	17
7-Month Total	**108**	**1**	**19,894**	**836**	**107**	**465**	**1,055**	**-590**	**2,879**	**-538**	**19,842**	**833**	**106**
2025 7-Month Total	**86**	**1**	**15,874**	**667**	**85**	**414**	**1,298**	**-884**	**2,787**	**-768**	**15,759**	**662**	**84**
2024 7-Month Total	**123**	**2**	**22,676**	**952**	**122**	**7,257**	**2,674**	**4,583**	**3,445**	**-368**	**27,628**	**1,160**	**148**

[a] Data are for "biodiesel," which is primarily fatty acid methyl esters (FAME). See "Biodiesel" in Glossary.

[b] Total vegetable oil and other biomass inputs to the production of biodiesel.

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

[d] Net imports equal imports minus exports.

[e] Stocks are at end of period. Includes biodiesel stocks at (or in) refineries, pipelines, and bulk terminals. Beginning in 2011, also includes stocks at biodiesel production plants.

[f] A negative value indicates a decrease in stocks and a positive value indicates an increase.

[g] In 2009, because of incomplete data coverage and differing data sources, a "Balancing Item" amount of 733 thousand barrels (653 thousand barrels in January 2009; 80 thousand barrels in February 2009) is used to balance biodiesel supply and disposition.

[h] Derived from the final 2010 stocks value for bulk terminals and biodiesel production plants (977 thousand barrels), not the final 2010 value for bulk terminals only (672 thousand barrels) that is shown under "Stocks."

[i] Derived from the preliminary 2025 stocks value (3,417 thousand barrels), not the final 2025 value (3,414 thousand barrels) that is shown under "Stocks."

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

Notes: • Mbbl = thousand barrels. MMgal = million U.S. gallons. TBtu = trillion Btu. • Biodiesel data in thousand barrels are converted to million gallons by multiplying by 0.042, and are converted to Btu by multiplying by 5.359 million Btu per barrel (the approximate heat content of biodiesel). • Through 2000, data are not available. Beginning in 2001, data not from EIA surveys are estimates. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#renewable (Excel and CSV files) for all available annual and monthly data beginning in 2001.

Sources: See end of section.

Table 10.4b Renewable Diesel Fuel Overview

	Feedstock[b]	Losses and Co-products[c]	Production[a,d]			Trade[a]			Stocks[a,f]	Stock Change[a,g]	Consumption[a,h]		
						Imports	Exports	Net Imports[e]					
	TBtu	TBtu	Mbbl	MMgal	TBtu	Mbbl	Mbbl	Mbbl	Mbbl	Mbbl	Mbbl	MMgal	TBtu
2011 Total	**NA**	**NA**	**1,477**	**62**	**8**	**–**	**NA**	**–**	**7**	**7**	**1,470**	**62**	**8**
2012 Total	**NA**	**NA**	**1,248**	**52**	**7**	**605**	**NA**	**605**	**94**	**87**	**1,766**	**74**	**10**
2013 Total	**NA**	**NA**	**2,697**	**113**	**15**	**4,921**	**NA**	**4,921**	**691**	**597**	**7,021**	**295**	**39**
2014 Total	**NA**	**NA**	**3,789**	**159**	**21**	**2,873**	**NA**	**2,873**	**350**	**-341**	**7,003**	**294**	**38**
2015 Total	**NA**	**NA**	**4,211**	**177**	**23**	**4,874**	**NA**	**4,874**	**634**	**284**	**8,801**	**370**	**48**
2016 Total	**NA**	**NA**	**5,750**	**241**	**32**	**5,304**	**NA**	**5,304**	**1,315**	**681**	**10,373**	**436**	**57**
2017 Total	**NA**	**NA**	**6,151**	**258**	**34**	**4,509**	**NA**	**4,509**	**753**	**-562**	**11,222**	**471**	**62**
2018 Total	**NA**	**NA**	**7,273**	**305**	**40**	**4,124**	**NA**	**4,124**	**1,727**	**974**	**10,423**	**438**	**57**
2019 Total	**NA**	**NA**	**11,715**	**492**	**64**	**6,143**	**NA**	**6,143**	**1,491**	**-236**	**18,094**	**760**	**99**
2020 Total	**NA**	**NA**	**12,702**	**533**	**70**	**6,658**	**NA**	**6,658**	**1,287**	**-204**	**19,564**	**822**	**107**
2021 Total	**NA**	**NA**	**[d] 20,503**	**[d] 861**	**[d] 113**	**9,340**	**NA**	**9,340**	**2,353**	**1,066**	**28,777**	**1,209**	**158**
2022 Total	**NA**	**NA**	**35,692**	**1,499**	**196**	**6,254**	**NA**	**6,254**	**3,405**	**1,053**	**40,893**	**1,718**	**225**
2023 Total	**NA**	**NA**	**61,895**	**2,600**	**340**	**8,622**	**NA**	**8,622**	**5,478**	**2,072**	**68,445**	**2,875**	**376**
2024 January	NA	NA	5,707	240	31	860	NA	860	6,572	1,095	5,472	230	30
February	NA	NA	5,624	236	31	1,002	NA	1,002	6,517	-55	6,681	281	37
March	NA	NA	5,688	239	31	1,053	NA	1,053	6,670	152	6,588	277	36
April	NA	NA	6,222	261	34	1,030	NA	1,030	6,908	238	7,014	295	39
May	NA	NA	5,468	230	30	1,209	NA	1,209	5,957	-951	7,628	320	42
June	NA	NA	7,020	295	39	1,459	NA	1,459	6,720	762	7,717	324	42
July	NA	NA	6,835	287	38	1,600	NA	1,600	6,136	-584	9,019	379	50
August	NA	NA	6,648	279	37	1,359	NA	1,359	6,343	207	7,800	328	43
September	NA	NA	6,385	268	35	1,015	NA	1,015	6,104	-239	7,639	321	42
October	NA	NA	6,770	284	37	701	NA	701	6,108	4	7,467	314	41
November	NA	NA	6,797	285	37	145	NA	145	5,686	-422	7,364	309	40
December	NA	NA	6,889	289	38	961	NA	961	6,531	845	7,005	294	38
Total	**NA**	**NA**	**76,054**	**3,194**	**418**	**12,394**	**NA**	**12,394**	**6,531**	**1,053**	**87,395**	**3,671**	**480**
2025 January	NA	NA	5,416	227	30	1	760	-759	7,002	471	[h] 4,187	[h] 176	[h] 23
February	NA	NA	4,449	187	24	442	543	-101	6,184	-817	5,165	217	28
March	NA	NA	5,551	233	30	177	642	-465	6,264	80	5,006	210	28
April	NA	NA	5,332	224	29	33	1,264	-1,231	4,973	-1,291	[R] 5,391	226	30
May	NA	NA	6,248	262	34	154	1,009	-855	5,319	345	5,048	212	28
June	NA	NA	6,232	262	34	81	1,524	-1,443	6,582	1,263	3,526	148	19
July	NA	NA	6,221	261	34	230	1,599	-1,369	6,395	-187	5,039	212	28
August	NA	NA	5,670	238	31	441	1,339	-898	5,950	-445	5,216	219	29
September	NA	NA	6,464	271	36	347	1,532	-1,185	6,473	522	4,757	200	26
October	NA	NA	6,420	270	35	900	1,769	-869	6,394	-79	5,629	236	31
November	NA	NA	6,067	255	33	112	1,567	-1,455	6,604	210	4,402	185	24
December	NA	NA	6,076	255	33	475	1,339	-864	6,422	-182	5,395	227	30
Total	**NA**	**NA**	**70,147**	**2,946**	**385**	**3,393**	**[R] 14,888**	**[R] -11,495**	**6,422**	**-109**	**[R] 58,760**	**2,468**	**323**
2026 January	NA	NA	4,682	197	26	–	566	-566	7,163	[i] 751	3,365	141	18
February	NA	NA	4,703	198	26	225	1,410	-1,185	6,382	-781	4,299	181	24
March	NA	NA	6,413	269	35	250	1,017	-767	6,618	236	5,411	227	30
April	NA	NA	6,803	286	37	–	1,078	-1,078	6,708	90	5,635	237	31
May	NA	NA	7,587	319	42	–	1,865	-1,865	7,003	295	5,427	228	30
June	NA	NA	7,746	325	43	–	1,288	-1,288	6,422	-580	7,039	296	39
July	NA	NA	7,894	332	43	–	1,644	-1,644	5,545	-877	7,127	299	39
7-Month Total	**NA**	**NA**	**45,829**	**1,925**	**252**	**475**	**8,867**	**-8,392**	**5,545**	**-867**	**38,304**	**1,609**	**210**
2025 7-Month Total	**NA**	**NA**	**39,450**	**1,657**	**217**	**1,118**	**7,341**	**-6,223**	**6,395**	**-136**	**33,362**	**1,401**	**183**
2024 7-Month Total	**NA**	**NA**	**42,564**	**1,788**	**234**	**8,213**	**NA**	**8,213**	**6,136**	**658**	**50,119**	**2,105**	**275**

[a] Data are for "renewable diesel fuel," which is commonly called "non-ester renewable diesel" and "green diesel," and which is chemically similar to petroleum diesel fuel. Beginning in 2025, exports data also include renewable jet fuel (sustainable aviation fuel).

[b] Total vegetable oil and other biomass inputs to the production of renewable diesel fuel.

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

[d] Through 2020, production data are from U.S. Environmental Protection Agency. Beginning in 2021, production data are from EIA. See sources at end of section.

[e] Net imports equal imports minus exports.

[f] Stocks are at end of period. Includes renewable diesel fuel stocks at refineries and bulk terminals. Beginning in 2021, also includes renewable diesel fuel stocks at renewable fuel production plants.

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

[h] Through 2024, consumption, which is calculated as production plus imports minus stock change, also includes amounts of exports that cannot be differentiated from consumption. Beginning in 2025, consumption is calculated as production plus net imports minus stock change.

[i] Derived from the preliminary 2025 stocks value (6,412 thousand barrels), not the final 2025 value (6,422 thousand barrels) that is shown under "Stocks."

R=Revised. NA=Not available. – =No data reported.

Notes: • Mbbl = thousand barrels. MMgal = million U.S. gallons. TBtu = trillion Btu. • Renewable diesel fuel data in thousand barrels are converted to million gallons by multiplying by 0.042, and are converted to Btu by multiplying by 5.494 million Btu per barrel (the approximate heat content of renewable diesel fuel). • Through 2010, data are not available, or there is incomplete data coverage. Beginning in 2011, data not from EIA surveys are estimates. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#renewable (Excel and CSV files) for all available annual and monthly data beginning in 2011.

Sources: See end of section.

Table 10.4c Other Biofuels Overview

	Feedstock[b]	Losses and Co-products[c]	Production[a,d]			Trade[a]			Stocks[a,f]	Stock Change[a,g]	Consumption[a,h]		
						Imports	Exports	Net Imports[e]					
	TBtu	TBtu	Mbbl	MMgal	TBtu	Mbbl	Mbbl	Mbbl	Mbbl	Mbbl	Mbbl	MMgal	TBtu
2014 Total	**NA**	**NA**	**290**	**12**	**2**	**–**	**NA**	**–**	**7**	**2**	**288**	**12**	**2**
2015 Total	**NA**	**NA**	**393**	**17**	**2**	**–**	**NA**	**–**	**4**	**-3**	**396**	**17**	**2**
2016 Total	**NA**	**NA**	**503**	**21**	**3**	**–**	**NA**	**–**	**43**	**39**	**464**	**20**	**2**
2017 Total	**NA**	**NA**	**570**	**24**	**3**	**–**	**NA**	**–**	**28**	**-15**	**585**	**25**	**3**
2018 Total	**NA**	**NA**	**611**	**26**	**3**	**–**	**NA**	**–**	**54**	**26**	**585**	**25**	**3**
2019 Total	**NA**	**NA**	**791**	**33**	**4**	**–**	**NA**	**–**	**50**	**-4**	**795**	**33**	**4**
2020 Total	**NA**	**NA**	**761**	**32**	**4**	**–**	**NA**	**–**	**27**	**-23**	**784**	**33**	**4**
2021 Total[i]	**NA**	**NA**	**[d] 1,914**	**[d] 80**	**[d] 10**	**27**	**NA**	**27**	**83**	**56**	**1,885**	**79**	**10**
2022 Total	**NA**	**NA**	**4,841**	**203**	**26**	**114**	**NA**	**114**	**282**	**200**	**4,756**	**200**	**25**
2023 Total	**NA**	**NA**	**7,058**	**296**	**38**	**100**	**NA**	**100**	**314**	**32**	**7,126**	**299**	**38**
2024 January	NA	NA	623	26	3	–	NA	–	400	85	538	23	3
February	NA	NA	620	26	3	–	NA	–	412	12	607	26	3
March	NA	NA	692	29	4	–	NA	–	496	84	609	26	3
April	NA	NA	651	27	3	–	NA	–	414	-82	733	31	4
May	NA	NA	512	21	3	–	NA	–	478	64	447	19	2
June	NA	NA	651	27	3	–	NA	–	538	60	592	25	3
July	NA	NA	580	24	3	–	NA	–	467	-71	652	27	3
August	NA	NA	700	29	4	–	NA	–	612	145	555	23	3
September	NA	NA	874	37	5	–	NA	–	740	129	746	31	4
October	NA	NA	742	31	4	–	NA	–	631	-110	851	36	5
November	NA	NA	856	36	5	–	NA	–	451	-179	1,035	43	6
December	NA	NA	792	33	4	–	NA	–	489	37	754	32	4
Total	**NA**	**NA**	**8,293**	**348**	**44**	**–**	**NA**	**–**	**489**	**174**	**8,118**	**341**	**44**
2025 January	NA	NA	1,031	43	6	–	(s)	(s)	698	210	[h] 821	[h] 34	[h] 4
February	NA	NA	1,236	52	7	–	45	-45	882	184	1,006	42	5
March	NA	NA	1,033	43	6	–	1	-1	945	62	969	41	5
April	NA	NA	888	37	5	–	(s)	(s)	855	-90	978	41	5
May	NA	NA	1,109	47	6	–	55	-55	885	31	1,024	43	5
June	NA	NA	1,142	48	6	–	120	-120	629	-257	1,279	54	7
July	NA	NA	1,290	54	7	–	(s)	(s)	877	248	1,041	44	6
August	NA	NA	740	31	4	–	52	-52	718	-159	847	36	5
September	NA	NA	1,342	56	7	–	99	-99	842	123	1,119	47	6
October	NA	NA	1,498	63	8	–	–	–	1,137	296	1,202	50	6
November	NA	NA	1,801	76	10	–	97	-97	1,043	-94	1,798	76	10
December	NA	NA	1,667	70	9	–	66	-66	1,171	128	1,473	62	8
Total	**NA**	**NA**	**14,776**	**621**	**79**	**–**	**536**	**-536**	**1,171**	**683**	**13,558**	**569**	**73**
2026 January	NA	NA	1,029	43	6	–	–	–	1,107	[i] 100	928	39	5
February	NA	NA	991	42	5	–	–	–	1,143	37	954	40	5
March	NA	NA	1,126	47	6	–	99	-99	1,086	-57	1,085	46	6
April	NA	NA	1,090	46	6	–	111	-111	1,011	-75	1,054	44	6
May	NA	NA	1,164	49	6	–	–	–	798	-213	1,377	58	7
June	NA	NA	1,179	50	6	–	110	-110	1,002	204	864	36	5
July	NA	NA	1,283	54	7	–	–	–	747	-255	1,538	65	8
7-Month Total	**NA**	**NA**	**7,862**	**330**	**42**	**–**	**320**	**-320**	**747**	**-259**	**7,801**	**328**	**42**
2025 7-Month Total	**NA**	**NA**	**7,729**	**325**	**41**	**–**	**221**	**-221**	**877**	**388**	**7,119**	**299**	**38**
2024 7-Month Total	**NA**	**NA**	**4,330**	**182**	**23**	**–**	**NA**	**–**	**467**	**152**	**4,177**	**175**	**22**

[a] Data are for renewable heating oil, renewable jet fuel (sustainable aviation fuel), renewable naphtha and gasoline, biobutanol, and other biofuels and biointermediates. Beginning in 2025, exports data for renewable jet fuel (sustainable aviation fuel) are included with renewable diesel fuel exports on Table 10.4b.

[b] Total vegetable oil and other biomass inputs to the production of other biofuels.

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

[d] Through 2020, production data are from U.S. Environmental Protection Agency. Beginning in 2021, production data are from EIA. See sources at end of section.

[e] Net imports equal imports minus exports.

[f] Stocks are at end of period. Includes other biofuels stocks at refineries and bulk terminals. Beginning in 2021, also includes other biofuels stocks at renewable fuel production plants.

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

[h] Through 2024, consumption, which is calculated as production plus imports minus stock change, also includes amounts of exports that cannot be differentiated from consumption. Beginning in 2025, consumption is calculated as production plus net imports minus stock change.

[i] There is a discontinuity in the time series between 2020 and 2021. Beginning in 2021, there is expanded coverage of other biofuels due to the incorporation of data from EIA, Form EIA-819, "Monthly Report of Biofuels, Fuels from Non-Biogenic Wastes, Fuel Oxygenates, Isooctane, and Isooctene."

[j] Derived from the preliminary 2025 stocks value (1,006 thousand barrels), not the final 2025 value (1,171 thousand barrels) that is shown under "Stocks."

NA=Not available. – =No data reported. (s)=Less than 500 barrels and greater than -500 barrels.

Notes: • Mbbl = thousand barrels. MMgal = million U.S. gallons. TBtu = trillion Btu. • Other biofuels data in thousand barrels are converted to million gallons by multiplying by 0.042, and are converted to Btu by multiplying by 5.359 million Btu per barrel (the approximate heat content of other biofuels). • Through 2013, data are not available, or there is incomplete data coverage. Beginning in 2014, data not from EIA surveys are estimates. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#renewable (Excel and CSV files) for all available annual and monthly data beginning in 2014.

Sources: See end of section.

Table 10.5 Solar Energy Consumption

(Trillion Btu)

	Small-Scale[a] Solar Energy[b]						Utility-Scale[c] Solar Energy[b]				
		Electricity[d]					Electricity[e]				
	Heat[f]	Residential Sector	Commercial Sector	Industrial Sector	Total	Total[g]	Commercial Sector[h]	Industrial Sector[i]	Electric Power Sector[j]	Total	Total[k]
1985 Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**(s)**	**(s)**	**(s)**
1990 Total	**55**	**(s)**	**(s)**	**(s)**	**(s)**	**55**	**–**	**–**	**1**	**1**	**56**
1995 Total	**63**	**(s)**	**(s)**	**(s)**	**(s)**	**63**	**–**	**–**	**2**	**2**	**64**
2000 Total	**57**	**(s)**	**(s)**	**(s)**	**(s)**	**58**	**–**	**–**	**2**	**2**	**59**
2005 Total	**49**	**(s)**	**1**	**(s)**	**1**	**50**	**–**	**–**	**2**	**2**	**52**
2010 Total	**56**	**3**	**4**	**1**	**8**	**64**	**(s)**	**(s)**	**4**	**4**	**68**
2011 Total	**58**	**5**	**6**	**1**	**12**	**70**	**(s)**	**(s)**	**6**	**6**	**76**
2012 Total	**59**	**7**	**10**	**2**	**20**	**79**	**1**	**(s)**	**14**	**15**	**94**
2013 Total	**61**	**11**	**14**	**3**	**28**	**89**	**1**	**(s)**	**30**	**31**	**120**
2014 Total	**63**	**17**	**18**	**4**	**38**	**101**	**1**	**(s)**	**59**	**60**	**161**
2015 Total	**63**	**24**	**19**	**5**	**48**	**112**	**1**	**(s)**	**83**	**85**	**197**
2016 Total	**65**	**36**	**21**	**7**	**64**	**129**	**2**	**(s)**	**121**	**123**	**252**
2017 Total	**68**	**48**	**26**	**8**	**82**	**150**	**2**	**(s)**	**180**	**182**	**331**
2018 Total	**69**	**58**	**33**	**9**	**101**	**170**	**2**	**(s)**	**216**	**218**	**388**
2019 Total	**70**	**71**	**38**	**10**	**119**	**189**	**2**	**(s)**	**243**	**245**	**435**
2020 Total	**70**	**86**	**44**	**12**	**142**	**212**	**2**	**(s)**	**302**	**304**	**516**
2021 Total	**75**	**103**	**52**	**13**	**168**	**243**	**2**	**(s)**	**391**	**393**	**636**
2022 Total	**84**	**135**	**60**	**14**	**209**	**293**	**2**	**1**	**487**	**491**	**784**
2023 Total	**92**	**168**	**67**	**15**	**250**	**342**	**2**	**1**	**562**	**565**	**907**
2024 January	6	11	4	1	16	22	(s)	(s)	33	33	55
February	6	12	5	1	18	25	(s)	(s)	43	43	67
March	9	17	6	1	24	33	(s)	(s)	54	55	88
April	9	18	7	2	27	36	(s)	(s)	65	66	102
May	10	20	8	2	29	39	(s)	(s)	76	76	116
June	10	20	8	2	29	40	(s)	(s)	83	83	123
July	11	20	8	2	30	41	(s)	(s)	83	84	124
August	10	20	8	2	29	39	(s)	(s)	83	83	122
September	9	17	7	1	26	35	(s)	(s)	70	70	105
October	8	16	6	1	23	31	(s)	(s)	67	68	99
November	7	13	5	1	18	25	(s)	(s)	47	47	72
December	6	12	4	1	17	23	(s)	(s)	43	43	66
Total	**102**	**196**	**74**	**16**	**286**	**388**	**2**	**2**	**746**	**750**	**1,138**
2025 January	6	13	5	1	18	25	(s)	(s)	52	53	78
February	7	14	5	1	20	27	(s)	(s)	56	56	83
March	9	19	7	1	27	37	(s)	(s)	79	79	116
April	10	20	8	2	30	40	(s)	(s)	91	91	132
May	11	21	9	2	32	43	(s)	(s)	101	101	144
June	11	22	9	2	32	43	(s)	1	108	109	153
July	12	23	9	2	34	45	(s)	1	113	114	159
August	11	21	9	2	32	43	(s)	1	108	109	151
September	10	19	8	2	28	38	(s)	1	95	96	134
October	9	18	7	1	26	35	(s)	1	83	84	119
November	7	14	5	1	20	28	(s)	(s)	63	63	91
December	7	13	5	1	19	26	(s)	(s)	52	53	78
Total	**111**	**216**	**85**	**17**	**318**	**429**	**2**	**5**	**1,001**	**1,009**	**1,438**
2026 January	6	14	5	1	21	27	(s)	1	61	61	88
February	7	15	6	1	22	29	(s)	1	72	73	101
March	9	21	8	2	31	40	(s)	1	98	99	139
April	10	23	9	2	33	44	(s)	1	105	106	150
May	11	25	10	2	37	47	(s)	1	123	124	172
June	11	25	10	2	37	48	(s)	1	132	133	180
July	11	25	10	2	37	49	(s)	1	140	141	190
7-Month Total	**66**	**146**	**59**	**11**	**217**	**283**	**2**	**5**	**731**	**737**	**1,020**
2025 7-Month Total	**67**	**131**	**51**	**10**	**193**	**260**	**1**	**2**	**601**	**604**	**864**
2024 7-Month Total	**62**	**119**	**45**	**10**	**174**	**235**	**1**	**1**	**437**	**439**	**674**

[a] Data are estimates for small-scale facilities (combined generator nameplate capacity less than 1 megawatt).

[b] See "Photovoltaic Energy" and "Solar Thermal Energy" in Glossary.

[c] Data are for utility-scale facilities (combined generator nameplate capacity of 1 megawatt or more).

[d] Solar photovoltaic (PV) electricity generation at small-scale facilities connected to the electric power grid (converted to Btu by multiplying by the heat content of electricity).

[e] Solar photovoltaic (PV) and solar thermal electricity net generation at utility-scale facilities (converted to Btu by multiplying by the heat content of electricity).

[f] Solar thermal direct use energy in the residential, commercial, and industrial sectors for all end uses, such as pool heating, hot water heating, and space heating.

[g] Data are the sum of "Small-Scale Solar Energy Heat" and "Small-Scale Solar Energy Electricity."

[h] Commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7.

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

[j] Electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 1988, data are for electric utilities only; beginning in 1989, data are for electric utilities and independent power producers.

[k] Data are the sum of "Small-Scale Solar Energy Total" and "Utility-Scale Solar Energy Total."

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

Notes: • Small-scale solar energy data for all years, and utility-scale solar energy data for the current two years, are estimates. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#renewable (Excel and CSV files) for all available annual and monthly data beginning in 1984.

Sources: See end of section.

Table 10.6 Solar Electricity Net Generation

(Million Kilowatthours)

	Small-Scale[a] Solar Generation[b]				Utility-Scale[c] Solar Generation[b]				
	Residential Sector	Commercial Sector	Industrial Sector	Total	Commercial Sector[d]	Industrial Sector[e]	Electric Power Sector[f]	Total	Total
1985 Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**11**	**11**	**11**
1990 Total	**12**	**16**	**4**	**32**	**–**	**–**	**367**	**367**	**399**
1995 Total	**20**	**28**	**6**	**54**	**–**	**–**	**497**	**497**	**551**
2000 Total	**39**	**53**	**12**	**104**	**–**	**–**	**493**	**493**	**598**
2005 Total	**121**	**166**	**37**	**324**	**–**	**–**	**550**	**550**	**875**
2010 Total	**899**	**1,130**	**250**	**2,280**	**5**	**2**	**1,206**	**1,212**	**3,492**
2011 Total	**1,358**	**1,845**	**409**	**3,612**	**84**	**7**	**1,727**	**1,818**	**5,429**
2012 Total	**2,058**	**3,061**	**678**	**5,797**	**148**	**14**	**4,164**	**4,327**	**10,123**
2013 Total	**3,217**	**4,106**	**909**	**8,232**	**294**	**17**	**8,724**	**9,036**	**17,268**
2014 Total	**4,947**	**5,146**	**1,139**	**11,233**	**371**	**16**	**17,304**	**17,691**	**28,924**
2015 Total	**6,999**	**5,689**	**1,451**	**14,139**	**416**	**21**	**24,456**	**24,893**	**39,032**
2016 Total	**10,595**	**6,158**	**2,060**	**18,812**	**529**	**27**	**35,497**	**36,054**	**54,866**
2017 Total	**13,942**	**7,685**	**2,364**	**23,990**	**521**	**42**	**52,724**	**53,287**	**77,277**
2018 Total	**17,105**	**9,798**	**2,636**	**29,539**	**525**	**47**	**63,253**	**63,825**	**93,365**
2019 Total	**20,914**	**11,002**	**3,041**	**34,957**	**587**	**85**	**71,265**	**71,937**	**106,894**
2020 Total	**25,179**	**12,859**	**3,484**	**41,522**	**586**	**101**	**88,511**	**89,199**	**130,721**
2021 Total	**30,182**	**15,124**	**3,858**	**49,164**	**598**	**137**	**114,523**	**115,258**	**164,422**
2022 Total	**39,510**	**17,724**	**4,048**	**61,282**	**669**	**276**	**142,847**	**143,792**	**205,074**
2023 Total	**49,273**	**19,751**	**4,382**	**73,406**	**615**	**326**	**164,590**	**165,530**	**238,937**
2024 January	3,240	1,218	268	4,726	23	23	9,537	9,583	14,309
February	3,659	1,386	296	5,342	34	32	12,474	12,540	17,882
March	4,885	1,821	406	7,113	48	43	15,928	16,019	23,132
April	5,385	2,007	440	7,832	56	52	19,133	19,241	27,073
May	5,845	2,216	478	8,539	64	62	22,245	22,371	30,910
June	5,863	2,213	476	8,553	67	62	24,330	24,459	33,012
July	5,991	2,297	490	8,778	63	61	24,359	24,484	33,262
August	5,735	2,204	473	8,412	61	59	24,209	24,328	32,741
September	5,108	1,969	433	7,511	48	52	20,438	20,538	28,049
October	4,638	1,709	390	6,736	46	44	19,738	19,828	26,564
November	3,754	1,336	303	5,393	31	31	13,780	13,841	19,234
December	3,442	1,276	267	4,984	25	25	12,551	12,601	17,585
Total	**57,547**	**21,652**	**4,719**	**83,918**	**566**	**546**	**218,722**	**219,834**	**303,752**
2025 January	3,703	1,408	285	5,397	38	36	15,379	15,454	20,851
February	3,967	1,534	305	5,805	39	38	16,371	16,448	22,253
March	5,456	2,073	433	7,961	60	52	23,126	23,238	31,199
April	5,967	2,322	469	8,758	66	60	26,654	26,781	35,538
May	6,268	2,522	515	9,306	69	66	29,610	29,746	39,051
June	6,379	2,530	514	9,423	76	184	31,774	32,034	41,458
July	6,689	2,636	532	9,857	80	197	33,147	33,424	43,281
August	6,273	2,531	515	9,319	76	184	31,549	31,809	41,128
September	5,434	2,277	466	8,176	67	211	27,870	28,149	36,325
October	5,199	1,968	421	7,589	57	184	24,365	24,605	32,195
November	4,128	1,533	326	5,987	47	139	18,407	18,592	24,580
December	3,812	1,460	297	5,569	34	113	15,245	15,392	20,962
Total	**63,274**	**24,795**	**5,080**	**93,148**	**709**	**1,464**	**293,499**	**295,671**	**388,820**
2026 January	4,138	1,599	314	6,051	40	151	17,795	17,985	24,036
February	4,370	1,731	332	6,433	46	165	21,094	21,305	27,739
March	6,065	2,413	474	8,953	63	215	28,722	29,000	37,953
April	6,619	2,674	514	9,808	79	211	30,814	31,104	40,912
May	7,212	2,949	568	10,728	99	235	36,084	36,418	47,147
June	7,217	2,943	564	10,724	111	231	38,581	38,923	49,648
July	7,287	3,056	582	10,925	91	259	41,062	41,412	52,337
7-Month Total	**42,910**	**17,365**	**3,348**	**63,623**	**528**	**1,467**	**214,153**	**216,148**	**279,771**
2025 7-Month Total	**38,428**	**15,025**	**3,054**	**56,507**	**428**	**633**	**176,062**	**177,124**	**233,631**
2024 7-Month Total	**34,870**	**13,158**	**2,853**	**50,882**	**355**	**336**	**128,006**	**128,697**	**179,579**

[a] Data are estimates for solar photovoltaic (PV) electricity generation at small-scale facilities (combined generator nameplate capacity less than 1 megawatt) connected to the electric power grid.

[b] See "Photovoltaic Energy" and "Solar Thermal Energy" in Glossary.

[c] Solar photovoltaic (PV) and solar thermal electricity net generation at utility-scale facilities (combined generator nameplate capacity of 1 megawatt or more).

[d] Commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7.

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

[f] Electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 1988, data are for electric utilities only; beginning in 1989, data are for electric utilities and independent power producers.

NA=Not available. – =No data reported.

Notes: • Small-scale solar generation data for all years, and utility-scale solar energy data for the current two years, are estimates. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#renewable (Excel and CSV files) for all available annual and monthly data beginning in 1984.

Sources: • **Small-Scale Solar Generation: 1989–2013**—Calculated as small-scale solar energy consumption (see Table 10.5) divided by the heat content of electricity. **2014 forward**—U.S. Energy Information Administration (EIA), *Electric Power Monthly*, monthly reports, Tables 1.1, 1.2.C, 1.2.D, and 1.2.E. • **Utility-Scale Solar Generation: 1984–1988**—EIA, Form EIA-759, "Monthly Power Plant Report." **1989–1997:** EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-867, "Annual Nonutility Power Producer Report." **1998–2000:** EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-860B, "Annual Electric Generator Report—Nonutility." **2001–2003:** EIA, Form EIA-906, "Power Plant Report." **2004–2007:** EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report." **2008 forward:** EIA, Form EIA-923, "Power Plant Operations Report." • **Total:** Calculated as small-scale solar generation plus utility-scale solar generation.

Note. Renewable Energy Production and Consumption. In Tables 1.1, 1.3, and 10.1, renewable energy consumption consists of: conventional hydroelectricity net generation (converted to Btu by multiplying by the electricity heat content factor); geothermal electricity net generation (converted to Btu by multiplying by the electricity heat content factor), and geothermal heat pump and geothermal direct use energy; solar thermal and photovoltaic electricity net generation (converted to Btu by multiplying by the electricity heat content factor), and solar thermal direct use energy; wind electricity net generation (converted to Btu by multiplying by the electricity heat content factor); wood and wood-derived fuels consumption; biomass waste (municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass) consumption; fuel ethanol (minus denaturant), biodiesel, renewable diesel fuel, and other biofuels consumption; and losses and co-products from the production of fuel ethanol and biodiesel. In Tables 1.1, 1.2, and 10.1, renewable energy production is assumed to equal consumption for all renewable energy sources except wood and biofuels; plus wood production (which is the sum of wood consumption and densified biomass exports); plus biofuels production (which comprises fuel ethanol feedstock, biodiesel feedstock, renewable diesel fuel production, and other biofuels production).

Table 10.2a Sources

Residential Sector, Geothermal

1989–2011: Annual estimates by the U.S. Energy Information Administration (EIA) based on data from Oregon Institute of Technology, Geo-Heat Center.

2012 forward: Annual estimates assumed by EIA to be equal to that of 2011.

(For 1989 forward, monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month.)

Residential Sector, Solar

1989 forward: Residential sector solar consumption is the sum of the values for "Small-Scale Solar Energy Consumption: Heat" (which includes solar thermal direct use energy in the residential, commercial, and industrial sectors) from Table 10.5 and "Small-Scale Solar Energy Consumption: Electricity, Residential Sector" from Table 10.5.

Residential Sector, Wood

1949–1979: Annual estimates are from EIA, *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*, Table A2.

1980–2008: Annual estimates are based on EIA, Form EIA-457, "Residential Energy Consumption Survey"; and National Oceanic and Atmospheric Administration regional heating degree-day data.

2009 forward: Annual estimates based on EIA, Form EIA-457, “Residential Energy Consumption Survey”; and residential wood consumption growth rates from EIA's *Annual Energy Outlook* data system.

(For 1973 forward, monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month.)

Residential Sector, Total Renewable Energy

1949–1988: Residential sector total renewable energy consumption is equal to residential sector wood consumption.

1989 forward: Residential sector total renewable energy consumption is the sum of the residential sector consumption values for geothermal, solar, and wood.

Commercial Sector, Hydroelectric Power

1989 forward: Commercial sector conventional hydroelectricity net generation data from EIA, Form EIA-923, "Power Plant Operations Report," and predecessor forms, are converted to Btu by multiplying by the electricity heat content factor.

Commercial Sector, Geothermal Heat Pump and Direct Use Energy
1989–2011: Annual estimates by EIA based on data from Oregon Institute of Technology, Geo-Heat Center.

2012 forward: Annual estimates assumed by EIA to be equal to that of 2011.

(For 1989 forward, monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month.)

Commercial Sector, Geothermal Electricity Net Generation
December 2018 forward: Commercial sector geothermal electricity net generation data from EIA, Form EIA-923, "Power Plant Operations Report," are converted to Btu by multiplying by the electricity heat content factor.

Commercial Sector, Geothermal Total
1989–November 2018: Commercial sector geothermal total consumption is equal to commercial sector heat pump and direct use energy.

December 2018 forward: Commercial sector geothermal total consumption is the sum of the commercial sector values for geothermal heat pump and direct use energy, and geothermal electricity net generation.

Commercial Sector, Solar
1989 forward: Commercial sector solar consumption is the sum of the values for "Small-Scale Solar Energy Consumption: Electricity, Commercial Sector" from Table 10.5 and "Utility-Scale Solar Energy Consumption: Electricity, Commercial Sector" from Table 10.5.

Commercial Sector, Wind
2009 forward: Commercial sector wind electricity net generation data from EIA, Form EIA-923, "Power Plant Operations Report," are converted to Btu by multiplying by the electricity heat content factor.

Commercial Sector, Wood
1949–1979: Annual estimates are from EIA, *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*, Table A2.

1980–1983: Annual estimates are from EIA, *Estimates of U.S. Wood Energy Consumption 1980 –1983*, Table ES1.

1984: Annual estimate assumed by EIA to be equal to that of 1983.

1985–1988: Annual estimates interpolated by EIA.

(For 1973–1988, monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month.)

1989 forward: Monthly/annual commercial sector combined-heat-and-power (CHP) wood consumption data are from EIA, Form EIA-923, "Power Plant Operations Report," and predecessor forms. For 1989–2013, annual estimates for commercial sector non-CHP wood consumption are based on EIA, Form EIA-871, "Commercial Buildings Energy Consumption Survey"; U.S. heating degree days (see MER Table 1.11); and estimates of growth in commercial floor space. For 2014 forward, annual estimates for commercial sector non-CHP wood consumption are assumed by EIA to be equal to that of 2013. For 1989 forward, monthly estimates for commercial sector non-CHP wood consumption are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month. Commercial sector total wood consumption is the sum of commercial sector CHP and non-CHP wood consumption.

Commercial Sector, Biomass Waste
1989 forward: Table 7.4c.

Commercial Sector, Fuel Ethanol (Minus Denaturant)
1981 forward: The commercial sector share of motor gasoline consumption is equal to commercial sector motor gasoline consumption from Table 3.7a divided by motor gasoline product supplied from Table 3.5. Commercial sector fuel ethanol (minus denaturant) consumption is equal to fuel ethanol (minus denaturant) consumption from Table 10.3

multiplied by the commercial sector share of motor gasoline consumption. Note that there is a discontinuity in this time series between 2014 and 2015 due to a change in the method for allocating motor gasoline consumption to the end-use sectors; beginning in 2015, the commercial and industrial sector shares of fuel ethanol consumption are larger than in 2014, while the transportation sector share is smaller.

Commercial Sector, Total Biomass

1949–1980: Commercial sector total biomass consumption is equal to commercial sector wood consumption.

1981–1988: Commercial sector total biomass consumption is the sum of the commercial sector consumption values for wood and fuel ethanol (minus denaturant).

1989 forward: Commercial sector total biomass consumption is the sum of the commercial sector consumption values for wood, waste, and fuel ethanol (minus denaturant).

Commercial Sector, Total Renewable Energy

1949–1988: Commercial sector total renewable energy consumption is equal to commercial sector total biomass consumption.

1989–2007: Commercial sector total renewable energy consumption is the sum of the commercial sector consumption values for conventional hydroelectric power, geothermal, and total biomass.

2008: Commercial sector total renewable energy consumption is the sum of the commercial sector consumption values for conventional hydroelectric power, geothermal, solar, and total biomass.

2009 forward: Commercial sector total renewable energy is the sum of the commercial sector consumption values for conventional hydroelectric power, geothermal, solar, wind, and total biomass.

Table 10.2b Sources

Industrial Sector, Hydroelectric Power

1949 forward: Industrial sector conventional hydroelectricity net generation data from Table 7.2c are converted to Btu by multiplying by the electricity heat content factor.

Industrial Sector, Geothermal

1989–2009: Annual estimates by the U.S. Energy Information Administration (EIA) based on data from Oregon Institute of Technology, Geo-Heat Center.

2010 forward: Annual estimates assumed by EIA to be equal to that of 2009.

(For 1989 forward, monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month.)

Industrial Sector, Solar

1989 forward: Industrial sector solar consumption is the sum of the values for "Small-Scale Solar Energy Consumption: Electricity, Industrial Sector" from Table 10.5 and "Utility-Scale Solar Energy Consumption: Electricity, Industrial Sector" from Table 10.6.

Industrial Sector, Wind

2011 forward: Industrial sector wind electricity net generation data from EIA, Form EIA-923, "Power Plant Operations Report," are converted to Btu by multiplying by the electricity heat content factor.

Industrial Sector, Wood

1949–1979: Annual estimates are from EIA, *Estimates of U.S. Wood Energy Consumption from 1949 to 1981,* Table A2.

1980–1983: Annual estimates are from EIA, *Estimates of U.S. Wood Energy Consumption 1980–1983,* Table ES1.

1984: Annual estimate is from EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 1.

1985 and 1986: Annual estimates interpolated by EIA.

1987: Annual estimate is from EIA, *Estimates of Biofuels Consumption in the United States During 1987*, Table 2.

1988: Annual estimate interpolated by EIA.

(For 1973–1988, monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month.)

1989 forward: Monthly/annual industrial sector combined-heat-and-power (CHP) wood consumption data are from EIA, Form EIA-923, "Power Plant Operations Report," and predecessor forms. Annual estimates for industrial sector non-CHP wood consumption are based on EIA, Form EIA-846, "Manufacturing Energy Consumption Survey" (for 2023 forward, the annual estimates are assumed by EIA to be equal to that of 2022). For 1989 forward, monthly estimates for industrial sector non-CHP wood consumption are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month. Industrial sector total wood consumption is the sum of industrial sector CHP and non-CHP wood consumption.

Industrial Sector, Biomass Waste

1981: Annual estimate is calculated as total waste consumption (from EIA, *Estimates of U.S. Biofuels Consumption 199*0, Table 8) minus electric power sector waste consumption (from MER Table 10.2c).

1982 and 1983: Annual estimates are calculated as total waste consumption (based on *Estimates of U.S. Biofuels Consumption 1990*, Table 8) minus electric power sector waste consumption (from MER, Table 10.2c).

1984: Annual estimate is calculated as total waste consumption (from EIA*, Estimates of U.S. Biofuels Consumption 1990*, Table 8) minus electric power sector waste consumption (from MER, Table 10.2c).

1985 and 1986: Annual estimates interpolated by EIA.

1987: Annual estimate is calculated as total waste consumption (from EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 8) minus electric power sector waste consumption (from MER, Table 10.2c).

1988: Annual estimate interpolated by EIA.

(For 1973–1988, monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month.)

1989 forward: Monthly/annual industrial sector combined-heat-and-power (CHP) consumption data are from Table 7.4c. Annual estimates for industrial sector non-CHP waste consumption are based on information presented in Government Advisory Associates, *Resource Recovery Yearbook* and *Methane Recovery Yearbook,* and information provided by the U.S. Environmental Protection Agency, Landfill Methane Outreach Program (for 2014 forward, the annual estimates are assumed by EIA to be equal to that of 2013). For 1989 forward, monthly estimates for industrial sector non-CHP waste consumption are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month. Industrial sector total waste consumption is the sum of industrial sector CHP and non-CHP waste consumption.

Industrial Sector, Fuel Ethanol (Minus Denaturant)

1981 forward: The industrial sector share of motor gasoline consumption is equal to industrial sector motor gasoline consumption from Table 3.7b divided by motor gasoline product supplied from Table 3.5. Industrial sector fuel ethanol (minus denaturant) consumption is equal to fuel ethanol (minus denaturant) consumption from Table 10.3 multiplied by the industrial sector share of motor gasoline consumption. Note that there is a discontinuity in this time series between 2014 and 2015 due to a change in the method for allocating motor gasoline consumption to the end-use sectors; beginning in 2015, the commercial and industrial sector shares of fuel ethanol consumption are larger than in 2014, while the transportation sector share is smaller.

Industrial Sector, Biomass Losses and Co-products
1981 forward: Calculated as fuel ethanol losses and co-products from Table 10.3 plus biodiesel losses and co-products from Table 10.4a.

Industrial Sector, Total Biomass
1949–1980: Industrial sector total biomass consumption is equal to industrial sector wood consumption.

1981 forward: Industrial sector total biomass consumption is the sum of the industrial sector consumption values for wood, waste, fuel ethanol (minus denaturant), and biomass losses and co-products.

Industrial Sector, Total Renewable Energy
1949–1988: Industrial sector total renewable energy consumption is the sum of the industrial sector consumption values for conventional hydroelectric power and total biomass.

1989–2009: Industrial sector total renewable energy consumption is the sum of the industrial sector consumption values for conventional hydroelectric power, geothermal, and total biomass.

2010: Industrial sector total renewable energy consumption is the sum of the industrial sector consumption values for conventional hydroelectric power, geothermal, solar, and total biomass.

2011 forward: Industrial sector total renewable energy consumption is the sum of the industrial sector consumption values for conventional hydroelectric power, geothermal, solar, wind, and total biomass.

Table 10.2c Sources

Transportation Sector, Fuel Ethanol (Minus Denaturant)
1981 forward: The transportation sector share of motor gasoline consumption is equal to transportation sector motor gasoline consumption from Table 3.7c divided by motor gasoline product supplied from Table 3.5. Transportation sector fuel ethanol (minus denaturant) consumption is equal to fuel ethanol (minus denaturant) consumption from Table 10.3 multiplied by the transportation sector share of motor gasoline consumption. Note that there is a discontinuity in this time series between 2014 and 2015 due to a change in the method for allocating motor gasoline consumption to the end-use sectors; beginning in 2015, the commercial and industrial sector shares of fuel ethanol consumption are larger than in 2014, while the transportation sector share is smaller.

Transportation Sector, Biodiesel
2001 forward: Transportation sector biodiesel consumption is assumed to equal total biodiesel consumption from Table 10.4a.

Transportation Sector, Renewable Diesel Fuel
2011 forward: Transportation sector renewable diesel fuel consumption is assumed to equal total renewable diesel fuel consumption from Table 10.4b.

Transportation Sector, Other Biofuels
2014 forward: Transportation sector other biofuels consumption is assumed to equal total other biofuels consumption from Table 10.4c.

Transportation Sector, Total Renewable Energy
1981–2000: Transportation sector total renewable energy consumption is equal to transportation sector fuel ethanol (minus denaturant) consumption.

2001–2010: Transportation sector total renewable energy consumption is the sum of the transportation sector consumption values for fuel ethanol (minus denaturant) and biodiesel.

2011–2013: Transportation sector total renewable energy consumption is the sum of the transportation sector consumption values for fuel ethanol (minus denaturant), biodiesel, and renewable diesel fuel.

2014 forward: Transportation sector total renewable energy consumption is the sum of the transportation sector consumption values for fuel ethanol (minus denaturant), biodiesel, renewable diesel fuel, and other biofuels.

Electric Power Sector, Hydroelectric Power
1949 forward: Electric power sector conventional hydroelectricity net generation data from Table 7.2b are converted to Btu by multiplying by the electricity heat content factor.

Electric Power Sector, Geothermal
1960 forward: Electric power sector geothermal electricity net generation data from Table 7.2b are converted to Btu by multiplying by the electricity heat content factor.

Electric Power Sector, Solar
1984 forward: Electric power sector solar electricity net generation data from Table 7.2b are converted to Btu by multiplying by the electricity heat content factor.

Electric Power Sector, Wind
1983 forward: Electric power sector wind electricity net generation data from Table 7.2b are converted to Btu by multiplying by the electricity heat content factor.

Electric Power Sector, Wood
1949 forward: Table 7.4b.

Electric Power Sector, Biomass Waste
1970 forward: Table 7.4b.

Electric Power Sector, Total Biomass
1949–1969: Electric power sector total biomass consumption is equal to electric power sector wood consumption.

1970 forward: Electric power sector total biomass consumption is the sum of the electric power sector consumption values for wood and biomass waste.

Electric Power Sector, Total Renewable Energy
1949–1959: Electric power sector total renewable energy consumption is the sum of the electric power sector consumption values for hydroelectric power and total biomass.

1960–1982: Electric power sector total renewable energy consumption is the sum of the electric power sector consumption values for hydroelectric power, geothermal, and total biomass.

1983: Electric power sector total renewable energy consumption is the sum of the electric power sector consumption values for hydroelectric power, geothermal, wind, and total biomass.

1984 forward: Electric power sector total renewable energy consumption is the sum of the electric power sector consumption values for hydroelectric power, geothermal, solar, wind, and total biomass.

Table 10.3 Sources

Feedstock
1981 forward: Calculated as fuel ethanol production (in thousand barrels) minus denaturant, and then multiplied by the fuel ethanol feedstock factor.

Losses and Co-products
1981 forward: Calculated as fuel ethanol feedstock plus denaturant minus fuel ethanol production.

Denaturant
1981–2008: Data in thousand barrels for petroleum denaturant in fuel ethanol produced are estimated as 2% of fuel ethanol production; these data are converted to Btu by multiplying by 4.661 million Btu per barrel (the estimated quantity-weighted factor of natural gasoline and conventional motor gasoline used as denaturant).

2009–2020: U.S. Energy Information Administration (EIA), *Petroleum Supply Annual* (PSA), annual reports, Table 1. Data in thousand barrels for net production of natural gasoline at "renewable fuels and oxygenate plants" are multiplied by -1; these data are converted to Btu by multiplying by 4.638 million Btu per barrel (the approximate heat content of natural gasoline). Data in thousand barrels for net production of conventional motor gasoline and motor gasoline blending components at "renewable fuels and oxygenate plants" are multiplied by -1; these data are converted to Btu by multiplying by 5.222 million Btu per barrel (the approximate heat content of motor gasoline blending components). Total denaturant is the sum of the values for natural gasoline, conventional motor gasoline, and motor gasoline blending components.

2021–2025: EIA, PSA, annual reports. Data in thousand barrels for net production of natural gasoline at biofuels plants are multiplied by -1; these data are converted to Btu by multiplying by 4.638 million Btu per barrel (the approximate heat content of natural gasoline). Data in thousand barrels for net production of conventional motor gasoline and motor gasoline blending components at biofuels plants are multiplied by -1; these data are converted to Btu by multiplying by 5.222 million Btu per barrel (the approximate heat content of motor gasoline blending components). Total denaturant is the sum of the values for natural gasoline, conventional motor gasoline, and motor gasoline blending components.

2026: EIA, *Petroleum Supply Monthly* (PSM), monthly reports. Data in thousand barrels for net production of natural gasoline at biofuels plants are multiplied by -1; these data are converted to Btu by multiplying by 4.638 million Btu per barrel (the approximate heat content of natural gasoline). Data in thousand barrels for net production of conventional motor gasoline and motor gasoline blending components at biofuels plants are multiplied by -1; these data are converted to Btu by multiplying by 5.222 million Btu per barrel (the approximate heat content of motor gasoline blending components). Total denaturant is the sum of the values for natural gasoline, conventional motor gasoline, and motor gasoline blending components.

Production

1981–1992: Fuel ethanol production is assumed to equal fuel ethanol consumption—see sources for "Consumption."

1993–2004: Calculated as fuel ethanol consumption plus fuel ethanol stock change minus fuel ethanol net imports. These data differ slightly from the original production data from EIA, Form EIA-819, "Monthly Oxygenate Report," and predecessor form, which were not reconciled and updated to be consistent with the final balance.

2005–2008: EIA, Form EIA-819, "Monthly Oxygenate Report."

2009–2020: EIA, PSA, annual reports, Table 1, data for net production of fuel ethanol at "renewable fuels and oxygenate plants."

2021–2025: EIA, PSA, annual reports, data for net production of fuel ethanol at biofuels plants.

2026: EIA, PSM, monthly reports, data for net production of fuel ethanol at biofuels plants.

Trade, Stocks, and Stock Change

1992–2025: EIA, PSA, annual reports.

2026: EIA, PSM, monthly reports.

Consumption

1981–1989: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 10; and interpolated values for 1982, 1983, 1985, 1986, and 1988.

1990–1992: EIA, *Estimates of U.S. Biomass Energy Consumption 1992*, Table D2; and interpolated value for 1991.

1993–2004: EIA, PSA, annual reports, Tables 2 and 16. Calculated as 10% of oxygenated finished motor gasoline field production (Table 2), plus fuel ethanol refinery input (Table 16).

2005–2008: EIA, PSA, annual reports, Tables 1 and 15. Calculated as motor gasoline blending components adjustments (Table 1), plus finished motor gasoline adjustments (Table 1), plus fuel ethanol refinery and blender net inputs (Table 15).

2009–2025: EIA, PSA, annual reports. Calculated as fuel ethanol refinery and blender net inputs minus fuel ethanol adjustments.

2026: EIA, PSM, monthly reports. Calculated as fuel ethanol refinery and blender net inputs minus fuel ethanol adjustments.

Consumption Minus Denaturant

1981 forward: Calculated as fuel ethanol consumption minus the amount of denaturant in fuel ethanol consumed. Denaturant in fuel ethanol consumed is estimated by multiplying denaturant in fuel ethanol produced by the fuel ethanol consumption-to-production ratio.

Table 10.4a Sources

Biodiesel Feedstock

2001 forward: Calculated as biodiesel production in thousand barrels multiplied by 5.433 million Btu per barrel (the biodiesel feedstock factor).

Biodiesel Losses and Co-products

2001 forward: Calculated as biodiesel feedstock minus biodiesel production.

Biodiesel Production

2001–2005: U.S. Department of Agriculture, Commodity Credit Corporation, Bioenergy Program records. Annual data are derived from quarterly data. Monthly data are estimated by dividing the annual data by the number of days in the year and then multiplying by the number of days in the month.

2006: U.S. Department of Commerce, U.S. Census Bureau, "M311K—Fats and Oils: Production, Consumption, and Stocks," data for soybean oil consumed in methyl esters (biodiesel). In addition, the U.S. Energy Information Administration (EIA) estimates that 14.4 million gallons of yellow grease were consumed in methyl esters (biodiesel).

2007: U.S. Department of Commerce, U.S. Census Bureau, "M311K—Fats and Oils: Production, Consumption, and Stocks," data for all fats and oils consumed in methyl esters (biodiesel).

2008: EIA, *Monthly Biodiesel Production Report*, December 2009 (release date October 2010), Table 11. Monthly data for 2008 are estimated based on U.S. Department of Commerce, U.S. Census Bureau, M311K data, multiplied by the EIA 2008 annual value's share of the M311K 2008 annual value.

2009 and 2010: EIA, *Monthly Biodiesel Production Report*, monthly reports, Table 1.

2011–2020: EIA, *Petroleum Supply Annual* (PSA), annual reports, Table 1, data for “renewable fuels except fuel ethanol.”

2021–2025: EIA, PSA, annual reports, data for biodiesel.

2026: EIA, *Petroleum Supply Monthly* (PSM), monthly reports, data for biodiesel.

Biodiesel Trade

2001–2011: For imports, U.S. Department of Agriculture, data for the following Harmonized Tariff Schedule codes: 3824.90.40.20, "Fatty Esters Animal/Vegetable Mixture" (data through June 2010); and 3824.90.40.30, "Biodiesel/Mixes" (data for July 2010–2011). For exports, U.S. Department of Agriculture, data for the following Schedule B codes: 3824.90.40.00, "Fatty Substances Animal/Vegetable/Mixture" (data through 2010); and 3824.90.40.30, "Biodiesel <70%" (data for 2011). (The data above are converted from pounds to gallons by dividing by 7.4.) Although these categories include products other than biodiesel (such as biodiesel coprocessed with petroleum feedstocks; and products destined for soaps, cosmetics, and other items), biodiesel is the largest component. In the absence of other reliable data for biodiesel trade, EIA sees these data as good substitutes.

2012–2018: EIA, PSA, annual reports, Tables 25 and 31, data for “biomass-based diesel fuel.”

2019–2020: EIA, PSA, annual reports, Tables 25 and 31, data for biodiesel.

2021–2025: EIA, PSA, annual reports, data for biodiesel.

2026: EIA, PSM, monthly reports, data for biodiesel.

Biodiesel Stocks and Stock Change

2009–2018: EIA, Form EIA-22M, "Monthly Biodiesel Production Survey," data for biodiesel; and Form EIA-810, "Monthly Refinery Report," Form EIA-812, "Monthly Product Pipeline Report," and Form EIA-815, "Monthly Bulk Terminal and Blender Report," data for "biomass-based diesel fuel."

2019–September 2020: EIA, Form EIA-22M, "Monthly Biodiesel Production Survey," Form EIA-810, "Monthly Refinery Report," and Form EIA-815, "Monthly Bulk Terminal and Blender Report," data for biodiesel.

October 2020–December 2020: EIA, Form EIA-810, "Monthly Refinery Report," Form EIA-815, "Monthly Bulk Terminal and Blender Report," and Form EIA-819, "Monthly Report of Biofuels, Fuels from Non-Biogenic Wastes, Fuel Oxygenates, Isooctane, and Isooctene," data for biodiesel.

2021–2025: EIA, PSA, annual reports, data for biodiesel.

2026: EIA, PSM, monthly reports, data for biodiesel.

Biodiesel Consumption

2001–2008: Calculated as biodiesel production plus biodiesel net imports.

January and February 2009: EIA, PSA, Table 1, data for refinery and blender net inputs of "renewable fuels except fuel ethanol."

March 2009 forward: Calculated as biodiesel production plus biodiesel net imports minus biodiesel stock change.

Table 10.4b Sources

Renewable Diesel Fuel Production

2011–2020: U.S. Environmental Protection Agency, "RINs Generated Transactions—Generation Summary Report," updated on September 10, 2021. Data are for volumes (in gallons); for "domestic" producer type; for fuel "non-ester renewable diesel."

2021–2025: EIA, PSA, annual reports, data for renewable diesel fuel.

2026: EIA, PSM, monthly reports, data for renewable diesel fuel.

Renewable Diesel Fuel Trade

2012–2020: EIA, PSA, annual reports, Table 25, data for "other renewable diesel fuel."

2021–2025: EIA, PSA, annual reports, data for renewable diesel fuel.

2026: EIA, PSM, monthly reports, data for renewable diesel fuel.

Renewable Diesel Fuel Stocks and Stock Change

2011–2020: EIA, Form EIA-810, "Monthly Refinery Report," and Form EIA-815, "Monthly Bulk Terminal and Blender Report," data for "other renewable diesel fuel."

2021–2025: EIA, PSA, annual reports, data for renewable diesel fuel.

2026: EIA, PSM, monthly reports, data for renewable diesel fuel.

Renewable Diesel Fuel Consumption

2011–2025: Calculated as renewable diesel fuel production plus renewable diesel fuel imports minus renewable diesel fuel stock change.

2026: Calculated as renewable diesel fuel production plus renewable diesel fuel net imports minus renewable diesel fuel stock change.

Table 10.4c Sources

Other Biofuels Production

2014–2020: U.S. Environmental Protection Agency, "RINs Generated Transactions—Generation Summary Report," updated on September 10, 2021. Data are for volumes (in gallons); for "domestic" producer type; for fuels "renewable heating oil," "renewable jet fuel," "naphtha," "LPG," "butanol," "cellulosic diesel," and "cellulosic renewable gasoline blendstock."

2021–2025: EIA, PSA, annual reports, data for other biofuels.

2026: EIA, PSM, monthly reports, data for other biofuels.

Other Biofuels Trade

2014–2020: EIA, PSA, annual reports, Table 25, data for "other renewable fuels."

2021–2025: EIA, PSA, annual reports, data for other biofuels.

2026: EIA, PSM, monthly reports, data for other biofuels.

Other Biofuels Stocks and Stock Change

2014–2020: EIA, Form EIA-810, "Monthly Refinery Report," and Form EIA-815, "Monthly Bulk Terminal and Blender Report," data for "other renewable fuels."

2021–2025: EIA, PSA, annual reports, data for other biofuels.

2026: EIA, PSM, monthly reports, data for other biofuels.

Other Biofuels Consumption

2014–2025: Calculated as other biofuels production plus other biofuels imports minus other biofuels stock change.

2026: Calculated as other biofuels production plus other biofuels net imports minus other biofuels stock change.

Table 10.5 Sources

Small-Scale Solar Energy Consumption: Heat

Annual Data

1989–2009: Annual estimates by the U.S. Energy Information Administration (EIA) based on EIA, Form EIA-63A, "Annual Solar Thermal Collector/Reflector Shipments Report." Solar energy consumption by solar thermal non-electric applications (mainly in the residential sector, but with some in the commercial and industrial sectors) is based on assumptions about the stock of equipment in place and other factors.

2010 forward: Annual estimates based on residential solar hot water heating and commercial solar thermal growth rates from EIA's *Annual Energy Outlook* (AEO) data system.

Monthly Data

1989–2013: Monthly estimates for each year are obtained by allocating a given year's annual value to the months in that year. Each month's allocator is the average of that month's "Small-Scale Solar Energy Consumption: Electricity, Total" values in 2014 and 2015. The allocators, when rounded, are as follows: January—5%; February—6%; March—8%; April—9%; May—10%; June—10%; July—10%; August—10%; September—9%; October—9%; November—7%; and December—7%.

2014 forward: Once all 12 months of "Small-Scale Solar Energy Consumption: Electricity, Total" data are available for a given year, they are used as allocators and applied to the annual estimate in order to derive monthly estimates for that year. Initial monthly estimates for the current year use the previous year's allocators.

Small-Scale Solar Energy Consumption: Electricity, Residential Sector

Beginning in 2014, monthly and annual data for residential sector small-scale solar photovoltaic generation are from EIA, *Electric Power Monthly*, Table 1.2.E. Those data are converted to consumption data in Btu by multiplying by the electricity heat content factor.

Backcasts for earlier periods are developed as follows:

Annual Data

1989–2003: Annual growth rates are calculated based on small-scale solar electricity consumption in all sectors. Consumption is estimated using information on shipments of solar panels from EIA, Form EIA-63B, "Annual Photovoltaic Cell/Module Shipments Report," and assumptions about the stock of equipment in place and other factors. The growth rates are applied to more recent data to create historical annual estimates.

2004–2008: Annual growth rates based on commercial sector solar photovoltaic growth rates from EIA's *Annual Energy Outlook* (AEO) data system are applied to more recent data to create historical annual estimates.

2009–2013: Annual growth rates based on residential sector solar photovoltaic growth rates from EIA's *Annual Energy Outlook* (AEO) data system are applied to more recent data to create historical annual estimates.

Monthly Data

1989–2013: See "Small-Scale Solar Energy Consumption: Heat, Monthly Data."

Small-Scale Solar Energy Consumption: Electricity, Commercial Sector

Beginning in 2014, monthly and annual data for commercial sector small-scale solar photovoltaic generation are from EIA, *Electric Power Monthly*, Table 1.2.C. Those data are converted to consumption data in Btu by multiplying by the electricity heat content factor.

Backcasts for earlier periods are developed as follows:

Annual Data

1989–2003: Annual growth rates based on EIA, Form EIA-63B, "Annual Photovoltaic Cell/Module Shipments Report," are applied to more recent data to create historical annual estimates. (See "Small-Scale Solar Energy Consumption: Electricity, Residential Sector" sources above for details.)

2004–2013: Annual growth rates based on commercial sector solar photovoltaic growth rates from EIA's *Annual Energy Outlook* (AEO) data system are applied to more recent data to create historical annual estimates.

Monthly Data

1989–2013: See "Small-Scale Solar Energy Consumption: Heat, Monthly Data."

Small-Scale Solar Energy Consumption: Electricity, Industrial Sector

Beginning in 2014, monthly and annual data for industrial sector small-scale solar photovoltaic generation are from EIA, *Electric Power Monthly*, Table 1.2.D. Those data are converted to consumption data in Btu by multiplying by the electricity heat content factor.

Backcasts for earlier periods are developed as follows:

Annual Data

1989–2003: Annual growth rates based on EIA, Form EIA-63B, "Annual Photovoltaic Cell/Module Shipments Report," are applied to more recent data to create historical annual estimates. (See "Small-Scale Solar Energy Consumption: Electricity, Residential Sector" sources above for details.)

2004–2013: Annual growth rates based on commercial sector solar photovoltaic growth rates from EIA's *Annual Energy Outlook* (AEO) data system are applied to more recent data to create historical annual estimates.

Monthly Data

1989–2013: See "Small-Scale Solar Energy Consumption: Heat, Monthly Data."

Small-Scale Solar Energy Consumption: Electricity, Total
1989 forward: Small-scale solar energy consumption for total electricity is the sum of the small-scale solar energy consumption (for electricity) values for the residential, commercial, and industrial sectors.

Small-Scale Solar Energy Consumption: Total
1989 forward: Small-scale solar energy consumption total is the sum of small-scale solar energy consumption values for heat and total electricity.

Utility-Scale Solar Energy Consumption: Electricity, Commercial Sector
2008 forward: Commercial sector solar photovoltaic and solar thermal electricity net generation data from EIA, Form EIA-923, "Power Plant Operations Report," are converted to Btu by multiplying by the electricity heat content factor.

Utility-Scale Solar Energy Consumption: Electricity, Industrial Sector
2010 forward: Industrial sector solar photovoltaic and solar thermal electricity net generation data from EIA, Form EIA-923, "Power Plant Operations Report," are converted to Btu by multiplying by the electricity heat content factor.

Utility-Scale Solar Energy Consumption: Electricity, Electric Power Sector
1984 forward: Electric power sector solar photovoltaic and solar thermal electricity net generation data from Table 7.2b are converted to Btu by multiplying the electricity heat content factor.

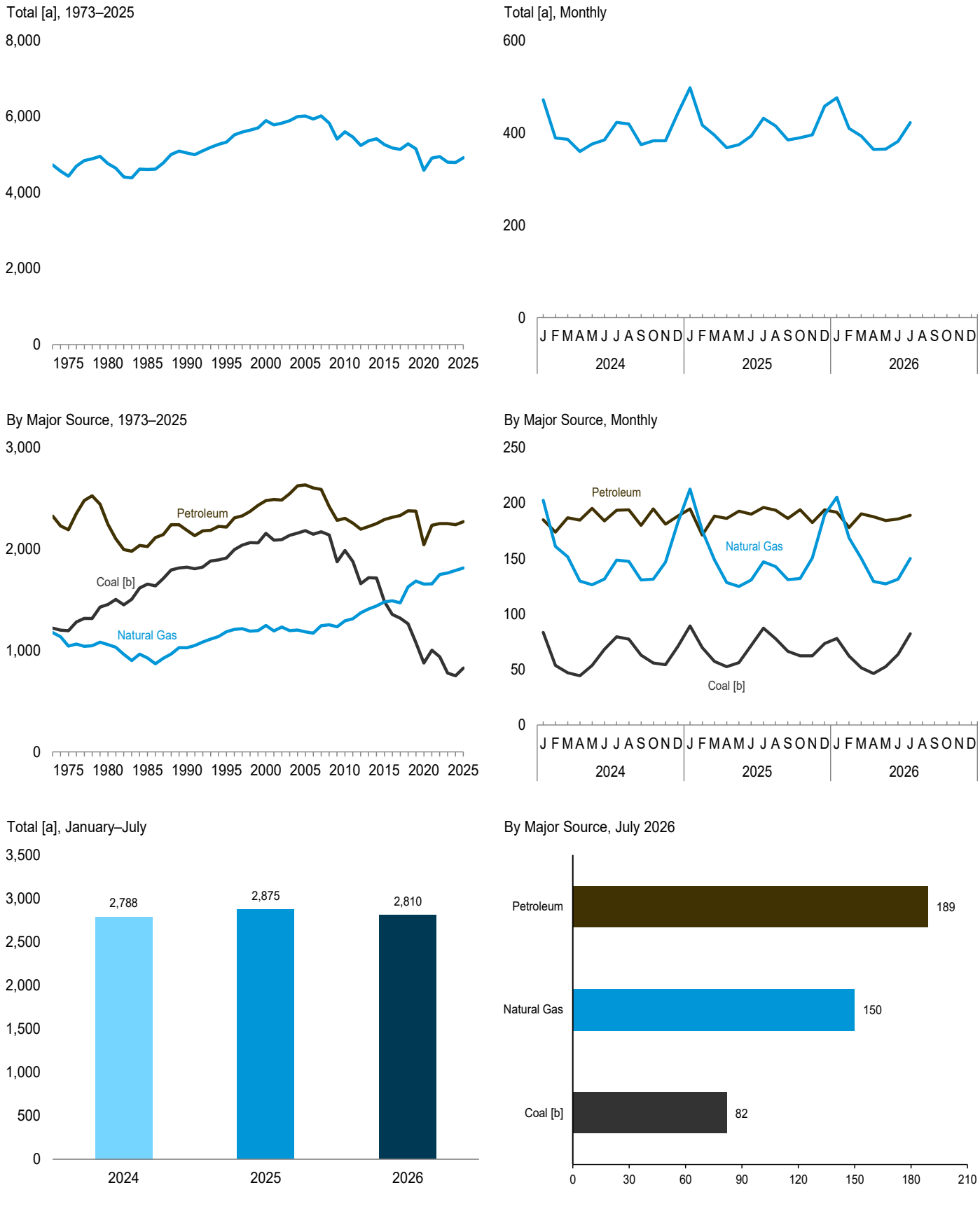
Utility-Scale Solar Energy Consumption: Electricity, Total
1984 forward: Utility-scale solar energy consumption for total electricity is the sum of the utility-scale solar energy consumption (for electricity) values for the commercial, industrial, and electric power sectors.

Solar Energy Consumption: Total
1984 forward: Total solar energy consumption is the sum of the values for total small-scale solar energy consumption and total utility-scale solar energy consumption.

11. Environment

Figure 11.1 Carbon Dioxide Emissions From Energy Consumption by Source

(Million Metric Tons of Carbon Dioxide)



[a] Through 2011, excludes emissions from biomass energy consumption. Beginning in 2012, excludes emissions from biomass energy consumption except small amounts of emissions from "other biofuels."

[b] Includes coal coke net imports.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#environment.

Source: Table 11.1.

Table 11.1 Carbon Dioxide Emissions From Energy Consumption by Source

(Million Metric Tons of Carbon Dioxide[a])

			Petroleum											
	Coal[b]	Natural Gas[c]	Aviation Gasoline	Distillate Fuel Oil[d]	HGL[e]	Jet Fuel	Kero-sene	Lubri-cants	Motor Gasoline[f]	Petroleum Coke	Residual Fuel Oil	Other[g]	Total	Total[h,i]
1973 Total	1,221	1,175	6	485	80	154	33	13	911	55	486	102	2,325	4,721
1975 Total	1,195	1,043	5	447	73	146	24	11	911	52	424	97	2,190	4,428
1980 Total	1,454	1,058	4	451	78	156	24	13	901	50	433	134	2,244	4,757
1985 Total	1,655	927	3	450	82	178	17	12	933	56	207	86	2,024	4,606
1990 Total	1,820	1,027	3	475	75	223	6	13	988	72	212	119	2,185	5,038
1995 Total	1,912	1,186	3	504	90	222	8	13	1,042	78	147	111	2,217	5,325
2000 Total	2,155	1,246	3	592	106	259	10	14	1,141	85	157	111	2,477	5,889
2005 Total	2,180	1,183	2	653	92	251	11	12	1,205	110	159	140	2,633	6,008
2010 Total	1,986	1,292	2	591	84	214	3	11	1,107	81	92	119	2,304	5,594
2011 Total	1,876	1,312	2	600	79	213	2	10	1,074	78	79	118	2,255	5,455
2012 Total	1,658	1,372	2	577	76	210	1	9	1,066	78	64	114	2,195	5,236
2013 Total	1,718	1,408	2	581	85	214	1	10	1,077	77	55	120	2,221	5,359
2014 Total	1,713	1,438	2	614	86	220	1	10	1,085	77	44	112	2,252	5,414
2015 Total	1,482	1,479	1	606	86	231	1	11	1,114	77	45	116	2,290	5,262
2016 Total	1,355	1,490	1	583	83	242	1	11	1,134	77	56	124	2,312	5,169
2017 Total	1,318	1,471	1	591	86	251	1	10	1,131	71	59	130	2,332	5,131
2018 Total	1,263	1,627	2	626	98	255	1	10	1,131	73	55	127	2,377	5,278
2019 Total	1,078	1,685	2	621	107	261	1	9	1,128	67	47	131	2,374	5,147
2020 Total	876	1,655	1	572	105	161	1	8	977	58	36	123	2,044	4,585
2021 Total	1,003	1,656	1	611	111	205	1	9	1,067	60	54	116	2,235	4,906
2022 Total	938	1,748	2	619	97	233	1	9	1,065	58	57	111	2,251	4,945
2023 Total	776	1,764	1	602	96	247	2	7	1,081	57	47	110	2,251	4,799
2024 January	83	203	(s)	50	12	19	(s)	1	85	4	4	9	185	472
February	54	161	(s)	48	9	18	(s)	(s)	83	3	4	8	174	389
March	47	152	(s)	48	9	21	(s)	1	92	3	4	9	187	386
April	44	130	(s)	48	7	21	(s)	1	88	6	5	9	185	359
May	54	126	(s)	49	7	22	(s)	1	96	6	4	10	195	376
June	68	131	(s)	46	6	22	(s)	1	92	4	4	9	184	384
July	79	149	(s)	48	6	23	(s)	1	96	6	4	9	194	422
August	77	147	(s)	51	7	23	(s)	1	95	4	4	10	194	419
September	63	131	(s)	47	7	21	(s)	1	89	4	3	9	180	374
October	56	131	(s)	54	8	22	(s)	1	93	4	5	9	195	383
November	54	147	(s)	47	9	21	(s)	(s)	88	4	4	9	181	383
December	71	182	(s)	49	11	22	(s)	(s)	90	3	4	9	188	442
Total	751	1,790	2	585	98	253	1	6	1,088	51	51	107	2,241	4,789
2025 January	89	213	(s)	53	13	21	(s)	(s)	87	6	5	9	195	497
February	70	175	(s)	47	10	18	(s)	(s)	80	2	5	8	171	417
March	57	149	(s)	51	9	21	(s)	1	90	3	5	9	188	395
April	52	128	(s)	50	8	22	(s)	1	88	5	4	9	186	368
May	56	125	(s)	50	7	23	(s)	1	93	6	3	9	193	374
June	72	131	(s)	49	7	23	(s)	1	93	4	4	9	190	393
July	87	147	(s)	50	7	24	(s)	1	94	5	5	10	196	431
August	78	143	(s)	49	7	23	(s)	1	95	5	4	10	194	415
September	66	131	(s)	50	7	21	(s)	1	90	4	5	9	186	384
October	62	132	(s)	54	8	23	(s)	1	91	3	5	9	194	389
November	62	R 150	(s)	49	10	21	(s)	1	87	2	5	8	182	396
December	73	R 189	(s)	50	11	22	(s)	1	91	4	6	9	194	R 457
Total	826	R 1,813	2	603	104	260	2	7	1,079	50	55	107	2,269	4,916
2026 January	78	205	(s)	53	13	21	(s)	1	85	5	4	9	192	476
February	62	169	(s)	50	11	19	(s)	1	80	5	5	8	178	409
March	52	150	(s)	51	8	21	(s)	1	91	5	4	9	190	393
April	R 47	129	(s)	49	7	22	(s)	1	91	3	5	9	188	R 364
May	R 53	127	(s)	47	7	22	(s)	1	89	6	4	9	184	R 365
June	R 64	131	(s)	48	6	22	(s)	1	88	5	6	9	186	381
July	82	150	(s)	48	7	24	(s)	1	92	4	4	10	189	422
7-Month Total	437	1,063	1	346	59	151	1	5	614	33	33	63	1,307	2,810
2025 7-Month Total	484	1,068	1	351	61	151	1	4	626	32	31	62	1,319	2,875
2024 7-Month Total	430	1,051	1	338	56	146	1	4	632	32	30	63	1,303	2,788

[a] Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.
[b] Includes coal coke net imports.
[c] Natural gas, excluding supplemental gaseous fuels.
[d] Distillate fuel oil, excluding biodiesel and renewable diesel fuel.
[e] Hydrocarbon gas liquids.
[f] Finished motor gasoline, excluding fuel ethanol.
[g] Aviation gasoline blending components, crude oil, motor gasoline blending components, petrochemical feedstocks, special naphthas, still gas, unfinished oils, waxes, and miscellaneous petroleum products.
[h] Includes electric power sector use of geothermal energy and non-biomass waste. See Table 11.6.
[i] Through 2011, excludes emissions from biomass energy consumption. Beginning in 2012, excludes emissions from biomass energy consumption except small amounts of emissions from "other biofuels." See "Biomass" and "Other Biofuels" in Glossary. See Table 11.7 for energy-related carbon dioxide emissions from wood, biomass waste, fuel ethanol (minus denaturant), and biodiesel.

R=Revised. (s)=Less than 0.5 million metric tons.

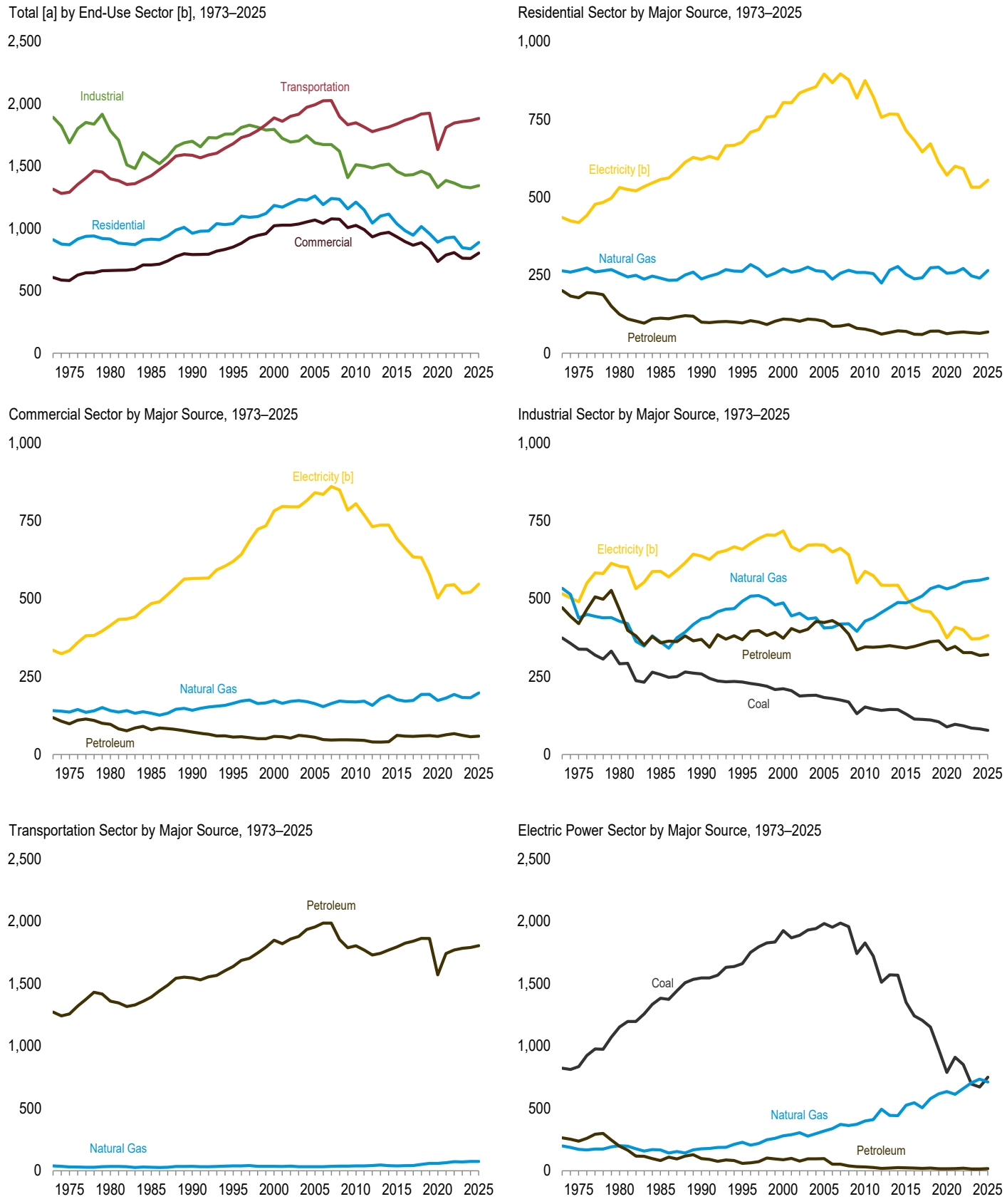
Notes: • Data are estimates for carbon dioxide emissions from energy consumption, plus the relatively small amount of emissions from the non-combustion use of fossil fuels. See "Section 11 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note 1, "Emissions of Carbon Dioxide and Other Greenhouse Gases," at end of section. • Through 2011, data exclude emissions from biomass energy consumption; beginning in 2012, data exclude emissions from biomass energy consumption except small amounts of emissions from "other biofuels." See "Biomass" and "Other Biofuels" in Glossary. See Table 11.7 and Note 2, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," at end of section. • 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/#environment (Excel and CSV files) for all available annual and monthly data beginning in 1973.

Sources: See end of section.

Figure 11.2 Carbon Dioxide Emissions From Energy Consumption by Sector

(Million Metric Tons of Carbon Dioxide)



[a] Through 2011, excludes emissions from biomass energy consumption. Beginning in 2012, excludes emissions from biomass energy consumption except small amounts of emissions from "other biofuels."

[b] Emissions from energy consumption in the electric power sector are allocated to the end-use sectors in proportion to each sector's share of total electricity sales to ultimate customers.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#environment.

Sources: Tables 11.2–11.6.

Table 11.2 Carbon Dioxide Emissions From Energy Consumption: Residential Sector

(Million Metric Tons of Carbon Dioxide[a])

	Coal	Natural Gas[b]	Petroleum				Electricity[e]	Total[f]
			Distillate Fuel Oil[c]	HGL[d]	Kerosene	Total		
1973 Total	**9**	**264**	**148**	**36**	**17**	**201**	**435**	**908**
1975 Total	**6**	**266**	**134**	**32**	**12**	**178**	**419**	**869**
1980 Total	**3**	**256**	**97**	**20**	**8**	**125**	**531**	**915**
1985 Total	**4**	**240**	**81**	**20**	**12**	**112**	**557**	**914**
1990 Total	**3**	**238**	**72**	**22**	**5**	**99**	**622**	**962**
1995 Total	**2**	**263**	**67**	**25**	**5**	**97**	**677**	**1,039**
2000 Total	**1**	**271**	**68**	**35**	**7**	**109**	**804**	**1,185**
2005 Total	**1**	**262**	**64**	**32**	**6**	**102**	**895**	**1,261**
2010 Total	**NA**	**259**	**42**	**33**	**2**	**77**	**874**	**1,210**
2011 Total	**NA**	**255**	**39**	**31**	**1**	**71**	**823**	**1,149**
2012 Total	**NA**	**225**	**36**	**25**	**1**	**61**	**757**	**1,043**
2013 Total	**NA**	**266**	**36**	**29**	**1**	**66**	**767**	**1,100**
2014 Total	**NA**	**278**	**40**	**31**	**1**	**71**	**766**	**1,115**
2015 Total	**NA**	**253**	**41**	**28**	**1**	**70**	**714**	**1,037**
2016 Total	**NA**	**238**	**32**	**27**	**1**	**60**	**683**	**981**
2017 Total	**NA**	**242**	**32**	**27**	**1**	**60**	**645**	**946**
2018 Total	**NA**	**274**	**38**	**32**	**1**	**70**	**672**	**1,016**
2019 Total	**NA**	**276**	**35**	**35**	**1**	**71**	**611**	**958**
2020 Total	**NA**	**256**	**30**	**31**	**1**	**62**	**571**	**890**
2021 Total	**NA**	**259**	**35**	**30**	**1**	**66**	**600**	**925**
2022 Total	**NA**	**272**	**36**	**32**	**1**	**68**	**591**	**931**
2023 Total	**NA**	**248**	**35**	**30**	**1**	**65**	**532**	**845**
2024 January	NA	51	5	5	(s)	10	58	119
February	NA	35	5	4	(s)	9	37	82
March	NA	28	4	3	(s)	7	32	67
April	NA	17	2	2	(s)	5	29	51
May	NA	9	2	1	(s)	4	36	49
June	NA	7	2	1	(s)	3	51	61
July	NA	6	1	1	(s)	2	66	74
August	NA	6	1	1	(s)	2	62	70
September	NA	6	2	1	(s)	3	46	55
October	NA	11	2	2	(s)	4	37	52
November	NA	23	3	3	(s)	6	34	63
December	NA	42	4	4	(s)	8	47	97
Total	**NA**	**240**	**34**	**29**	**1**	**63**	**532**	**836**
2025 January	NA	57	5	6	(s)	11	62	130
February	NA	44	5	4	(s)	10	46	100
March	NA	29	4	3	(s)	7	35	71
April	NA	18	3	2	(s)	5	31	54
May	NA	10	2	2	(s)	4	35	49
June	NA	7	2	1	(s)	3	51	61
July	NA	6	1	1	(s)	2	68	76
August	NA	6	1	1	(s)	2	59	67
September	NA	6	2	1	(s)	3	47	56
October	NA	12	3	2	(s)	5	38	55
November	NA	26	3	3	(s)	6	37	69
December	NA	45	4	5	(s)	9	49	103
Total	**NA**	**265**	**35**	**32**	**1**	**68**	**555**	**887**
2026 January	NA	53	5	6	(s)	11	55	119
February	NA	40	5	4	(s)	10	44	93
March	NA	26	4	3	(s)	7	34	67
April	NA	15	[R]3	2	(s)	5	30	50
May	NA	10	2	2	(s)	4	34	49
June	NA	7	2	1	(s)	3	47	57
July	NA	6	1	1	(s)	2	66	75
7-Month Total	**NA**	**158**	**22**	**19**	**1**	**42**	**310**	**509**
2025 7-Month Total	**NA**	**170**	**22**	**20**	**1**	**43**	**327**	**540**
2024 7-Month Total	**NA**	**154**	**21**	**18**	**1**	**40**	**309**	**503**

[a] Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.
[b] Natural gas, excluding supplemental gaseous fuels.
[c] Distillate fuel oil, excluding biodiesel and renewable diesel fuel.
[d] Hydrocarbon gas liquids.
[e] Emissions from energy consumption (for electricity and a small amount of useful thermal output) in the electric power sector are allocated to the end-use sectors in proportion to each sector's share of total electricity sales to ultimate customers. See Tables 7.6 and 11.6.
[f] Through 2011, excludes emissions from biomass energy consumption. Beginning in 2012, excludes emissions from biomass energy consumption except small amounts of emissions from "other biofuels." See "Biomass" and "Other Biofuels" in Glossary. See Table 11.7 for energy-related carbon dioxide emissions from wood, biomass waste, fuel ethanol (minus denaturant), and biodiesel.
R=Revised. NA=Not available. (s)=Less than 0.5 million metric tons.

Notes: • Data are estimates for carbon dioxide emissions from energy consumption. See "Section 11 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note 1, "Emissions of Carbon Dioxide and Other Greenhouse Gases," at end of section. • Through 2011, data exclude emissions from biomass energy consumption; beginning in 2012, data exclude emissions from biomass energy consumption except small amounts of emissions from "other biofuels." See "Biomass" and "Other Biofuels" in Glossary. See Table 11.7 and Note 2, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," at end of section. • 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/#environment (Excel and CSV files) for all available annual and monthly data beginning in 1973.
Sources: See end of section.

Table 11.3 Carbon Dioxide Emissions From Energy Consumption: Commercial Sector

(Million Metric Tons of Carbon Dioxide[a])

	Coal	Natural Gas[b]	Petroleum							Electricity[f]	Total[g]
			Distillate Fuel Oil[c]	HGL[d]	Kerosene	Motor Gasoline[e]	Petroleum Coke	Residual Fuel Oil	Total		
1973 Total	**15**	**140**	**48**	**9**	**5**	**6**	**NA**	**50**	**118**	**334**	**607**
1975 Total	**14**	**136**	**43**	**8**	**4**	**6**	**NA**	**37**	**98**	**334**	**582**
1980 Total	**11**	**141**	**38**	**6**	**3**	**8**	**NA**	**42**	**97**	**414**	**662**
1985 Total	**13**	**132**	**47**	**6**	**2**	**7**	**NA**	**17**	**79**	**484**	**708**
1990 Total	**12**	**142**	**40**	**6**	**1**	**8**	**0**	**17**	**72**	**564**	**790**
1995 Total	**11**	**164**	**35**	**7**	**2**	**1**	**(s)**	**11**	**56**	**619**	**850**
2000 Total	**9**	**173**	**37**	**9**	**2**	**3**	**(s)**	**7**	**58**	**781**	**1,021**
2005 Total	**9**	**163**	**33**	**8**	**2**	**3**	**(s)**	**9**	**55**	**840**	**1,067**
2010 Total	**7**	**168**	**29**	**9**	**(s)**	**3**	**(s)**	**5**	**46**	**804**	**1,025**
2011 Total	**6**	**171**	**29**	**9**	**(s)**	**3**	**(s)**	**4**	**45**	**768**	**990**
2012 Total	**4**	**157**	**26**	**9**	**(s)**	**3**	**(s)**	**2**	**40**	**731**	**932**
2013 Total	**4**	**179**	**25**	**10**	**(s)**	**3**	**(s)**	**2**	**40**	**736**	**958**
2014 Total	**4**	**189**	**26**	**10**	**(s)**	**4**	**(s)**	**1**	**41**	**736**	**970**
2015 Total	**3**	**175**	**27**	**9**	**(s)**	**25**	**(s)**	**(s)**	**61**	**692**	**932**
2016 Total	**2**	**171**	**24**	**9**	**(s)**	**25**	**(s)**	**(s)**	**59**	**661**	**893**
2017 Total	**2**	**173**	**24**	**10**	**(s)**	**24**	**(s)**	**(s)**	**58**	**633**	**866**
2018 Total	**2**	**193**	**24**	**11**	**(s)**	**24**	**(s)**	**(s)**	**59**	**632**	**886**
2019 Total	**2**	**193**	**24**	**11**	**(s)**	**24**	**(s)**	**(s)**	**60**	**578**	**832**
2020 Total	**1**	**173**	**20**	**13**	**(s)**	**24**	**(s)**	**(s)**	**58**	**502**	**735**
2021 Total	**1**	**180**	**24**	**14**	**(s)**	**25**	**(s)**	**(s)**	**63**	**542**	**787**
2022 Total	**1**	**192**	**25**	**13**	**(s)**	**29**	**(s)**	**(s)**	**67**	**545**	**805**
2023 Total	**1**	**182**	**24**	**12**	**(s)**	**25**	**(s)**	**(s)**	**61**	**517**	**762**
2024 January	(s)	30	3	2	(s)	2	(s)	(s)	7	48	85
February	(s)	23	4	1	(s)	2	(s)	(s)	7	35	65
March	(s)	19	3	1	(s)	2	0	(s)	6	34	59
April	(s)	14	2	1	(s)	2	0	(s)	4	33	52
May	(s)	10	1	1	(s)	2	(s)	(s)	4	40	54
June	(s)	8	1	1	(s)	2	(s)	(s)	4	47	59
July	(s)	8	1	1	(s)	2	0	(s)	3	55	67
August	(s)	8	1	1	(s)	2	0	(s)	3	55	66
September	(s)	8	1	1	(s)	2	0	(s)	4	46	58
October	(s)	11	2	1	(s)	2	0	(s)	4	42	58
November	(s)	17	2	1	(s)	2	0	(s)	5	39	61
December	(s)	25	3	2	(s)	2	(s)	(s)	6	44	75
Total	**1**	**182**	**23**	**12**	**(s)**	**21**	**(s)**	**(s)**	**57**	**521**	**760**
2025 January	(s)	33	3	2	(s)	2	(s)	(s)	7	51	91
February	(s)	27	4	2	(s)	2	(s)	(s)	7	41	75
March	(s)	20	3	1	(s)	2	0	(s)	6	36	62
April	(s)	14	2	1	(s)	2	0	(s)	4	36	R 54
May	(s)	10	2	1	(s)	2	0	(s)	4	40	55
June	(s)	R 9	1	1	(s)	2	0	(s)	4	49	61
July	(s)	8	1	1	(s)	2	0	(s)	3	58	70
August	(s)	8	1	1	(s)	2	0	(s)	3	54	66
September	(s)	8	1	1	(s)	2	0	(s)	4	48	60
October	(s)	12	2	1	(s)	2	0	(s)	4	44	61
November	(s)	19	2	1	(s)	2	0	(s)	5	42	66
December	(s)	28	3	2	(s)	2	(s)	(s)	6	46	80
Total	**1**	**R 197**	**24**	**13**	**(s)**	**21**	**(s)**	**(s)**	**58**	**547**	**R 803**
2026 January	(s)	32	3	2	(s)	2	(s)	(s)	7	48	87
February	(s)	24	4	1	(s)	2	(s)	(s)	7	40	71
March	(s)	19	3	1	(s)	2	(s)	(s)	6	37	62
April	(s)	13	2	1	(s)	2	0	(s)	4	36	53
May	(s)	10	R 2	1	(s)	2	0	(s)	4	40	54
June	(s)	9	1	1	(s)	2	0	(s)	4	46	59
July	(s)	8	1	1	(s)	2	0	(s)	3	59	71
7-Month Total	**1**	**116**	**15**	**7**	**(s)**	**12**	**(s)**	**(s)**	**35**	**306**	**457**
2025 7-Month Total	**1**	**122**	**15**	**8**	**(s)**	**12**	**(s)**	**(s)**	**36**	**311**	**469**
2024 7-Month Total	**1**	**111**	**15**	**7**	**(s)**	**12**	**(s)**	**(s)**	**35**	**294**	**440**

[a] Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.
[b] Natural gas, excluding supplemental gaseous fuels.
[c] Distillate fuel oil, excluding biodiesel and renewable diesel fuel.
[d] Hydrocarbon gas liquids.
[e] Finished motor gasoline, excluding fuel ethanol.
[f] Emissions from energy consumption (for electricity and a small amount of useful thermal output) in the electric power sector are allocated to the end-use sectors in proportion to each sector's share of total electricity sales to ultimate customers. See Tables 7.6 and 11.6.
[g] Through 2011, excludes emissions from biomass energy consumption. Beginning in 2012, excludes emissions from biomass energy consumption except small amounts of emissions from "other biofuels." See "Biomass" and "Other Biofuels" in Glossary. See Table 11.7 for energy-related carbon dioxide emissions from wood, biomass waste, fuel ethanol (minus denaturant), and biodiesel.

R=Revised. NA=Not available. (s)=Less than 0.5 million metric tons.

Notes: • Data are estimates for carbon dioxide emissions from energy consumption. See "Section 11 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note 1, "Emissions of Carbon Dioxide and Other Greenhouse Gases," at end of section. • Through 2011, data exclude emissions from biomass energy consumption; beginning in 2012, data exclude emissions from biomass energy consumption except small amounts of emissions from "other biofuels." See "Biomass" and "Other Biofuels" in Glossary. See Table 11.7 and Note 2, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," at end of section. • 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/#environment (Excel and CSV files) for all available annual and monthly data beginning in 1973.

Sources: See end of section.

Table 11.4 Carbon Dioxide Emissions From Energy Consumption: Industrial Sector

(Million Metric Tons of Carbon Dioxide[a])

	Coal	Coal Coke Net Imports	Natural Gas[b]	Petroleum									Electricity[g]	Total[h]
				Distillate Fuel Oil[c]	HGL[d]	Kerosene	Lubricants	Motor Gasoline[e]	Petroleum Coke	Residual Fuel Oil	Other[f]	Total		
1973 Total	373	-1	533	107	31	11	7	18	54	139	102	471	515	1,891
1975 Total	338	2	438	98	30	9	6	16	52	113	97	420	490	1,687
1980 Total	291	-4	427	97	52	13	7	11	50	101	134	465	604	1,782
1985 Total	257	-2	361	82	54	3	6	16	55	56	86	358	587	1,561
1990 Total	258	1	435	85	45	1	7	13	69	31	119	369	636	1,699
1995 Total	233	7	492	83	57	1	7	14	69	25	111	368	658	1,757
2000 Total	211	7	486	89	61	1	7	11	75	18	111	373	717	1,795
2005 Total	182	5	405	94	49	3	6	25	86	21	140	423	671	1,687
2010 Total	152	-1	428	85	42	1	5	17	67	9	119	345	587	1,512
2011 Total	146	1	438	91	39	(s)	5	17	64	10	118	344	574	1,503
2012 Total	142	(s)	455	94	42	(s)	4	17	69	5	114	346	543	1,486
2013 Total	145	-2	472	94	46	(s)	5	17	64	4	120	349	542	1,505
2014 Total	144	-2	487	101	45	(s)	5	14	65	3	112	345	543	1,516
2015 Total	129	-2	486	87	48	(s)	5	17	66	2	116	342	502	1,457
2016 Total	113	-2	496	86	46	(s)	5	17	65	4	124	347	472	1,426
2017 Total	112	-3	508	89	48	(s)	5	17	61	4	130	354	461	1,432
2018 Total	111	-3	532	93	54	(s)	5	18	62	3	127	362	458	1,459
2019 Total	105	-2	540	89	60	(s)	4	18	60	3	131	364	425	1,432
2020 Total	88	-1	531	79	60	(s)	4	18	49	2	123	336	374	1,328
2021 Total	97	-6	539	88	67	(s)	4	17	51	3	116	346	408	1,385
2022 Total	92	-6	552	89	52	(s)	4	18	49	3	111	327	400	1,364
2023 Total	85	-4	556	87	54	(s)	3	18	51	3	110	326	370	1,334
2024 January	7	(s)	51	8	5	(s)	(s)	1	4	(s)	9	28	34	120
February	7	(s)	46	7	4	(s)	(s)	1	2	(s)	8	23	25	102
March	7	(s)	48	6	4	(s)	(s)	2	3	(s)	9	24	26	105
April	7	-1	45	7	4	(s)	(s)	1	6	(s)	9	28	25	104
May	7	(s)	45	7	5	(s)	(s)	2	6	(s)	10	29	30	110
June	7	-1	43	5	5	(s)	(s)	1	3	(s)	9	25	33	107
July	7	(s)	45	6	5	(s)	(s)	2	6	(s)	9	28	37	117
August	7	(s)	46	8	5	(s)	(s)	2	4	(s)	10	28	37	117
September	7	(s)	44	6	5	(s)	(s)	1	4	(s)	9	26	32	108
October	7	(s)	46	10	5	(s)	(s)	2	3	(s)	9	30	31	112
November	7	(s)	47	6	5	(s)	(s)	1	4	(s)	9	25	29	108
December	7	(s)	51	7	5	(s)	(s)	1	2	(s)	9	25	32	114
Total	82	-4	559	84	57	(s)	3	18	46	3	107	318	371	1,326
2025 January	7	(s)	53	9	5	(s)	(s)	1	6	(s)	9	30	34	124
February	6	(s)	47	6	4	(s)	(s)	1	2	(s)	8	22	29	104
March	7	(s)	49	7	4	(s)	(s)	1	3	(s)	9	25	26	107
April	6	(s)	46	8	4	(s)	(s)	1	4	(s)	9	27	27	105
May	6	(s)	46	7	5	(s)	(s)	2	6	(s)	9	29	29	110
June	6	(s)	44	6	5	(s)	(s)	2	3	(s)	9	26	34	109
July	6	(s)	45	7	5	(s)	(s)	2	5	(s)	10	28	38	118
August	6	(s)	46	6	6	(s)	(s)	2	4	(s)	10	27	36	116
September	6	(s)	R 44	8	5	(s)	(s)	1	3	(s)	9	27	33	111
October	7	(s)	46	9	5	(s)	(s)	1	3	(s)	9	28	31	112
November	6	(s)	48	7	5	(s)	(s)	1	2	(s)	8	25	30	109
December	7	(s)	52	7	5	(s)	(s)	1	4	(s)	9	26	32	116
Total	77	-2	565	86	58	(s)	4	18	44	3	107	321	381	1,343
2026 January	6	(s)	52	R 8	5	(s)	(s)	1	5	(s)	9	30	32	R 120
February	6	(s)	46	R 7	5	(s)	(s)	1	5	(s)	8	27	27	R 106
March	6	(s)	49	8	4	(s)	(s)	1	4	(s)	9	27	26	108
April	6	(s)	46	R 7	4	(s)	(s)	1	3	(s)	9	25	26	103
May	6	(s)	47	5	5	(s)	(s)	1	5	(s)	9	26	29	107
June	6	(s)	45	6	4	(s)	(s)	1	4	(s)	9	26	31	R 109
July	6	(s)	46	5	5	(s)	(s)	2	4	(s)	10	25	37	114
7-Month Total	43	-1	331	46	32	(s)	2	10	30	2	63	185	208	767
2025 7-Month Total	45	-2	329	50	33	(s)	2	10	29	2	62	187	217	777
2024 7-Month Total	47	-2	325	47	31	(s)	2	10	29	2	63	184	209	764

[a] Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.
[b] Natural gas, excluding supplemental gaseous fuels.
[c] Distillate fuel oil, excluding biodiesel and renewable diesel fuel.
[d] Hydrocarbon gas liquids.
[e] Finished motor gasoline, excluding fuel ethanol.
[f] Aviation gasoline blending components, crude oil, motor gasoline blending components, petrochemical feedstocks, special naphthas, still gas, unfinished oils, waxes, and miscellaneous petroleum products.
[g] Emissions from energy consumption (for electricity and a small amount of useful thermal output) in the electric power sector are allocated to the end-use sectors in proportion to each sector's share of total electricity sales to ultimate customers. See Tables 7.6 and 11.6.
[h] Through 2011, excludes emissions from biomass energy consumption. Beginning in 2012, excludes emissions from biomass energy consumption except small amounts of emissions from "other biofuels." See "Biomass" and "Other Biofuels" in Glossary. See Table 11.7 for energy-related carbon dioxide emissions from wood, biomass waste, fuel ethanol (minus denaturant), and biodiesel.

R=Revised. (s)=Less than 0.5 million metric tons and greater than -0.5 million metric tons.

Notes: • Data are estimates for carbon dioxide emissions from energy consumption, plus the relatively small amount of emissions from the non-combustion use of fossil fuels. See "Section 11 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note 1, "Emissions of Carbon Dioxide and Other Greenhouse Gases," at end of section. • Through 2011, data exclude emissions from biomass energy consumption; beginning in 2012, data exclude emissions from biomass energy consumption except small amounts of emissions from "other biofuels." See "Biomass" and "Other Biofuels" in Glossary. See Table 11.7 and Note 2, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," at end of section. • 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/#environment (Excel and CSV files) for all available annual and monthly data beginning in 1973.

Sources: See end of section.

Table 11.5 Carbon Dioxide Emissions From Energy Consumption: Transportation Sector

(Million Metric Tons of Carbon Dioxide[a])

	Coal	Natural Gas[b]	Petroleum								Elec-tricity[f]	Total[g]
			Aviation Gasoline	Distillate Fuel Oil[c]	HGL[d]	Jet Fuel	Lubri-cants	Motor Gasoline[e]	Residual Fuel Oil	Total		
1973 Total	(s)	39	6	164	3	152	6	887	55	1,272	2	1,314
1975 Total	(s)	32	5	157	3	144	6	889	53	1,257	2	1,291
1980 Total	(h)	34	4	207	1	155	6	882	105	1,360	2	1,397
1985 Total	(h)	28	3	234	2	178	6	910	59	1,392	3	1,423
1990 Total	(h)	36	3	271	1	223	7	967	76	1,547	3	1,587
1995 Total	(h)	38	3	310	1	222	6	1,027	68	1,637	3	1,679
2000 Total	(h)	36	3	386	1	259	7	1,128	67	1,848	4	1,888
2005 Total	(h)	33	2	453	2	251	6	1,177	63	1,954	5	1,992
2010 Total	(h)	38	2	429	(s)	214	6	1,086	67	1,804	5	1,847
2011 Total	(h)	39	2	436	(s)	213	5	1,054	58	1,769	4	1,813
2012 Total	(h)	41	2	417	(s)	210	5	1,047	50	1,730	4	1,776
2013 Total	(h)	47	2	421	(s)	214	5	1,057	44	1,744	4	1,795
2014 Total	(h)	40	2	441	(s)	220	6	1,067	34	1,769	4	1,814
2015 Total	(h)	39	1	447	1	231	6	1,073	35	1,794	4	1,837
2016 Total	(h)	40	1	437	1	242	6	1,092	47	1,825	4	1,869
2017 Total	(h)	42	1	442	1	251	5	1,090	50	1,841	4	1,887
2018 Total	(h)	51	2	466	1	255	5	1,090	45	1,864	4	1,918
2019 Total	(h)	59	2	468	1	261	5	1,086	40	1,862	3	1,924
2020 Total	(h)	59	1	439	1	161	4	935	29	1,572	3	1,633
2021 Total	(h)	65	1	459	1	205	5	1,025	46	1,742	3	1,809
2022 Total	(h)	72	2	464	1	233	5	1,018	47	1,770	3	1,845
2023 Total	(h)	72	1	453	1	247	4	1,038	39	1,783	3	1,857
2024 January	(h)	8	(s)	33	(s)	19	(s)	82	3	139	(s)	147
February	(h)	7	(s)	31	(s)	18	(s)	80	3	134	(s)	140
March	(h)	6	(s)	35	(s)	21	(s)	89	4	149	(s)	155
April	(h)	5	(s)	36	(s)	21	(s)	85	4	147	(s)	152
May	(h)	5	(s)	38	(s)	22	(s)	93	4	157	(s)	163
June	(h)	5	(s)	38	(s)	22	(s)	88	4	152	(s)	157
July	(h)	6	(s)	40	(s)	23	(s)	92	4	159	(s)	165
August	(h)	6	(s)	41	(s)	23	(s)	92	4	159	(s)	166
September	(h)	5	(s)	37	(s)	21	(s)	86	3	147	(s)	152
October	(h)	5	(s)	40	(s)	22	(s)	90	4	155	(s)	161
November	(h)	6	(s)	35	(s)	21	(s)	85	4	144	(s)	150
December	(h)	8	(s)	35	(s)	22	(s)	87	4	148	(s)	156
Total	(h)	74	2	440	1	253	3	1,048	43	1,790	3	1,866
2025 January	(h)	9	(s)	34	(s)	21	(s)	84	4	144	(s)	152
February	(h)	7	(s)	32	(s)	18	(s)	78	4	131	(s)	138
March	(h)	6	(s)	37	(s)	21	(s)	87	4	149	(s)	155
April	(h)	5	(s)	38	(s)	22	(s)	85	4	149	(s)	154
May	(h)	5	(s)	39	(s)	23	(s)	90	3	155	(s)	160
June	(h)	5	(s)	39	(s)	23	(s)	90	3	156	(s)	161
July	(h)	6	(s)	41	(s)	24	(s)	91	4	161	(s)	167
August	(h)	6	(s)	41	(s)	23	(s)	92	3	159	(s)	165
September	(h)	5	(s)	39	(s)	21	(s)	86	5	151	(s)	157
October	(h)	5	(s)	41	(s)	23	(s)	88	4	156	(s)	161
November	(h)	6	(s)	36	(s)	21	(s)	83	4	145	(s)	152
December	(h)	8	(s)	36	(s)	22	(s)	87	4	151	(s)	158
Total	(h)	74	2	453	1	260	4	1,040	46	1,806	3	1,883
2026 January	(h)	8	(s)	34	(s)	21	(s)	82	3	140	(s)	149
February	(h)	7	(s)	32	(s)	19	(s)	77	4	132	(s)	139
March	(h)	6	(s)	R 37	(s)	21	(s)	87	4	R 150	(s)	156
April	(h)	5	(s)	37	(s)	22	(s)	87	5	152	(s)	158
May	(h)	5	(s)	38	(s)	22	(s)	85	4	149	(s)	R 155
June	(h)	5	(s)	R 39	(s)	22	(s)	85	5	R 152	(s)	157
July	(h)	6	(s)	40	(s)	24	(s)	88	3	156	(s)	163
7-Month Total	(h)	43	1	257	(s)	151	3	592	27	1,032	1	1,077
2025 7-Month Total	(h)	44	1	260	(s)	151	2	604	26	1,044	2	1,089
2024 7-Month Total	(h)	43	1	252	(s)	146	2	610	25	1,036	1	1,081

[a] Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.
[b] Natural gas, excluding supplemental gaseous fuels.
[c] Distillate fuel oil, excluding biodiesel and renewable diesel fuel.
[d] Hydrocarbon gas liquids.
[e] Finished motor gasoline, excluding fuel ethanol.
[f] Emissions from energy consumption (for electricity and a small amount of useful thermal output) in the electric power sector are allocated to the end-use sectors in proportion to each sector's share of total electricity sales to ultimate customers. See Tables 7.6 and 11.6.
[g] Through 2011, excludes emissions from biomass energy consumption. Beginning in 2012, excludes emissions from biomass energy consumption except small amounts of emissions from "other biofuels." See "Biomass" and "Other Biofuels" in Glossary. See Table 11.7 for energy-related carbon dioxide emissions from wood, biomass waste, fuel ethanol (minus denaturant), and biodiesel.
[h] Beginning in 1978, the small amounts of coal consumed for transportation are reported as industrial sector consumption.

R=Revised. (s)=Less than 0.5 million metric tons.

Notes: • Data are estimates for carbon dioxide emissions from energy consumption, plus the relatively small amount of emissions from the non-combustion use of fossil fuels. See "Section 11 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note 1, "Emissions of Carbon Dioxide and Other Greenhouse Gases," at end of section. • Through 2011, data exclude emissions from biomass energy consumption; beginning in 2012, data exclude emissions from biomass energy consumption except small amounts of emissions from "other biofuels." See "Biomass" and "Other Biofuels" in Glossary. See Table 11.7 and Note 2, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," at end of section. • 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/#environment (Excel and CSV files) for all available annual and monthly data beginning in 1973.

Sources: See end of section.

Table 11.6 Carbon Dioxide Emissions From Energy Consumption: Electric Power Sector

(Million Metric Tons of Carbon Dioxide[a])

	Coal	Natural Gas[b]	Petroleum				Geo-thermal	Non-Biomass Waste[d]	Total[e]
			Distillate Fuel Oil[c]	Petroleum Coke	Residual Fuel Oil	Total			
1973 Total	**824**	**199**	**20**	**2**	**242**	**264**	**NA**	**NA**	**1,286**
1975 Total	**836**	**172**	**17**	**(s)**	**221**	**237**	**NA**	**NA**	**1,245**
1980 Total	**1,153**	**200**	**12**	**1**	**185**	**198**	**NA**	**NA**	**1,551**
1985 Total	**1,383**	**166**	**6**	**1**	**75**	**82**	**NA**	**NA**	**1,631**
1990 Total	**1,547**	**175**	**7**	**3**	**87**	**98**	**(s)**	**6**	**1,826**
1995 Total	**1,660**	**228**	**8**	**8**	**43**	**59**	**(s)**	**10**	**1,957**
2000 Total	**1,926**	**281**	**13**	**10**	**65**	**89**	**(s)**	**10**	**2,306**
2005 Total	**1,983**	**319**	**9**	**24**	**66**	**98**	**(s)**	**11**	**2,412**
2010 Total	**1,828**	**400**	**6**	**14**	**12**	**31**	**(s)**	**11**	**2,270**
2011 Total	**1,723**	**409**	**5**	**14**	**7**	**26**	**(s)**	**11**	**2,170**
2012 Total	**1,512**	**493**	**4**	**9**	**6**	**18**	**(s)**	**11**	**2,035**
2013 Total	**1,571**	**444**	**4**	**13**	**6**	**22**	**(s)**	**11**	**2,049**
2014 Total	**1,568**	**443**	**6**	**12**	**7**	**25**	**(s)**	**11**	**2,048**
2015 Total	**1,351**	**525**	**5**	**11**	**7**	**24**	**(s)**	**11**	**1,912**
2016 Total	**1,242**	**545**	**4**	**12**	**5**	**21**	**(s)**	**11**	**1,820**
2017 Total	**1,207**	**506**	**4**	**10**	**5**	**19**	**(s)**	**11**	**1,743**
2018 Total	**1,153**	**578**	**6**	**10**	**6**	**22**	**(s)**	**11**	**1,765**
2019 Total	**974**	**617**	**4**	**8**	**4**	**16**	**(s)**	**11**	**1,618**
2020 Total	**788**	**635**	**3**	**9**	**4**	**16**	**(s)**	**11**	**1,450**
2021 Total	**910**	**613**	**4**	**9**	**4**	**18**	**(s)**	**12**	**1,553**
2022 Total	**851**	**659**	**6**	**9**	**6**	**21**	**(s)**	**7**	**1,539**
2023 Total	**694**	**705**	**4**	**6**	**5**	**15**	**(s)**	**7**	**1,422**
2024 January	76	62	1	(s)	(s)	2	(s)	1	141
February	47	50	(s)	(s)	(s)	1	(s)	1	98
March	40	50	(s)	(s)	(s)	1	(s)	1	92
April	38	48	(s)	(s)	(s)	1	(s)	1	88
May	47	57	(s)	(s)	(s)	1	(s)	1	106
June	62	68	(s)	1	(s)	1	(s)	1	131
July	73	83	(s)	1	(s)	1	(s)	1	158
August	71	82	(s)	1	(s)	1	(s)	1	154
September	57	67	(s)	(s)	(s)	1	(s)	1	125
October	49	58	(s)	(s)	(s)	1	(s)	1	109
November	47	54	(s)	(s)	(s)	1	(s)	1	103
December	64	57	(s)	(s)	(s)	1	(s)	1	122
Total	**672**	**735**	**4**	**5**	**5**	**14**	**(s)**	**6**	**1,427**
2025 January	83	61	1	1	1	3	(s)	1	147
February	63	51	(s)	(s)	(s)	1	(s)	(s)	116
March	50	45	(s)	(s)	(s)	1	(s)	1	97
April	47	45	(s)	(s)	(s)	1	(s)	1	93
May	50	53	(s)	(s)	(s)	1	(s)	1	105
June	66	66	(s)	1	(s)	1	(s)	1	134
July	81	81	(s)	1	(s)	1	(s)	1	165
August	71	77	(s)	1	(s)	1	(s)	1	150
September	60	67	(s)	(s)	(s)	1	(s)	1	128
October	56	56	(s)	1	(s)	1	(s)	1	114
November	56	52	(s)	(s)	(s)	1	(s)	1	109
December	67	57	1	(s)	1	2	(s)	1	126
Total	**750**	**712**	**5**	**6**	**5**	**17**	**(s)**	**6**	**1,485**
2026 January	72	60	2	(s)	1	4	(s)	1	136
February	56	52	1	(s)	1	2	(s)	(s)	111
March	45	50	(s)	(s)	(s)	1	(s)	1	97
April	41	49	(s)	(s)	(s)	1	(s)	1	91
May	46	55	(s)	(s)	(s)	1	(s)	1	103
June	58	65	(s)	1	(s)	1	(s)	1	125
July	76	84	1	1	(s)	2	(s)	1	162
7-Month Total	**394**	**414**	**6**	**3**	**4**	**13**	**(s)**	**4**	**825**
2025 7-Month Total	**440**	**403**	**3**	**3**	**3**	**10**	**(s)**	**4**	**857**
2024 7-Month Total	**384**	**418**	**2**	**3**	**3**	**8**	**(s)**	**4**	**814**

[a] Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.

[b] Natural gas, excluding supplemental gaseous fuels.

[c] Distillate fuel oil, excluding biodiesel and renewable diesel fuel.

[d] Municipal solid waste from non-biogenic sources, and tire-derived fuels. Through 1994, also includes blast furnace gas, and other manufactured and waste gases derived from fossil fuels.

[e] Through 2011, excludes emissions from biomass energy consumption. Beginning in 2012, excludes emissions from biomass energy consumption except small amounts of emissions from "other biofuels." See "Biomass" and "Other Biofuels" in Glossary. See Table 11.7 for energy-related carbon dioxide emissions from wood, biomass waste, fuel ethanol (minus denaturant), and biodiesel.

NA=Not available. (s)=Less than 0.5 million metric tons.

Notes: • Data are estimates for carbon dioxide emissions from energy consumption. See "Section 11 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note 1, "Emissions of Carbon Dioxide and Other Greenhouse Gases," at end of section. • Through 2011, data exclude emissions from biomass energy consumption; beginning in 2012, data exclude emissions from biomass energy consumption except small amounts of emissions from "other biofuels." See "Biomass" and "Other Biofuels" in Glossary. See Table 11.7 and Note 2, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," at end of section. • 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/#environment (Excel and CSV files) for all available annual and monthly data beginning in 1973.

Sources: See end of section.

Table 11.7 Carbon Dioxide Emissions From Biomass Energy Consumption

(Million Metric Tons of Carbon Dioxide[a])

	By Source					By Sector					
	Wood[b]	Biomass Waste[c]	Fuel Ethanol[d]	Bio-diesel[e]	Total[f]	Resi-dential	Com-mercial[g]	Indus-trial[h]	Trans-portation	Electric Power[i]	Total[f]
1973 Total	**143**	**(s)**	**NA**	**NA**	**143**	**33**	**1**	**109**	**NA**	**(s)**	**143**
1975 Total	**140**	**(s)**	**NA**	**NA**	**141**	**40**	**1**	**100**	**NA**	**(s)**	**141**
1980 Total	**232**	**(s)**	**NA**	**NA**	**232**	**80**	**2**	**150**	**NA**	**(s)**	**232**
1985 Total	**252**	**14**	**3**	**NA**	**270**	**95**	**2**	**168**	**3**	**1**	**270**
1990 Total	**208**	**24**	**4**	**NA**	**237**	**54**	**8**	**147**	**4**	**23**	**237**
1995 Total	**222**	**30**	**8**	**NA**	**260**	**49**	**9**	**166**	**8**	**28**	**260**
2000 Total	**212**	**27**	**9**	**NA**	**248**	**39**	**9**	**161**	**9**	**29**	**248**
2005 Total	**200**	**37**	**23**	**1**	**261**	**40**	**10**	**150**	**23**	**37**	**261**
2010 Total	**208**	**42**	**73**	**2**	**325**	**51**	**10**	**149**	**74**	**42**	**325**
2011 Total	**208**	**42**	**73**	**8**	**331**	**49**	**11**	**151**	**80**	**40**	**331**
2012 Total	**202**	**42**	**73**	**8**	**325**	**41**	**10**	**153**	**80**	**42**	**325**
2013 Total	**219**	**45**	**75**	**13**	**353**	**54**	**11**	**158**	**87**	**43**	**353**
2014 Total	**225**	**47**	**76**	**13**	**361**	**54**	**11**	**158**	**88**	**49**	**361**
2015 Total	**216**	**47**	**79**	**14**	**356**	**48**	**13**	**157**	**90**	**48**	**356**
2016 Total	**208**	**46**	**81**	**20**	**354**	**42**	**13**	**155**	**98**	**47**	**354**
2017 Total	**204**	**45**	**82**	**19**	**350**	**40**	**13**	**152**	**98**	**47**	**350**
2018 Total	**211**	**44**	**82**	**18**	**355**	**49**	**13**	**151**	**97**	**46**	**355**
2019 Total	**209**	**40**	**83**	**17**	**349**	**51**	**12**	**147**	**97**	**41**	**349**
2020 Total	**184**	**40**	**72**	**18**	**313**	**32**	**12**	**143**	**86**	**39**	**313**
2021 Total	**187**	**39**	**79**	**16**	**321**	**33**	**12**	**144**	**92**	**39**	**321**
2022 Total	**200**	**37**	**80**	**16**	**333**	**42**	**16**	**149**	**92**	**35**	**333**
2023 Total	**185**	**36**	**81**	**18**	**319**	**36**	**15**	**141**	**96**	**32**	**319**
2024 January	15	3	6	2	26	3	1	12	7	3	26
February	14	3	6	2	25	3	1	11	8	3	25
March	15	3	7	2	26	3	1	12	8	2	26
April	15	3	6	2	25	3	1	12	8	2	25
May	15	3	7	2	27	3	1	12	9	2	27
June	15	3	7	2	26	3	1	11	8	2	26
July	15	3	7	1	27	3	1	12	8	3	27
August	15	3	7	1	27	3	1	12	8	3	27
September	15	3	7	1	26	3	1	12	8	2	26
October	14	3	7	2	26	3	1	11	8	2	26
November	15	3	7	1	26	3	1	12	8	2	26
December	16	3	7	1	27	3	1	12	8	3	27
Total	**179**	**35**	**81**	**18**	**313**	**33**	**15**	**140**	**96**	**30**	**313**
2025 January	15	3	6	1	26	3	1	12	7	3	26
February	14	3	6	1	23	3	1	11	7	2	23
March	15	3	7	1	26	3	1	12	7	2	26
April	14	3	7	1	25	3	1	11	8	2	25
May	15	3	7	1	25	3	1	11	8	2	25
June	15	3	7	1	25	3	1	11	8	3	25
July	16	3	7	1	26	3	1	12	8	3	26
August	15	3	7	1	26	3	1	12	7	3	26
September	15	3	7	1	25	3	1	11	7	3	25
October	15	3	7	1	26	3	1	12	8	2	26
November	15	3	6	1	25	3	1	11	7	2	25
December	15	3	7	1	26	3	1	12	8	3	26
Total	**179**	**34**	**81**	**10**	**305**	**35**	**14**	**137**	**89**	**29**	**305**
2026 January	15	3	6	1	25	3	1	11	7	3	25
February	14	3	6	1	23	2	1	10	7	3	23
March	15	3	7	1	25	3	1	11	8	3	25
April	13	3	7	1	24	3	1	10	8	2	24
May	15	3	7	1	26	3	1	11	8	2	26
June	14	3	7	1	25	3	1	11	8	2	25
July	15	3	7	1	26	3	1	11	8	3	26
7-Month Total	**100**	**19**	**47**	**8**	**174**	**19**	**8**	**77**	**53**	**17**	**174**
2025 7-Month Total	**104**	**20**	**47**	**6**	**177**	**20**	**8**	**80**	**51**	**17**	**177**
2024 7-Month Total	**104**	**21**	**47**	**11**	**183**	**19**	**9**	**81**	**56**	**17**	**183**

[a] Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.

[b] Wood and wood-derived fuels.

[c] Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass.

[d] Fuel ethanol minus denaturant.

[e] "Biodiesel" is primarily fatty acid methyl esters (FAME). See "Biodiesel" in Glossary.

[f] Includes energy-related carbon dioxide emissions from wood, biomass waste, fuel ethanol (minus denaturant), and biodiesel; excludes emissions from renewable diesel fuel and "other biofuels." See "Renewable Diesel Fuel" and "Other Biofuels" in Glossary.

[g] Commercial sector, including commercial combined-heat-and-power (CHP) and commercial electricity-only plants.

[h] Industrial sector, including industrial combined-heat-and-power (CHP) and industrial electricity-only plants.

[i] The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

NA=Not available. (s)=Less than 0.5 million metric tons.

Notes: • Except for small amounts of emissions from "other biofuels" beginning in 2012, carbon dioxide emissions from biomass energy consumption are excluded from the energy-related carbon dioxide emissions reported in Tables 11.1–11.6. See "Biomass" and "Other Biofuels" in Glossary. See Note 2, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," at end of section. • Data are estimates. See "Section 11 Methodology and Sources" at end of section. • See "Carbon Dioxide" in Glossary. • See Note 1, "Emissions of Carbon Dioxide and Other Greenhouse Gases," at end of section. • 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/#environment (Excel and CSV files) for all available annual and monthly data beginning in 1973.

Sources: See end of section.

Note 1. Emissions of Carbon Dioxide and Other Greenhouse Gases. Greenhouse gases are those gases—such as water vapor, carbon dioxide (CO2), methane, nitrous oxide, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride—that are transparent to solar (short-wave) radiation but opaque to long-wave (infrared) radiation, thus preventing long-wave radiant energy from leaving Earth's atmosphere. The net effect is a trapping of absorbed radiation and a tendency to warm the planet's surface.

The vast majority of U.S. CO2 emissions come from fossil fuel combustion, with smaller amounts from the non-combustion use of fossil fuels, as well as from electricity generation using geothermal energy and non-biomass waste. Other sources of CO2 emissions include industrial processes, such as cement and limestone production. Data in the U.S. Energy Information Administration's (EIA) *Monthly Energy Review* (MER) Tables 11.1–11.6 are estimates for U.S. CO2 emissions from energy consumption, plus the non-combustion use of fossil fuels. (Except for small amounts of emissions from "other biofuels" beginning in 2012, carbon dioxide emissions from biomass energy consumption are excluded from the energy-related carbon dioxide emissions reported in Tables 11.1–11.6. See "Biomass" and "Other Biofuels" in Glossary. See Table 11.7 for energy-related carbon dioxide emissions from wood, biomass waste, fuel ethanol (minus denaturant), and biodiesel.)

For annual U.S. estimates of CO2 emissions from all sources, as well as emissions for other greenhouse gases, see the U.S. Environmental Protection Agency's *Inventory of U.S. Greenhouse Gas Emissions and Sinks* reports at https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2022.

Note 2. Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion. Except for small amounts of emissions from "other biofuels" beginning in 2012, carbon dioxide (CO2) emissions from the combustion of biomass to produce energy are excluded from the energy-related CO2 emissions reported in MER Tables 11.1–11.6; but CO2 emissions from wood, biomass waste, fuel ethanol (minus denaturant), and biodiesel appear in MER Table 11.7. According to current international convention (see the Intergovernmental Panel on Climate Change's "2006 IPCC Guidelines for National Greenhouse Gas Inventories"), carbon released through biomass combustion is excluded from reported energy-related emissions. The release of carbon from biomass combustion is assumed to be balanced by the uptake of carbon when the feedstock is grown, resulting in zero net emissions over some period of time. (This is not to say that biomass energy is carbon-neutral. Energy inputs are required in order to grow, fertilize, and harvest the feedstock and to produce and process the biomass into fuels.)

However, analysts have debated whether increased use of biomass energy may result in a decline in terrestrial carbon stocks, leading to a net positive release of carbon rather than the zero net release assumed by its exclusion from reported energy-related emissions. For example, the clearing of forests for biofuel crops could result in an initial release of carbon that is not fully recaptured in subsequent use of the land for agriculture.

To reflect the potential net emissions, the international convention for greenhouse gas inventories is to report biomass emissions in the category "agriculture, forestry, and other land use," usually based on estimates of net changes in carbon stocks over time.

This indirect accounting of CO2 emissions from biomass can potentially lead to confusion in accounting for and understanding the flow of CO2 emissions within energy and non-energy systems. In recognition of this issue, reporting of CO2 emissions from biomass combustion alongside other energy-related CO2 emissions offers an alternative accounting treatment. It is important, however, to avoid misinterpreting emissions from fossil energy and biomass energy sources as necessarily additive. Instead, the combined total of direct CO2 emissions from biomass and energy-related CO2 emissions implicitly assumes that none of the carbon emitted was previously or subsequently reabsorbed in terrestrial sinks or that other emissions sources offset any such sequestration.

Section 11 Methodology and Sources

To estimate carbon dioxide emissions from energy consumption for the *Monthly Energy Review* (MER), Tables 11.1–11.7, the U.S. Energy Information Administration (EIA) uses the following methodology and sources:

Step 1. Determine Fuel Consumption

Coal—Coal sectoral (residential, commercial, coke plants, other industrial, transportation, electric power) consumption data in thousand short tons are from MER Table 6.2. Coal sectoral consumption data are converted to trillion Btu by multiplying by the coal heat content factors.

Coal Coke Net Imports—Coal coke net imports data in trillion Btu are derived from coal coke imports and exports data in MER Tables 1.4a and 1.4b.

Natural Gas (excluding supplemental gaseous fuels)—Natural gas sectoral consumption data in trillion Btu are from MER Tables 2.2–2.6.

Petroleum—Total and sectoral consumption (product supplied) data in thousand barrels per day for asphalt and road oil, aviation gasoline, distillate fuel oil, hydrocarbon gas liquids (HGL), jet fuel, kerosene, lubricants, motor gasoline, petroleum coke, and residual fuel oil are from MER Tables 3.5 and 3.7a–3.7c. For the component products of HGL (ethane/ethylene, propane/propylene, normal butane/butylene, isobutane/isobutylene, and natural gasoline [through 2021]) and "other petroleum" (aviation gasoline blending components, crude oil, motor gasoline blending components, naphthas for petrochemical feedstock use, other oils for petrochemical feedstock use, special naphthas, still gas, unfinished oils [through 2021], waxes, and miscellaneous petroleum products), consumption (product supplied) data in thousand barrels per day are from EIA's *Petroleum Supply Annual* (PSA), *Petroleum Supply Monthly* (PSM), and earlier publications (see sources for MER Table 3.5). Petroleum consumption data by product are converted to trillion Btu by multiplying by the petroleum heat content factors.

Biomass—Sectoral consumption data in trillion Btu for wood, biomass waste, fuel ethanol (minus denaturant), and biodiesel are from MER Tables 10.2a–10.2c.

Step 2. Remove Biofuels From Petroleum

Distillate Fuel Oil—Beginning in 2009, the distillate fuel oil data (for total and transportation sector) in Step 1 include biodiesel and renewable diesel fuel, which are non-fossil renewable fuels.

2009–2011: To remove the biodiesel portion from distillate fuel oil, data for biodiesel consumption (calculated using data from 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”) are converted to trillion Btu by multiplying by the biodiesel heat content factor, and then subtracted from the distillate fuel oil consumption values. To remove the renewable diesel fuel portion from distillate fuel oil, data for refinery and blender net inputs (from EIA-810, “Monthly Refinery Report,” and EIA-815, “Monthly Bulk Terminal and Blender Report”) are converted to trillion Btu by multiplying by the renewable diesel fuel heat content factor, and then subtracted from the distillate fuel oil consumption values.

2012–2020: To remove the biodiesel portion from distillate fuel oil, data for biodiesel consumption (from MER Table 10.4) is subtracted from the distillate fuel oil consumption values. To remove the renewable diesel fuel portion from distillate fuel oil, data for refinery and blender net inputs (from EIA-810, “Monthly Refinery Report,” and EIA-815, “Monthly Bulk Terminal and Blender Report”) are converted to trillion Btu by multiplying by the renewable diesel fuel heat content factor, and then subtracted from the distillate fuel oil consumption values.

2021 forward: To remove the biodiesel and renewable diesel fuel portions from distillate fuel oil, data for refinery and blender net inputs (from EIA-810, “Monthly Refinery Report,” and EIA-815, “Monthly Bulk Terminal and Blender Report”) are converted to trillion Btu by multiplying by the biodiesel and renewable diesel fuel heat content factors, and then subtracted from the distillate fuel oil consumption values.

Motor Gasoline—Beginning in 1993, the motor gasoline data (for total, commercial sector, industrial sector, and transportation sector) in Step 1 include fuel ethanol, a non-fossil renewable fuel. To remove the fuel ethanol portion from motor gasoline, data in trillion Btu for fuel ethanol consumption (from MER Tables 10.2a, 10.2b, and 10.3) are subtracted from the motor gasoline consumption values. (Note that about 2% of fuel ethanol is fossil-based petroleum denaturant, to make the fuel ethanol undrinkable. For 1993–2008, petroleum denaturant is double counted in the PSA product supplied statistics, in both the original product category—e.g., natural gasoline—and also in the finished motor

gasoline category; for this time period for MER Section 11, petroleum denaturant is removed along with the fuel ethanol from motor gasoline, but left in the original product. Beginning in 2009, petroleum denaturant is counted only in the PSA/PSM product supplied statistics for motor gasoline; for this time period for MER Section 11, petroleum denaturant is left in motor gasoline.)

Step 3. Remove Carbon Sequestered by Non-Combustion Use

The following fuels have industrial non-combustion uses as chemical feedstocks and other products: coal, natural gas, asphalt and road oil, distillate fuel oil, hydrocarbon gas liquids (ethane/ethylene, propane/propylene, normal butane/butylene, isobutane/isobutylene, and natural gasoline), lubricants (which have industrial and transportation non-combustion uses), naphthas, other oils, petroleum coke, residual fuel oil, special naphthas, still gas, waxes, and miscellaneous petroleum products. See Tables 1.13a and 1.13b for estimates of fossil fuel non-combustion uses.

In the non-combustion use of these fuels, some of the carbon is stored (sequestered) in the final product, and EIA subtracts this from the fuel consumption values in Steps 1 and 2. EIA calculates the amount of carbon sequestered as the product of the non-combustion use of fossil fuels shown in MER Table 1.13b and the following carbon sequestration factors. The factors range from 0.00 to 1.00. A factor of 0.00 indicates that the fuel does not sequester any carbon (all is emitted), while a factor of 1.00 indicates that the fuel sequesters all of the carbon (none is emitted). EIA uses the following carbon sequestration factors: coal—0.75; natural gas used to produce hydrogen—0.00; natural gas used for other manufacturing—0.44; asphalt and road oil—1.00; distillate fuel oil—0.50; hydrocarbon gas liquids—0.80; lubricants—0.50; naphthas used for petrochemical feedstock—0.75; other oils used for petrochemical feedstock—0.50; petroleum coke used for aluminum production—0.00; petroleum coke used for other manufacturing—0.50; residual fuel oil—0.50; special naphthas—0.00; still gas—0.80; waxes—1.00; and miscellaneous petroleum products—1.00.

Step 4. Determine Carbon Dioxide Emissions From Energy Consumption

EIA calculates carbon dioxide (CO2) emissions data in million metric tons as the product of the consumption values in trillion Btu from Steps 1 and 2 (minus the carbon sequestered by non-combustion use in Step 3) and the annual CO2 emissions factors at https://www.eia.gov/environment/emissions/xls/CO2_coeffs_detailed.xls.

Except for plant condensate and unfractionated stream (which are EIA estimates), the CO2 emissions factors for fossil fuels are from the U.S. Environmental Protection Agency, *Inventory of U.S. Greenhouse Gas Emissions and Sinks*, Tables A-20, A-32, and A-226. EIA converts metric tons of carbon to metric tons of CO2 using the approximate molar mass (44/12)—see https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2022.

Coal—EIA calculates coal CO2 emissions for each sector (residential, commercial, coke plants, other industrial, transportation, electric power). Total coal emissions are the sum of the sectoral coal emissions.

Coal Coke Net Imports—EIA calculates coal coke net imports CO2 emissions for the industrial sector.

Natural Gas—EIA calculates natural gas CO2 emissions for each sector (residential, commercial, industrial, transportation, electric power). Total natural gas emissions are the sum of the sectoral natural gas emissions.

Petroleum—EIA calculates CO2 emissions for each petroleum product and sector. Total petroleum emissions are the sum of the product emissions. Total HGL emissions are the sum of the emissions for the component products (ethane/ethylene, propane/propylene, normal butane/butylene, isobutane/isobutylene, and natural gasoline). EIA estimates residential, commercial, and transportation sector HGL emissions as the product of the HGL consumption values in trillion Btu from MER Tables 3.8a and 3.8c and the propane emissions factor. EIA estimates industrial sector HGL emissions as total HGL emissions minus emissions by the other sectors.

Geothermal and Non-Biomass Waste—EIA estimates annual CO2 emissions data for geothermal and non-biomass waste on Form EIA-923, "Power Plant Operations Report" (and predecessor forms). EIA estimates monthly data by dividing the annual data by the number of days in the year and then multiplying by the number of days in the month. Annual estimates for the current year are set equal to those of the previous year.

Biomass—EIA calculates wood, biomass waste, and biofuel CO2 emissions for each sector. Total emissions for each biomass fuel are the sum of the sectoral emissions. EIA uses the following CO2 emissions factors, in million metric tons

CO_2 per quadrillion Btu: wood—93.80; biomass waste—90.70; fuel ethanol—68.44; and biodiesel—73.84. For 1973–1988, EIA estimates the biomass portion of waste in MER Tables 10.2a–10.2c as 67%; for 1989–2000, the annual biomass portion of waste ranges from 67% in 1989 to 58% in 2000, based on the biogenic shares of total municipal solid waste shown in EIA's "Methodology for Allocating Municipal Solid Waste to Biogenic and Non-Biogenic Energy," Table 1 at https://www.eia.gov/totalenergy/data/monthly/pdf/historical/msw.pdf.

Appendix A

Population, U.S. Gross Domestic Product, and U.S. Gross Output

Population, U.S. Gross Domestic Product, and U.S. Gross Output

Table A1. Population, U.S. Gross Domestic Product, and U.S. Gross Output

	Population			U.S. Gross Domestic Product			U.S. Gross Output[a]
	United States[b]	World	United States as Share of World	Billion Nominal Dollars[d]	Billion Chained (2017) Dollars[e]	Implicit Price Deflator[c] (2017 = 1.00000)	Billion Nominal Dollars[d]
	Million People		Percent				
1950	152.3	2,558.0	6.0	299.8	2,458.5	0.12195	577.8
1955	165.9	2,783.0	6.0	425.5	3,083.0	.13801	802.6
1960	180.7	3,043.7	5.9	542.4	3,500.3	.15495	1,006.0
1965	194.3	3,351.4	5.8	742.3	4,478.6	.16574	1,356.0
1970	205.1	3,714.3	5.5	1,073.3	5,316.4	.20189	1,903.0
1975	216.0	4,090.1	5.3	1,684.9	6,060.9	.27800	3,055.3
1980	227.2	4,446.7	5.1	2,857.3	7,257.3	.39371	5,462.0
1981	229.5	4,528.2	5.1	3,207.0	7,441.5	.43097	6,033.5
1982	231.7	4,610.6	5.0	3,343.8	7,307.3	.45759	6,175.0
1983	233.8	4,694.6	5.0	3,634.0	7,642.3	.47552	6,631.0
1984	235.8	4,776.3	4.9	4,037.6	8,195.3	.49267	7,313.8
1985	237.9	4,861.1	4.9	4,339.0	8,537.0	.50826	7,775.7
1986	240.1	4,948.4	4.9	4,579.6	8,832.6	.51849	8,031.0
1987	242.3	5,038.2	4.8	4,855.2	9,137.7	.53134	8,707.5
1988	244.5	5,129.2	4.8	5,236.4	9,519.4	.55008	9,434.2
1989	246.8	5,220.0	4.7	5,641.6	9,869.0	.57165	10,069.8
1990	249.6	5,312.2	4.7	5,963.1	10,055.1	.59305	10,624.6
1991	253.0	5,399.7	4.7	6,158.1	10,044.2	.61310	10,808.0
1992	256.5	5,486.0	4.7	6,520.3	10,398.0	.62707	11,381.0
1993	259.9	5,569.2	4.7	6,858.6	10,684.2	.64194	12,024.4
1994	263.1	5,650.1	4.7	7,287.2	11,114.6	.65564	12,826.8
1995	266.3	5,731.8	4.6	7,639.7	11,413.0	.66939	13,653.2
1996	269.4	5,812.7	4.6	8,073.1	11,843.6	.68164	14,463.4
1997	272.6	5,892.0	4.6	8,577.6	12,370.3	.69340	15,393.6
1998	275.9	5,970.2	4.6	9,062.8	12,924.9	.70119	16,217.0
1999	279.0	6,048.0	4.6	9,631.2	13,543.8	.71111	17,273.4
2000	282.2	6,126.1	4.6	10,251.0	14,096.0	.72722	18,625.7
2001	285.0	6,204.8	4.6	10,581.9	14,230.7	.74360	18,884.5
2002	287.6	6,283.8	4.6	10,929.1	14,472.7	.75515	19,173.8
2003	290.1	6,362.2	4.6	11,456.5	14,877.3	.77006	20,140.7
2004	292.8	6,442.0	4.5	12,217.2	15,449.8	.79077	21,689.1
2005	295.5	6,522.1	4.5	13,039.2	15,988.0	.81556	23,517.9
2006	298.4	6,604.1	4.5	13,815.6	16,433.1	.84071	24,925.5
2007	301.2	6,688.0	4.5	14,474.2	16,762.4	.86349	26,250.3
2008	304.1	6,773.9	4.5	14,769.9	16,781.5	.88013	27,024.9
2009	306.8	6,860.2	4.5	14,478.1	16,349.1	.88556	24,959.3
2010	309.3	6,945.6	4.5	15,049.0	16,789.8	.89632	26,479.5
2011	311.6	7,030.5	4.4	15,599.7	17,052.4	.91481	28,050.3
2012	313.8	7,116.0	4.4	16,254.0	17,442.8	.93185	29,232.2
2013	316.0	7,203.1	4.4	16,880.7	17,812.2	.94771	30,388.8
2014	318.3	7,290.3	4.4	17,608.1	18,261.7	.96421	31,795.7
2015	320.6	7,376.7	4.3	18,295.0	18,799.6	.97316	32,233.9
2016	322.9	7,462.2	4.3	18,804.9	19,141.7	.98241	32,898.1
2017	325.0	7,546.3	4.3	19,612.1	19,612.1	1.00000	34,468.1
2018	326.7	7,629.1	4.3	20,656.5	20,193.9	1.02291	36,504.5
2019	328.2	7,710.4	4.3	21,540.0	20,715.7	1.03979	37,658.0
2020	331.6	7,787.9	4.3	21,375.3	20,284.5	1.05377	36,714.6
2021	332.1	7,857.1	4.2	23,725.6	21,532.4	1.10186	41,833.3
2022	334.0	7,921.4	4.2	26,054.6	22,075.9	1.18023	46,611.2
2023	336.8	7,988.4	4.2	27,811.5	22,723.7	1.22390	48,540.3
2024	340.0	8,059.2	4.2	29,298.0	23,358.4	1.25428	50,736.6
2025	341.8	8,124.2	4.2	30,767.1	23,853.0	1.28986	53,003.9

[a] Gross output is the value of gross domestic product (GDP) plus the value of intermediate inputs used to produce GDP.
[b] Resident population of the 50 states and the District of Columbia estimated for July 1 of each year.
[c] The gross domestic product implicit price deflator is used to convert nominal dollars to chained (2017) dollars.
[d] See "Nominal Dollars" in Glossary.
[e] See "Chained Dollars" in Glossary.

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

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

Sources: • **United States Population: 1949–1989**—U.S. Department of Commerce (DOC), U.S. Census Bureau, Current Population Reports Series P-25 (June 2000). **1990–1999**—DOC, U.S. Census Bureau, "Time Series of Intercensal State Population Estimates" (April 2002). **2000–2009**—DOC, U.S. Census Bureau, "Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico" (September 2011). **2010–2019**—DOC, U.S. Census Bureau, "Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico" (December 2019). **2020 forward**—DOC, U.S. Census Bureau, "Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico" (December 2024). • **World Population: 1950 forward**—DOC, U.S. Census Bureau, International Database (December 2024). • **United States as Share of World Population:** Calculated as U.S. population divided by world population. • **U.S. Gross Domestic Product: 1949 forward**—DOC, Bureau of Economic Analysis (BEA), National Income and Product Accounts (September 2025), Tables 1.1.5, 1.1.6, and 1.1.9. • **U.S. Gross Output: 1949–1996**—DOC, BEA, GDP by industry (Historical) data (November 2021). **1997 forward**—DOC, BEA, GDP by Industry data (September 2025).

Appendix B

Alternative Measures for the Energy Content of Noncombustible Renewables

Alternative Measures for the Energy Content of Noncombustible Renewables

Energy sources are measured in different physical units: liquid fuels in barrels or gallons, gases in cubic feet, coal in short tons, and electricity in kilowatthours. EIA converts each source into common British thermal units (Btu) to allow comparison among different types of energy and to calculate total energy concepts.

Noncombustible renewables (hydroelectric, geothermal, solar, and wind energy) are resources from which energy is extracted without burning or combusting fuel. When noncombustible renewables generate electricity, there is no fuel combustion and, therefore, no set Btu conversion factors for the energy sources.[1]

There are three broadly accepted ways to convert electricity generated from noncombustible renewables into Btu of primary energy—the captured energy, fossil fuel equivalency, and incident energy approaches. Each of these methods are described in detail below.

Captured Energy Approach

The captured energy approach converts primary energy consumption of noncombustible renewables from kilowatthours (kWh) to Btu using the constant conversion factor representing the heat content of electricity—3,412 Btu per kWh. Captured energy reflects the primary energy captured for economic use and does not include losses. In other words, it represents the net energy available for direct consumption after the transformation of a noncombustible renewable source of energy into electricity, where captured energy is the energy measured as the "output" of a generating unit, such as electricity from a wind turbine or solar plant.

The captured energy approach is often used to show the economically significant portion of the energy transformation associated with renewable energy sources. There is no market for the resource-specific energy apart from its immediate, site-specific energy conversion, and there is no substantive opportunity cost to its continued exploitation.[2] This approach is preferred by the *UN International Recommendations for Energy Statistics* (IRES) because the detailed data needed to estimate quantities of incident energy are not available now and are not likely to develop soon. This approach is also more closely tied to a physical market commodity, that is, electricity net generation, than the conceptual measure derived using the fossil fuel equivalency approach.

Fossil Fuel Equivalency Approach

The fossil fuel equivalency approach converts the consumption of noncombustible renewable electricity (in kWh) to Btu by applying a fossil fuel equivalency factor, based on the fossil-fuels heat rate. The fossil-fuels heat rate is equal to the average thermal efficiency across fossil-fueled fired generating plants based on fuel consumption and net generation data reported to EIA. The fossil fuel equivalent consumption represents the energy consumed as if the electricity were generated by fossil fuels and is useful for analysis when considering the amount of primary fossil fuel energy displaced by renewable energy sources.

However, unlike the captured energy approach, the fossil fuel equivalency approach is not as directly tied to any real market or physical quantity. The fossil fuel equivalency approach measures neither primary energy consumption nor fossil fuels actually displaced. Additionally, its use becomes increasingly problematic as noncombustible renewables begin to displace other renewables instead of fossil fuels.

Incident Energy Approach

Incident energy is the mechanical, radiation, or thermal energy that is measurable as the "input" of the device. EIA defines "incident energy" for noncombustible renewables as the gross energy that first strikes an energy conversion device:

- For hydroelectric, the energy contained in the water passing through the penstock (a closed conduit for carrying water to the turbines)
- For geothermal, the energy contained in the hot fluid at the surface of the wellbore

- For wind, the energy contained in the wind that passes through the rotor disc
- For solar, the energy contained in the sunlight that strikes the panel or collector mirror

The incident energy approach converts noncombustible renewable electricity to Btu by accounting for the "losses" that result from an inability to convert 100% of incident energy to a useful form of energy. EIA has not published total primary energy consumption statistics based on this approach because it is difficult to obtain accurate estimates of input energy without creating undue burden on survey respondents and possible concern about the quality of the resulting data. Few renewable electricity power plants track cumulative input energy due to its lack of economic significance or other purpose. In addition, estimated energy efficiencies of renewable conversion technologies vary significantly across technologies, site-specific configurations, and environmental factors.[3]

EIA now using the captured energy approach

Starting with the September 2023 *Monthly Energy Review* (MER), EIA began converting electricity generation from noncombustible renewables into Btu using the captured energy approach rather than the fossil fuel equivalency approach in its main data tables (reflected in MER Sections 1, 2, and 10). The Btu values of hydroelectric, geothermal, solar, and wind energy consumption and, consequently, total primary energy consumption and total energy production are lower for all time periods because of the new conversion factor (the heat content of electricity).

After a thorough review of the alternative approaches, EIA made the change for two primary reasons. First, adopting the captured energy approach promotes international comparability in energy statistics by adopting the standards provided in IRES. Second, as renewable energy continues to represent an increasingly larger portion of U.S. energy consumption over time, the fossil fuel equivalent values of generation from renewable sources become less relevant to our data users than the electrical energy provided by renewable sources.

Some analysts may still prefer to use the measures based on the fossil fuel equivalency approach, which was previously used by EIA. MER Tables B1–B4 present noncombustible renewable energy statistics using the fossil fuel equivalency approach.

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[1]Direct use of noncombustible renewables in the form of heat (e.g., solar thermal heating) is estimated separately and is measured in Btu.
[2]There is an initial opportunity cost when a facility is first built: water behind a dam might flood land that could have been used for other purposes, or a solar panel might shade an area that could have used the sunlight. But that is a "fixed" opportunity cost that does not change during the operation of the plant.
[3]Based on EIA research conducted in 2016, engineering estimates of conversion efficiencies for noncombustible renewables range from less than 20% for solar photovoltaics and geothermal to 90% for large-scale hydroelectricity plants. Those estimates are notional indications of the energy output as a percent of energy input at each technology based on typical equipment operating within the normal operating range for that technology.

Table B1. Primary Energy Overview, Fossil Fuel Equivalency Approach

(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**	**6.233**	**100.101**
2010 Total	**58.159**	**8.434**	**8.313**	**74.906**	**29.866**	**8.176**	**21.690**	**.916**	**80.723**	**8.434**	**8.266**	**97.512**
2011 Total	**60.529**	**8.269**	**9.306**	**78.104**	**28.748**	**10.373**	**18.375**	**.389**	**79.263**	**8.269**	**9.210**	**96.868**
2012 Total	**62.298**	**8.062**	**8.890**	**79.249**	**27.068**	**11.267**	**15.801**	**-.670**	**77.304**	**8.062**	**8.853**	**94.380**
2013 Total	**64.180**	**8.244**	**9.438**	**81.862**	**24.623**	**11.788**	**12.835**	**2.433**	**79.224**	**8.244**	**9.465**	**97.131**
2014 Total	**69.599**	**8.338**	**9.795**	**87.732**	**23.241**	**12.270**	**10.971**	**-.409**	**80.017**	**8.338**	**9.759**	**98.294**
2015 Total	**70.174**	**8.337**	**9.760**	**88.271**	**23.794**	**12.902**	**10.892**	**-1.764**	**79.090**	**8.337**	**9.743**	**97.398**
2016 Total	**65.460**	**8.427**	**10.469**	**84.356**	**25.378**	**14.119**	**11.259**	**1.758**	**78.319**	**8.427**	**10.401**	**97.373**
2017 Total	**68.519**	**8.419**	**11.253**	**88.191**	**25.458**	**17.946**	**7.512**	**1.940**	**77.901**	**8.419**	**11.132**	**97.644**
2018 Total	**75.824**	**8.438**	**11.575**	**95.837**	**24.833**	**21.224**	**3.610**	**1.789**	**81.281**	**8.438**	**11.365**	**101.236**
2019 Total	**81.449**	**8.452**	**11.624**	**101.525**	**22.865**	**23.476**	**-.610**	**-.440**	**80.425**	**8.452**	**11.465**	**100.475**
2020 Total	**76.209**	**8.251**	**11.583**	**96.042**	**19.988**	**23.464**	**-3.476**	**.433**	**73.169**	**8.251**	**11.418**	**92.999**
2021 Total	**78.019**	**8.131**	**12.220**	**98.370**	**21.455**	**25.071**	**-3.616**	**3.022**	**77.454**	**8.131**	**12.057**	**97.775**
2022 Total	**82.296**	**8.061**	**13.366**	**103.723**	**21.507**	**27.335**	**-5.828**	**1.986**	**78.529**	**8.061**	**13.149**	**99.880**
2023 Total	**86.174**	**8.099**	**13.309**	**107.582**	**21.657**	**29.656**	**-7.999**	**-1.029**	**77.262**	**8.099**	**13.128**	**98.554**
2024 January	7.077	.721	1.066	8.864	1.904	2.521	-.617	1.175	7.652	.721	1.043	9.422
February	6.923	.674	1.135	8.732	1.714	2.526	-.811	.237	6.363	.674	1.119	8.157
March	7.254	.662	1.263	9.179	1.736	2.650	-.914	-.033	6.330	.662	1.242	8.231
April	6.926	.601	1.265	8.793	1.770	2.362	-.591	-.517	5.832	.601	1.253	7.684
May	7.206	.679	1.277	9.162	1.939	2.564	-.625	-.516	6.067	.679	1.275	8.021
June	7.110	.712	1.274	9.096	1.824	2.595	-.771	-.177	6.171	.712	1.259	8.147
July	7.352	.729	1.198	9.280	1.967	2.551	-.583	-.034	6.738	.729	1.187	8.663
August	7.443	.729	1.195	9.366	1.785	2.625	-.840	.125	6.741	.729	1.174	8.651
September	7.160	.654	1.090	8.904	1.724	2.539	-.815	-.300	6.054	.654	1.073	7.789
October	7.461	.614	1.168	9.243	1.725	2.563	-.839	-.406	6.224	.614	1.155	7.999
November	7.168	.646	1.130	8.944	1.746	2.661	-.914	-.024	6.253	.646	1.104	8.006
December	7.465	.744	1.149	9.358	1.861	2.687	-.826	.558	7.220	.744	1.119	9.089
Total	**86.544**	**8.165**	**14.211**	**108.920**	**21.696**	**30.844**	**-9.147**	**.088**	**77.644**	**8.165**	**14.004**	**99.860**
2025 January	7.338	.749	1.208	9.295	1.901	2.578	-.678	R 1.359	8.050	.749	1.167	9.976
February	6.671	.646	1.124	8.441	1.613	2.431	-.818	.899	6.771	.646	1.098	R 8.521
March	7.632	.652	1.367	9.651	1.669	2.712	-1.043	R -.221	R 6.398	.652	1.334	R 8.387
April	7.294	.605	1.338	9.236	1.633	2.540	-.908	R -.463	5.935	.605	1.321	R 7.866
May	7.547	.649	1.327	9.523	1.740	2.583	-.843	R -.702	R 6.026	.649	1.295	R 7.978
June	7.343	.692	1.319	9.354	1.686	2.528	-.842	R -.242	R 6.291	.692	1.282	R 8.271
July	7.670	.739	1.300	9.709	1.745	2.552	-.807	R -.017	R 6.880	.739	1.263	R 8.885
August	7.752	.738	1.236	9.727	1.761	2.680	-.918	R -.183	R 6.679	.738	1.203	R 8.625
September	7.486	.684	1.126	9.296	1.724	2.678	-.954	R -.364	R 6.199	.684	1.091	R 7.978
October	7.694	.618	1.236	9.548	1.633	2.769	-1.136	-.315	6.278	.618	1.203	8.097
November	7.535	.666	1.189	9.390	1.605	2.735	-1.130	R -.007	R 6.444	.666	1.146	R 8.253
December	7.771	.757	1.273	9.801	1.870	2.893	-1.023	R .659	R 7.443	.757	1.239	R 9.437
Total	**89.732**	**8.195**	**15.044**	**112.971**	**20.580**	**31.679**	**-11.099**	**R .402**	**R 79.393**	**8.195**	**14.643**	**R 102.274**
2026 January	7.565	.765	1.290	9.620	1.869	2.766	-.897	1.058	7.775	.765	1.244	R 9.781
February	7.007	.651	1.200	8.859	1.652	R 2.594	-.941	.585	6.685	.651	1.165	8.503
March	7.785	.648	1.482	9.915	1.756	3.021	R -1.265	R -.146	R 6.409	.648	1.447	R 8.505
April	7.542	.599	1.412	9.553	1.644	3.151	-1.508	R -.129	R 5.932	.599	1.382	R 7.917
May	R 7.737	.679	1.440	R 9.856	1.647	3.233	-1.586	R -.251	R 5.926	.679	1.404	R 8.019
June	R 7.545	.718	1.468	R 9.732	1.617	R 2.999	R -1.383	R -.036	R 6.148	.718	1.436	R 8.313
July	7.868	.743	1.396	10.007	1.707	2.838	-1.131	.011	6.771	.743	1.361	8.887
7-Month Total	**53.050**	**4.804**	**9.688**	**67.543**	**11.891**	**20.601**	**-8.710**	**1.092**	**45.646**	**4.804**	**9.440**	**59.925**
2025 7-Month Total	**51.494**	**4.731**	**8.984**	**65.209**	**11.986**	**17.925**	**-5.938**	**.613**	**46.350**	**4.731**	**8.761**	**59.884**
2024 7-Month Total	**49.848**	**4.778**	**8.478**	**63.104**	**12.856**	**17.769**	**-4.913**	**.135**	**45.152**	**4.778**	**8.378**	**58.326**

[a] Coal, natural gas (dry), crude oil, and natural gas plant liquids.
[b] See Table B4 for notes on series components and estimation.
[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/#appendices (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: • **Production:** Table B2. • **Trade:** Tables 1.4a and 1.4b. • **Stock Change and Other:** Calculated as consumption minus production and net imports. • **Consumption:** Table B3.

Table B2. Primary Energy Production by Source, Fossil Fuel Equivalency Approach

(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**	**.063**	**.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**
2010 Total	**22.038**	**21.806**	**11.610**	**2.705**	**58.159**	**8.434**	**2.539**	**.208**	**.090**	**.923**	**4.553**	**8.313**	**74.906**
2011 Total	**22.221**	**23.406**	**12.012**	**2.890**	**60.529**	**8.269**	**3.103**	**.212**	**.110**	**1.168**	**4.712**	**9.306**	**78.104**
2012 Total	**20.677**	**24.610**	**13.849**	**3.162**	**62.298**	**8.062**	**2.629**	**.212**	**.156**	**1.340**	**4.554**	**8.890**	**79.249**
2013 Total	**20.001**	**24.859**	**15.868**	**3.451**	**64.180**	**8.244**	**2.562**	**.214**	**.226**	**1.601**	**4.835**	**9.438**	**81.862**
2014 Total	**20.286**	**26.718**	**18.590**	**4.005**	**69.599**	**8.338**	**2.466**	**.214**	**.338**	**1.727**	**5.049**	**9.795**	**87.732**
2015 Total	**17.946**	**28.067**	**19.685**	**4.476**	**70.174**	**8.337**	**2.320**	**.212**	**.427**	**1.776**	**5.025**	**9.760**	**88.271**
2016 Total	**14.667**	**27.576**	**18.552**	**4.665**	**65.460**	**8.427**	**2.471**	**.210**	**.572**	**2.095**	**5.122**	**10.469**	**84.356**
2017 Total	**15.625**	**28.325**	**19.582**	**4.987**	**68.519**	**8.419**	**2.765**	**.210**	**.779**	**2.342**	**5.156**	**11.253**	**88.191**
2018 Total	**15.363**	**31.882**	**22.852**	**5.727**	**75.824**	**8.438**	**2.661**	**.209**	**.918**	**2.481**	**5.306**	**11.575**	**95.837**
2019 Total	**14.256**	**35.187**	**25.655**	**6.352**	**81.449**	**8.452**	**2.562**	**.201**	**1.021**	**2.633**	**5.207**	**11.624**	**101.525**
2020 Total	**10.703**	**35.062**	**23.639**	**6.805**	**76.209**	**8.251**	**2.501**	**.203**	**1.216**	**2.963**	**4.700**	**11.583**	**96.042**
2021 Total	**11.596**	**35.807**	**23.517**	**7.099**	**78.019**	**8.131**	**2.225**	**.205**	**1.529**	**3.345**	**4.916**	**12.220**	**98.370**
2022 Total	**12.043**	**37.560**	**24.951**	**7.742**	**82.296**	**8.061**	**2.245**	**.205**	**1.892**	**3.827**	**5.196**	**13.366**	**103.723**
2023 Total	**11.750**	**39.008**	**26.936**	**8.480**	**86.174**	**8.099**	**2.114**	**.205**	**2.154**	**3.634**	**5.202**	**13.309**	**107.582**
2024 January	.911	3.271	2.213	.681	7.077	.721	.186	.017	.129	.300	.434	1.066	8.864
February	.910	3.145	2.172	.696	6.923	.674	.179	.016	.161	.353	.425	1.135	8.732
March	.866	3.289	2.327	.772	7.254	.662	.201	.017	.208	.389	.448	1.263	9.179
April	.741	3.153	2.273	.760	6.926	.601	.180	.016	.243	.406	.420	1.265	8.793
May	.814	3.263	2.337	.792	7.206	.679	.211	.016	.277	.338	.435	1.277	9.162
June	.890	3.196	2.260	.764	7.110	.712	.193	.016	.295	.333	.437	1.274	9.096
July	.897	3.344	2.333	.777	7.352	.729	.184	.016	.297	.244	.457	1.198	9.280
August	.972	3.313	2.366	.792	7.443	.729	.177	.016	.292	.252	.458	1.195	9.366
September	.942	3.184	2.258	.777	7.160	.654	.137	.016	.251	.251	.435	1.090	8.904
October	.912	3.336	2.395	.818	7.461	.614	.132	.016	.237	.341	.441	1.168	9.243
November	.844	3.229	2.302	.793	7.168	.646	.144	.017	.172	.346	.452	1.130	8.944
December	.882	3.397	2.386	.799	7.465	.744	.168	.017	.158	.341	.465	1.149	9.358
Total	**10.579**	**39.121**	**27.624**	**9.221**	**86.544**	**8.165**	**2.093**	**.196**	**2.719**	**3.894**	**5.308**	**14.211**	**108.920**
2025 January	.922	E 3.349	2.322	.745	7.338	.749	.185	.017	.186	.376	.444	1.208	9.295
February	.819	E 3.042	2.114	.696	6.671	.646	.168	.016	.199	.339	.402	1.124	8.441
March	.983	E 3.446	2.386	.817	7.632	.652	.193	.017	.278	.436	.442	1.367	9.651
April	.863	E 3.321	2.314	.796	7.294	.605	.197	.016	.317	.395	.413	1.338	9.236
May	.907	E 3.421	2.387	.833	7.547	.649	.210	.016	.348	.318	.436	1.327	9.523
June	.871	E 3.341	2.331	.801	7.343	.692	.191	.016	.368	.308	.435	1.319	9.354
July	.930	E 3.468	2.420	.850	7.670	.739	.172	.016	.385	.274	.453	1.300	9.709
August	.967	E 3.489	2.440	.856	7.752	.738	.173	.017	.365	.235	.445	1.236	9.727
September	.900	E 3.365	2.375	.846	7.486	.684	.132	.016	.323	.221	.434	1.126	9.296
October	.916	E 3.447	2.468	.863	7.694	.618	.143	.016	.286	.341	.450	1.236	9.548
November	.890	E 3.427	2.377	.840	7.535	.666	.159	.016	.219	.353	.443	1.189	9.390
December	.909	E 3.585	2.435	.841	7.771	.757	.206	.017	.187	.405	.457	1.273	9.801
Total	**10.876**	**E 40.702**	**28.369**	**9.785**	**89.732**	**8.195**	**2.129**	**.199**	**3.461**	**4.002**	**5.254**	**15.044**	**112.971**
2026 January	.928	E 3.493	E 2.346	.798	7.565	.765	.240	.018	.213	.383	.436	1.290	9.620
February	.849	E 3.210	E 2.184	.764	7.007	.651	.194	.016	.246	.342	.403	1.200	8.859
March	.938	E 3.556	E 2.421	.870	7.785	.648	.232	.017	.336	.450	.446	1.482	9.915
April	R .860	E 3.451	E 2.386	.846	7.542	.599	.194	.016	.363	.423	.416	1.412	9.553
May	R .871	RE 3.548	RE 2.436	.883	R 7.737	.679	.196	.016	.417	.355	.456	1.440	R 9.856
June	R .848	E 3.491	RE 2.363	.844	R 7.545	.718	.204	.016	.439	.361	.448	1.468	R 9.732
July	.873	E 3.652	E 2.460	.883	7.868	.743	.175	.017	.462	.277	.465	1.396	10.007
7-Month Total	**6.167**	**E 24.401**	**E 16.595**	**5.887**	**53.050**	**4.804**	**1.435**	**.115**	**2.476**	**2.591**	**3.071**	**9.688**	**67.543**
2025 7-Month Total	**6.294**	**E 23.388**	**16.273**	**5.539**	**51.494**	**4.731**	**1.316**	**.116**	**2.081**	**2.446**	**3.025**	**8.984**	**65.209**
2024 7-Month Total	**6.027**	**22.662**	**15.916**	**5.243**	**49.848**	**4.778**	**1.335**	**.115**	**1.609**	**2.363**	**3.057**	**8.478**	**63.104**

[a] Most data are estimates. See Table B4 for notes on series components and estimation.

[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/#appendices (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: • **Fossil Fuels** and **Nuclear Electric Power:** Table 1.2. • **Renewable Energy:** Table B4. • **Total:** Calculated as the sum of Fossil Fuels, Nuclear Electric Power, and Renewable Energy.

Table B3. Primary Energy Consumption by Source, Fossil Fuel Equivalency Approach

(Quadrillion Btu)

	Fossil Fuels[a]				Nuclear Electric Power	Renewable Energy[b]						Total[g]
	Coal	Natural Gas[c]	Petroleum[d]	Total[e]		Hydroelectric Power[f]	Geothermal	Solar	Wind	Biomass	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	.063	.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	6.233	100.101
2010 Total	20.834	24.575	35.321	80.723	8.434	2.539	.208	.090	.923	4.506	8.266	97.512
2011 Total	19.658	24.955	34.639	79.263	8.269	3.103	.212	.110	1.168	4.616	9.210	96.868
2012 Total	17.378	26.089	33.833	77.304	8.062	2.629	.212	.156	1.340	4.517	8.853	94.380
2013 Total	18.039	26.805	34.398	79.224	8.244	2.562	.214	.226	1.601	4.861	9.465	97.131
2014 Total	17.998	27.383	34.658	80.017	8.338	2.466	.214	.338	1.727	5.013	9.759	98.294
2015 Total	15.549	28.191	35.368	79.090	8.337	2.320	.212	.427	1.776	5.008	9.743	97.398
2016 Total	14.226	28.400	35.712	78.319	8.427	2.471	.210	.572	2.095	5.053	10.401	97.373
2017 Total	13.837	28.049	36.043	77.901	8.419	2.765	.210	.779	2.342	5.035	11.132	97.644
2018 Total	13.252	31.163	36.892	81.281	8.438	2.661	.209	.918	2.481	5.096	11.365	101.236
2019 Total	11.316	32.264	36.866	80.425	8.452	2.562	.201	1.021	2.633	5.048	11.465	100.475
2020 Total	9.181	31.669	32.331	73.169	8.251	2.501	.203	1.216	2.963	4.535	11.418	92.999
2021 Total	10.549	31.711	35.243	77.454	8.131	2.225	.205	1.529	3.345	4.753	12.057	97.775
2022 Total	9.888	33.379	35.319	78.529	8.061	2.245	.205	1.892	3.827	4.980	13.149	99.880
2023 Total	8.171	33.676	35.448	77.262	8.099	2.114	.205	2.154	3.634	5.021	13.128	98.554
2024 January	.879	3.859	2.914	7.652	.721	.186	.017	.129	.300	.411	1.043	9.422
February	.562	3.069	2.734	6.363	.674	.179	.016	.161	.353	.410	1.119	8.157
March	.494	2.896	2.944	6.330	.662	.201	.017	.208	.389	.427	1.242	8.231
April	.467	2.480	2.888	5.832	.601	.180	.016	.243	.406	.408	1.253	7.684
May	.563	2.417	3.089	6.067	.679	.211	.016	.277	.338	.433	1.275	8.021
June	.721	2.513	2.942	6.171	.712	.193	.016	.295	.333	.422	1.259	8.147
July	.838	2.839	3.062	6.738	.729	.184	.016	.297	.244	.446	1.187	8.663
August	.818	2.816	3.111	6.741	.729	.177	.016	.292	.252	.437	1.174	8.651
September	.664	2.498	2.896	6.054	.654	.137	.016	.251	.251	.418	1.073	7.789
October	.589	2.513	3.127	6.224	.614	.132	.016	.237	.341	.428	1.155	7.999
November	.570	2.802	2.885	6.253	.646	.144	.017	.172	.346	.425	1.104	8.006
December	.747	3.478	2.999	7.220	.744	.168	.017	.158	.341	.435	1.119	9.089
Total	7.912	34.179	35.590	77.644	8.165	2.093	.196	2.719	3.894	5.101	14.004	99.860
2025 January	.940	R 4.052	3.059	8.050	.749	.185	.017	.186	.376	.403	1.167	9.976
February	.733	3.339	2.700	6.771	.646	.168	.016	.199	.339	.377	1.098	R 8.521
March	.597	R 2.842	2.960	R 6.398	.652	.193	.017	.278	.436	.409	1.334	R 8.387
April	.549	R 2.454	2.934	5.935	.605	.197	.016	.317	.395	.396	1.321	R 7.866
May	.590	R 2.386	3.053	R 6.026	.649	.210	.016	.348	.318	.404	1.295	R 7.978
June	.755	R 2.498	3.039	R 6.291	.692	.191	.016	.368	.308	.398	1.282	R 8.271
July	.921	R 2.810	3.151	R 6.880	.739	.172	.016	.385	.274	.416	1.263	R 8.885
August	.817	R 2.727	3.137	R 6.679	.738	.173	.017	.365	.235	.412	1.203	R 8.625
September	.695	R 2.504	3.001	R 6.199	.684	.132	.016	.323	.221	.399	1.091	R 7.978
October	.652	2.524	3.102	6.278	.618	.143	.016	.286	.341	.417	1.203	8.097
November	.651	R 2.873	2.919	R 6.444	.666	.159	.016	.219	.353	.399	1.146	R 8.253
December	.771	3.614	3.060	R 7.443	.757	.206	.017	.187	.405	.423	1.239	R 9.437
Total	8.671	R 34.624	36.115	R 79.393	8.195	2.129	.199	3.461	4.002	4.853	14.643	R 102.274
2026 January	.820	R 3.915	3.040	7.775	.765	.240	.018	.213	.383	.390	1.244	R 9.781
February	.653	R 3.215	2.819	6.685	.651	.194	.016	.246	.342	.368	1.165	8.503
March	.539	R 2.869	3.002	R 6.409	.648	.232	.017	.336	.450	.412	1.447	R 8.505
April	R .486	R 2.474	2.974	R 5.932	.599	.194	.016	.363	.423	.386	1.382	R 7.917
May	R .548	2.433	2.945	R 5.926	.679	.196	.016	.417	.355	.420	1.404	R 8.019
June	R .668	2.513	2.969	R 6.148	.718	.204	.016	.439	.361	.416	1.436	R 8.313
July	.863	2.868	3.039	6.771	.743	.175	.017	.462	.277	.430	1.361	8.887
7-Month Total	4.578	20.288	20.789	45.646	4.804	1.435	.115	2.476	2.591	2.822	9.440	59.925
2025 7-Month Total	5.085	20.382	20.896	46.350	4.731	1.316	.116	2.081	2.446	2.803	8.761	59.884
2024 7-Month Total	4.525	20.074	20.573	45.152	4.778	1.335	.115	1.609	2.363	2.957	8.378	58.326

[a] Includes non-combustion use of fossil fuels.

[b] Most data are estimates. See Table B4 for notes on series components and estimation.

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

Sources: • **Fossil Fuels** and **Nuclear Electric Power:** Table 1.3. • **Renewable Energy:** Table B4. • **Total:** Calculated as the sum of Fossil Fuels, Nuclear Electric Power, Renewable Energy, and Electricity Net Imports (see Table 1.4c).

Table B4. Renewable Energy Production and Consumption by Source, Fossil Fuel Equivalency Approach (Trillion Btu)

	Production[a]				Consumption								
	Biomass			Total Renewable Energy[e]	Noncombustible (Fossil Fuel Equivalent)				Biomass				Total Renewable Energy
	Wood[b]	Biofuels[c]	Total[d]		Hydroelectric Power[f]	Geothermal[g]	Solar[h]	Wind[i]	Wood[j]	Waste[k]	Biofuels[l]	Total	
1950 Total	**1,562**	**NA**	**1,562**	**2,978**	**1,415**	**NA**	**NA**	**NA**	**1,562**	**NA**	**NA**	**1,562**	**2,978**
1955 Total	**1,424**	**NA**	**1,424**	**2,784**	**1,360**	**NA**	**NA**	**NA**	**1,424**	**NA**	**NA**	**1,424**	**2,784**
1960 Total	**1,320**	**NA**	**1,320**	**2,928**	**1,608**	**(s)**	**NA**	**NA**	**1,320**	**NA**	**NA**	**1,320**	**2,928**
1965 Total	**1,335**	**NA**	**1,335**	**3,396**	**2,059**	**2**	**NA**	**NA**	**1,335**	**NA**	**NA**	**1,335**	**3,396**
1970 Total	**1,429**	**NA**	**1,431**	**4,070**	**2,634**	**6**	**NA**	**NA**	**1,429**	**2**	**NA**	**1,431**	**4,070**
1975 Total	**1,497**	**NA**	**1,499**	**4,687**	**3,155**	**34**	**NA**	**NA**	**1,497**	**2**	**NA**	**1,499**	**4,687**
1980 Total	**2,474**	**NA**	**2,475**	**5,428**	**2,900**	**53**	**NA**	**NA**	**2,474**	**2**	**NA**	**2,475**	**5,428**
1985 Total	**2,687**	**93**	**3,016**	**6,084**	**2,970**	**97**	**NA**	**(s)**	**2,687**	**236**	**93**	**3,016**	**6,084**
1990 Total	**2,216**	**111**	**2,735**	**6,040**	**3,046**	**171**	**59**	**29**	**2,216**	**408**	**111**	**2,735**	**6,040**
1995 Total	**2,370**	**198**	**3,099**	**6,557**	**3,205**	**152**	**68**	**33**	**2,370**	**531**	**200**	**3,101**	**6,559**
2000 Total	**2,262**	**233**	**3,006**	**6,102**	**2,811**	**164**	**63**	**57**	**2,262**	**511**	**236**	**3,008**	**6,104**
2005 Total	**2,137**	**561**	**3,101**	**6,221**	**2,703**	**181**	**58**	**178**	**2,137**	**403**	**574**	**3,114**	**6,233**
2010 Total	**2,217**	**1,868**	**4,553**	**8,313**	**2,539**	**208**	**90**	**923**	**2,217**	**468**	**1,821**	**4,506**	**8,266**
2011 Total	**2,213**	**2,037**	**4,712**	**9,306**	**3,103**	**212**	**110**	**1,168**	**2,213**	**462**	**1,941**	**4,616**	**9,210**
2012 Total	**2,151**	**1,936**	**4,554**	**8,890**	**2,629**	**212**	**156**	**1,340**	**2,151**	**467**	**1,899**	**4,517**	**8,853**
2013 Total	**2,338**	**2,000**	**4,835**	**9,438**	**2,562**	**214**	**226**	**1,601**	**2,338**	**496**	**2,026**	**4,861**	**9,465**
2014 Total	**2,398**	**2,135**	**5,049**	**9,795**	**2,466**	**214**	**338**	**1,727**	**2,398**	**516**	**2,099**	**5,013**	**9,759**
2015 Total	**2,305**	**2,201**	**5,025**	**9,760**	**2,320**	**212**	**427**	**1,776**	**2,305**	**518**	**2,185**	**5,008**	**9,743**
2016 Total	**2,290**	**2,329**	**5,122**	**10,469**	**2,471**	**210**	**572**	**2,095**	**2,217**	**503**	**2,333**	**5,053**	**10,401**
2017 Total	**2,254**	**2,407**	**5,156**	**11,253**	**2,765**	**210**	**779**	**2,342**	**2,176**	**495**	**2,364**	**5,035**	**11,132**
2018 Total	**2,348**	**2,471**	**5,306**	**11,575**	**2,661**	**209**	**918**	**2,481**	**2,254**	**487**	**2,355**	**5,096**	**11,365**
2019 Total	**2,333**	**2,432**	**5,207**	**11,624**	**2,562**	**201**	**1,021**	**2,633**	**2,229**	**442**	**2,376**	**5,048**	**11,465**
2020 Total	**2,066**	**2,194**	**4,700**	**11,583**	**2,501**	**203**	**1,216**	**2,963**	**1,960**	**440**	**2,136**	**4,535**	**11,418**
2021 Total	**2,111**	**2,374**	**4,916**	**12,220**	**2,225**	**205**	**1,529**	**3,345**	**1,992**	**430**	**2,331**	**4,753**	**12,057**
2022 Total	**2,273**	**2,511**	**5,196**	**13,366**	**2,245**	**205**	**1,892**	**3,827**	**2,135**	**412**	**2,433**	**4,980**	**13,149**
2023 Total	**2,103**	**2,705**	**5,202**	**13,309**	**2,114**	**205**	**2,154**	**3,634**	**1,968**	**394**	**2,659**	**5,021**	**13,128**
2024 January	173	226	434	1,066	186	17	129	300	165	35	212	411	1,043
February	166	227	425	1,135	179	16	161	353	154	32	223	410	1,119
March	174	241	448	1,263	201	17	208	389	161	33	232	427	1,242
April	166	223	420	1,265	180	16	243	406	155	31	222	408	1,253
May	170	232	435	1,277	211	16	277	338	158	33	242	433	1,275
June	169	238	437	1,274	193	16	295	333	157	30	235	422	1,259
July	173	252	457	1,198	184	16	297	244	162	32	252	446	1,187
August	176	250	458	1,195	177	16	292	252	163	32	242	437	1,174
September	169	236	435	1,090	137	16	251	251	157	31	231	418	1,073
October	164	245	441	1,168	132	16	237	341	153	32	243	428	1,155
November	169	251	452	1,130	144	17	172	346	157	32	235	425	1,104
December	178	255	465	1,149	168	17	158	341	166	33	236	435	1,119
Total	**2,046**	**2,875**	**5,308**	**14,211**	**2,093**	**196**	**2,719**	**3,894**	**1,909**	**387**	**2,806**	**5,101**	**14,004**
2025 January	177	234	444	1,208	185	17	186	376	165	33	206	403	1,167
February	160	213	402	1,124	168	16	199	339	148	30	199	377	1,098
March	176	233	442	1,367	193	17	278	436	163	33	213	409	1,334
April	162	220	413	1,338	197	16	317	395	151	31	214	396	1,321
May	170	235	436	1,327	210	16	348	318	158	31	215	404	1,295
June	170	236	435	1,319	191	16	368	308	158	30	210	398	1,282
July	180	243	453	1,300	172	16	385	274	166	30	219	416	1,263
August	177	238	445	1,236	173	17	365	235	165	30	217	412	1,203
September	172	233	434	1,126	132	16	323	221	160	29	210	399	1,091
October	171	248	450	1,236	143	16	286	341	158	31	227	417	1,203
November	169	243	443	1,189	159	16	219	353	156	31	212	399	1,146
December	175	249	457	1,273	206	17	187	405	163	32	228	423	1,239
Total	**2,058**	**2,824**	**5,254**	**15,044**	**2,129**	**199**	**3,461**	**4,002**	**1,912**	**372**	**2,569**	**4,853**	**14,643**
2026 January	172	232	436	1,290	240	18	213	383	159	31	199	390	1,244
February	154	220	403	1,200	194	16	246	342	145	29	194	368	1,165
March	166	248	446	1,482	232	17	336	450	155	32	225	412	1,447
April	154	233	416	1,412	194	16	363	423	140	30	216	386	1,382
May	169	257	456	1,440	196	16	417	355	157	30	234	420	1,404
June	164	255	448	1,468	204	16	439	361	151	29	236	416	1,436
July	173	262	465	1,396	175	17	462	277	159	30	241	430	1,361
7-Month Total	**1,152**	**1,707**	**3,071**	**9,688**	**1,435**	**115**	**2,476**	**2,591**	**1,066**	**211**	**1,546**	**2,822**	**9,440**
2025 7-Month Total	**1,195**	**1,613**	**3,025**	**8,984**	**1,316**	**116**	**2,081**	**2,446**	**1,110**	**217**	**1,475**	**2,803**	**8,761**
2024 7-Month Total	**1,191**	**1,640**	**3,057**	**8,478**	**1,335**	**115**	**1,609**	**2,363**	**1,113**	**227**	**1,618**	**2,957**	**8,378**

[a] For hydroelectric power, geothermal, solar, wind, and biomass waste, production equals consumption.

[b] Wood and wood-derived fuels. Through 2015, wood production equals consumption. Beginning in 2016, wood production equals consumption plus densified biomass exports.

[c] Total biomass inputs to the production of fuel ethanol and biodiesel. Beginning in 2011, also includes production of renewable diesel fuel. Beginning in 2014, also includes production of other biofuels.

[d] Includes biomass waste.

[e] Hydroelectric power, geothermal, solar, wind, and biomass.

[f] Conventional hydroelectricity net generation (converted to Btu by multiplying by the total fossil fuels heat rate factors).

[g] Geothermal electricity net generation (converted to Btu by multiplying by the total fossil fuels heat rate factors), and geothermal heat pump and direct use energy.

[h] Solar photovoltaic (PV) and solar thermal electricity net generation (converted to Btu by multiplying by the total fossil fuels heat rate factors), and solar thermal direct use energy.

[i] Wind electricity net generation (converted to Btu by multiplying by the total fossil fuels heat rate factors).

[j] Wood and wood-derived fuels.

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

[l] Fuel ethanol (minus denaturant), biodiesel, renewable diesel fuel, and other biofuels consumption; plus losses and co-products from the production of fuel ethanol and biodiesel.

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

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

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

Sources: • **Biomass:** Table 10.1. • **Hydroelectric Power** and **Wind:** Calculated as electricity net generation (see Table 7.2a) multiplied by the total fossil fuels heat rate factors. • **Geothermal:** Calculated as geothermal electricity net generation (see Table 7.2a) multiplied by the total fossil fuels heat rate factors; plus geothermal heat pump and direct use energy in the residential, commercial, and industrial sectors (see Tables 10.2a and 10.2b) .• **Solar:** Calculated as solar electricity net generation (see Table 7.2a) multiplied by the total fossil fuels heat rate factors; plus solar thermal direct use energy (see Table 10.5). • **Total Production:** Calculated as the sum of biomass production and noncombustible consumption. • **Total Consumption:** Calculated as the sum of biomass consumption and noncombustible consumption.

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Appendix C
Electric Vehicle Charging Infrastructure

Table C1. Electric Vehicle Charging Infrastructure

(Number)

	Locations[a]							Ports						
	With Public Ports Only	With Private Ports Only	With Public and Private Ports	With Networked Ports Only[b]	With Non-Networked Ports Only[c]	With Networked and Non-Networked Ports	Total	DC[d] Fast-Charging Ports	Level 2 Charging Ports	Level 1 Charging Ports	Legacy Charging Ports	Total	DC[d] Fast-Charging Ports per Location[e]	Level 2 Charging Ports per Location[f]
2007 Year	NA	NA	NA	NA	NA	NA	432	NA	NA	NA	NA	NA	NA	NA
2008 Year	NA	NA	NA	NA	NA	NA	440	NA	NA	NA	NA	NA	NA	NA
2009 Year	NA	NA	NA	NA	NA	NA	484	NA	NA	NA	NA	NA	NA	NA
2010 Year	NA	NA	NA	NA	NA	NA	626	NA	NA	NA	NA	NA	NA	NA
2011 Year	NA	NA	NA	NA	NA	NA	2,100	NA	NA	NA	NA	5,070	NA	NA
2012 Year	NA	NA	NA	NA	NA	NA	6,200	NA	NA	NA	NA	15,192	NA	NA
2013 Year	NA	NA	NA	NA	NA	NA	8,100	NA	NA	NA	NA	19,472	NA	NA
2014 Year	NA	NA	NA	NA	NA	NA	10,957	1,494	20,636	3,781	NA	25,913	NA	NA
2015 Year	12,267	1,235	1,474	9,583	4,502	891	14,976	7,046	45,497	4,203	597	57,343	3.20	3.34
2016 Year	16,078	1,734	1,532	12,756	5,007	1,581	19,344	10,874	60,635	4,085	362	75,956	3.55	3.49
2017 Year	19,721	1,812	1,455	15,659	5,203	2,126	22,988	12,554	75,236	3,764	453	92,007	3.74	3.62
2018 Year	21,920	1,890	1,448	17,166	5,379	2,713	25,258	11,739	83,681	2,905	108	98,433	3.89	3.59
2019 Year	24,374	2,205	1,339	19,238	5,959	2,721	27,918	14,898	93,239	3,080	92	111,309	3.94	3.68
2020 Year	28,325	1,912	1,522	22,748	6,239	2,772	31,759	19,337	109,590	2,808	61	131,796	4.17	3.83
2021 Year	45,583	2,460	1,577	39,581	7,212	2,827	49,620	24,575	130,059	3,797	56	158,487	3.98	2.92
2022 Year	52,801	2,708	1,704	48,627	8,082	504	57,213	30,193	152,306	3,415	45	185,959	4.07	2.98
2023 Year	64,515	3,183	1,184	60,085	8,109	688	68,882	41,722	170,519	3,263	29	215,533	4.14	2.83
2024 January	65,260	3,212	1,151	60,869	8,101	653	69,623	42,775	171,963	3,203	29	217,970	4.15	2.83
February	65,915	3,253	1,143	61,619	8,050	642	70,311	43,781	173,216	3,191	29	220,217	4.14	2.83
March	66,650	3,283	1,149	62,396	8,047	639	71,082	44,866	175,167	3,191	29	223,253	4.14	2.84
April	67,863	3,313	1,151	63,628	8,056	643	72,327	46,387	178,750	3,192	29	228,358	4.14	2.85
May	68,444	3,329	1,140	64,153	8,097	663	72,913	47,333	180,977	3,193	29	231,532	4.14	2.87
June	69,231	3,349	1,142	64,962	8,105	655	73,722	48,218	182,927	3,192	29	234,366	4.13	2.88
July	70,034	3,653	1,125	66,044	8,091	677	74,812	49,156	186,752	3,187	29	239,124	4.12	2.90
August	70,494	3,698	1,113	66,556	8,072	677	75,305	50,518	188,728	3,176	29	242,451	4.17	2.91
September	70,966	3,708	1,106	67,082	8,030	668	75,780	51,360	186,820	3,173	29	241,382	4.18	2.87
October	71,825	3,783	1,066	67,819	8,221	634	76,674	52,443	189,944	3,147	29	245,563	4.18	2.89
November	72,469	3,796	1,055	68,517	8,173	630	77,320	53,861	191,109	3,140	28	248,138	4.21	2.89
December	73,083	3,793	1,047	69,176	8,122	625	77,923	54,728	189,195	3,136	28	247,087	4.20	2.84
2025 January	74,051	3,728	1,036	70,202	8,276	337	78,815	55,868	190,406	2,903	28	249,205	4.19	2.83
February	74,687	3,730	1,037	70,839	8,278	337	79,454	56,666	191,313	2,903	28	250,910	4.20	2.83
March	75,152	3,740	1,037	71,310	8,281	338	79,929	58,301	194,414	2,903	28	255,646	4.26	2.86
April	74,831	3,756	1,034	70,992	8,299	330	79,621	58,829	194,618	2,913	28	256,388	4.38	2.87
May	75,237	3,739	1,005	71,935	7,831	215	79,981	59,974	193,406	2,725	26	256,131	4.41	2.84
June	75,113	3,787	963	71,888	7,797	178	79,863	61,426	191,957	2,723	25	256,131	4.45	2.84
July	75,740	3,799	955	72,566	7,758	170	80,494	62,379	193,704	2,717	25	258,825	4.45	2.84
August	76,220	4,361	938	72,935	8,418	166	81,519	63,603	199,963	3,049	25	266,640	4.47	2.90
September	76,846	4,374	913	73,564	8,405	164	82,133	64,783	201,028	3,049	25	268,885	4.49	2.90
October	77,021	4,379	904	73,787	8,363	154	82,304	65,870	201,437	3,034	25	270,366	4.51	2.91
November	77,404	4,374	889	74,262	8,262	143	82,667	67,554	202,104	3,008	24	272,690	4.57	2.91
December	77,718	4,377	874	74,638	8,196	135	82,969	69,277	202,663	3,005	24	274,969	4.62	2.91
2026 January	76,530	4,695	430	73,494	8,034	127	81,655	69,654	199,470	2,979	24	272,127	4.73	2.92
February	76,987	4,696	430	73,957	8,036	120	82,113	70,390	200,108	2,979	24	273,501	4.73	2.92
March	77,219	4,695	428	74,201	8,022	119	82,342	71,386	200,797	2,979	22	275,184	4.76	2.92
April	77,793	4,695	422	74,796	7,997	117	82,910	72,378	201,726	2,977	21	277,102	4.76	2.92
May	78,373	4,700	422	75,398	7,980	117	83,495	73,888	203,158	2,976	21	280,043	4.82	2.92
June	79,076	4,703	419	76,123	7,961	114	84,198	74,085	204,779	2,973	21	281,858	4.80	2.91
July	79,748	4,688	423	76,867	7,880	112	84,859	75,215	206,819	2,705	21	284,760	4.83	2.92
August	R 79,633	R 4,646	414	R 76,878	R 7,727	88	R 84,693	R 76,341	R 207,049	R 2,713	14	R 286,117	R 4.87	2.94
September	80,328	4,597	417	77,582	7,673	87	85,342	78,009	208,612	2,707	14	289,342	4.93	2.94

[a] Includes all of the electric vehicle (EV) charging ports located at a single location regardless of who is able to access the ports, what charging network they belong to, or the level of charging. Ports are determined to be at the same location based on latitude, longitude, and AFDC equipment ID number.

[b] Networked ports are connected to the internet, can communicate with their EV service provider, have a dedicated platform that allows users to find the chargers, and pay to charge. The service provider can manage who can access the port and the cost of charging. The charging infrastructure may also be able to communicate directly with drivers, other charging infrastructure, and utilities.

[c] Non-networked ports are not connected to the internet and provide only basic charging capabilities.

[d] Direct current.

[e] Calculated as the total number of DC fast charging ports divided by the total number of locations with DC fast charging ports (available in the microdata file). Includes only locations with DC fast charging ports.

[f] Calculated as the total number of Level 2 charging ports divided by the total number of locations with Level 2 charging ports (available in the microdata file). Includes only locations with Level 2 charging ports.

R=Revised. NA=Not available.

Notes: • Does not include data on charging infrastructure at single-family residential locations. • See "Appendix C Methodology and Sources" and end of section. • See "Electric Vehicle" in Glossary. • Data are at end of period. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#appendices (Excel and CSV files) for all available national and state annual and monthly data beginning in June 2015 and monthly microdata file.

Sources: See end of section.

Data Source

The U.S. Energy Information Administration (EIA) receives administrative electric vehicle (EV) charging infrastructure data from the U.S. Department of Energy, Office of Critical Minerals and Energy Innovation Alternative Fuels Data Center (AFDC).[1] AFDC collects and publishes location-level charging infrastructure data that allows alternative fuel vehicle owners to find fueling and charging stations near them or along a route. AFDC receives daily updates from many of the networked providers.[2] Networked providers that do not provide daily updates provide regular updates. AFDC contacts non-networked[3] providers every two years to determine if the stations are still in service.[4] AFDC does not collect data on charging infrastructure at single-family residential locations.

Historical annual data (2007-2014)

Historical annual data come from the AFDC Alternative Fueling Station Counts by State (https://afdc.energy.gov/stations/states?count=total&include_temporarily_unavailable=false&date=) and are included in the 2023 historical data file (https://afdc.energy.gov/files/docs/historical-station-counts.xlsx?year=2023). Estimated location counts for 2011-2013 are from AFDC analysis (https://afdc.energy.gov/data/10964).

Historical monthly data (June 2015 – December 2021)

The National Laboratory of the Rockies (NLR), which manages the AFDC, provided the historical data to EIA. The data began in June 2015 and went through December 2021, however not all months were available. The table below shows the months of data EIA received. For the months that are blacked out, EIA did not receive any data.

2015	2016	2017	2018	2019	2020	2021
			January	January	January	January
	February	February	February	February	February	February
	March	March	March	March	March	March
	April	April	April	April	April	April
		May		May	May	
June	June	June	June	June	June	June
	July		July	July	July	July
August		August	August	August	August	August
September	September	September	September	September	September	September
		October	October	October	October	October
November	November	November	November	November		November
		December	December	December	December	December

Monthly updates (January 2022 – present)

Beginning in January 2022, EIA began pulling the data through the AFDC API[5] on the last business day of every month.

Data

EIA uses multiple variables from the AFDC database to develop the MER PDF, excel, CSV, microdata and monthly state data output files. AFDC variables of interest include:

- Location information – station name, ID, fuel type code, open date, access code, status code, facility type, EV renewable source, EV pricing
- Physical location information – latitude, longitude, street address, city, state, zip, intersection/directions
- Charing port information – EV network, EV connector types, EV DC fast num, EV level 1 EVSE num, EV level 2 EVSE num, EV other EVSE

Historical data series included variables with different names but with the same data. The charging port information was structured differently in historical datasets. Work was completed to convert the data in the historical datasets into the same format as the current datasets.

Data quality

The EV charging infrastructure data are administrative data and do not have the same level of statistical accuracy as data published from many of EIA's surveys.

Coverage

The data do not represent the entire population or a statistically representative subset of the population of EV charging infrastructure. Instead, the data represent the known to NLR EV charging infrastructure at the time of the data pull. NLR works with EV charging network providers to receive daily updates.[6] The accuracy and timeliness of the networked providers charging infrastructure will continue to improve as additional networked providers convert to providing daily updates to NLR. There are also non-networked public and private EV chargers, and it is harder to track when these ports become available for use or are decommissioned. These challenges result in less EV charging infrastructure reported than exists, but it is unknown how many additional EV charger locations and ports exist. It is likely that the networked EV charging infrastructure are more accurately represented than the non-networked charging infrastructure. It is also likely that that the public charging infrastructure is more accurately represented than the private charging infrastructure due to a lack of incentive for the owners of private charging infrastructure to make the existence of their ports known to the public.

Data Cleaning

EIA has not verified the accuracy of the administrative data and only conducted minimal cleaning of the data. The cleaning EIA did complete included:

- Fixing latitudes and longitudes if they equaled 0, 0 or 1, -1, to facility creation of location ID
- Normalizing the naming convention of several variables including the electric network providers and the facility type
- Removing charging infrastructure outside of the United States, that had not opened yet, and non-EV locations

Breaks in series

There was a break in series in the number of charging locations between December 2020 and January 2021 because of a definitional change to align with the international standard – Open Charge Point Interface (OCPI).[7]

Duplicate observations

It is likely that duplicate observations exist. Duplicate observations may be introduced multiple ways:

- Multiple people adding the same charging port
- Updates to the networked providers database creating the appearance of a new charging port
- Changes in the underlying data structure of the historical data series creating the appearance of new ports
- EIA's imputation of number of charging ports to the date the charging port opened, not the date it first appeared

Because EIA cannot verify if these are duplicates, the details of the possibly duplicated charging infrastructure remain in the database.

Creation of the location and port id

In most historical datasets, the AFDC data included an equipment ID variable that is helpful to identify EV charging locations. However, this variable was inadequate to track EV charging location overtime for a couple reasons:

1. Between February 2017 and January 2018, 10 monthly datasets are missing equipment IDs
2. Ports located at the same location could have different equipment IDs for various reasons:
    a. Co-located public and private ports have different equipment IDs
    b. Co-located networked and non-networked ports have different equipment IDs
    c. Ports that either came online or were added to the AFDC database at different times have different equipment IDs
    d. Changes in underlying systems could cause an already established port to receive a new equipment ID

For these reasons, EIA created a new ID variable called the "Location ID" using latitude and longitude pairings and equipment ID. It is common for a location ID to be associated with multiple latitudes and longitudes parings as well as multiple equipment IDs due to responses to these variables changing in the historical datasets.

To allow for variation across ports at a location, EIA created a "Port ID" variable using access group (public versus private access), network provider, port level (DC fast charger, Level 2, Level 1, or Legacy), and equipment ID. Every unique combination of the previously mentioned variables received a different Port ID.

Imputation

EIA imputes all missing and incomplete data. Historical datasets had missing subsets of data, so EIA had to fill in the missing data. The missing subsets varied from large (all private charging ports) to small (ports missing for one month and then reappearing during the next month). EIA filled in the missing month with the port count data from the following month.

EIA also imputed data in months that we did not receive any data from NLR. EIA imputed the data using data from the first month following the missing month if the location open date was during the missing month or prior. We did not extend the life of any ports if the last month they appeared in was the month prior to the missing month. We assumed the last month in service was the last month the port appeared, not during the missing month.

In addition, we imputed to remove errors that only appear in one month. For each historical month, EIA compared the previous and following months. If those months were equal but the middle month was different, then EIA updated the middle month to match the other months. New EV ports require a long time lag to install, so it is unlikely that the number of ports would change for a single month then return to their original number.

It is common for EV infrastructure to be added to the AFDC website months or years after the location came online. Because of this, EIA also backfilled EV charging port data to cover all months since the port was available, not only when it appeared in the AFDC database. The MER conducts this backfill imputation twice per year, in the May and November MERs, to correspond with the release of data in the State Energy Data System (SEDS).[8]

Data quality analysis

In December 2023 and January 2024, we conducted a data quality evaluation study to assess the accuracy of the number of electric vehicle (EV) charging ports and charging locations. The study relied on a virtual ground truthing process that compared the number of charging ports listed for 120 randomly sampled charging locations from the August 2023 MER File compared to what EIA observed in online resources available, particularly online street-level imagery. A paired t-test found no significant mean difference between the MER File charging port counts versus observed charging port counts at a 99% confidence level. The MER File reflected the observed number of charging ports approximately 94% of the time, and the MER File reflected the observed number of charging ports within an absolute value difference of two charging ports approximately 99% of the time. The study also identified potential sources of error that contributed to charging port count differences but based on the quantitative findings of the study, these possible sources of error seemed to have limited effect on the MER File's accuracy. Overall, the study findings show that the MER File's data quality accuracy was generally high at reflecting observable charging port counts.

Available data

In addition to the monthly and annual national data, monthly state level data and a microdata file are also available at http://www.eia.gov/totalenergy/data/monthly/#appendices.

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1. Alternative Fuels Data Center: https://afdc.energy.gov/stations/#/find/nearest
2. Networked ports are connected to the internet, can communicate with their EV service provider, have a dedicated platform that allows users to find the chargers and pay to charge. The service provider can manage who can access the station and the cost of charging. The charging infrastructure may also be able to communicate directly with drivers, other charging infrastructure, and utilities.
3. Non-networked ports are not connected to the internet and provide only basic charging capabilities.
4. Details on the EV charging infrastructure data received by AFDC: https://afdc.energy.gov/stations/#/find/nearest?show_about=true
5. AFDC API details: https://developer.nrel.gov/docs/transportation/alt-fuel-stations-v1/all/
6. For more details of the networked providers NLR is currently receiving daily updates from see: https://afdc.energy.gov/stations/#/find/nearest?show_about=true
7. For more details on the OCIP see https://afdc.energy.gov/stations/#/find/nearest?show_about=true
8. For more information on SEDS see https://www.eia.gov/state/seds/