



Short-Term Energy Outlook (STEO)

Forecast highlights

Global liquid fuels

- For the 2018 April–September summer driving season, EIA forecasts U.S. regular gasoline retail prices to average \$2.74/gallon (gal), up from an average of \$2.41/gal last summer (see [Summer Fuels Outlook](#)). The higher forecast gasoline prices are primarily the result of higher forecast crude oil prices. For all of 2018, EIA expects U.S. regular gasoline retail prices to average \$2.64/gal and gasoline retail prices for all grades to average \$2.76/gal, which would result in the average U.S. household spending about \$190 (9%) more on motor fuel in 2018 compared with 2017.
- Brent crude oil spot prices averaged \$66 per barrel (b) in March. EIA forecasts Brent spot prices will average about \$63/b in both 2018 and 2019. EIA expects West Texas Intermediate (WTI) crude oil prices to average \$4/b lower than Brent prices in both 2018 and 2019. NYMEX WTI futures and options contract values for July 2018 delivery that traded during the five-day period ending April 5, 2018, suggest a range of \$52/b to \$78/b encompasses the market expectation for July 2018 WTI prices at the 95% confidence level.
- EIA estimates that U.S. crude oil production averaged 10.4 million barrels per day (b/d) in March, up 260,000 b/d from the February level. Total U.S. crude oil production averaged [9.3 million b/d in 2017](#). EIA projects that U.S. crude oil production will average 10.7 million b/d in 2018, which would mark the highest annual average U.S. crude oil production level, surpassing the previous record of 9.6 million b/d set in 1970. EIA forecasts that 2019 crude oil production will again increase, averaging 11.4 million b/d.

Natural gas

- U.S. dry natural gas production averaged 73.6 billion cubic feet per day (Bcf/d) in 2017. EIA forecasts dry natural gas production will average 81.1 Bcf/d in 2018, establishing a new record. EIA expects natural gas production will rise by 1.7 Bcf/d in 2019.
- Growing U.S. natural gas production is expected to support both growing domestic consumption and increasing natural gas exports in the forecast. EIA forecasts U.S. consumption of natural gas to increase by 4.2 Bcf/d (5.7%) in 2018 and by 0.7 Bcf/d (0.9%) in 2019, with electric power generation the leading contributor to this increase.

EIA also expects [net natural gas exports](#) to increase from 0.4 Bcf/d in 2017 to an annual average of 2.2 Bcf/d in 2018 and 4.4 Bcf/d in 2019.

- EIA estimates that natural gas inventories ended March (typically considered the end of the winter heating season) at almost 1.4 trillion cubic feet (Tcf), which was 19% lower than the previous five-year average. Based on a forecast of rising production, EIA forecasts that natural gas inventories will increase by more than the five-year average rate of growth during the injection season (April–October) to reach almost 3.8 Tcf on October 31, which would be 2% lower than the previous five-year average.
- EIA expects Henry Hub natural gas spot prices to average \$2.99/million British Thermal units (MMBtu) in 2018 and \$3.07/MMBtu in 2019. The average NYMEX futures and options contract values for July 2018 delivery that traded during the five-day period ending April 5, 2018, suggest that a range of \$2.30/MMBtu to \$3.43/MMBtu encompasses the market expectation for July Henry Hub natural gas prices at the 95% confidence level.

Electricity, coal, renewables, and emissions

- For the summer cooling season (June–August), EIA forecasts that the average U.S. household will spend \$426 on electricity bills, which would be an increase of more than 3% from last summer. EIA forecasts average household electricity use will be 1% higher this summer compared with last summer, based on a forecast of slightly warmer temperatures, and that retail electricity prices will be 2% higher than last summer.
- EIA expects the share of U.S. total utility-scale electricity generation from natural gas-fired power plants to rise from 32% in 2017 to 34% in 2018 and to remain at 34% in 2019. The forecast electricity generation share from coal averages 29% in both 2018 and 2019, down from 30% in 2017. The nuclear share of generation was 20% in 2017 and is forecast to average 20% in 2018 and 19% in 2019. Nonhydropower renewables provided slightly less than 10% of electricity generation in 2017 and are expected to provide 10% in 2018 and nearly 11% in 2019. The generation share of hydropower was about 7% in 2017 and is forecast to fall to less than 7% in both 2018 and 2019.
- EIA forecasts coal production to decline by 5% to 738 million short tons (MMst) in 2018. The production decrease is largely attributable to lower forecasts of coal use in the electric power sector (down 4% in 2018). Lower expected global demand for U.S. coal exports in 2018 and 2019 also contributes to the forecast of lower coal production. EIA expects production to then increase slightly to 748 MMst in 2019.
- In 2017 EIA estimates that wind generated an average of 697,000 megawatthours per day (MWh/d). EIA projects that will rise to 735,000 MWh/d in 2018 and to 779,000 MWh/d in 2019. If factors such as precipitation and snowpack remain as forecast, conventional hydropower is projected to generate 732,000 MWh/d in 2019, [making it](#)

the first year that wind generation would exceed hydropower generation in the United States.

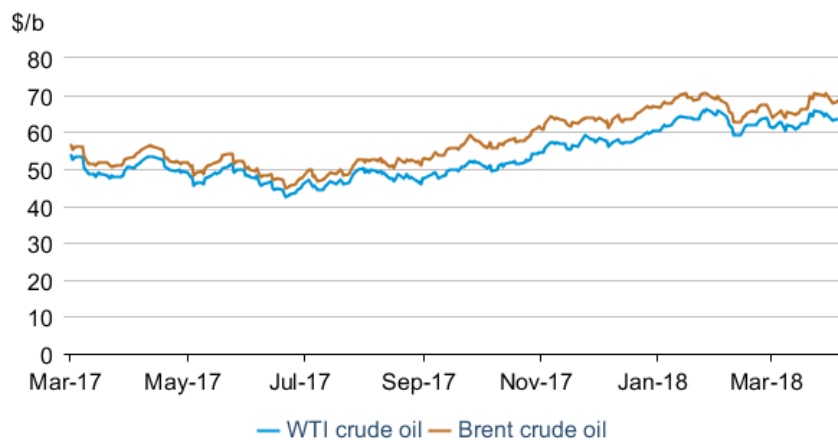
- After declining by 0.7% in 2017, EIA forecasts that energy-related carbon dioxide (CO₂) emissions will increase by 0.9% in 2018 and by another 1.0% in 2019. Energy-related CO₂ emissions are sensitive to changes in weather, economic growth, and energy prices.

Petroleum and natural gas markets review

Crude oil

Prices: The front-month futures price for North Sea Brent crude oil settled at \$68.33 per barrel (b) on April 5, an increase of \$4.50/b from March 1, 2018. Front-month futures prices for West Texas Intermediate (WTI) crude oil for delivery at Cushing, Oklahoma, increased by \$2.55/b during the same period, settling at \$63.54/b on April 5 (**Figure 1**). March Brent and WTI monthly average spot prices were 70 cents/b and 49 cents/b higher, respectively, than the February average spot prices.

Figure 1. Crude oil front-month futures prices



 CME Group and Intercontinental Exchange, as compiled by Bloomberg L.P.

Continuing draws in U.S. and global oil inventories as well as actual and potential supply disruptions may have put upward pressure on crude oil prices in March. Economic and political instability in [Venezuela](#) continues to affect its crude oil production. EIA estimates Venezuelan crude oil production averaged 1.5 million barrels per day (b/d) in March, a decline of about 24% year-over-year. In addition, whether or not the United States will extend the [Joint Comprehensive Plan of Action](#) (JCPOA) remains uncertain. Without an extension, it could lead to the reinstatement of sanctions on Iran, which could affect Iran's oil production and exports.

Commercial [crude oil inventories](#) in the United States fell lower than the previous five-year average for the week ending March 16, 2018, the first time inventories were lower than the five-year average since 2014. Large inventory declines in the United States during the past year

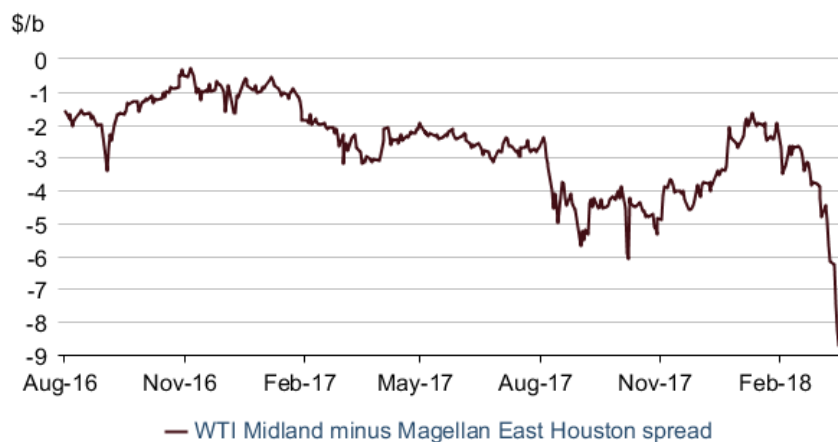
contributed to the 267 million barrel decline in total petroleum inventories since January 2017 in countries in the Organization for Economic Cooperation and Development (OECD), which are estimated to be 2.8 billion barrels as of the end of March.

Despite these supply developments, demand-side factors could have tempered some of the upward oil price pressures in recent weeks. Both the United States and China announced potential tariffs on several billion dollars' worth of each other's goods in March. A slowdown in global trade could affect oil demand and presents downside risks to the global oil consumption forecast, although the forecast was revised higher from EIA's previous STEO. EIA forecasts that global oil consumption will grow by 1.8 million b/d in both 2018 and 2019.

Crude oil price spreads: Crude oil production in the Permian region of Texas and New Mexico could be facing pipeline constraints, which is reflected in a widening discount of WTI Midland crude oil prices to Magellan East Houston crude oil prices. The WTI Midland price discount settled at -\$8.70/b on April 5, the largest discount since price postings for Magellan East Houston began in 2016 (**Figure 2**).

According to EIA's March *Drilling Productivity Report* (DPR), crude oil production growth in the Permian region is forecast to accelerate in March and April, growing month-over-month by 0.07 million b/d and 0.08 million b/d, respectively. The latest pipeline out of the region to begin service is the 0.4 million b/d Midland-to-Sealy pipeline, which began service in the fourth quarter of 2017 and is starting full operations this month. However, the widening price spreads suggest that takeaway constraints could already be affecting oil producers. New pipelines and pipeline expansions are not expected to be completed until the middle of 2019, which could lead to further price volatility for Midland crude oil.

Figure 2. WTI Midland minus Magellan East Houston

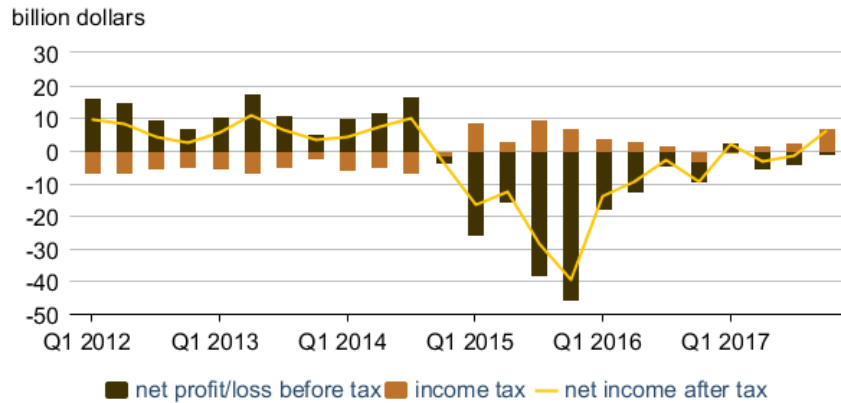


eia Bloomberg L.P.

Fourth-quarter 2017 financials: Quarterly financial results for 46 U.S. oil exploration and production companies reveal significant effects from the changes to corporate income tax law enacted at the end of 2017. These producers collectively claimed \$7 billion in tax benefits in the

quarter, contributing to an annual effective tax rate of -147%, which was likely because of a [one-time revaluation of the estimates of their future tax liabilities](#) at the lower corporate rate (**Figure 3**). In addition to the lower corporate income tax rate, U.S. companies are also allowed to accelerate the depreciation of capital investments made through 2023. These two factors could contribute to an increase in investment in upstream production.

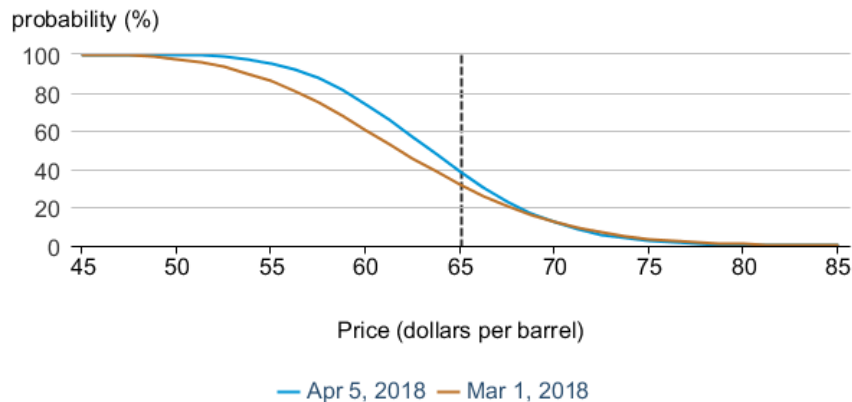
Figure 3. Net profit/loss and income tax for 46 publicly traded U.S. oil companies



 U.S. Energy Information Administration, based on Evaluate Energy

Market-derived probabilities: The June 2018 WTI contract averaged \$63.64/b for the five trading days ending April 5 and has a [market-derived probability](#) of exceeding \$65/b of 38% (**Figure 4**). This contract had a 32% market-derived probability of exceeding \$65/b as of March 1. Implied volatility decreased slightly since March 1, but the increase in WTI prices contributed to increasing the probability of exceeding \$65/b.

Figure 4. Probability of the June 2018 WTI contract expiring above price levels

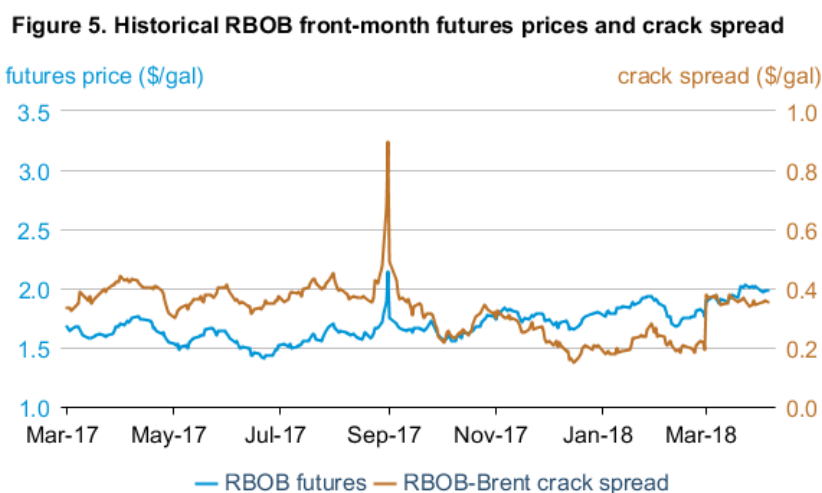


 U.S. Energy Information Administration, CME Group

Petroleum products

Gasoline prices: The front-month futures price of reformulated blendstock for oxygenate blending (RBOB, the petroleum component of gasoline used in many parts of the country) at New York Harbor settled at \$1.98 per gallon (gal) on April 5, 2018, **(Figure 5)**, an increase of 9 cents/gal since March 1, 2018. The RBOB–Brent crack spread (the difference between the price of RBOB and the price of Brent crude oil) decreased by 2 cents/gal to settle at 35 cents/gal over the same period.

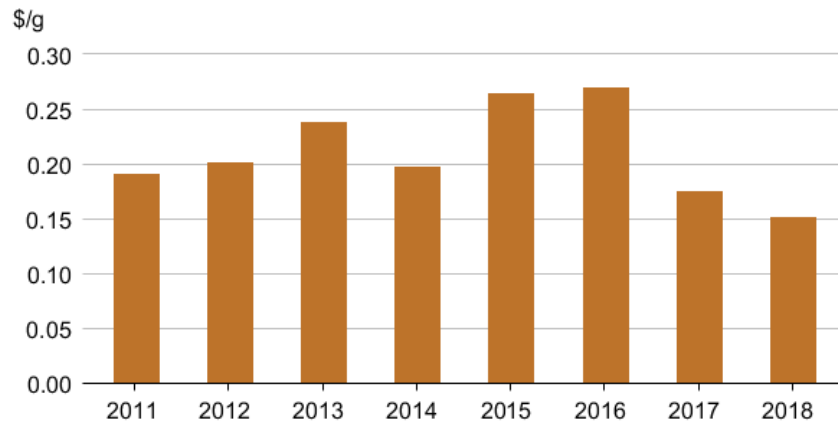
EIA estimates that U.S. gasoline consumption (measured as [product supplied](#)) was just under 9 million b/d for the first quarter of 2018, which would be the third highest on record for this time of year. Additionally, EIA estimates gasoline consumption plus gasoline exports for the four weeks ending March 30 averaged 10.2 million b/d, which would be an all-time high for the month if confirmed in monthly data.



 CME Group, as compiled by Bloomberg L.P., RBOB=reformulated blendstock for oxygenate blending

The RBOB–Brent crack spread [typically increases from February to March](#), as the more expensive April RBOB contract for delivery of summer grade gasoline begins trading in March. Although the RBOB–Brent crack spread increased from February to March this year, the increase was 15 cents/gal, lower than the previous five-year average increase of 23 cents/gal **(Figure 6)**. Despite the strength in first-quarter 2018 gasoline consumption, EIA forecasts second-quarter gasoline consumption to be slightly less than in the same quarter of 2017 at about 9.5 million b/d. In addition, despite the high level of consumption and exports, motor gasoline production has also been higher than year-ago levels, keeping gasoline inventories higher than the five-year average level. EIA estimates that total gasoline inventories ended March at almost 238 million barrels, about 6 million barrels more than the previous five-year average for the end of March.

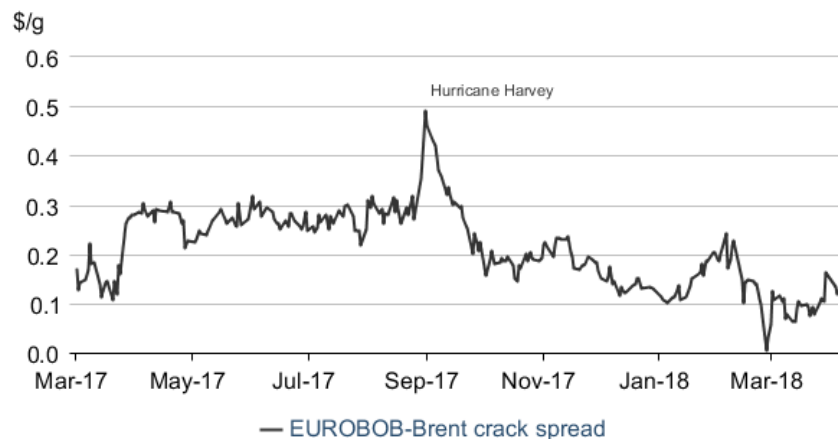
Figure 6. March RBOB-Brent crack spread minus February RBOB-Brent crack spread



eia CME Group, as compiled by Bloomberg L.P., RBOB=reformulated blendstock for oxygenate blending

Another factor that could have contributed to a lower-than-average increase in gasoline crack spreads this year is low gasoline crack spreads in the European gasoline market. The EUROBOB-Brent crack spread averaged 9 cents/gal in March, which is lower than the previous five-year average crack spread of 17 cents/gal (**Figure 7**). Gasoline inventories at the ARA (Amsterdam, Rotterdam, and Antwerp) hub have been more than the five-year maximum level for the entire month of March after being near the five-year average level in January. About 40% of gasoline imports to the U.S. East Coast come from Europe, so high inventories and low crack spreads in Europe can also affect U.S. gasoline crack spreads.

Figure 7. EUROBOB-Brent crack spread

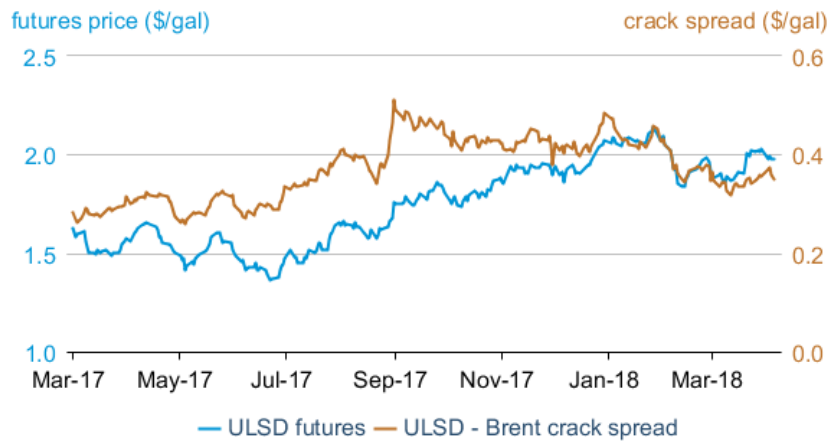


eia CME Group, as compiled by Bloomberg L.P.

Ultra-low sulfur diesel prices: The ultra-low sulfur diesel (ULSD) front-month futures price increased 9 cents/gal from March 1 to settle at \$1.98/gal on April 5. The ULSD-Brent crack spread (the difference between the price of ULSD and the price of Brent crude oil) decreased by 2 cents/gal over the same period, settling at 35 cents/gal (**Figure 8**).

A brief cold spell in March may have contributed to distillate consumption for the month surpassing 4 million b/d for the second consecutive year. Population-weighted heating degree days in the Middle Atlantic region were 7% higher than the 10-year average. In addition, for the first time since 2011, year-over-year U.S. industrial production growth in March exceeded 3.5% for the third consecutive month. Total U.S. distillate inventories stand 3% lower than the five-year average for the week ending March 30.

Figure 8. Historical ULSD front-month futures price and crack spread

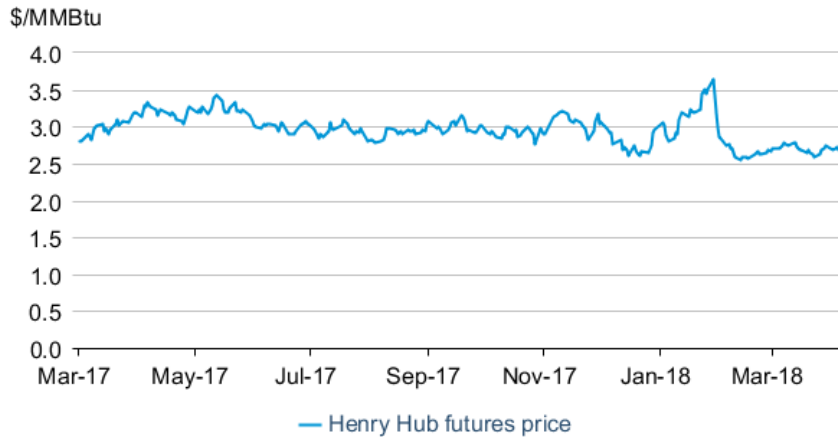


eia CME Group, as compiled by Bloomberg L.P., ULSD=ultra-low sulfur diesel

Natural Gas

The front-month natural gas futures contract for delivery at Henry Hub settled at \$2.68/million British thermal units (MMBtu) on April 5, a decrease of 2 cents/MMBtu from March 1 (**Figure 9**). Record production nearly offset rising exports and above-average consumption to help keep prices in a narrow range in March. Natural gas futures prices traded within a 25 cents/MMBtu range in March, the narrowest range for that month since at least 1995. Estimated U.S. natural gas production in March rose to 79.2 billion cubic feet per day (Bcf/d), 8.4 Bcf/d higher than the previous five-year average. U.S. consumption plus exports increased to 9.0 Bcf/d higher than the previous five-year average. The Henry Hub natural gas spot price averaged \$2.69/MMBtu in March, 3 cents/MMBtu higher than in February.

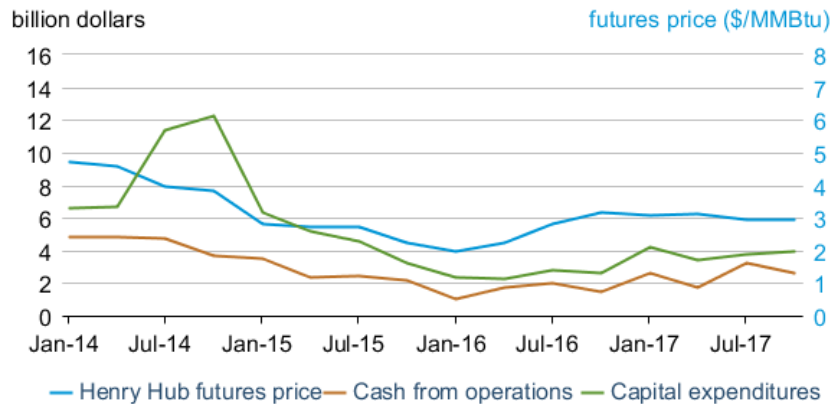
Figure 9. Historical front-month U.S. natural gas prices



eia CME Group, as compiled by Bloomberg L.P.

Capital expenditures for 20 U.S. natural gas producers rose to \$4 billion in the fourth quarter of 2017 (**Figure 10**), a \$1.4 billion increase from the prior year and the second highest quarterly expenditure in two years. Higher revenues and lower costs helped this group of companies report a positive net income in 2017 after two years of losses. Higher net income increased cash from operations and capital expenditures, which contributed to steadily rising natural gas production throughout 2017. Although capital expenditures have exceeded cash from operations since at least 2013 for these companies, the difference narrowed in 2016 and 2017, reducing the need for other types of financing such as issuing debt or equity. Cost declines and productivity increases since 2014 have allowed companies to do more with lower expenditures. Accordingly, U.S. dry natural gas production rose by 3.0 Bcf/d in the fourth quarter of 2017, the largest quarter-over-quarter increase since 1991.

Figure 10. Cash from operations and capital expenditures for 20 U.S. natural gas producers



eia U.S. Energy Information Administration, Evaluate Energy, CME Group, as compiled by Bloomberg L.P.

Notable forecast changes

- EIA forecasts that natural gas production in the Federal Gulf of Mexico will average 2.6 billion cubic feet per day (Bcf/d) in 2018 and 2.5 Bcf/d in 2019. These forecasts are 0.7 Bcf/d and 0.8 Bcf/d lower, respectively, than in the March STEO. The lower expected production levels are the result of EIA's reassessment of production given historical decline rates in the Federal Gulf of Mexico.
- For more information, see the [detailed table of STEO forecast changes](#).

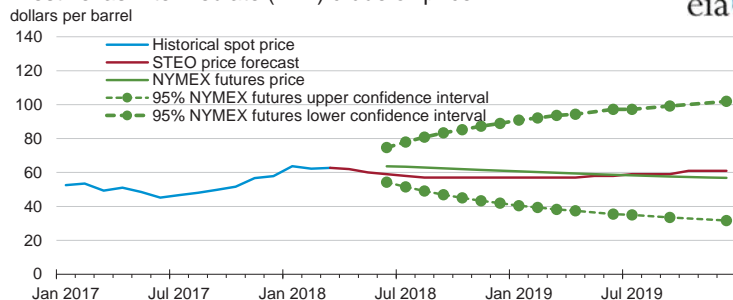
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Short-Term Energy Outlook

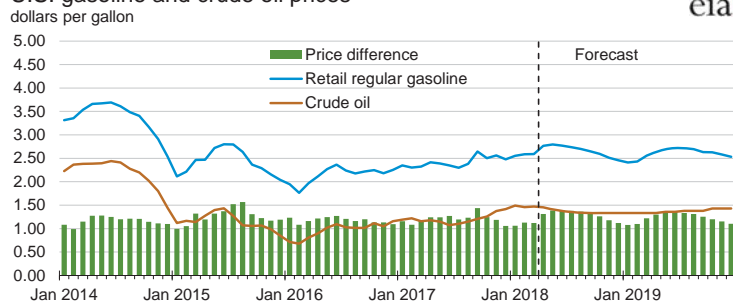
Chart Gallery for April 2018

West Texas Intermediate (WTI) crude oil price



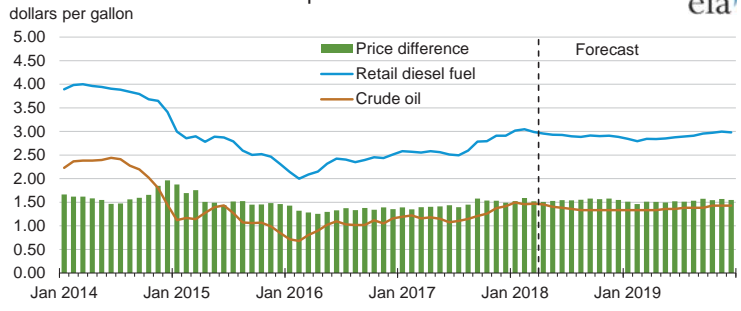
Note: Confidence interval derived from options market information for the 5 trading days ending Apr 5, 2018. Intervals not calculated for months with sparse trading in near-the-money options contracts.
Source: Short-Term Energy Outlook, April 2018, and CME Group.

U.S. gasoline and crude oil prices



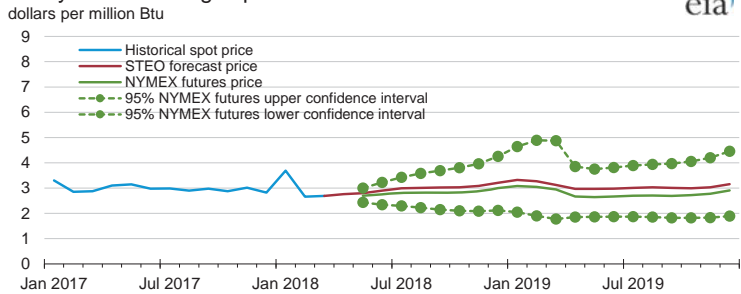
Crude oil price is composite refiner acquisition cost. Retail prices include state and federal taxes.
Source: Short-Term Energy Outlook, April 2018.

U.S. diesel fuel and crude oil prices



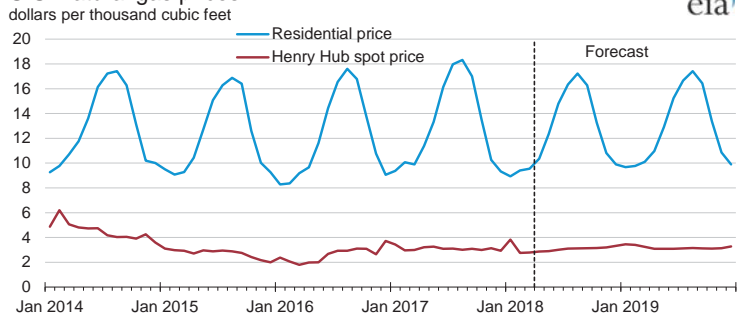
Crude oil price is composite refiner acquisition cost. Retail prices include state and federal taxes.
 Source: Short-Term Energy Outlook, April 2018.

Henry Hub natural gas price



Note: Confidence interval derived from options market information for the 5 trading days ending Apr 5, 2018. Intervals not calculated for months with sparse trading in near-the-money options contracts.
 Source: Short-Term Energy Outlook, April 2018, and CME Group.

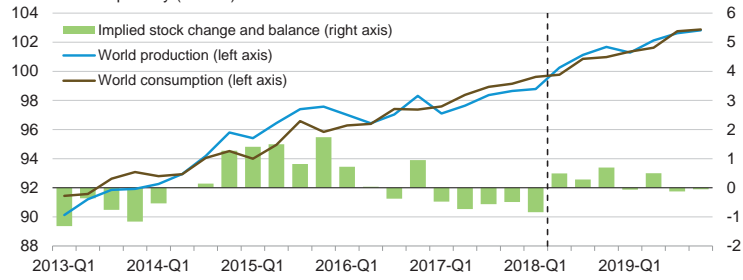
U.S. natural gas prices



Source: Short-Term Energy Outlook, April 2018, and Thomson Reuters.

World liquid fuels production and consumption balance

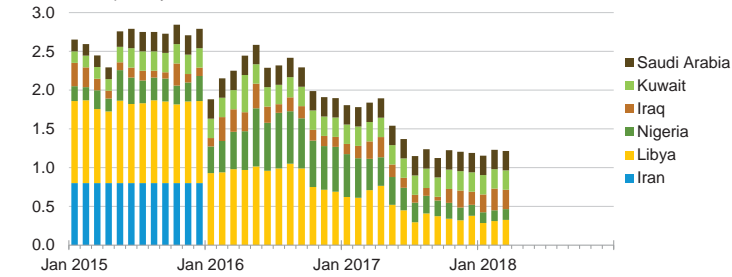
million barrels per day (MMb/d)



Source: Short-Term Energy Outlook, April 2018.

Estimated historical unplanned OPEC crude oil production outages

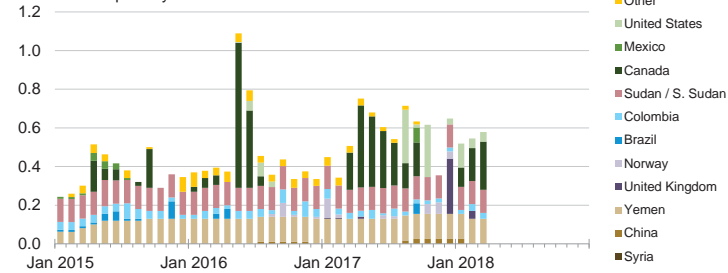
million barrels per day



Source: Short-Term Energy Outlook, April 2018.

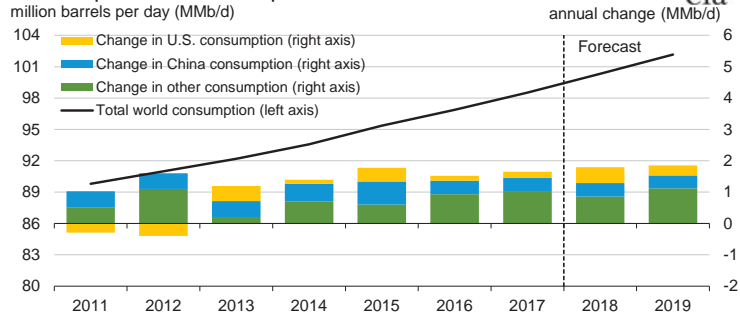
Estimated historical unplanned non-OPEC liquid fuels production outages

million barrels per day

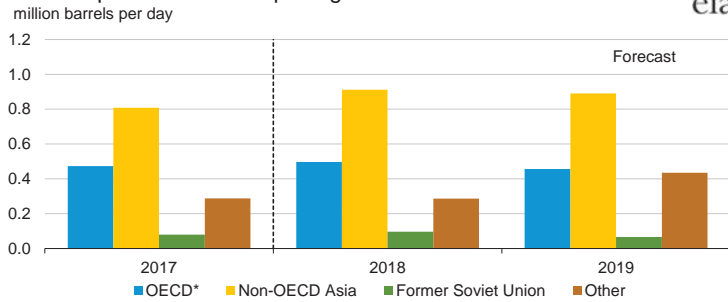


Source: Short-Term Energy Outlook, April 2018.

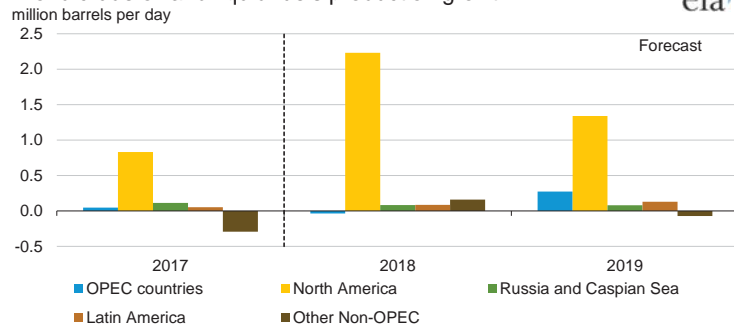
World liquid fuels consumption



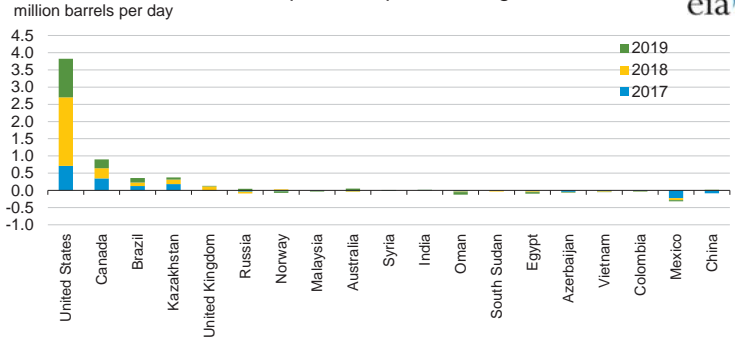
World liquid fuels consumption growth



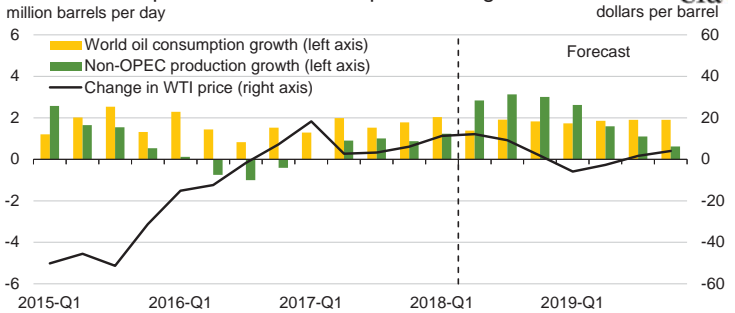
World crude oil and liquid fuels production growth



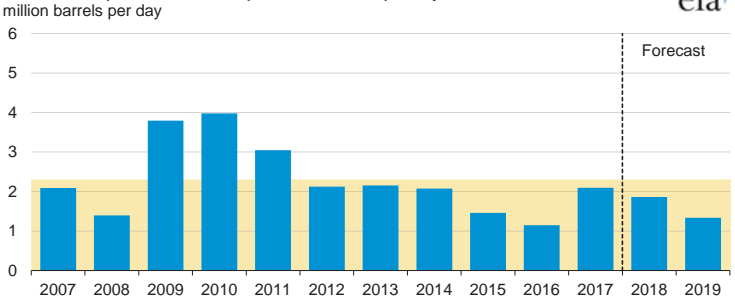
Non-OPEC crude oil and liquid fuels production growth



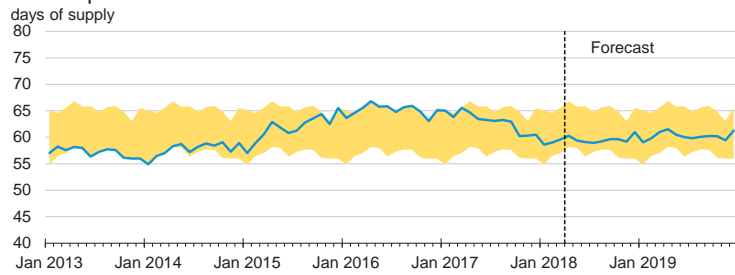
World consumption and non-OPEC production growth



OPEC surplus crude oil production capacity

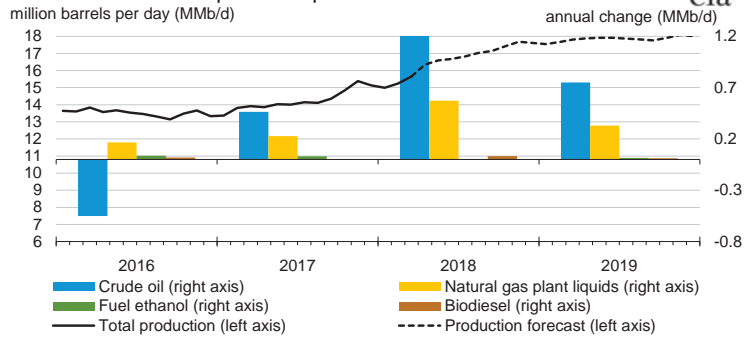


OECD commercial stocks of crude oil and other liquids



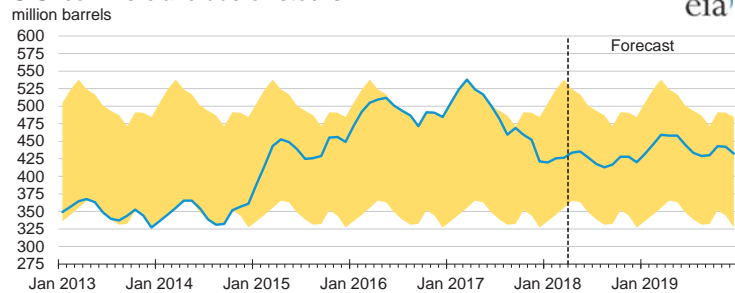
Note: Colored band around days of supply of crude oil and other liquids stocks represents the range between the minimum and maximum from Jan. 2013 - Dec. 2017.
Source: Short-Term Energy Outlook, April 2018.

U.S. crude oil and liquid fuels production



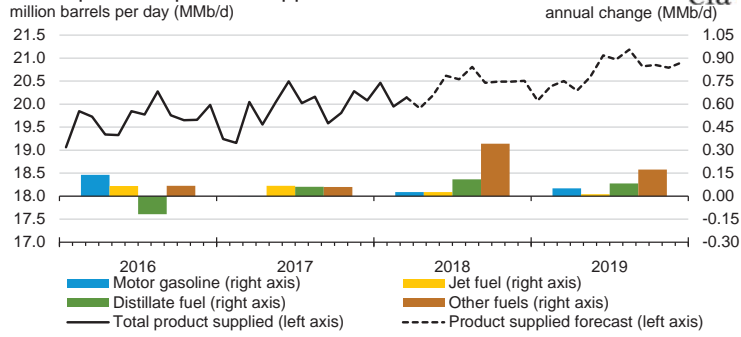
Source: Short-Term Energy Outlook, April 2018.

U.S. commercial crude oil stocks



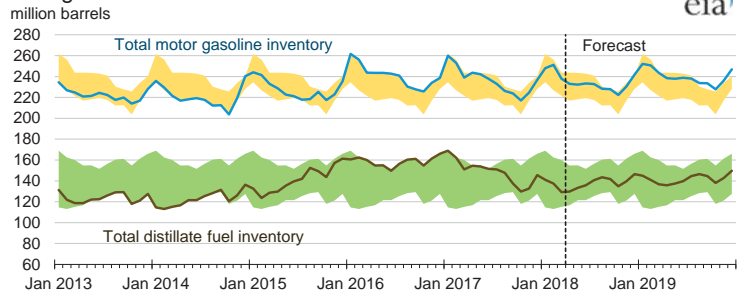
Note: Colored band around storage levels represents the range between the minimum and maximum from Jan. 2013 - Dec. 2017.
Source: Short-Term Energy Outlook, April 2018.

U.S. liquid fuels product supplied



Source: Short-Term Energy Outlook, April 2018.

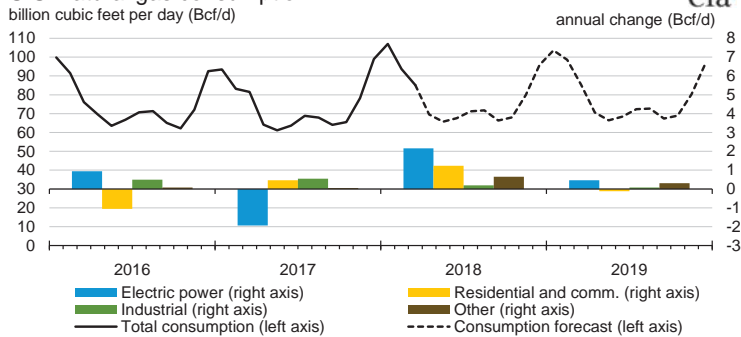
U.S. gasoline and distillate inventories



Note: Colored bands around storage levels represent the range between the minimum and maximum from Jan. 2013 - Dec. 2017.

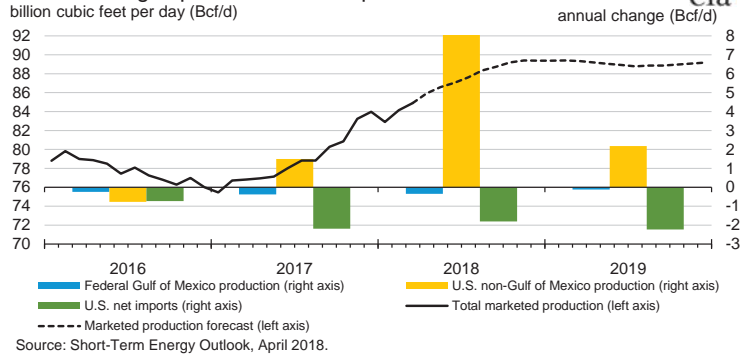
Source: Short-Term Energy Outlook, April 2018.

U.S. natural gas consumption

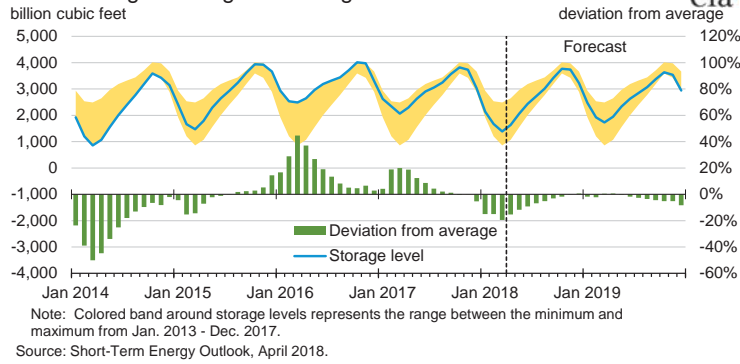


Source: Short-Term Energy Outlook, April 2018.

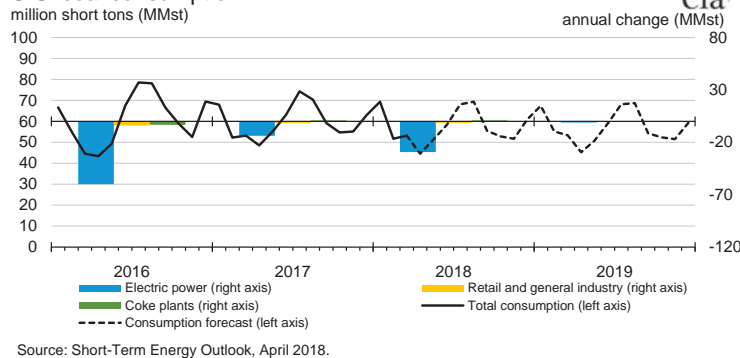
U.S. natural gas production and imports



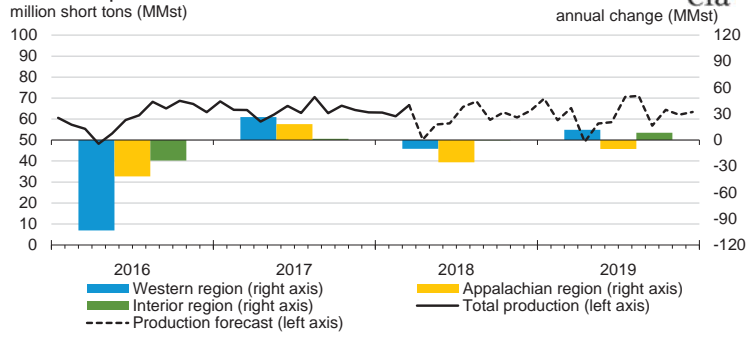
U.S. working natural gas in storage



U.S. coal consumption

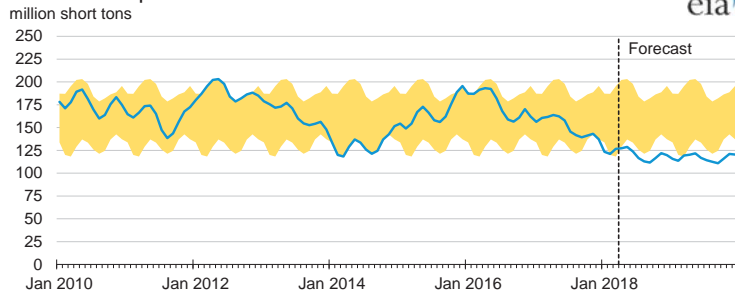


U.S. coal production



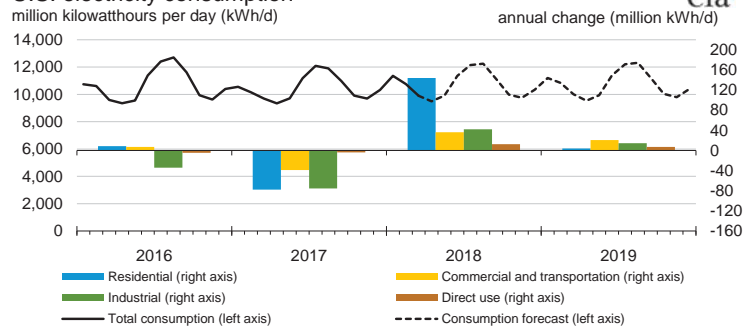
Source: Short-Term Energy Outlook, April 2018.

U.S. electric power coal stocks



Source: Short-Term Energy Outlook, April 2018.

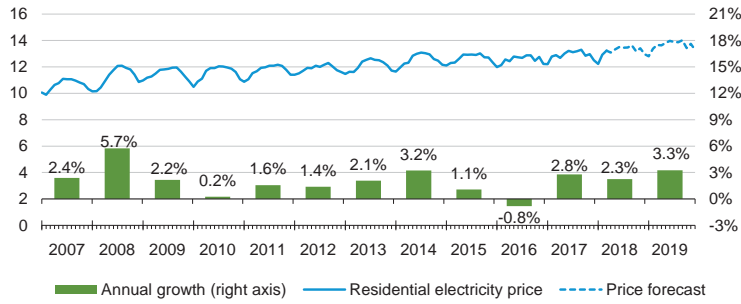
U.S. electricity consumption



Source: Short-Term Energy Outlook, April 2018.

U.S. residential electricity price

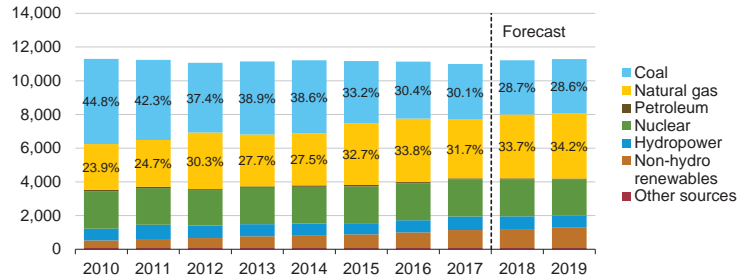
cents per kilowatthour



Source: Short-Term Energy Outlook, April 2018.

U.S. electricity generation by fuel, all sectors

thousand megawatthours per day

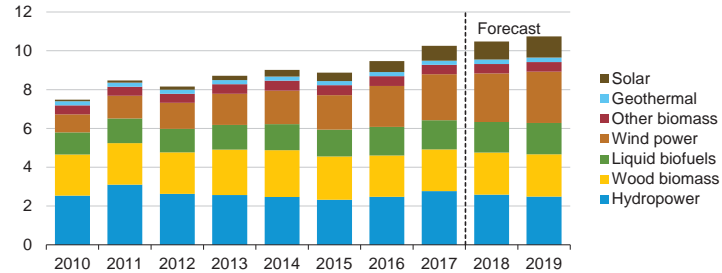


Note: Labels show percentage share of total generation provided by coal and natural gas.

Source: Short-Term Energy Outlook, April 2018.

U.S. renewable energy supply

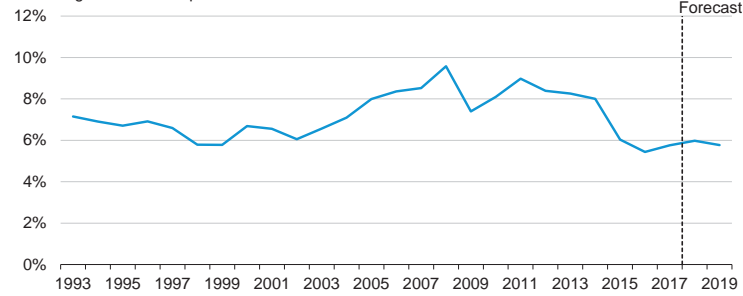
quadrillion British thermal units (Btu)



Note: Hydropower excludes pumped storage generation. Liquid biofuels include ethanol and biodiesel. Other biomass includes municipal waste from biogenic sources, landfill gas, and other non-wood waste.

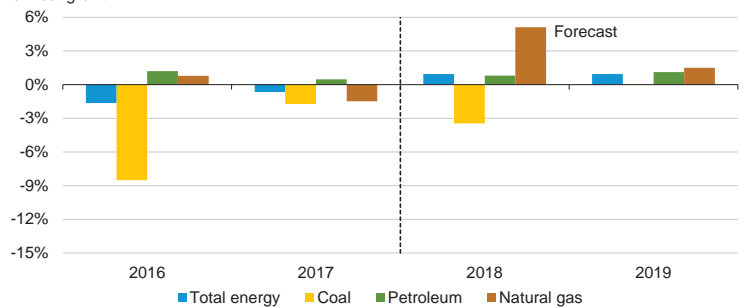
Source: Short-Term Energy Outlook, April 2018.

U.S. annual energy expenditures share of gross domestic product



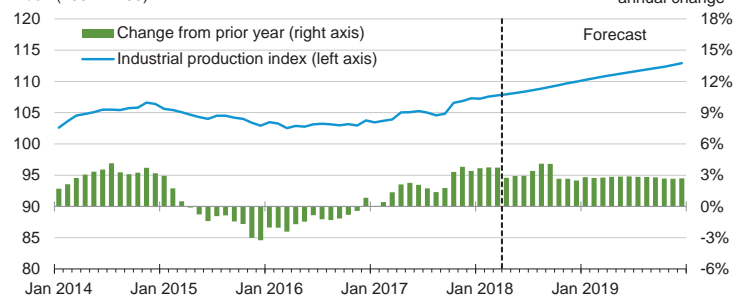
Source: Short-Term Energy Outlook, April 2018.

U.S. energy-related carbon dioxide emissions annual growth



Source: Short-Term Energy Outlook, April 2018.

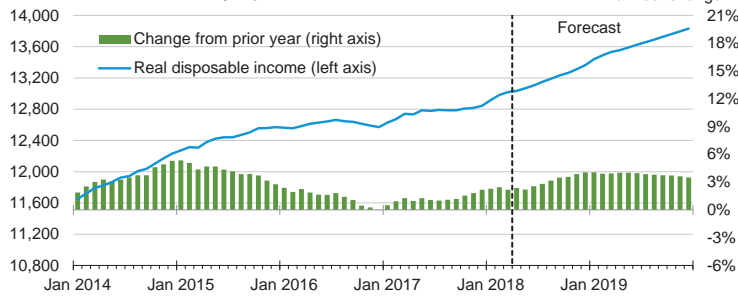
U.S. total industrial production index index (2007 = 100)



Source: Short-Term Energy Outlook, April 2018.

U.S. disposable income

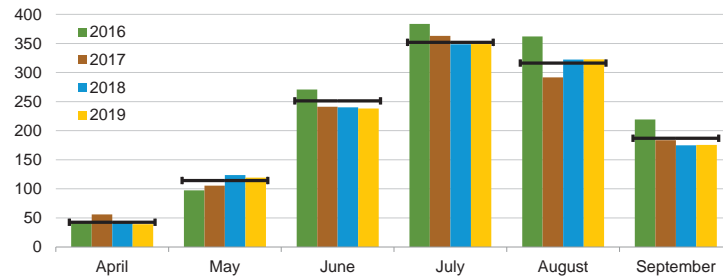
billion 2009 dollars, seasonally adjusted



Source: Short-Term Energy Outlook, April 2018.

U.S. summer cooling degree days

population-weighted

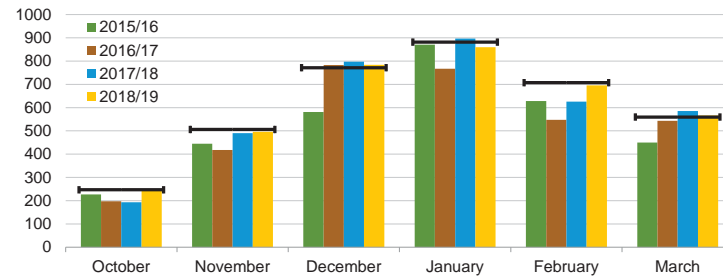


Note: EIA calculations based on from the National Oceanic and Atmospheric Administration data. Horizontal lines indicate each month's prior 10-year average (2008-2017). Projections reflect NOAA's 14-16 month outlook.

Source: Short-Term Energy Outlook, April 2018.

U.S. winter heating degree days

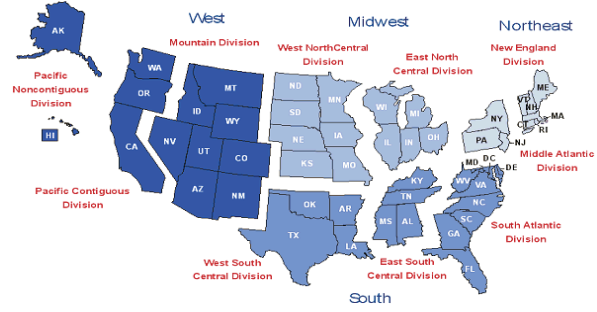
population-weighted



Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data. Horizontal lines indicate each month's prior 10-year average (Oct 2008 - Mar 2018). Projections reflect NOAA's 14-16 month outlook.

Source: Short-Term Energy Outlook, April 2018.

U.S. census regions and divisions



Source: Short-Term Energy Outlook, April 2018.

Table SF01. U.S. Motor Gasoline Summer Outlook

U.S. Energy Information Administration | Short-Term Energy Outlook - April 2018

	2017			2018			Year-over-year Change (percent)		
	Q2	Q3	Season	Q2	Q3	Season	Q2	Q3	Season
Nominal Prices (dollars per gallon)									
WTI Crude Oil (Spot) ^a	1.15	1.15	1.15	<i>1.44</i>	<i>1.37</i>	<i>1.40</i>	25.3	19.1	22.2
Brent Crude Oil Price (Spot)	1.18	1.24	1.21	<i>1.53</i>	<i>1.46</i>	<i>1.50</i>	29.7	17.7	23.6
U.S. Refiner Average Crude Oil Cost	1.13	1.15	1.14	<i>1.41</i>	<i>1.34</i>	<i>1.38</i>	24.5	16.6	20.5
Wholesale Gasoline Price ^b	1.65	1.72	1.69	<i>2.01</i>	<i>1.91</i>	<i>1.96</i>	21.3	11.0	16.0
Wholesale Diesel Fuel Price ^b	1.55	1.69	1.62	<i>1.99</i>	<i>1.95</i>	<i>1.97</i>	28.7	15.7	21.9
Regular Gasoline Retail Price ^c	2.38	2.44	2.41	<i>2.78</i>	<i>2.70</i>	<i>2.74</i>	16.5	10.6	13.5
Diesel Fuel Retail Price ^c	2.55	2.63	2.59	<i>2.94</i>	<i>2.90</i>	<i>2.92</i>	15.2	10.4	12.7
Gasoline Consumption/Supply (million barrels per day)									
Total Consumption	9.535	9.560	9.548	<i>9.522</i>	<i>9.606</i>	<i>9.564</i>	-0.1	0.5	0.2
Total Refinery and Blender Net Supply ^d	8.508	8.439	8.473	<i>8.626</i>	<i>8.668</i>	<i>8.647</i>	1.4	2.7	2.1
Fuel Ethanol Blending	0.957	0.957	0.957	<i>0.960</i>	<i>0.968</i>	<i>0.964</i>	0.2	1.2	0.7
Total Stock Withdrawal ^e	0.011	0.154	0.083	<i>0.049</i>	<i>0.059</i>	<i>0.054</i>			
Net Imports ^e	0.059	0.010	0.035	<i>-0.113</i>	<i>-0.088</i>	<i>-0.100</i>			
Refinery Utilization (percent)	93.8	91.1	92.4	<i>94.1</i>	<i>94.1</i>	<i>94.1</i>			
Total Gasoline Stocks (million barrels)									
Beginning	239.0	237.9	239.0	<i>237.8</i>	<i>233.4</i>	<i>237.8</i>			
Ending	237.9	223.8	223.8	<i>233.4</i>	<i>228.0</i>	<i>228.0</i>			
Economic Indicators (annualized billion 2009 dollars)									
Real GDP	17,031	17,164	17,097	<i>17,481</i>	<i>17,619</i>	<i>17,550</i>	2.6	2.7	2.6
Real Income	12,766	12,788	12,777	<i>13,068</i>	<i>13,190</i>	<i>13,129</i>	2.4	3.1	2.8

^a Spot Price of West Texas Intermediate (WTI) crude oil.

^b Price product sold by refiners to resellers.

^c Average retail price including taxes.

^d Finished gasoline net production minus gasoline blend components net inputs minus fuel ethanol blending and supply adjustment.

^e Total stock withdrawal and net imports includes both finished gasoline and gasoline blend components.

GDP = gross domestic product.

Notes: Minor discrepancies with other Energy Information Administration (EIA) published historical data are due to rounding. Historical data are printed in bold. Forecasts are in italic. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: latest data available from: EIA, *Petroleum Supply Monthly*, DOE/EIA-0109; Monthly Energy Review, DOE/EIA-0035; U.S. Department of Commerce, Bureau of Economic Analysis (GDP and income); Thomson Reuters (WTI and Brent crude oil spot prices). Macroeconomic projections are based on IHS Markit Macroeconomic Forecast Model.

Table SF02. Average Summer Residential Electricity Usage, Prices and Expenditures

U.S. Energy Information Administration | Short-Term Energy Outlook - April 2018

	2013	2014	2015	2016	2017	Forecast 2018	Change from 2017
United States							
Usage (kWh)	3,130	3,038	3,165	3,327	3,132	3,164	1.0%
Price (cents/kWh)	12.58	13.04	12.92	12.77	13.17	13.47	2.3%
Expenditures	\$394	\$396	\$409	\$425	\$412	\$426	3.4%
New England							
Usage (kWh)	2,173	1,930	1,982	2,108	2,093	2,198	5.0%
Price (cents/kWh)	16.04	17.63	18.65	18.34	18.81	19.53	3.8%
Expenditures	\$348	\$340	\$370	\$386	\$394	\$429	9.1%
Middle Atlantic							
Usage (kWh)	2,447	2,234	2,376	2,549	2,332	2,390	2.5%
Price (cents/kWh)	16.39	16.90	16.37	15.90	16.44	16.73	1.7%
Expenditures	\$401	\$378	\$389	\$405	\$383	\$400	4.3%
East North Central							
Usage (kWh)	2,618	2,505	2,565	2,902	2,588	2,663	2.9%
Price (cents/kWh)	12.57	13.24	13.27	13.08	13.29	13.78	3.6%
Expenditures	\$329	\$332	\$340	\$380	\$344	\$367	6.6%
West North Central							
Usage (kWh)	3,099	3,041	3,075	3,302	3,048	3,152	3.4%
Price (cents/kWh)	12.25	12.42	12.65	12.85	13.36	13.65	2.2%
Expenditures	\$380	\$378	\$389	\$424	\$407	\$430	5.6%
South Atlantic							
Usage (kWh)	3,773	3,778	3,999	4,147	3,834	3,833	0.0%
Price (cents/kWh)	11.76	12.09	12.04	11.79	12.21	12.51	2.5%
Expenditures	\$444	\$457	\$482	\$489	\$468	\$479	2.4%
East South Central							
Usage (kWh)	4,079	4,034	4,279	4,413	4,088	4,219	3.2%
Price (cents/kWh)	10.71	11.09	10.91	10.93	11.34	11.78	3.9%
Expenditures	\$437	\$447	\$467	\$482	\$464	\$497	7.2%
West South Central							
Usage (kWh)	4,509	4,256	4,538	4,605	4,386	4,520	3.0%
Price (cents/kWh)	10.94	11.46	11.03	10.58	10.85	11.03	1.6%
Expenditures	\$493	\$488	\$501	\$487	\$476	\$498	4.7%
Mountain							
Usage (kWh)	3,382	3,230	3,298	3,437	3,429	3,338	-2.7%
Price (cents/kWh)	11.97	12.32	12.33	12.04	12.30	12.57	2.3%
Expenditures	\$405	\$398	\$407	\$414	\$422	\$420	-0.4%
Pacific							
Usage (kWh)	2,038	2,090	2,051	2,097	2,152	2,020	-6.1%
Price (cents/kWh)	14.47	15.17	15.33	16.00	16.44	16.74	1.8%
Expenditures	\$295	\$317	\$314	\$336	\$354	\$338	-4.5%

Notes: kWh = kilowatthours. All data cover the 3-month period of June-August of each year. Usage amounts represent total residential retail electricity sales per customer. Prices and expenditures are not adjusted for inflation.

Source: EIA Form-861 and Form-826 databases, Short-Term Energy Outlook.

Table 1. U.S. Energy Markets Summary

U.S. Energy Information Administration | Short-Term Energy Outlook - April 2018

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
Energy Supply															
Crude Oil Production (a) (million barrels per day)	8.99	9.10	9.29	9.89	10.15	<i>10.55</i>	<i>10.78</i>	<i>11.27</i>	<i>11.46</i>	<i>11.46</i>	<i>11.33</i>	<i>11.52</i>	9.32	<i>10.69</i>	<i>11.44</i>
Dry Natural Gas Production (billion cubic feet per day)	71.27	72.04	73.98	76.94	78.32	<i>80.62</i>	<i>82.17</i>	<i>83.14</i>	<i>83.14</i>	<i>82.79</i>	<i>82.54</i>	<i>82.70</i>	73.57	<i>81.08</i>	<i>82.79</i>
Coal Production (million short tons)	197	187	196	194	191	<i>166</i>	<i>194</i>	<i>188</i>	<i>194</i>	<i>165</i>	<i>198</i>	<i>190</i>	774	<i>738</i>	<i>748</i>
Energy Consumption															
Liquid Fuels (million barrels per day)	19.49	20.03	19.92	20.05	20.19	<i>20.24</i>	<i>20.61</i>	<i>20.49</i>	<i>20.32</i>	<i>20.64</i>	<i>20.99</i>	<i>20.85</i>	19.88	<i>20.38</i>	<i>20.70</i>
Natural Gas (billion cubic feet per day)	86.15	62.97	66.97	80.94	95.34	<i>67.62</i>	<i>69.77</i>	<i>81.32</i>	<i>95.75</i>	<i>68.45</i>	<i>70.84</i>		74.22	<i>78.45</i>	<i>79.18</i>
Coal (b) (million short tons)	173	167	204	173	174	<i>154</i>	<i>193</i>	<i>166</i>	<i>176</i>	<i>155</i>	<i>191</i>	<i>163</i>	717	<i>687</i>	<i>685</i>
Electricity (billion kilowatt hours per day)	10.13	10.08	11.66	9.98	10.67	<i>10.25</i>	<i>11.85</i>	<i>10.03</i>	<i>10.69</i>	<i>10.29</i>	<i>11.91</i>	<i>10.09</i>	10.47	<i>10.70</i>	<i>10.75</i>
Renewables (c) (quadrillion Btu)	2.79	2.99	2.57	2.67	2.77	<i>2.96</i>	<i>2.73</i>	<i>2.73</i>	<i>2.77</i>	<i>3.06</i>	<i>2.82</i>	<i>2.85</i>	11.02	<i>11.18</i>	<i>11.50</i>
Total Energy Consumption (d) (quadrillion Btu)	25.06	23.26	24.37	25.13	25.57	<i>23.20</i>	<i>24.46</i>	<i>24.79</i>	<i>25.92</i>	<i>23.51</i>	<i>24.71</i>	<i>25.00</i>	97.83	<i>98.02</i>	<i>99.14</i>
Energy Prices															
Crude Oil West Texas Intermediate Spot (dollars per barrel)	51.64	48.15	48.16	55.27	62.90	<i>60.33</i>	<i>57.33</i>	<i>57.00</i>	<i>57.00</i>	<i>57.66</i>	<i>59.00</i>	<i>61.00</i>	50.79	<i>59.37</i>	<i>58.68</i>
Natural Gas Henry Hub Spot (dollars per million Btu)	3.01	3.08	2.95	2.90	3.01	<i>2.82</i>	<i>3.01</i>	<i>3.11</i>	<i>3.24</i>	<i>2.97</i>	<i>3.02</i>	<i>3.06</i>	2.99	<i>2.99</i>	<i>3.07</i>
Coal (dollars per million Btu)	2.08	2.12	2.07	2.04	2.15	<i>2.21</i>	<i>2.21</i>	<i>2.19</i>	<i>2.22</i>	<i>2.20</i>	<i>2.22</i>	<i>2.19</i>	2.08	<i>2.19</i>	<i>2.21</i>
Macroeconomic															
Real Gross Domestic Product (billion chained 2009 dollars - SAAR)	16,903	17,031	17,164	17,272	17,347	<i>17,481</i>	<i>17,619</i>	<i>17,753</i>	<i>17,875</i>	<i>17,986</i>	<i>18,085</i>	<i>18,186</i>	17,092	<i>17,550</i>	<i>18,033</i>
Percent change from prior year	2.0	2.2	2.3	2.5	2.6	<i>2.6</i>	<i>2.7</i>	<i>2.8</i>	<i>3.0</i>	<i>2.9</i>	<i>2.6</i>	<i>2.4</i>	2.3	<i>2.7</i>	<i>2.8</i>
GDP Implicit Price Deflator (Index, 2009=100)	112.8	113.0	113.6	114.3	115.0	<i>115.4</i>	<i>116.0</i>	<i>116.7</i>	<i>117.5</i>	<i>118.3</i>	<i>119.1</i>	<i>119.8</i>	113.4	<i>115.8</i>	<i>118.7</i>
Percent change from prior year	2.0	1.6	1.8	1.9	2.0	<i>2.1</i>	<i>2.1</i>	<i>2.1</i>	<i>2.2</i>	<i>2.5</i>	<i>2.6</i>	<i>2.6</i>	1.8	<i>2.1</i>	<i>2.5</i>
Real Disposable Personal Income (billion chained 2009 dollars - SAAR)	12,680	12,766	12,788	12,823	12,972	<i>13,068</i>	<i>13,190</i>	<i>13,314</i>	<i>13,486</i>	<i>13,590</i>	<i>13,691</i>	<i>13,795</i>	12,764	<i>13,136</i>	<i>13,641</i>
Percent change from prior year	0.9	1.1	1.1	1.8	2.3	<i>2.4</i>	<i>3.1</i>	<i>3.8</i>	<i>4.0</i>	<i>4.0</i>	<i>3.8</i>	<i>3.6</i>	1.2	<i>2.9</i>	<i>3.8</i>
Manufacturing Production Index (Index, 2012=100)	103.7	104.5	104.0	105.7	106.1	<i>106.6</i>	<i>107.3</i>	<i>108.2</i>	<i>109.0</i>	<i>109.6</i>	<i>110.1</i>	<i>110.7</i>	104.5	<i>107.1</i>	<i>109.9</i>
Percent change from prior year	0.8	1.8	1.3	2.5	2.3	<i>2.1</i>	<i>3.2</i>	<i>2.4</i>	<i>2.7</i>	<i>2.8</i>	<i>2.6</i>	<i>2.3</i>	1.6	<i>2.5</i>	<i>2.6</i>
Weather															
U.S. Heating Degree-Days	1,858	427	65	1,481	2,108	<i>472</i>	<i>74</i>	<i>1,529</i>	<i>2,121</i>	<i>491</i>	<i>74</i>	<i>1,527</i>	3,832	<i>4,182</i>	<i>4,213</i>
U.S. Cooling Degree-Days	70	403	838	114	49	<i>407</i>	<i>846</i>	<i>91</i>	<i>42</i>	<i>396</i>	<i>847</i>	<i>91</i>	1,425	<i>1,393</i>	<i>1,377</i>

- = no data available

Prices are not adjusted for inflation.

(a) Includes lease condensate.

(b) Total consumption includes Independent Power Producer (IPP) consumption.

(c) Renewable energy includes minor components of non-marketed renewable energy that is neither bought nor sold, either directly or indirectly, as inputs to marketed energy.

EIA does not estimate or project end-use consumption of non-marketed renewable energy.

(d) The conversion from physical units to Btu is calculated using a subset of conversion factors used in the calculations of gross energy consumption in EIA's Monthly Energy Review. Consequently, the historical data may not precisely match those published in the MER or the Annual Energy Review (AER).

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.**Historical data:** Latest data available from Energy Information Administration databases supporting the following reports: *Petroleum Supply Monthly*, DOE/EIA-0109;*Petroleum Supply Annual*, DOE/EIA-0340/2; *Weekly Petroleum Status Report*, DOE/EIA-0208; *Petroleum Marketing Monthly*, DOE/EIA-0380; *Natural Gas Monthly*, DOE/EIA-0130;*Electric Power Monthly*, DOE/EIA-0226; *Quarterly Coal Report*, DOE/EIA-0121; and *International Petroleum Monthly*, DOE/EIA-0520.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model. U.S. macroeconomic projections are based on the IHS Markit model of the U.S. Economy.

Weather projections from National Oceanic and Atmospheric Administration.

Table 2. Energy Prices

U.S. Energy Information Administration | Short-Term Energy Outlook - April 2018

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
Crude Oil (dollars per barrel)															
West Texas Intermediate Spot Average	51.64	48.15	48.16	55.27	62.90	<i>60.33</i>	<i>57.33</i>	<i>57.00</i>	<i>57.00</i>	<i>57.66</i>	<i>59.00</i>	<i>61.00</i>	50.79	<i>59.37</i>	<i>58.68</i>
Brent Spot Average	53.57	49.59	52.09	61.42	66.84	<i>64.33</i>	<i>61.33</i>	<i>61.00</i>	<i>61.00</i>	<i>61.66</i>	<i>63.00</i>	<i>65.00</i>	54.15	<i>63.36</i>	<i>62.68</i>
U.S. Imported Average	47.94	46.12	47.49	55.29	59.43	<i>56.85</i>	<i>53.85</i>	<i>53.50</i>	<i>53.50</i>	<i>54.18</i>	<i>55.50</i>	<i>57.50</i>	49.00	<i>56.01</i>	<i>55.17</i>
U.S. Refiner Average Acquisition Cost	49.91	47.66	48.32	56.79	61.91	<i>59.31</i>	<i>56.34</i>	<i>56.00</i>	<i>56.00</i>	<i>56.68</i>	<i>58.00</i>	<i>60.00</i>	50.68	<i>58.35</i>	<i>57.68</i>
U.S. Liquid Fuels (cents per gallon)															
Refiner Prices for Resale															
Gasoline	163	165	172	175	187	<i>201</i>	<i>191</i>	<i>173</i>	<i>172</i>	<i>191</i>	<i>189</i>	<i>180</i>	169	<i>188</i>	<i>183</i>
Diesel Fuel	162	155	169	190	198	<i>199</i>	<i>195</i>	<i>193</i>	<i>189</i>	<i>192</i>	<i>199</i>	<i>203</i>	169	<i>196</i>	<i>196</i>
Heating Oil	154	144	154	179	192	<i>188</i>	<i>186</i>	<i>185</i>	<i>185</i>	<i>181</i>	<i>189</i>	<i>194</i>	160	<i>188</i>	<i>185</i>
Refiner Prices to End Users															
Jet Fuel	158	150	162	181	194	<i>192</i>	<i>189</i>	<i>187</i>	<i>187</i>	<i>187</i>	<i>194</i>	<i>199</i>	163	<i>191</i>	<i>192</i>
No. 6 Residual Fuel Oil (a)	128	120	124	140	152	<i>146</i>	<i>140</i>	<i>139</i>	<i>139</i>	<i>138</i>	<i>142</i>	<i>147</i>	129	<i>144</i>	<i>142</i>
Retail Prices Including Taxes															
Gasoline Regular Grade (b)	233	238	244	251	258	<i>278</i>	<i>270</i>	<i>252</i>	<i>247</i>	<i>268</i>	<i>268</i>	<i>258</i>	242	<i>264</i>	<i>261</i>
Gasoline All Grades (b)	244	250	255	263	270	<i>289</i>	<i>281</i>	<i>264</i>	<i>259</i>	<i>280</i>	<i>280</i>	<i>270</i>	253	<i>276</i>	<i>272</i>
On-highway Diesel Fuel	257	255	263	287	302	<i>294</i>	<i>290</i>	<i>290</i>	<i>283</i>	<i>286</i>	<i>292</i>	<i>298</i>	265	<i>294</i>	<i>290</i>
Heating Oil	247	238	234	265	287	<i>280</i>	<i>277</i>	<i>282</i>	<i>287</i>	<i>274</i>	<i>278</i>	<i>290</i>	251	<i>284</i>	<i>285</i>
Natural Gas															
Henry Hub Spot (dollars per thousand cubic feet)	3.12	3.19	3.06	3.01	3.13	<i>2.92</i>	<i>3.12</i>	<i>3.22</i>	<i>3.36</i>	<i>3.08</i>	<i>3.13</i>	<i>3.17</i>	3.10	<i>3.10</i>	<i>3.19</i>
Henry Hub Spot (dollars per million Btu)	3.01	3.08	2.95	2.90	3.01	<i>2.82</i>	<i>3.01</i>	<i>3.11</i>	<i>3.24</i>	<i>2.97</i>	<i>3.02</i>	<i>3.06</i>	2.99	<i>2.99</i>	<i>3.07</i>
U.S. Retail Prices (dollars per thousand cubic feet)															
Industrial Sector	4.50	4.11	3.89	4.00	4.40	<i>3.80</i>	<i>3.97</i>	<i>4.36</i>	<i>4.71</i>	<i>4.02</i>	<i>4.01</i>	<i>4.34</i>	4.14	<i>4.15</i>	<i>4.29</i>
Commercial Sector	7.71	8.33	8.69	7.56	7.57	<i>7.97</i>	<i>8.54</i>	<i>7.89</i>	<i>7.85</i>	<i>8.32</i>	<i>8.71</i>	<i>7.95</i>	7.87	<i>7.84</i>	<i>8.05</i>
Residential Sector	9.73	13.00	17.74	10.19	9.25	<i>11.83</i>	<i>16.60</i>	<i>10.69</i>	<i>9.82</i>	<i>12.37</i>	<i>16.82</i>	<i>10.73</i>	10.92	<i>10.55</i>	<i>10.95</i>
U.S. Electricity															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	2.08	2.12	2.07	2.04	2.15	<i>2.21</i>	<i>2.21</i>	<i>2.19</i>	<i>2.22</i>	<i>2.20</i>	<i>2.22</i>	<i>2.19</i>	2.08	<i>2.19</i>	<i>2.21</i>
Natural Gas	3.69	3.38	3.19	3.39	4.05	<i>3.12</i>	<i>3.26</i>	<i>3.57</i>	<i>3.85</i>	<i>3.24</i>	<i>3.25</i>	<i>3.50</i>	3.39	<i>3.47</i>	<i>3.43</i>
Residual Fuel Oil (c)	11.16	10.60	10.03	11.93	12.90	<i>12.99</i>	<i>11.93</i>	<i>11.45</i>	<i>11.66</i>	<i>12.31</i>	<i>11.86</i>	<i>11.89</i>	10.97	<i>12.42</i>	<i>11.90</i>
Distillate Fuel Oil	12.74	12.23	13.13	14.54	15.93	<i>15.46</i>	<i>15.15</i>	<i>15.08</i>	<i>14.80</i>	<i>14.96</i>	<i>15.32</i>	<i>15.74</i>	13.26	<i>15.59</i>	<i>15.18</i>
Retail Prices (cents per kilowatthour)															
Industrial Sector	6.64	6.89	7.27	6.79	7.00	<i>7.14</i>	<i>7.57</i>	<i>7.06</i>	<i>7.10</i>	<i>7.24</i>	<i>7.67</i>	<i>7.15</i>	6.91	<i>7.20</i>	<i>7.30</i>
Commercial Sector	10.39	10.68	11.03	10.56	10.63	<i>10.91</i>	<i>11.35</i>	<i>10.91</i>	<i>10.86</i>	<i>11.00</i>	<i>11.35</i>	<i>10.94</i>	10.68	<i>10.96</i>	<i>11.05</i>
Residential Sector	12.59	12.99	13.19	12.75	12.73	<i>13.32</i>	<i>13.51</i>	<i>13.17</i>	<i>13.23</i>	<i>13.82</i>	<i>13.92</i>	<i>13.47</i>	12.90	<i>13.19</i>	<i>13.62</i>

- = no data available

Prices are not adjusted for inflation.

(a) Average for all sulfur contents.

(b) Average self-service cash price.

(c) Includes fuel oils No. 4, No. 5, No. 6, and topped crude.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Prices exclude taxes unless otherwise noted.

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: *Petroleum Marketing Monthly*, DOE/EIA-0380;

Weekly Petroleum Status Report, DOE/EIA-0208; *Natural Gas Monthly*, DOE/EIA-0130; *Electric Power Monthly*, DOE/EIA-0226; and *Monthly Energy Review*, DOE/EIA-0035.

 WTI and Brent crude oils, and Henry Hub natural gas spot prices from Reuter's News Service (<http://www.reuters.com>).

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 3a. International Petroleum and Other Liquids Production, Consumption, and Inventories

U.S. Energy Information Administration | Short-Term Energy Outlook - April 2018

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
Supply (million barrels per day) (a)															
OECD	27.12	26.91	27.09	28.07	28.39	29.56	29.95	30.80	30.90	31.07	30.91	31.32	27.30	29.68	31.05
U.S. (50 States)	15.00	15.32	15.48	16.45	16.61	17.39	17.82	18.39	18.48	18.74	18.64	18.84	15.57	17.56	18.68
Canada	5.05	4.71	4.99	5.02	4.90	5.24	5.35	5.45	5.47	5.46	5.51	5.55	4.94	5.24	5.50
Mexico	2.35	2.34	2.19	2.16	2.20	2.22	2.20	2.20	2.19	2.18	2.16	2.15	2.26	2.21	2.17
Other OECD	4.71	4.54	4.43	4.44	4.68	4.71	4.57	4.76	4.76	4.69	4.59	4.78	4.53	4.68	4.71
Non-OECD	69.99	70.74	71.28	70.59	70.39	70.70	71.18	70.88	70.39	71.05	71.72	71.50	70.65	70.79	71.17
OPEC	38.84	39.32	39.68	39.28	39.29	39.09	39.32	39.29	39.18	39.36	39.70	39.82	39.28	39.24	39.52
Crude Oil Portion	32.08	32.32	32.89	32.47	32.39	32.15	32.33	32.27	32.13	32.24	32.51	32.55	32.44	32.28	32.36
Other Liquids (b)	6.77	7.00	6.79	6.81	6.90	6.94	6.98	7.02	7.05	7.12	7.19	7.27	6.84	6.96	7.16
Eurasia	14.43	14.31	14.23	14.33	14.45	14.39	14.35	14.48	14.50	14.42	14.47	14.56	14.32	14.42	14.49
China	4.82	4.83	4.74	4.75	4.78	4.78	4.78	4.83	4.78	4.80	4.80	4.83	4.78	4.79	4.80
Other Non-OECD	11.89	12.29	12.63	12.23	11.87	12.43	12.73	12.28	11.93	12.47	12.75	12.29	12.26	12.33	12.36
Total World Supply	97.10	97.65	98.37	98.65	98.78	100.26	101.13	101.67	101.29	102.12	102.62	102.82	97.95	100.47	102.22
Non-OPEC Supply	58.26	58.33	58.69	59.38	59.49	61.17	61.82	62.39	62.11	62.76	62.92	63.00	58.67	61.23	62.70
Consumption (million barrels per day) (c)															
OECD	46.79	46.92	47.46	47.69	47.54	46.97	48.11	48.23	47.90	47.45	48.63	48.70	47.22	47.72	48.17
U.S. (50 States)	19.49	20.03	19.92	20.05	20.19	20.24	20.61	20.49	20.32	20.64	20.99	20.85	19.88	20.38	20.70
U.S. Territories	0.15	0.15	0.13	0.09	0.09	0.09	0.10	0.10	0.11	0.11	0.12	0.13	0.13	0.10	0.12
Canada	2.35	2.34	2.50	2.46	2.39	2.33	2.45	2.43	2.39	2.33	2.45	2.43	2.41	2.40	2.40
Europe	13.95	14.33	14.76	14.44	14.02	14.38	14.85	14.54	14.17	14.40	14.92	14.60	14.37	14.45	14.53
Japan	4.33	3.64	3.69	4.12	4.28	3.50	3.62	3.98	4.27	3.45	3.58	3.95	3.94	3.84	3.81
Other OECD	6.52	6.44	6.46	6.53	6.57	6.43	6.50	6.68	6.63	6.51	6.57	6.75	6.49	6.54	6.62
Non-OECD	50.79	51.46	51.47	51.46	52.08	52.79	52.74	52.74	53.46	54.17	54.12	54.17	51.30	52.59	53.98
Eurasia	4.76	4.75	5.02	4.89	4.80	4.84	5.11	4.99	4.85	4.90	5.17	5.05	4.86	4.94	4.99
Europe	0.69	0.70	0.72	0.72	0.71	0.71	0.73	0.73	0.72	0.72	0.74	0.74	0.70	0.72	0.73
China	13.48	13.29	13.01	13.27	13.98	13.74	13.40	13.64	14.42	14.15	13.80	14.04	13.26	13.69	14.10
Other Asia	12.99	13.31	13.03	13.36	13.59	13.82	13.45	13.76	14.11	14.29	13.90	14.24	13.17	13.66	14.14
Other Non-OECD	18.86	19.42	19.71	19.21	19.00	19.69	20.04	19.62	19.36	20.11	20.51	20.11	19.30	19.59	20.02
Total World Consumption	97.58	98.38	98.93	99.15	99.62	99.76	100.85	100.98	101.36	101.62	102.75	102.87	98.52	100.31	102.16
Total Crude Oil and Other Liquids Inventory Net Withdrawals (million barrels per day)															
U.S. (50 States)	0.00	0.22	0.34	0.91	0.44	-0.56	-0.23	0.39	-0.15	-0.31	-0.11	0.36	0.37	0.01	-0.05
Other OECD	-0.30	0.02	0.30	0.46	0.14	0.02	-0.02	-0.37	0.08	-0.06	0.08	-0.10	0.12	-0.06	0.00
Other Stock Draws and Balance	0.78	0.49	-0.07	-0.87	0.26	0.05	-0.04	-0.71	0.14	-0.12	0.16	-0.20	0.08	-0.11	-0.01
Total Stock Draw	0.48	0.73	0.57	0.49	0.84	-0.49	-0.28	-0.70	0.06	-0.50	0.13	0.06	0.57	-0.16	-0.06
End-of-period Commercial Crude Oil and Other Liquids Inventories (million barrels)															
U.S. Commercial Inventory	1,338	1,330	1,305	1,232	1,190	1,244	1,268	1,237	1,254	1,287	1,301	1,270	1,232	1,237	1,270
OECD Commercial Inventory	3,012	3,001	2,954	2,838	2,784	2,835	2,861	2,864	2,875	2,913	2,920	2,898	2,838	2,864	2,898

- = no data available

OECD = Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Latvia, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, the United States.

OPEC = Organization of the Petroleum Exporting Countries: Algeria, Angola, Ecuador, Equatorial Guinea, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, Venezuela.

(a) Supply includes production of crude oil (including lease condensates), natural gas plant liquids, biofuels, other liquids, and refinery processing gains.

(b) Includes lease condensate, natural gas plant liquids, other liquids, and refinery processing gain. Includes other unaccounted-for liquids.

 (c) Consumption of petroleum by the OECD countries is synonymous with "petroleum product supplied," defined in the glossary of the EIA *Retro Petroleum Supply Monthly*, DOE/EIA-0109.

Consumption of petroleum by the non-OECD countries is "apparent consumption," which includes internal consumption, refinery fuel and loss, and bunkering.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Historical data: Latest data available from Energy Information Administration international energy statistics.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 3b. Non-OPEC Petroleum and Other Liquids Supply (million barrels per day)

U.S. Energy Information Administration | Short-Term Energy Outlook - April 2018

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
North America	22.41	22.37	22.67	23.62	23.71	<i>24.85</i>	<i>25.38</i>	<i>26.04</i>	<i>26.14</i>	<i>26.37</i>	<i>26.31</i>	<i>26.54</i>	22.77	<i>25.00</i>	<i>26.34</i>
Canada	5.05	4.71	4.99	5.02	4.90	<i>5.24</i>	<i>5.35</i>	<i>5.45</i>	<i>5.47</i>	<i>5.46</i>	<i>5.51</i>	<i>5.55</i>	4.94	<i>5.24</i>	<i>5.50</i>
Mexico	2.35	2.34	2.19	2.16	2.20	<i>2.22</i>	<i>2.20</i>	<i>2.20</i>	<i>2.19</i>	<i>2.18</i>	<i>2.16</i>	<i>2.15</i>	2.26	<i>2.21</i>	<i>2.17</i>
United States	15.00	15.32	15.48	16.45	16.61	<i>17.39</i>	<i>17.82</i>	<i>18.39</i>	<i>18.48</i>	<i>18.74</i>	<i>18.64</i>	<i>18.84</i>	15.57	<i>17.56</i>	<i>18.68</i>
Central and South America	4.91	5.40	5.71	5.30	4.93	<i>5.50</i>	<i>5.83</i>	<i>5.41</i>	<i>5.06</i>	<i>5.63</i>	<i>5.95</i>	<i>5.54</i>	5.33	<i>5.42</i>	<i>5.55</i>
Argentina	0.67	0.67	0.67	0.68	0.66	<i>0.66</i>	<i>0.67</i>	<i>0.67</i>	<i>0.65</i>	<i>0.65</i>	<i>0.66</i>	<i>0.67</i>	0.67	<i>0.67</i>	<i>0.66</i>
Brazil	2.95	3.44	3.73	3.32	3.02	<i>3.55</i>	<i>3.86</i>	<i>3.44</i>	<i>3.13</i>	<i>3.68</i>	<i>3.99</i>	<i>3.58</i>	3.36	<i>3.47</i>	<i>3.60</i>
Colombia	0.87	0.88	0.88	0.87	0.84	<i>0.88</i>	<i>0.88</i>	<i>0.87</i>	<i>0.86</i>	<i>0.87</i>	<i>0.87</i>	<i>0.86</i>	0.88	<i>0.86</i>	<i>0.87</i>
Other Central and S. America	0.42	0.42	0.42	0.42	0.41	<i>0.42</i>	<i>0.42</i>	<i>0.43</i>	<i>0.42</i>	<i>0.42</i>	<i>0.43</i>	<i>0.44</i>	0.42	<i>0.42</i>	<i>0.43</i>
Europe	4.22	4.05	3.92	3.96	4.18	<i>4.21</i>	<i>4.07</i>	<i>4.23</i>	<i>4.22</i>	<i>4.13</i>	<i>4.01</i>	<i>4.19</i>	4.04	<i>4.17</i>	<i>4.14</i>
Norway	2.08	2.00	1.91	1.92	2.01	<i>2.00</i>	<i>2.00</i>	<i>2.03</i>	<i>2.01</i>	<i>1.94</i>	<i>1.92</i>	<i>1.99</i>	1.98	<i>2.01</i>	<i>1.96</i>
United Kingdom	1.11	1.07	1.00	1.02	1.16	<i>1.21</i>	<i>1.07</i>	<i>1.21</i>	<i>1.21</i>	<i>1.21</i>	<i>1.11</i>	<i>1.21</i>	1.05	<i>1.16</i>	<i>1.18</i>
Eurasia	14.43	14.31	14.23	14.33	14.45	<i>14.39</i>	<i>14.35</i>	<i>14.48</i>	<i>14.50</i>	<i>14.42</i>	<i>14.47</i>	<i>14.56</i>	14.32	<i>14.42</i>	<i>14.49</i>
Azerbaijan	0.79	0.80	0.79	0.81	0.82	<i>0.80</i>	<i>0.78</i>	<i>0.77</i>	<i>0.79</i>	<i>0.78</i>	<i>0.77</i>	<i>0.76</i>	0.80	<i>0.79</i>	<i>0.77</i>
Kazakhstan	1.87	1.87	1.86	1.92	2.00	<i>1.97</i>	<i>2.01</i>	<i>2.08</i>	<i>2.09</i>	<i>2.00</i>	<i>2.07</i>	<i>2.14</i>	1.88	<i>2.01</i>	<i>2.08</i>
Russia	11.32	11.18	11.14	11.16	11.18	<i>11.16</i>	<i>11.09</i>	<i>11.17</i>	<i>11.18</i>	<i>11.20</i>	<i>11.19</i>	<i>11.22</i>	11.20	<i>11.15</i>	<i>11.20</i>
Turkmenistan	0.28	0.28	0.29	0.29	0.29	<i>0.29</i>	<i>0.29</i>	<i>0.28</i>	<i>0.28</i>	<i>0.28</i>	<i>0.28</i>	<i>0.28</i>	0.28	<i>0.29</i>	<i>0.28</i>
Other Eurasia	0.16	0.17	0.16	0.16	0.18	<i>0.18</i>	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	<i>0.16</i>	0.16	<i>0.17</i>	<i>0.16</i>
Middle East	1.07	1.07	1.07	1.08	1.11	<i>1.09</i>	<i>1.07</i>	<i>1.05</i>	<i>1.05</i>	<i>1.03</i>	<i>1.02</i>	<i>1.00</i>	1.07	<i>1.08</i>	<i>1.03</i>
Oman	0.98	0.98	0.98	0.98	0.99	<i>0.97</i>	<i>0.95</i>	<i>0.94</i>	<i>0.92</i>	<i>0.90</i>	<i>0.88</i>	<i>0.87</i>	0.98	<i>0.96</i>	<i>0.89</i>
Asia and Oceania	9.35	9.28	9.19	9.19	9.29	<i>9.28</i>	<i>9.27</i>	<i>9.32</i>	<i>9.32</i>	<i>9.34</i>	<i>9.33</i>	<i>9.34</i>	9.25	<i>9.29</i>	<i>9.33</i>
Australia	0.35	0.36	0.37	0.35	0.34	<i>0.34</i>	<i>0.33</i>	<i>0.35</i>	<i>0.37</i>	<i>0.39</i>	<i>0.40</i>	<i>0.41</i>	0.36	<i>0.34</i>	<i>0.39</i>
China	4.82	4.83	4.74	4.75	4.78	<i>4.78</i>	<i>4.78</i>	<i>4.83</i>	<i>4.78</i>	<i>4.80</i>	<i>4.80</i>	<i>4.83</i>	4.78	<i>4.79</i>	<i>4.80</i>
India	1.01	1.00	1.00	1.00	1.00	<i>1.01</i>	<i>1.00</i>	<i>1.00</i>	<i>1.01</i>	<i>1.01</i>	<i>1.01</i>	<i>1.00</i>	1.00	<i>1.00</i>	<i>1.01</i>
Indonesia	0.93	0.91	0.91	0.90	0.91	<i>0.90</i>	<i>0.90</i>	<i>0.90</i>	<i>0.90</i>	<i>0.89</i>	<i>0.88</i>	<i>0.87</i>	0.91	<i>0.90</i>	<i>0.89</i>
Malaysia	0.74	0.72	0.71	0.72	0.74	<i>0.72</i>	<i>0.72</i>	<i>0.71</i>	<i>0.72</i>	<i>0.71</i>	<i>0.70</i>	<i>0.69</i>	0.72	<i>0.72</i>	<i>0.71</i>
Vietnam	0.29	0.29	0.28	0.28	0.27	<i>0.27</i>	<i>0.27</i>	<i>0.27</i>	<i>0.27</i>	<i>0.27</i>	<i>0.27</i>	<i>0.27</i>	0.28	<i>0.27</i>	<i>0.27</i>
Africa	1.86	1.86	1.91	1.91	1.83	<i>1.85</i>	<i>1.85</i>	<i>1.85</i>	<i>1.83</i>	<i>1.83</i>	<i>1.83</i>	<i>1.83</i>	1.88	<i>1.85</i>	<i>1.83</i>
Egypt	0.64	0.65	0.66	0.66	0.63	<i>0.63</i>	<i>0.63</i>	<i>0.63</i>	<i>0.58</i>	<i>0.58</i>	<i>0.58</i>	<i>0.58</i>	0.65	<i>0.63</i>	<i>0.58</i>
South Sudan	0.15	0.15	0.15	0.15	0.12	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	0.15	<i>0.12</i>	<i>0.12</i>
Total non-OPEC liquids	58.26	58.33	58.69	59.38	59.49	<i>61.17</i>	<i>61.82</i>	<i>62.39</i>	<i>62.11</i>	<i>62.76</i>	<i>62.92</i>	<i>63.00</i>	58.67	<i>61.23</i>	<i>62.70</i>
OPEC non-crude liquids	6.77	7.00	6.79	6.81	6.90	<i>6.94</i>	<i>6.98</i>	<i>7.02</i>	<i>7.05</i>	<i>7.12</i>	<i>7.19</i>	<i>7.27</i>	6.84	<i>6.96</i>	<i>7.16</i>
Non-OPEC + OPEC non-crude	65.03	65.33	65.48	66.18	66.39	<i>68.11</i>	<i>68.80</i>	<i>69.41</i>	<i>69.17</i>	<i>69.88</i>	<i>70.11</i>	<i>70.27</i>	65.51	<i>68.19</i>	<i>69.86</i>
Unplanned non-OPEC Production Outages	0.43	0.68	0.63	0.54	0.55	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	0.57	<i>n/a</i>	<i>n/a</i>

- = no data available

OPEC = Organization of the Petroleum Exporting Countries: Algeria, Angola, Ecuador, Equatorial Guinea, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, Venezuela.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Supply includes production of crude oil (including lease condensates), natural gas plant liquids, biofuels, other liquids, and refinery processing gains.

Not all countries are shown in each region and sum of reported country volumes may not equal regional volumes.

Historical data: Latest data available from Energy Information Administration international energy statistics.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 3c. OPEC Crude Oil (excluding condensates) Supply (million barrels per day)

U.S. Energy Information Administration | Short-Term Energy Outlook - April 2018

	2017				2018				2019				Year			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019	
Crude Oil																
Algeria	1.04	1.03	1.03	1.00	1.02	-	-	-	-	-	-	-	-	1.03	-	-
Angola	1.64	1.66	1.66	1.63	1.59	-	-	-	-	-	-	-	-	1.65	-	-
Ecuador	0.53	0.53	0.54	0.52	0.52	-	-	-	-	-	-	-	-	0.53	-	-
Equatorial Guinea	0.14	0.14	0.13	0.13	0.14	-	-	-	-	-	-	-	-	0.13	-	-
Gabon	0.19	0.20	0.20	0.20	0.20	-	-	-	-	-	-	-	-	0.20	-	-
Iran	3.80	3.81	3.83	3.84	3.83	-	-	-	-	-	-	-	-	3.82	-	-
Iraq	4.46	4.44	4.50	4.36	4.46	-	-	-	-	-	-	-	-	4.44	-	-
Kuwait	2.74	2.71	2.72	2.72	2.71	-	-	-	-	-	-	-	-	2.72	-	-
Libya	0.65	0.72	0.94	0.95	0.99	-	-	-	-	-	-	-	-	0.82	-	-
Nigeria	1.38	1.49	1.68	1.72	1.72	-	-	-	-	-	-	-	-	1.57	-	-
Qatar	0.62	0.61	0.61	0.60	0.61	-	-	-	-	-	-	-	-	0.61	-	-
Saudi Arabia	9.98	10.09	10.18	10.11	10.14	-	-	-	-	-	-	-	-	10.09	-	-
United Arab Emirates	2.92	2.90	2.92	2.90	2.88	-	-	-	-	-	-	-	-	2.91	-	-
Venezuela	1.99	1.97	1.95	1.78	1.57	-	-	-	-	-	-	-	-	1.92	-	-
OPEC Total	32.08	32.32	32.89	32.47	32.39	32.15	32.33	32.27	32.13	32.24	32.51	32.55	32.44	32.28	32.36	
Other Liquids (a)	6.77	7.00	6.79	6.81	6.90	<i>6.94</i>	<i>6.98</i>	<i>7.02</i>	<i>7.05</i>	<i>7.12</i>	<i>7.19</i>	<i>7.27</i>	6.84	<i>6.96</i>	<i>7.16</i>	
Total OPEC Supply	38.84	39.32	39.68	39.28	39.29	<i>39.09</i>	<i>39.32</i>	<i>39.29</i>	<i>39.18</i>	<i>39.36</i>	<i>39.70</i>	<i>39.82</i>	39.28	<i>39.24</i>	<i>39.52</i>	
Crude Oil Production Capacity																
Africa	5.04	5.24	5.64	5.64	5.66	5.57	5.55	5.54	5.51	5.53	5.56	5.63	5.39	5.58	5.56	
Middle East	26.70	26.69	26.71	26.64	26.59	26.69	26.69	26.68	26.43	26.52	26.65	26.69	26.69	26.67	26.57	
South America	2.53	2.51	2.49	2.31	2.09	1.95	1.85	1.71	1.64	1.59	1.54	1.50	2.46	1.90	1.56	
OPEC Total	34.27	34.44	34.84	34.58	34.34	34.21	34.09	33.93	33.58	33.64	33.75	33.82	34.54	34.14	33.70	
Surplus Crude Oil Production Capacity																
Africa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.01	
Middle East	2.19	2.13	1.95	2.11	1.95	2.07	1.76	1.67	1.43	1.38	1.24	1.27	2.09	1.86	1.33	
South America	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
OPEC Total	2.19	2.13	1.95	2.11	1.95	2.07	1.76	1.67	1.45	1.40	1.24	1.27	2.09	1.86	1.34	
Unplanned OPEC Production Outages	1.81	1.60	1.17	1.21	1.20	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	1.45	<i>n/a</i>	<i>n/a</i>	

- = no data available

OPEC = Organization of the Petroleum Exporting Countries: Algeria, Angola, Equatorial Guinea, Gabon, Libya, and Nigeria (Africa); Ecuador and Venezuela (South America); Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates (Middle East).

(a) Includes lease condensate, natural gas plant liquids, other liquids, and refinery processing gain. Includes other unaccounted-for liquids.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Historical data: Latest data available from Energy Information Administration international energy statistics.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 3d. World Petroleum and Other Liquids Consumption (million barrels per day)

U.S. Energy Information Administration | Short-Term Energy Outlook - April 2018

	2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
North America	23.81	24.35	24.33	24.40	24.50	<i>24.48</i>	<i>24.96</i>	<i>24.87</i>	<i>24.63</i>	<i>24.91</i>	<i>25.37</i>	<i>25.23</i>	24.23	<i>24.70</i>	<i>25.04</i>
Canada	2.35	2.34	2.50	2.46	2.39	<i>2.33</i>	<i>2.45</i>	<i>2.43</i>	<i>2.39</i>	<i>2.33</i>	<i>2.45</i>	<i>2.43</i>	2.41	<i>2.40</i>	<i>2.40</i>
Mexico	1.96	1.98	1.90	1.88	1.91	<i>1.90</i>	<i>1.90</i>	<i>1.94</i>	<i>1.91</i>	<i>1.92</i>	<i>1.92</i>	<i>1.95</i>	1.93	<i>1.91</i>	<i>1.92</i>
United States	19.49	20.03	19.92	20.05	20.19	<i>20.24</i>	<i>20.61</i>	<i>20.49</i>	<i>20.32</i>	<i>20.64</i>	<i>20.99</i>	<i>20.85</i>	19.88	<i>20.38</i>	<i>20.70</i>
Central and South America	6.98	7.04	7.12	7.05	6.85	<i>7.01</i>	<i>7.13</i>	<i>7.13</i>	<i>6.97</i>	<i>7.16</i>	<i>7.29</i>	<i>7.31</i>	7.05	<i>7.03</i>	<i>7.18</i>
Brazil	3.02	3.01	3.09	3.10	3.00	<i>3.08</i>	<i>3.17</i>	<i>3.19</i>	<i>3.11</i>	<i>3.20</i>	<i>3.30</i>	<i>3.34</i>	3.06	<i>3.11</i>	<i>3.24</i>
Europe	14.64	15.02	15.47	15.15	14.73	<i>15.09</i>	<i>15.58</i>	<i>15.28</i>	<i>14.89</i>	<i>15.12</i>	<i>15.66</i>	<i>15.34</i>	15.08	<i>15.17</i>	<i>15.25</i>
Eurasia	4.76	4.75	5.02	4.89	4.80	<i>4.84</i>	<i>5.11</i>	<i>4.99</i>	<i>4.85</i>	<i>4.90</i>	<i>5.17</i>	<i>5.05</i>	4.86	<i>4.94</i>	<i>4.99</i>
Russia	3.61	3.62	3.82	3.69	3.61	<i>3.68</i>	<i>3.89</i>	<i>3.76</i>	<i>3.66</i>	<i>3.73</i>	<i>3.94</i>	<i>3.81</i>	3.68	<i>3.73</i>	<i>3.78</i>
Middle East	8.21	8.74	9.07	8.45	8.32	<i>8.88</i>	<i>9.22</i>	<i>8.62</i>	<i>8.48</i>	<i>9.04</i>	<i>9.40</i>	<i>8.79</i>	8.62	<i>8.76</i>	<i>8.93</i>
Asia and Oceania	34.83	34.17	33.73	34.87	35.96	<i>35.01</i>	<i>34.49</i>	<i>35.58</i>	<i>36.96</i>	<i>35.90</i>	<i>35.35</i>	<i>36.46</i>	34.40	<i>35.26</i>	<i>36.16</i>
China	13.48	13.29	13.01	13.27	13.98	<i>13.74</i>	<i>13.40</i>	<i>13.64</i>	<i>14.42</i>	<i>14.15</i>	<i>13.80</i>	<i>14.04</i>	13.26	<i>13.69</i>	<i>14.10</i>
Japan	4.33	3.64	3.69	4.12	4.28	<i>3.50</i>	<i>3.62</i>	<i>3.98</i>	<i>4.27</i>	<i>3.45</i>	<i>3.58</i>	<i>3.95</i>	3.94	<i>3.84</i>	<i>3.81</i>
India	4.40	4.64	4.42	4.75	4.79	<i>4.93</i>	<i>4.63</i>	<i>4.92</i>	<i>5.17</i>	<i>5.25</i>	<i>4.92</i>	<i>5.23</i>	4.55	<i>4.82</i>	<i>5.14</i>
Africa	4.34	4.30	4.19	4.31	4.45	<i>4.43</i>	<i>4.34</i>	<i>4.51</i>	<i>4.56</i>	<i>4.57</i>	<i>4.50</i>	<i>4.68</i>	4.28	<i>4.43</i>	<i>4.58</i>
Total OECD Liquid Fuels Consumption	46.79	46.92	47.46	47.69	47.54	<i>46.97</i>	<i>48.11</i>	<i>48.23</i>	<i>47.90</i>	<i>47.45</i>	<i>48.63</i>	<i>48.70</i>	47.22	<i>47.72</i>	<i>48.17</i>
Total non-OECD Liquid Fuels Consumption	50.79	51.46	51.47	51.46	52.08	<i>52.79</i>	<i>52.74</i>	<i>52.74</i>	<i>53.46</i>	<i>54.17</i>	<i>54.12</i>	<i>54.17</i>	51.30	<i>52.59</i>	<i>53.98</i>
Total World Liquid Fuels Consumption	97.58	98.38	98.93	99.15	99.62	<i>99.76</i>	<i>100.85</i>	<i>100.98</i>	<i>101.36</i>	<i>101.62</i>	<i>102.75</i>	<i>102.87</i>	98.52	<i>100.31</i>	<i>102.16</i>
Oil-weighted Real Gross Domestic Product (a)															
World Index, 2015 Q1 = 100	105.6	106.5	107.3	108.2	109.3	<i>110.1</i>	<i>111.0</i>	<i>112.0</i>	<i>113.0</i>	<i>113.8</i>	<i>114.6</i>	<i>115.5</i>	106.9	<i>110.6</i>	<i>114.2</i>
Percent change from prior year	3.6	2.9	3.1	3.1	3.4	<i>3.4</i>	<i>3.4</i>	<i>3.5</i>	<i>3.4</i>	<i>3.3</i>	<i>3.3</i>	<i>3.1</i>	3.2	<i>3.4</i>	<i>3.3</i>
OECD Index, 2015 Q1 = 100	103.8	104.5	105.1	105.7	106.5	<i>107.1</i>	<i>107.7</i>	<i>108.4</i>	<i>109.2</i>	<i>109.6</i>	<i>110.0</i>	<i>110.5</i>	104.8	<i>107.5</i>	<i>109.8</i>
Percent change from prior year	3.0	2.1	2.4	2.3	2.6	<i>2.6</i>	<i>2.5</i>	<i>2.6</i>	<i>2.5</i>	<i>2.3</i>	<i>2.1</i>	<i>1.9</i>	2.4	<i>2.6</i>	<i>2.2</i>
Non-OECD Index, 2015 Q1 = 100	107.4	108.4	109.5	110.6	111.9	<i>113.0</i>	<i>114.1</i>	<i>115.4</i>	<i>116.7</i>	<i>117.9</i>	<i>119.1</i>	<i>120.4</i>	109.0	<i>113.6</i>	<i>118.5</i>
Percent change from prior year	4.2	3.6	3.8	3.9	4.2	<i>4.2</i>	<i>4.2</i>	<i>4.3</i>	<i>4.3</i>	<i>4.4</i>	<i>4.4</i>	<i>4.3</i>	3.9	<i>4.2</i>	<i>4.3</i>
Real U.S. Dollar Exchange Rate (a)															
Index, 2015 Q1 = 100	104.90	103.43	101.85	102.15	100.33	<i>99.74</i>	<i>99.26</i>	<i>98.84</i>	<i>98.68</i>	<i>98.56</i>	<i>98.46</i>	<i>98.32</i>	103.08	<i>99.54</i>	<i>98.51</i>
Percent change from prior year	-0.1	0.4	-1.0	-2.4	-4.4	<i>-3.6</i>	<i>-2.5</i>	<i>-3.2</i>	<i>-1.6</i>	<i>-1.2</i>	<i>-0.8</i>	<i>-0.5</i>	-0.8	<i>-3.4</i>	<i>-1.0</i>

- = no data available

OECD = Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Latvia, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, the United States.

(a) Weighted geometric mean of real indices for various countries with weights equal to each country's share of world oil consumption in the base period. Exchange rate is measured in foreign currency per U.S. dollar. GDP and exchange rate data are from Oxford Economics, and oil consumption data are from EIA.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Historical data: Latest data available from Energy Information Administration international energy statistics.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 4a. U.S. Petroleum and Other Liquids Supply, Consumption, and Inventories
 U.S. Energy Information Administration | Short-Term Energy Outlook - April 2018

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
Supply (million barrels per day)															
Crude Oil Supply															
Domestic Production (a)	8.99	9.10	9.29	9.89	10.15	10.55	10.78	11.27	11.46	11.46	11.33	11.52	9.32	10.69	11.44
Alaska	0.52	0.50	0.45	0.51	0.51	0.48	0.43	0.49	0.51	0.49	0.44	0.50	0.49	0.48	0.48
Federal Gulf of Mexico (b)	1.73	1.62	1.68	1.56	1.64	1.73	1.66	1.76	1.84	1.85	1.74	1.84	1.65	1.70	1.82
Lower 48 States (excl GOM)	6.74	6.98	7.16	7.82	8.01	8.34	8.69	9.01	9.11	9.13	9.15	9.19	7.18	8.51	9.14
Crude Oil Net Imports (c)	7.24	7.24	6.63	6.08	6.23	6.64	6.17	5.16	5.16	5.61	5.64	5.13	6.79	6.05	5.39
SPR Net Withdrawals	0.04	0.14	0.06	0.12	-0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.02	0.09	0.02	0.04
Commercial Inventory Net Withdrawals	-0.59	0.41	0.34	0.52	-0.06	-0.01	0.11	-0.04	-0.43	0.16	0.16	-0.03	0.17	0.00	-0.03
Crude Oil Adjustment (d)	0.23	0.24	0.28	0.11	0.14	0.19	0.21	0.15	0.19	0.19	0.21	0.15	0.22	0.17	0.19
Total Crude Oil Input to Refineries	15.91	17.13	16.60	16.72	16.43	17.40	17.31	16.59	16.42	17.45	17.39	16.80	16.59	16.94	17.02
Other Supply															
Refinery Processing Gain	1.09	1.13	1.07	1.12	1.09	1.13	1.13	1.11	1.08	1.13	1.13	1.12	1.10	1.11	1.12
Natural Gas Plant Liquids Production	3.54	3.70	3.72	3.99	3.95	4.27	4.45	4.55	4.51	4.66	4.69	4.70	3.74	4.31	4.64
Renewables and Oxygenate Production (e)	1.17	1.16	1.19	1.23	1.19	1.19	1.21	1.21	1.19	1.23	1.24	1.24	1.19	1.20	1.22
Fuel Ethanol Production	1.04	1.01	1.02	1.06	1.04	1.02	1.03	1.03	1.04	1.05	1.05	1.05	1.03	1.03	1.05
Petroleum Products Adjustment (f)	0.21	0.22	0.21	0.22	0.23	0.25	0.25	0.25	0.25	0.26	0.26	0.26	0.22	0.24	0.25
Product Net Imports (c)	-2.96	-2.99	-2.80	-3.49	-3.22	-3.42	-3.37	-3.60	-3.36	-3.57	-3.39	-3.63	-3.06	-3.40	-3.49
Hydrocarbon Gas Liquids	-1.20	-1.18	-1.16	-1.29	-1.26	-1.35	-1.43	-1.63	-1.50	-1.55	-1.51	-1.60	-1.21	-1.42	-1.54
Unfinished Oils	0.37	0.34	0.38	0.38	0.37	0.32	0.39	0.32	0.38	0.38	0.40	0.32	0.37	0.35	0.37
Other HC/Oxygenates	-0.13	-0.09	-0.09	-0.13	-0.11	-0.10	-0.08	-0.09	-0.12	-0.09	-0.08	-0.08	-0.11	-0.09	-0.09
Motor Gasoline Blend Comp.	0.43	0.68	0.64	0.36	0.42	0.66	0.50	0.43	0.49	0.66	0.49	0.45	0.53	0.50	0.52
Finished Motor Gasoline	-0.66	-0.62	-0.63	-0.94	-0.95	-0.78	-0.59	-0.78	-0.86	-0.75	-0.56	-0.83	-0.71	-0.77	-0.75
Jet Fuel	-0.04	-0.07	-0.01	0.02	-0.08	-0.08	-0.06	-0.02	-0.05	-0.06	-0.07	-0.03	-0.02	-0.06	-0.05
Distillate Fuel Oil	-1.01	-1.36	-1.32	-1.22	-0.96	-1.29	-1.37	-1.13	-1.03	-1.32	-1.33	-1.09	-1.23	-1.19	-1.19
Residual Fuel Oil	-0.10	-0.11	-0.12	-0.09	-0.03	-0.12	-0.10	-0.11	-0.07	-0.14	-0.11	-0.12	-0.10	-0.09	-0.11
Other Oils (g)	-0.61	-0.60	-0.50	-0.59	-0.61	-0.68	-0.62	-0.60	-0.59	-0.69	-0.63	-0.64	-0.57	-0.63	-0.64
Product Inventory Net Withdrawals	0.56	-0.33	-0.07	0.27	0.52	-0.58	-0.37	0.38	0.24	-0.51	-0.32	0.37	0.11	-0.02	-0.06
Total Supply	19.52	20.03	19.92	20.05	20.19	20.24	20.61	20.49	20.32	20.64	20.99	20.85	19.88	20.38	20.70
Consumption (million barrels per day)															
Hydrocarbon Gas Liquids	2.79	2.45	2.33	2.81	3.18	2.68	2.80	3.16	3.29	2.92	3.02	3.31	2.60	2.96	3.13
Unfinished Oils	0.02	0.02	-0.01	-0.04	0.05	-0.03	-0.03	0.01	0.00	-0.03	-0.03	0.01	0.00	0.00	-0.01
Motor Gasoline	8.95	9.54	9.56	9.23	8.99	9.52	9.61	9.26	9.00	9.58	9.66	9.34	9.32	9.35	9.40
Fuel Ethanol blended into Motor Gasoline	0.90	0.96	0.96	0.95	0.96	0.96	0.97	0.94	0.92	0.98	0.99	0.96	0.94	0.96	0.96
Jet Fuel	1.60	1.68	1.71	1.73	1.64	1.70	1.76	1.73	1.63	1.73	1.78	1.75	1.68	1.71	1.72
Distillate Fuel Oil	3.95	3.91	3.87	4.02	4.13	4.02	3.97	4.08	4.15	4.11	4.08	4.18	3.94	4.05	4.13
Residual Fuel Oil	0.37	0.37	0.30	0.39	0.33	0.31	0.33	0.30	0.36	0.31	0.32	0.29	0.36	0.32	0.32
Other Oils (g)	1.83	2.06	2.15	1.91	1.87	2.03	2.17	1.97	1.89	2.02	2.16	1.97	1.99	2.01	2.01
Total Consumption	19.49	20.03	19.92	20.05	20.19	20.24	20.61	20.49	20.32	20.64	20.99	20.85	19.88	20.38	20.70
Total Petroleum and Other Liquids Net Imports	4.28	4.25	3.83	2.59	3.01	3.23	2.80	1.56	1.80	2.03	2.25	1.50	3.73	2.64	1.90
End-of-period Inventories (million barrels)															
Commercial Inventory															
Crude Oil (excluding SPR)	537.9	500.4	469.1	421.1	426.4	426.9	416.8	420.1	459.2	445.0	430.1	432.4	421.1	420.1	432.4
Hydrocarbon Gas Liquids	148.1	190.6	229.7	190.9	139.4	194.7	237.6	189.9	156.4	206.8	244.3	198.1	190.9	189.9	198.1
Unfinished Oils	89.3	88.7	89.2	86.3	95.8	90.2	86.7	79.9	90.7	88.9	87.0	80.1	86.3	79.9	80.1
Other HC/Oxygenates	32.6	29.3	28.3	30.1	29.7	28.6	27.9	28.6	30.3	29.3	28.6	29.2	30.1	28.6	29.2
Total Motor Gasoline	239.0	237.9	223.8	236.7	237.8	233.4	228.0	241.9	243.5	238.8	233.5	246.9	236.7	241.9	246.9
Finished Motor Gasoline	21.7	22.5	21.8	24.6	24.2	23.7	24.2	27.5	25.0	23.9	24.6	25.5	24.6	27.5	25.5
Motor Gasoline Blend Comp.	217.2	215.5	202.0	212.1	213.6	209.7	203.8	214.4	218.4	214.9	208.9	221.4	212.1	214.4	221.4
Jet Fuel	42.3	41.0	43.3	41.2	40.1	41.4	42.8	40.6	40.8	42.3	44.0	41.9	41.2	40.6	41.9
Distillate Fuel Oil	151.1	151.6	137.5	145.6	129.2	135.7	141.8	146.4	136.8	139.7	144.7	149.7	145.6	146.4	149.7
Residual Fuel Oil	40.8	35.2	35.9	29.4	35.5	37.9	37.4	37.9	39.9	40.5	39.3	39.5	29.4	37.9	39.5
Other Oils (g)	56.6	55.2	47.9	50.9	56.5	55.1	49.2	51.4	57.0	55.7	49.9	52.1	50.9	51.4	52.1
Total Commercial Inventory	1,338	1,330	1,305	1,232	1,190	1,244	1,268	1,237	1,254	1,287	1,301	1,270	1,232	1,237	1,270
Crude Oil in SPR	692	679	674	663	665	663	659	655	651	647	643	642	663	655	642

- = no data available

(a) Includes lease condensate.

(b) Crude oil production from U.S. Federal leases in the Gulf of Mexico (GOM).

(c) Net imports equals gross imports minus gross exports.

(d) Crude oil adjustment balances supply and consumption and was previously referred to as "Unaccounted for Crude Oil."

(e) Renewables and oxygenate production includes pentanes plus, oxygenates (excluding fuel ethanol), and renewable fuels.

(f) Petroleum products adjustment includes hydrogen/oxygenates/renewables/other hydrocarbons, motor gasoline blend components, and finished motor gasoline.

(g) "Other Oils" includes aviation gasoline blend components, finished aviation gasoline, kerosene, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt and road oil, still gas, and miscellaneous products.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

SPR: Strategic Petroleum Reserve

HC: Hydrocarbons

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: *Petroleum Supply Monthly*, DOE/EIA-0109; *Petroleum Supply Annual*, DOE/EIA-0340/2; and *Weekly Petroleum Status Report*, DOE/EIA-0208.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 4b. U.S. Hydrocarbon Gas Liquids (HGL) and Petroleum Refinery Balances (million barrels per day, except inventories and utilization factor)

U.S. Energy Information Administration | Short-Term Energy Outlook - April 2018

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
HGL Production															
Natural Gas Processing Plants															
Ethane	1.33	1.39	1.34	1.56	1.57	1.65	1.73	1.84	1.82	1.91	1.92	1.96	1.41	1.70	1.90
Propane	1.16	1.21	1.23	1.28	1.26	1.37	1.42	1.43	1.43	1.44	1.44	1.44	1.22	1.37	1.44
Butanes	0.63	0.65	0.67	0.69	0.68	0.75	0.77	0.77	0.77	0.78	0.78	0.77	0.66	0.74	0.78
Natural Gasoline (Pentanes Plus)	0.41	0.45	0.48	0.46	0.44	0.51	0.53	0.52	0.49	0.53	0.54	0.52	0.45	0.50	0.52
Refinery and Blender Net Production															
Ethane/Ethylene	0.00	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01
Propane	0.29	0.32	0.30	0.32	0.31	0.33	0.32	0.31	0.31	0.33	0.33	0.32	0.31	0.32	0.32
Propylene (refinery-grade)	0.27	0.29	0.27	0.30	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.29	0.29	0.28	0.28
Butanes/Butylenes	-0.09	0.27	0.16	-0.22	-0.09	0.26	0.18	-0.19	-0.07	0.26	0.18	-0.18	0.03	0.04	0.05
Renewable Fuels and Oxygenate Plant Net Production															
Natural Gasoline (Pentanes Plus)	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02
HGL Net Imports															
Ethane	-0.15	-0.16	-0.20	-0.21	-0.22	-0.24	-0.28	-0.30	-0.30	-0.31	-0.31	-0.31	-0.18	-0.26	-0.30
Propane/Propylene	-0.79	-0.71	-0.68	-0.83	-0.68	-0.73	-0.75	-0.93	-0.80	-0.85	-0.82	-0.91	-0.75	-0.78	-0.85
Butanes/Butylenes	-0.09	-0.12	-0.11	-0.11	-0.15	-0.16	-0.17	-0.18	-0.16	-0.15	-0.14	-0.15	-0.11	-0.16	-0.15
Natural Gasoline (Pentanes Plus)	-0.18	-0.18	-0.16	-0.14	-0.20	-0.22	-0.23	-0.22	-0.25	-0.24	-0.25	-0.24	-0.16	-0.22	-0.24
HGL Refinery and Blender Net Inputs															
Butanes/Butylenes	0.43	0.30	0.33	0.50	0.41	0.32	0.35	0.50	0.42	0.32	0.35	0.51	0.39	0.39	0.40
Natural Gasoline (Pentanes Plus)	0.16	0.18	0.18	0.19	0.16	0.17	0.18	0.18	0.17	0.18	0.18	0.18	0.18	0.17	0.18
HGL Consumption															
Ethane/Ethylene	1.19	1.23	1.13	1.33	1.40	1.38	1.45	1.57	1.55	1.58	1.63	1.68	1.22	1.45	1.61
Propane	1.05	0.60	0.67	0.85	1.19	0.66	0.71	0.98	1.13	0.66	0.71	0.99	0.79	0.89	0.87
Propylene (refinery-grade)	0.34	0.31	0.28	0.32	0.30	0.31	0.30	0.30	0.31	0.31	0.30	0.29	0.31	0.30	0.30
Butanes/Butylenes	0.12	0.23	0.18	0.16	0.21	0.26	0.26	0.23	0.23	0.31	0.30	0.27	0.17	0.24	0.28
Natural Gasoline (Pentanes Plus)	0.10	0.08	0.08	0.15	0.07	0.06	0.08	0.09	0.07	0.07	0.08	0.08	0.10	0.08	0.07
HGL Inventories (million barrels)															
Ethane	49.65	51.89	51.77	57.73	50.93	52.74	52.64	52.99	49.22	52.31	51.25	50.43	52.78	52.33	50.81
Propane	40.23	57.06	71.59	62.37	33.25	59.15	82.30	65.83	46.32	68.62	88.65	74.96	62.37	65.83	74.96
Propylene (refinery-grade)	3.75	4.01	5.21	4.82	4.73	5.05	5.25	5.50	4.61	4.60	4.88	5.53	4.82	5.50	5.53
Butanes/Butylenes	31.68	57.24	76.10	47.95	32.05	56.14	72.47	41.98	31.91	56.00	72.33	41.84	47.95	41.98	41.84
Natural Gasoline (Pentanes Plus)	21.49	20.55	23.40	20.14	18.67	21.62	24.38	25.00	23.77	25.25	27.19	27.13	20.14	25.00	27.13
Refinery and Blender Net Inputs															
Crude Oil	15.91	17.13	16.60	16.72	16.43	17.40	17.31	16.59	16.42	17.45	17.39	16.80	16.59	16.94	17.02
Hydrocarbon Gas Liquids	0.58	0.48	0.51	0.69	0.57	0.49	0.52	0.68	0.59	0.50	0.53	0.69	0.57	0.57	0.58
Other Hydrocarbons/Oxygenates	1.16	1.24	1.22	1.21	1.17	1.28	1.30	1.28	1.21	1.32	1.34	1.32	1.21	1.26	1.30
Unfinished Oils	0.25	0.33	0.38	0.45	0.21	0.41	0.45	0.38	0.25	0.43	0.46	0.38	0.36	0.37	0.38
Motor Gasoline Blend Components	0.39	0.65	0.67	0.22	0.35	0.82	0.65	0.47	0.57	0.84	0.66	0.49	0.49	0.57	0.64
Aviation Gasoline Blend Components	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Refinery and Blender Net Inputs	18.30	19.83	19.38	19.30	18.74	20.41	20.24	19.41	19.04	20.54	20.38	19.68	19.21	19.70	19.91
Refinery Processing Gain															
.....	1.09	1.13	1.07	1.12	1.09	1.13	1.13	1.11	1.08	1.13	1.13	1.12	1.10	1.11	1.12
Refinery and Blender Net Production															
Hydrocarbon Gas Liquids	0.48	0.89	0.73	0.40	0.51	0.88	0.79	0.42	0.52	0.88	0.79	0.43	0.63	0.65	0.65
Finished Motor Gasoline	9.57	10.10	10.04	10.13	9.80	10.40	10.27	10.21	9.94	10.44	10.31	10.32	9.96	10.17	10.25
Jet Fuel	1.63	1.74	1.75	1.69	1.71	1.80	1.83	1.72	1.68	1.81	1.87	1.75	1.70	1.77	1.78
Distillate Fuel	4.75	5.18	4.94	5.25	4.83	5.29	5.32	5.17	4.99	5.38	5.38	5.24	5.03	5.16	5.25
Residual Fuel	0.46	0.41	0.43	0.41	0.43	0.46	0.43	0.42	0.45	0.46	0.42	0.42	0.43	0.43	0.44
Other Oils (a)	2.50	2.64	2.56	2.53	2.55	2.69	2.73	2.59	2.54	2.69	2.73	2.64	2.56	2.64	2.65
Total Refinery and Blender Net Production	19.40	20.97	20.46	20.41	19.83	21.53	21.37	20.52	20.12	21.67	21.51	20.80	20.31	20.82	21.03
Refinery Distillation Inputs															
.....	16.23	17.42	16.90	17.00	16.77	17.51	17.51	16.82	16.64	17.56	17.58	17.00	16.89	17.16	17.20
Refinery Operable Distillation Capacity															
.....	18.62	18.58	18.55	18.52	18.57	18.60	18.60	18.60	18.61	18.61	18.65	18.65	18.57	18.59	18.63
Refinery Distillation Utilization Factor															
.....	0.87	0.94	0.91	0.92	0.90	0.94	0.94	0.90	0.89	0.94	0.94	0.91	0.91	0.92	0.92

- = no data available

(a) "Other Oils" includes aviation gasoline blend components, finished aviation gasoline, kerosene, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt and road oil, still gas, and miscellaneous products.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: *Petroleum Supply Monthly*, DOE/EIA-0109; *Petroleum Supply Annual*, DOE/EIA-0340/2; *Weekly Petroleum Status Report*, DOE/EIA-0208.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 4c. U.S. Regional Motor Gasoline Prices and Inventories

U.S. Energy Information Administration | Short-Term Energy Outlook - April 2018

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
Prices (cents per gallon)															
Refiner Wholesale Price	163	165	172	175	187	<i>201</i>	<i>191</i>	<i>173</i>	<i>172</i>	<i>191</i>	<i>189</i>	<i>180</i>	169	<i>188</i>	<i>183</i>
Gasoline Regular Grade Retail Prices Including Taxes															
PADD 1	231	233	241	249	255	<i>277</i>	<i>267</i>	<i>253</i>	<i>249</i>	<i>265</i>	<i>266</i>	<i>260</i>	239	<i>263</i>	<i>260</i>
PADD 2	223	228	232	242	246	<i>266</i>	<i>261</i>	<i>242</i>	<i>237</i>	<i>261</i>	<i>261</i>	<i>250</i>	231	<i>254</i>	<i>253</i>
PADD 3	210	216	222	225	230	<i>250</i>	<i>240</i>	<i>224</i>	<i>221</i>	<i>240</i>	<i>238</i>	<i>229</i>	218	<i>236</i>	<i>233</i>
PADD 4	227	239	245	252	247	<i>265</i>	<i>268</i>	<i>249</i>	<i>231</i>	<i>256</i>	<i>266</i>	<i>254</i>	241	<i>257</i>	<i>252</i>
PADD 5	276	289	290	299	312	<i>327</i>	<i>318</i>	<i>294</i>	<i>285</i>	<i>316</i>	<i>314</i>	<i>297</i>	288	<i>313</i>	<i>303</i>
U.S. Average	233	238	244	251	258	<i>278</i>	<i>270</i>	<i>252</i>	<i>247</i>	<i>268</i>	<i>268</i>	<i>258</i>	242	<i>264</i>	<i>261</i>
Gasoline All Grades Including Taxes	244	250	255	263	270	<i>289</i>	<i>281</i>	<i>264</i>	<i>259</i>	<i>280</i>	<i>280</i>	<i>270</i>	253	<i>276</i>	<i>272</i>
End-of-period Inventories (million barrels)															
Total Gasoline Inventories															
PADD 1	65.3	67.2	58.8	60.6	57.3	<i>64.2</i>	<i>62.0</i>	<i>65.3</i>	<i>66.6</i>	<i>66.6</i>	<i>63.5</i>	<i>67.1</i>	60.6	<i>65.3</i>	<i>67.1</i>
PADD 2	57.0	53.6	50.4	52.2	57.6	<i>51.8</i>	<i>49.8</i>	<i>52.2</i>	<i>55.0</i>	<i>52.7</i>	<i>51.1</i>	<i>53.4</i>	52.2	<i>52.2</i>	<i>53.4</i>
PADD 3	79.1	82.4	78.5	83.2	83.1	<i>81.0</i>	<i>80.6</i>	<i>84.9</i>	<i>83.8</i>	<i>83.3</i>	<i>83.2</i>	<i>86.7</i>	83.2	<i>84.9</i>	<i>86.7</i>
PADD 4	7.9	7.0	6.9	7.6	7.9	<i>7.6</i>	<i>7.4</i>	<i>7.9</i>	<i>7.7</i>	<i>7.7</i>	<i>7.5</i>	<i>8.0</i>	7.6	<i>7.9</i>	<i>8.0</i>
PADD 5	29.7	27.7	29.2	33.1	31.9	<i>28.9</i>	<i>28.2</i>	<i>31.6</i>	<i>30.4</i>	<i>28.5</i>	<i>28.3</i>	<i>31.7</i>	33.1	<i>31.6</i>	<i>31.7</i>
U.S. Total	239.0	237.9	223.8	236.7	237.8	<i>233.4</i>	<i>228.0</i>	<i>241.9</i>	<i>243.5</i>	<i>238.8</i>	<i>233.5</i>	<i>246.9</i>	236.7	<i>241.9</i>	<i>246.9</i>
Finished Gasoline Inventories															
U.S. Total	21.7	22.5	21.8	24.6	24.2	<i>23.7</i>	<i>24.2</i>	<i>27.5</i>	<i>25.0</i>	<i>23.9</i>	<i>24.6</i>	<i>25.5</i>	24.6	<i>27.5</i>	<i>25.5</i>
Gasoline Blending Components Inventories															
U.S. Total	217.2	215.5	202.0	212.1	213.6	<i>209.7</i>	<i>203.8</i>	<i>214.4</i>	<i>218.4</i>	<i>214.9</i>	<i>208.9</i>	<i>221.4</i>	212.1	<i>214.4</i>	<i>221.4</i>

- = no data available

Prices are not adjusted for inflation.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Regions refer to Petroleum Administration for Defense Districts (PADD).

 See "Petroleum for Administration Defense District" in EIA's Energy Glossary (<http://www.eia.doe.gov/glossary/index.html>) for a list of States in each region.

Historical data: Latest data available from Energy Information Administration databases supporting the following reports *Petroleum Marketing Monthly*, DOE/EIA-0380;

Petroleum Supply Monthly, DOE/EIA-0109; *Petroleum Supply Annual*, DOE/EIA-0340/2; and *Weekly Petroleum Status Report*, DOE/EIA-0208.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 5a. U.S. Natural Gas Supply, Consumption, and Inventories

U.S. Energy Information Administration | Short-Term Energy Outlook - April 2018

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
Supply (billion cubic feet per day)															
Total Marketed Production	76.32	77.36	79.30	82.68	83.97	<i>86.51</i>	<i>88.22</i>	<i>89.32</i>	<i>89.37</i>	<i>89.05</i>	<i>88.84</i>	<i>89.06</i>	78.93	<i>87.03</i>	<i>89.08</i>
Alaska	1.01	0.97	0.82	0.98	1.01	<i>0.85</i>	<i>0.77</i>	<i>0.93</i>	<i>1.00</i>	<i>0.86</i>	<i>0.78</i>	<i>0.94</i>	0.94	<i>0.89</i>	<i>0.90</i>
Federal GOM (a)	3.26	2.99	2.91	2.51	2.56	<i>2.65</i>	<i>2.53</i>	<i>2.56</i>	<i>2.55</i>	<i>2.50</i>	<i>2.39</i>	<i>2.38</i>	2.92	<i>2.58</i>	<i>2.45</i>
Lower 48 States (excl GOM)	72.05	73.40	75.56	79.19	80.40	<i>83.01</i>	<i>84.92</i>	<i>85.83</i>	<i>85.81</i>	<i>85.70</i>	<i>85.67</i>	<i>85.74</i>	75.07	<i>83.56</i>	<i>85.73</i>
Total Dry Gas Production	71.27	72.04	73.98	76.94	78.32	<i>80.62</i>	<i>82.17</i>	<i>83.14</i>	<i>83.14</i>	<i>82.79</i>	<i>82.54</i>	<i>82.70</i>	73.57	<i>81.08</i>	<i>82.79</i>
LNG Gross Imports	0.29	0.18	0.17	0.21	0.35	<i>0.17</i>	<i>0.18</i>	<i>0.26</i>	<i>0.32</i>	<i>0.17</i>	<i>0.17</i>	<i>0.21</i>	0.21	<i>0.24</i>	<i>0.22</i>
LNG Gross Exports	1.63	1.80	1.67	2.64	2.68	<i>2.82</i>	<i>3.00</i>	<i>3.44</i>	<i>4.00</i>	<i>4.26</i>	<i>5.01</i>	<i>5.81</i>	1.94	<i>2.99</i>	<i>4.77</i>
Pipeline Gross Imports	8.89	7.76	7.74	8.08	8.76	<i>7.82</i>	<i>7.84</i>	<i>7.80</i>	<i>8.79</i>	<i>7.97</i>	<i>8.05</i>	<i>8.36</i>	8.11	<i>8.05</i>	<i>8.29</i>
Pipeline Gross Exports	7.24	6.49	6.43	6.81	7.79	<i>7.10</i>	<i>7.05</i>	<i>7.90</i>	<i>8.90</i>	<i>7.75</i>	<i>7.58</i>	<i>8.26</i>	6.74	<i>7.46</i>	<i>8.12</i>
Supplemental Gaseous Fuels	0.16	0.13	0.16	0.16	0.17	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	0.15	<i>0.17</i>	<i>0.17</i>
Net Inventory Withdrawals	13.72	-9.02	-7.19	5.76	18.35	<i>-11.52</i>	<i>-10.70</i>	<i>2.09</i>	<i>16.65</i>	<i>-9.92</i>	<i>-8.08</i>	<i>4.69</i>	0.77	<i>-0.52</i>	<i>0.78</i>
Total Supply	85.45	62.80	66.76	81.71	95.47	<i>67.34</i>	<i>69.61</i>	<i>82.14</i>	<i>96.17</i>	<i>69.19</i>	<i>70.26</i>	<i>82.06</i>	74.15	<i>78.58</i>	<i>79.36</i>
Balancing Item (b)	0.69	0.17	0.21	-0.77	-0.13	<i>0.28</i>	<i>0.16</i>	<i>-0.82</i>	<i>-0.42</i>	<i>-0.74</i>	<i>0.57</i>	<i>-0.12</i>	0.07	<i>-0.13</i>	<i>-0.17</i>
Total Primary Supply	86.15	62.97	66.97	80.94	95.34	<i>67.62</i>	<i>69.77</i>	<i>81.32</i>	<i>95.75</i>	<i>68.45</i>	<i>70.84</i>	<i>81.94</i>	74.22	<i>78.45</i>	<i>79.18</i>
Consumption (billion cubic feet per day)															
Residential	22.17	6.65	3.55	16.26	25.76	<i>7.20</i>	<i>3.57</i>	<i>15.78</i>	<i>25.14</i>	<i>7.33</i>	<i>3.57</i>	<i>15.78</i>	12.12	<i>13.02</i>	<i>12.90</i>
Commercial	13.50	5.83	4.55	11.01	14.85	<i>6.04</i>	<i>4.58</i>	<i>10.75</i>	<i>14.81</i>	<i>6.07</i>	<i>4.59</i>	<i>10.73</i>	8.70	<i>9.03</i>	<i>9.03</i>
Industrial	22.96	20.45	20.34	22.85	23.67	<i>20.80</i>	<i>20.47</i>	<i>22.47</i>	<i>23.59</i>	<i>21.15</i>	<i>20.57</i>	<i>22.41</i>	21.65	<i>21.84</i>	<i>21.93</i>
Electric Power (c)	20.95	24.00	32.28	24.03	23.79	<i>26.84</i>	<i>34.24</i>	<i>25.03</i>	<i>24.50</i>	<i>26.85</i>	<i>34.93</i>	<i>25.48</i>	25.34	<i>27.50</i>	<i>27.96</i>
Lease and Plant Fuel	4.26	4.32	4.43	4.62	4.69	<i>4.83</i>	<i>4.93</i>	<i>4.99</i>	<i>4.99</i>	<i>4.97</i>	<i>4.96</i>	<i>4.97</i>	4.41	<i>4.86</i>	<i>4.97</i>
Pipeline and Distribution Use	2.19	1.60	1.70	2.05	2.46	<i>1.80</i>	<i>1.87</i>	<i>2.19</i>	<i>2.59</i>	<i>1.96</i>	<i>2.09</i>	<i>2.44</i>	1.88	<i>2.08</i>	<i>2.27</i>
Vehicle Use	0.12	0.12	0.12	0.12	0.12	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	0.12	<i>0.12</i>	<i>0.12</i>
Total Consumption	86.15	62.97	66.97	80.94	95.34	<i>67.62</i>	<i>69.77</i>	<i>81.32</i>	<i>95.75</i>	<i>68.45</i>	<i>70.84</i>	<i>81.94</i>	74.22	<i>78.45</i>	<i>79.18</i>
End-of-period Inventories (billion cubic feet)															
Working Gas Inventory	2,064	2,908	3,568	3,034	1,385	<i>2,433</i>	<i>3,418</i>	<i>3,225</i>	<i>1,726</i>	<i>2,629</i>	<i>3,372</i>	<i>2,941</i>	3,034	<i>3,225</i>	<i>2,941</i>
East Region (d)	260	563	866	710	228	<i>530</i>	<i>849</i>	<i>765</i>	<i>264</i>	<i>545</i>	<i>829</i>	<i>656</i>	710	<i>765</i>	<i>656</i>
Midwest Region (d)	478	702	994	829	265	<i>550</i>	<i>957</i>	<i>858</i>	<i>334</i>	<i>585</i>	<i>919</i>	<i>792</i>	829	<i>858</i>	<i>792</i>
South Central Region (d)	938	1,139	1,137	1,017	608	<i>916</i>	<i>1,077</i>	<i>1,113</i>	<i>776</i>	<i>1,001</i>	<i>1,056</i>	<i>1,000</i>	1,017	<i>1,113</i>	<i>1,000</i>
Mountain Region (d)	142	184	218	177	87	<i>135</i>	<i>195</i>	<i>184</i>	<i>127</i>	<i>167</i>	<i>204</i>	<i>169</i>	177	<i>184</i>	<i>169</i>
Pacific Region (d)	219	288	314	264	167	<i>271</i>	<i>309</i>	<i>274</i>	<i>195</i>	<i>301</i>	<i>333</i>	<i>293</i>	264	<i>274</i>	<i>293</i>
Alaska	27	32	39	36	31	<i>31</i>	<i>31</i>	<i>31</i>	<i>31</i>	<i>31</i>	<i>31</i>	<i>31</i>	36	<i>31</i>	<i>31</i>

- = no data available

(a) Marketed production from U.S. Federal leases in the Gulf of Mexico.

(b) The balancing item represents the difference between the sum of the components of natural gas supply and the sum of components of natural gas demand.

(c) Natural gas used for electricity generation and (a limited amount of) useful thermal output by electric utilities and independent power producers.

 (d) For a list of States in each inventory region refer to *Weekly Natural Gas Storage Report, Notes and Definitions* (<http://ir.eia.gov/ngs/notes.html>).

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

LNG: liquefied natural gas.

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: *Natural Gas Monthly*, DOE/EIA-0130; and *Electric Power Monthly*, DOE/EIA-0226.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 5b. U.S. Regional Natural Gas Prices (dollars per thousand cubic feet)

U.S. Energy Information Administration | Short-Term Energy Outlook - April 2018

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
Wholesale/Spot															
Henry Hub Spot Price	3.12	3.19	3.06	3.01	3.13	2.92	3.12	3.22	3.36	3.08	3.13	3.17	3.10	3.10	3.19
Residential Retail															
New England	12.85	14.08	18.12	13.57	13.56	13.89	17.12	13.63	13.16	14.06	17.22	13.60	13.60	13.86	13.70
Middle Atlantic	9.92	12.18	17.11	11.33	9.84	11.71	16.46	11.13	10.29	12.13	16.62	11.01	11.17	10.91	11.21
E. N. Central	7.77	11.52	17.80	7.81	7.35	10.48	16.42	8.91	8.08	11.00	16.65	8.92	8.86	8.77	9.26
W. N. Central	8.32	11.85	18.79	9.56	8.15	11.31	17.58	9.73	8.85	11.73	17.65	9.87	9.80	9.54	10.10
S. Atlantic	12.28	20.04	26.86	13.20	11.27	16.06	22.39	13.07	11.48	16.37	22.55	12.99	14.63	13.19	13.31
E. S. Central	10.53	15.83	20.82	11.32	9.56	13.87	19.85	12.59	10.30	14.78	20.77	13.02	12.05	11.47	12.24
W. S. Central	10.33	16.49	22.10	13.09	8.88	13.57	20.00	12.05	8.95	14.33	20.43	11.93	13.18	11.32	11.52
Mountain	8.21	10.17	13.91	8.76	8.22	9.56	13.48	9.07	8.95	10.27	13.94	9.28	9.14	9.13	9.67
Pacific	12.02	12.64	12.90	11.30	11.54	11.78	12.81	11.63	12.49	12.61	12.93	11.76	12.01	11.77	12.33
U.S. Average	9.73	13.00	17.74	10.19	9.25	11.83	16.60	10.69	9.82	12.37	16.82	10.73	10.92	10.55	10.95
Commercial Retail															
New England	9.55	9.97	10.61	9.53	10.30	10.43	10.41	10.02	10.12	10.25	10.22	10.04	9.71	10.25	10.13
Middle Atlantic	7.66	7.42	6.82	7.38	7.80	7.51	6.96	7.59	7.79	7.65	7.08	7.62	7.43	7.59	7.63
E. N. Central	6.63	7.90	8.98	6.21	6.23	7.28	8.83	7.02	6.79	7.80	9.10	7.08	6.84	6.81	7.20
W. N. Central	6.96	7.80	9.11	7.04	7.06	7.66	8.91	7.38	7.59	7.97	9.03	7.41	7.28	7.39	7.71
S. Atlantic	8.88	9.97	9.56	8.91	8.42	9.11	9.79	9.02	8.88	9.67	9.97	8.97	9.15	8.88	9.17
E. S. Central	9.05	10.28	10.76	9.30	8.73	9.59	10.10	9.08	8.63	9.61	10.12	9.07	9.53	9.12	9.08
W. S. Central	7.63	8.20	8.86	8.18	7.20	7.40	8.35	7.82	7.40	7.80	8.35	7.74	8.09	7.56	7.71
Mountain	6.88	7.37	8.27	7.21	7.09	7.31	8.22	7.26	7.50	7.76	8.49	7.42	7.22	7.31	7.63
Pacific	9.09	9.06	9.08	8.54	8.72	8.24	8.73	8.51	8.75	8.82	9.12	8.76	8.92	8.56	8.82
U.S. Average	7.71	8.33	8.69	7.56	7.57	7.97	8.54	7.89	7.85	8.32	8.71	7.95	7.87	7.84	8.05
Industrial Retail															
New England	7.81	7.04	6.39	7.05	8.23	7.32	6.89	8.09	8.56	7.75	7.10	8.07	7.19	7.77	8.00
Middle Atlantic	7.69	7.59	7.62	7.18	7.82	7.19	7.28	7.61	8.04	7.41	7.42	7.64	7.53	7.60	7.76
E. N. Central	5.86	5.96	5.59	5.30	5.87	5.84	5.99	5.95	6.53	6.16	6.07	5.97	5.66	5.90	6.25
W. N. Central	5.00	4.28	4.24	4.68	5.06	4.54	4.59	5.19	5.67	4.81	4.64	5.22	4.59	4.88	5.14
S. Atlantic	5.35	5.00	4.88	4.93	5.37	4.64	4.88	5.25	5.58	4.93	4.90	5.21	5.05	5.06	5.18
E. S. Central	5.06	4.59	4.40	4.56	4.84	4.25	4.43	4.90	5.11	4.59	4.52	4.85	4.67	4.62	4.79
W. S. Central	3.42	3.42	3.30	3.14	3.33	3.09	3.37	3.47	3.59	3.26	3.38	3.44	3.32	3.32	3.42
Mountain	5.31	5.36	5.61	5.50	5.49	5.44	5.97	6.06	6.17	5.83	6.03	6.04	5.43	5.73	6.03
Pacific	7.31	6.71	6.32	6.35	6.86	6.23	6.51	6.69	7.12	6.53	6.66	6.71	6.71	6.59	6.77
U.S. Average	4.50	4.11	3.89	4.00	4.40	3.80	3.97	4.36	4.71	4.02	4.01	4.34	4.14	4.15	4.29

- = no data available

Prices are not adjusted for inflation.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Regions refer to U.S. Census divisions.

See "Census division" in EIA's Energy Glossary (<http://www.eia.doe.gov/glossary/index.html>) for a list of States in each region.

Historical data: Latest data available from Energy Information Administration databases supporting the *Natural Gas Monthly*, DOE/EIA-0130.

Natural gas Henry Hub spot price from Reuter's News Service (<http://www.reuters.com>).

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 6. U.S. Coal Supply, Consumption, and Inventories

U.S. Energy Information Administration | Short-Term Energy Outlook - April 2018

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
Supply (million short tons)															
Production	197.0	187.1	196.2	193.8	191.1	165.6	193.7	187.9	194.4	165.5	198.4	189.8	774.1	738.3	748.1
Appalachia	50.7	51.2	46.3	50.2	50.5	43.6	40.2	38.7	44.6	40.2	39.0	39.0	198.5	173.0	162.9
Interior	38.5	36.4	34.9	35.6	35.3	31.5	38.7	39.5	43.0	32.3	38.7	39.4	145.4	145.1	153.3
Western	107.8	99.4	115.0	108.0	105.2	90.6	114.8	109.6	106.8	93.0	120.6	111.5	430.2	420.2	431.9
Primary Inventory Withdrawals	0.1	1.8	1.4	0.9	-2.7	2.4	1.4	-0.1	-3.6	1.7	1.7	-2.6	4.2	1.0	-2.8
Imports	1.9	2.2	2.3	1.4	1.7	2.2	2.8	2.4	1.4	2.3	2.9	2.6	7.8	9.1	9.3
Exports	22.3	21.8	24.6	28.2	22.6	20.6	19.4	18.7	19.4	19.0	19.8	19.7	97.0	81.3	77.9
Metallurgical Coal	12.2	13.5	14.8	14.8	13.2	13.2	13.3	13.1	13.2	12.8	13.2	12.9	55.3	52.7	52.0
Steam Coal	10.1	8.3	9.8	13.4	9.4	7.4	6.1	5.6	6.2	6.3	6.6	6.8	41.7	28.6	25.9
Total Primary Supply	176.8	169.2	175.3	167.9	167.5	149.6	178.5	171.4	172.9	150.5	183.2	170.2	689.1	667.0	676.7
Secondary Inventory Withdrawals	1.0	3.7	18.2	2.4	10.8	2.4	12.2	-8.2	0.8	2.3	5.6	-9.5	25.2	17.2	-0.9
Waste Coal (a)	2.5	1.8	2.3	2.1	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	8.7	9.6	9.6
Total Supply	180.3	174.7	195.8	172.3	180.7	154.4	193.0	165.6	176.0	155.1	191.2	163.1	723.1	693.8	685.5
Consumption (million short tons)															
Coke Plants	4.2	4.3	4.5	4.5	4.5	4.0	4.6	5.5	4.2	3.9	4.5	5.6	17.5	18.6	18.2
Electric Power Sector (b)	160.3	154.2	190.6	159.6	160.9	142.4	180.3	151.8	163.1	143.2	178.7	149.3	664.7	635.4	634.3
Retail and Other Industry	8.9	8.3	8.8	8.7	8.8	8.0	8.1	8.3	8.7	8.0	8.0	8.3	34.7	33.2	33.0
Residential and Commercial	0.4	0.2	0.2	0.3	0.3	0.1	0.1	0.2	0.2	0.1	0.1	0.1	1.1	0.6	0.5
Other Industrial	8.5	8.1	8.6	8.4	8.5	7.9	8.0	8.2	8.5	8.0	8.0	8.1	33.6	32.6	32.5
Total Consumption	173.5	166.8	203.9	172.7	174.2	154.4	193.0	165.6	176.0	155.1	191.2	163.1	717.0	687.3	685.5
Discrepancy (c)	6.8	7.9	-8.1	-0.4	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1	6.5	0.0
End-of-period Inventories (million short tons)															
Primary Inventories (d)	25.2	23.4	22.0	21.1	23.8	21.4	20.0	20.2	23.8	22.0	20.4	22.9	21.1	20.2	22.9
Secondary Inventories	166.7	163.0	144.9	142.5	131.6	129.2	117.1	125.3	124.5	122.2	116.6	126.1	142.5	125.3	126.1
Electric Power Sector	161.7	157.8	139.4	137.2	126.6	123.9	111.5	119.8	119.4	116.8	110.9	120.4	137.2	119.8	120.4
Retail and General Industry	3.2	3.3	3.5	3.2	3.4	3.3	3.5	3.4	3.5	3.5	3.6	3.6	3.2	3.4	3.6
Coke Plants	1.4	1.6	1.7	1.7	1.3	1.7	1.8	1.8	1.3	1.7	1.8	1.8	1.7	1.8	1.8
Coal Market Indicators															
Coal Miner Productivity															
(Tons per hour)	6.19	6.19	6.19	6.19	6.10	6.10	6.10	6.10	6.02	6.02	6.02	6.02	6.19	6.10	6.02
Total Raw Steel Production															
(Million short tons per day)	0.248	0.247	0.250	0.245	0.252	0.256	0.243	0.211	0.268	0.265	0.244	0.209	0.248	0.240	0.246
Cost of Coal to Electric Utilities															
(Dollars per million Btu)	2.08	2.12	2.07	2.04	2.15	2.21	2.21	2.19	2.22	2.20	2.22	2.19	2.08	2.19	2.21

- = no data available

(a) Waste coal includes waste coal and coal slurry reprocessed into briquettes.

(b) Coal used for electricity generation and (a limited amount of) useful thermal output by electric utilities and independent power producers.

(c) The discrepancy reflects an unaccounted-for shipper and receiver reporting difference, assumed to be zero in the forecast period.

(d) Primary stocks are held at the mines and distribution points.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.**Historical data:** Latest data available from Energy Information Administration databases supporting the following reports: *Quarterly Coal Report*, DOE/EIA-0121; and *Electric Power Monthly*, DOE/EIA-0226.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 7a. U.S. Electricity Industry Overview

U.S. Energy Information Administration | Short-Term Energy Outlook - April 2018

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
Electricity Supply (billion kilowatthours per day)															
Electricity Generation	10.58	10.69	12.15	10.57	11.08	<i>10.88</i>	<i>12.36</i>	<i>10.54</i>	<i>11.10</i>	<i>10.96</i>	<i>12.45</i>	<i>10.61</i>	11.00	<i>11.22</i>	<i>11.28</i>
Electric Power Sector (a)	10.15	10.27	11.71	10.14	10.64	<i>10.44</i>	<i>11.91</i>	<i>10.11</i>	<i>10.65</i>	<i>10.51</i>	<i>11.99</i>	<i>10.17</i>	10.57	<i>10.78</i>	<i>10.83</i>
Comm. and Indus. Sectors (b)	0.43	0.42	0.44	0.42	0.44	<i>0.44</i>	<i>0.45</i>	<i>0.44</i>	<i>0.45</i>	<i>0.44</i>	<i>0.46</i>	<i>0.45</i>	0.43	<i>0.44</i>	<i>0.45</i>
Net Imports	0.15	0.15	0.17	0.13	0.16	<i>0.19</i>	<i>0.20</i>	<i>0.16</i>	<i>0.17</i>	<i>0.17</i>	<i>0.19</i>	<i>0.15</i>	0.15	<i>0.18</i>	<i>0.17</i>
Total Supply	10.73	10.84	12.32	10.70	11.23	<i>11.07</i>	<i>12.57</i>	<i>10.70</i>	<i>11.27</i>	<i>11.12</i>	<i>12.64</i>	<i>10.76</i>	11.15	<i>11.39</i>	<i>11.45</i>
Losses and Unaccounted for (c)	0.59	0.76	0.66	0.72	0.57	<i>0.82</i>	<i>0.72</i>	<i>0.67</i>	<i>0.59</i>	<i>0.83</i>	<i>0.73</i>	<i>0.68</i>	0.68	<i>0.69</i>	<i>0.70</i>
Electricity Consumption (billion kilowatthours per day unless noted)															
Retail Sales	9.75	9.70	11.28	9.60	10.28	<i>9.87</i>	<i>11.45</i>	<i>9.64</i>	<i>10.29</i>	<i>9.90</i>	<i>11.51</i>	<i>9.69</i>	10.09	<i>10.31</i>	<i>10.35</i>
Residential Sector	3.71	3.43	4.46	3.51	4.09	<i>3.52</i>	<i>4.55</i>	<i>3.52</i>	<i>4.07</i>	<i>3.52</i>	<i>4.57</i>	<i>3.54</i>	3.78	<i>3.92</i>	<i>3.93</i>
Commercial Sector	3.51	3.64	4.08	3.55	3.59	<i>3.66</i>	<i>4.11</i>	<i>3.56</i>	<i>3.60</i>	<i>3.69</i>	<i>4.14</i>	<i>3.58</i>	3.70	<i>3.73</i>	<i>3.75</i>
Industrial Sector	2.50	2.62	2.72	2.53	2.57	<i>2.66</i>	<i>2.76</i>	<i>2.55</i>	<i>2.59</i>	<i>2.68</i>	<i>2.77</i>	<i>2.55</i>	2.59	<i>2.64</i>	<i>2.65</i>
Transportation Sector	0.02	0.02	0.02	0.02	0.02	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	0.02	<i>0.02</i>	<i>0.02</i>
Direct Use (d)	0.38	0.37	0.38	0.37	0.39	<i>0.38</i>	<i>0.40</i>	<i>0.39</i>	<i>0.40</i>	<i>0.39</i>	<i>0.41</i>	<i>0.39</i>	0.38	<i>0.39</i>	<i>0.40</i>
Total Consumption	10.13	10.08	11.66	9.98	10.67	<i>10.25</i>	<i>11.85</i>	<i>10.03</i>	<i>10.69</i>	<i>10.29</i>	<i>11.91</i>	<i>10.09</i>	10.47	<i>10.70</i>	<i>10.75</i>
Average residential electricity usage per customer (kWh)	2,532	2,365	3,109	2,446	2,756	<i>2,400</i>	<i>3,136</i>	<i>2,425</i>	<i>2,712</i>	<i>2,369</i>	<i>3,113</i>	<i>2,413</i>	10,453	<i>10,716</i>	<i>10,606</i>
Prices															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	2.08	2.12	2.07	2.04	2.15	<i>2.21</i>	<i>2.21</i>	<i>2.19</i>	<i>2.22</i>	<i>2.20</i>	<i>2.22</i>	<i>2.19</i>	2.08	<i>2.19</i>	<i>2.21</i>
Natural Gas	3.69	3.38	3.19	3.39	4.05	<i>3.12</i>	<i>3.26</i>	<i>3.57</i>	<i>3.85</i>	<i>3.24</i>	<i>3.25</i>	<i>3.50</i>	3.39	<i>3.47</i>	<i>3.43</i>
Residual Fuel Oil	11.16	10.60	10.03	11.93	12.90	<i>12.99</i>	<i>11.93</i>	<i>11.45</i>	<i>11.66</i>	<i>12.31</i>	<i>11.86</i>	<i>11.89</i>	10.97	<i>12.42</i>	<i>11.90</i>
Distillate Fuel Oil	12.74	12.23	13.13	14.54	15.93	<i>15.46</i>	<i>15.15</i>	<i>15.08</i>	<i>14.80</i>	<i>14.96</i>	<i>15.32</i>	<i>15.74</i>	13.26	<i>15.59</i>	<i>15.18</i>
Retail Prices (cents per kilowatthour)															
Residential Sector	12.59	12.99	13.19	12.75	12.73	<i>13.32</i>	<i>13.51</i>	<i>13.17</i>	<i>13.23</i>	<i>13.82</i>	<i>13.92</i>	<i>13.47</i>	12.90	<i>13.19</i>	<i>13.62</i>
Commercial Sector	10.39	10.68	11.03	10.56	10.63	<i>10.91</i>	<i>11.35</i>	<i>10.91</i>	<i>10.86</i>	<i>11.00</i>	<i>11.35</i>	<i>10.94</i>	10.68	<i>10.96</i>	<i>11.05</i>
Industrial Sector	6.64	6.89	7.27	6.79	7.00	<i>7.14</i>	<i>7.57</i>	<i>7.06</i>	<i>7.10</i>	<i>7.24</i>	<i>7.67</i>	<i>7.15</i>	6.91	<i>7.20</i>	<i>7.30</i>

- = no data available. kWh = kilowatthours. Btu = British thermal units.

Prices are not adjusted for inflation.

(a) Generation supplied by electricity-only and combined-heat-and-power (CHP) plants operated by electric utilities and independent power producers.

(b) Generation supplied by CHP and electricity-only plants operated by businesses in the commercial and industrial sectors, primarily for onsite use.

(c) Includes transmission and distribution losses, data collection time-frame differences, and estimation error.

 (d) Direct Use represents commercial and industrial facility use of onsite net electricity generation; and electrical sales or transfers to adjacent or collocated facilities for which revenue information is not available. See Table 7.6 of the EIA *Monthly Energy Review*.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: *Electric Power Monthly*, DOE/EIA-0226; and *Electric Power Annual*, DOE/EIA-0348.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 7b. U.S. Regional Electricity Retail Sales (Million Kilowatthours per Day)

U.S. Energy Information Administration | Short-Term Energy Outlook - April 2018

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
Residential Sector															
New England	142	119	143	126	143	120	150	126	142	120	150	126	133	135	134
Middle Atlantic	368	307	403	327	395	313	415	322	393	312	414	322	351	361	360
E. N. Central	507	435	545	475	552	443	565	467	547	442	563	467	491	507	505
W. N. Central	298	246	303	261	330	255	317	262	321	255	320	266	277	291	290
S. Atlantic	891	891	1,131	889	1,050	918	1,143	888	1,048	913	1,148	893	951	1,000	1,000
E. S. Central	305	277	368	288	362	290	384	291	361	291	386	292	310	332	332
W. S. Central	501	536	760	516	597	563	788	527	580	564	798	536	579	619	620
Mountain	245	259	347	232	237	260	352	235	242	260	355	238	271	271	274
Pacific contiguous	439	346	447	381	413	348	425	389	424	349	426	391	404	394	397
AK and HI	14	12	12	13	13	11	12	13	13	11	12	13	13	12	12
Total	3,712	3,428	4,458	3,507	4,094	3,521	4,551	3,520	4,071	3,517	4,571	3,543	3,778	3,922	3,926
Commercial Sector															
New England	155	150	168	149	141	146	166	147	140	145	164	144	156	150	149
Middle Atlantic	423	404	462	412	434	407	465	409	433	405	463	408	425	429	427
E. N. Central	489	486	537	482	501	488	544	481	503	490	545	482	498	503	505
W. N. Central	272	270	302	269	276	270	306	271	277	272	309	273	278	281	283
S. Atlantic	785	853	941	807	810	855	944	805	809	858	947	807	847	854	856
E. S. Central	225	241	275	229	239	248	281	229	241	250	284	231	243	249	252
W. S. Central	471	522	598	501	501	541	616	511	510	555	634	523	523	542	556
Mountain	246	265	301	249	244	265	304	251	247	267	307	254	265	266	269
Pacific contiguous	431	431	480	438	430	430	469	437	429	432	471	438	445	442	443
AK and HI	16	16	16	16	16	15	16	16	16	15	16	16	16	16	16
Total	3,513	3,637	4,079	3,551	3,593	3,664	4,111	3,558	3,604	3,690	4,141	3,575	3,696	3,733	3,753
Industrial Sector															
New England	46	46	49	47	44	44	47	45	42	43	46	44	47	45	44
Middle Atlantic	192	194	204	195	198	196	207	196	200	198	208	197	196	200	201
E. N. Central	495	504	522	489	524	517	530	492	526	517	529	490	502	515	516
W. N. Central	228	240	253	235	236	244	260	240	242	250	266	246	239	245	251
S. Atlantic	362	386	390	372	360	380	388	368	356	375	383	362	377	374	369
E. S. Central	267	275	280	262	265	272	281	259	263	269	277	256	271	269	266
W. S. Central	480	503	511	484	495	521	528	497	507	533	538	506	495	510	521
Mountain	210	228	245	210	214	231	250	214	218	235	253	217	223	227	231
Pacific contiguous	211	230	253	220	222	241	259	222	224	242	260	223	229	236	237
AK and HI	13	14	14	13	13	14	14	13	13	14	14	13	14	14	14
Total	2,504	2,619	2,722	2,526	2,571	2,660	2,763	2,546	2,592	2,676	2,775	2,555	2,593	2,635	2,649
Total All Sectors (a)															
New England	345	317	362	323	329	311	365	319	326	309	361	315	337	331	328
Middle Atlantic	994	915	1,079	943	1,040	926	1,098	937	1,036	924	1,096	936	983	1,000	998
E. N. Central	1,493	1,427	1,605	1,447	1,578	1,449	1,640	1,442	1,578	1,451	1,639	1,441	1,493	1,527	1,527
W. N. Central	798	755	857	765	843	768	884	774	840	777	895	785	794	817	824
S. Atlantic	2,042	2,134	2,465	2,070	2,224	2,157	2,479	2,065	2,216	2,151	2,482	2,066	2,179	2,231	2,229
E. S. Central	797	793	924	779	867	810	945	779	865	811	947	779	823	850	851
W. S. Central	1,452	1,561	1,869	1,501	1,594	1,625	1,932	1,536	1,598	1,653	1,971	1,566	1,597	1,672	1,698
Mountain	701	752	893	691	695	756	906	700	708	761	916	708	760	765	774
Pacific contiguous	1,084	1,010	1,184	1,042	1,067	1,022	1,155	1,051	1,080	1,026	1,158	1,054	1,080	1,074	1,080
AK and HI	43	41	43	43	42	41	43	42	42	40	42	42	42	42	42
Total	9,750	9,704	11,280	9,605	10,279	9,865	11,446	9,644	10,288	9,902	11,507	9,693	10,088	10,310	10,349

- = no data available

(a) Total retail sales to all sectors includes residential, commercial, industrial, and transportation sector sales.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Retail Sales represents total retail electricity sales by electric utilities and power marketers.

Regions refer to U.S. Census divisions.

See "Census division" in EIA's Energy Glossary (<http://www.eia.doe.gov/glossary/index.html>) for a list of States in each region.**Historical data:** Latest data available from Energy Information Administration databases supporting the following reports: *Electric Power Monthly*, DOE/EIA-0226; and *Electric Power Annual*, DOE/EIA-0348.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 7c. U.S. Regional Retail Electricity Prices (Cents per Kilowatt-hour)
 U.S. Energy Information Administration | Short-Term Energy Outlook - April 2018

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
Residential Sector															
New England	18.57	18.93	18.97	19.28	20.04	19.96	19.71	20.30	21.13	21.04	20.72	21.18	18.93	19.99	21.01
Middle Atlantic	15.55	16.27	16.43	15.87	15.64	16.52	16.73	16.32	16.11	17.04	17.18	16.71	16.04	16.30	16.76
E. N. Central	12.90	13.58	13.28	13.19	13.21	14.03	13.80	13.89	13.92	14.70	14.32	14.32	13.23	13.71	14.30
W. N. Central	10.93	12.66	13.16	11.51	10.91	12.87	13.48	11.93	11.37	13.29	13.80	12.16	12.07	12.28	12.65
S. Atlantic	11.69	12.01	12.26	11.81	11.83	12.29	12.58	12.23	12.30	12.73	12.93	12.46	11.96	12.24	12.62
E. S. Central	11.08	11.44	11.32	11.20	10.91	11.69	11.85	11.90	11.50	12.10	11.96	11.97	11.26	11.57	11.87
W. S. Central	10.55	10.93	10.87	10.76	10.70	11.13	11.06	11.01	11.07	11.48	11.32	11.18	10.79	10.98	11.27
Mountain	11.28	12.15	12.31	11.82	11.65	12.41	12.60	12.16	12.02	12.80	12.95	12.44	11.94	12.25	12.60
Pacific	14.51	14.70	16.50	14.37	15.07	15.38	16.71	14.38	15.47	16.11	17.62	14.88	15.07	15.41	16.05
U.S. Average	12.59	12.99	13.19	12.75	12.73	13.32	13.51	13.17	13.23	13.82	13.92	13.47	12.90	13.19	13.62
Commercial Sector															
New England	14.64	14.65	15.30	15.20	16.18	15.38	15.86	15.72	16.10	14.83	15.30	15.42	14.96	15.78	15.40
Middle Atlantic	12.08	12.75	13.34	12.08	12.33	12.89	13.49	12.19	12.32	12.86	13.49	12.34	12.58	12.75	12.77
E. N. Central	10.02	10.24	10.05	10.00	10.29	10.48	10.38	10.37	10.58	10.70	10.46	10.43	10.08	10.38	10.54
W. N. Central	9.12	10.11	10.57	9.26	9.25	10.33	10.89	9.60	9.48	10.59	11.13	9.85	9.79	10.04	10.29
S. Atlantic	9.44	9.38	9.55	9.54	9.71	9.58	9.82	9.90	10.23	9.87	9.93	9.95	9.48	9.75	9.99
E. S. Central	10.57	10.56	10.62	10.57	10.52	10.81	11.20	11.30	10.70	10.90	11.02	11.16	10.58	10.97	10.95
W. S. Central	8.37	8.40	8.38	8.28	8.43	8.43	8.42	8.34	8.15	8.05	8.10	8.27	8.36	8.40	8.14
Mountain	9.14	9.92	10.04	9.50	9.28	10.15	10.29	9.75	9.31	10.18	10.32	9.83	9.68	9.90	9.94
Pacific	12.53	13.56	15.36	13.61	12.91	14.08	16.27	14.31	13.74	14.67	16.71	14.48	13.82	14.44	14.95
U.S. Average	10.39	10.68	11.03	10.56	10.63	10.91	11.35	10.91	10.86	11.00	11.35	10.94	10.68	10.96	11.05
Industrial Sector															
New England	12.38	12.19	12.55	12.37	13.53	13.05	13.29	12.98	14.27	13.53	13.62	13.19	12.38	13.21	13.64
Middle Atlantic	6.94	6.94	6.88	6.81	7.33	7.02	6.99	6.93	7.17	6.94	6.96	6.89	6.89	7.07	6.99
E. N. Central	7.03	7.05	7.04	6.96	7.43	7.35	7.36	7.26	7.54	7.44	7.44	7.33	7.02	7.35	7.44
W. N. Central	6.89	7.35	8.08	6.86	7.07	7.57	8.35	7.10	7.21	7.69	8.47	7.20	7.31	7.54	7.67
S. Atlantic	6.32	6.39	6.79	6.34	6.79	6.58	7.09	6.64	6.84	6.64	7.16	6.71	6.46	6.78	6.84
E. S. Central	5.90	5.96	6.18	5.88	6.03	6.12	6.47	6.18	6.21	6.27	6.61	6.31	5.98	6.21	6.35
W. S. Central	5.28	5.56	5.72	5.41	5.71	5.83	6.09	5.74	5.76	5.94	6.22	5.88	5.50	5.85	5.96
Mountain	6.08	6.54	7.12	6.13	6.17	6.65	7.28	6.27	6.36	6.85	7.49	6.45	6.50	6.62	6.82
Pacific	8.23	9.35	10.74	9.73	8.64	9.69	10.97	9.88	8.76	9.77	11.04	9.94	9.58	9.85	9.93
U.S. Average	6.64	6.89	7.27	6.79	7.00	7.14	7.57	7.06	7.10	7.24	7.67	7.15	6.91	7.20	7.30
All Sectors (a)															
New England	15.94	15.88	16.35	16.35	17.50	16.79	17.10	17.11	18.03	17.03	17.32	17.38	16.13	17.13	17.44
Middle Atlantic	12.36	12.69	13.26	12.30	12.62	12.85	13.47	12.49	12.75	12.98	13.63	12.68	12.67	12.88	13.03
E. N. Central	10.01	10.13	10.17	10.01	10.39	10.45	10.58	10.45	10.72	10.75	10.81	10.63	10.08	10.47	10.73
W. N. Central	9.16	10.06	10.75	9.29	9.29	10.30	11.07	9.61	9.55	10.55	11.29	9.81	9.84	10.09	10.32
S. Atlantic	9.86	9.94	10.35	9.93	10.23	10.20	10.66	10.32	10.66	10.52	10.89	10.46	10.04	10.37	10.65
E. S. Central	9.21	9.27	9.55	9.23	9.32	9.55	10.06	9.82	9.67	9.79	10.11	9.87	9.33	9.70	9.87
W. S. Central	8.10	8.35	8.67	8.21	8.45	8.53	8.86	8.41	8.45	8.54	8.89	8.50	8.35	8.58	8.61
Mountain	8.97	9.67	10.12	9.26	9.16	9.86	10.36	9.50	9.33	10.05	10.56	9.67	9.55	9.77	9.95
Pacific	12.49	12.98	14.79	13.06	12.91	13.48	15.23	13.39	13.37	13.99	15.76	13.65	13.38	13.79	14.23
U.S. Average	10.26	10.47	10.98	10.37	10.57	10.75	11.29	10.71	10.85	10.98	11.48	10.87	10.54	10.85	11.06

- = no data available

Prices are not adjusted for inflation.

(a) Volume-weighted average of retail prices to residential, commercial, industrial, and transportation sectors.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Regions refer to U.S. Census divisions.

See "Census division" in EIA's Energy Glossary (<http://www.eia.doe.gov/glossary/index.html>) for a list of States in each region.

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: *Electric Power Monthly*, DOE/EIA-0226; and *Electric Power Annual*, DOE/EIA-0348.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 7d. U.S. Regional Electricity Generation, All Sectors (Thousand megawatthours per day)

U.S. Energy Information Administration | Short-Term Energy Outlook - April 2018

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
United States															
Coal	3,242	3,100	3,762	3,128	3,313	2,925	3,621	3,017	3,401	2,943	3,588	2,967	3,309	3,219	3,224
Natural Gas	2,969	3,286	4,359	3,322	3,322	3,684	4,621	3,504	3,451	3,692	4,717	3,570	3,487	3,786	3,860
Petroleum (a)	59	54	56	62	108	58	64	56	75	59	64	56	58	72	63
Other Gases	40	39	40	36	38	39	40	36	39	39	40	36	39	38	39
Nuclear	2,242	2,034	2,302	2,243	2,298	2,080	2,262	2,134	2,194	2,054	2,223	2,089	2,205	2,193	2,140
Renewable Energy Sources:	2,008	2,157	1,615	1,757	1,977	2,068	1,734	1,775	1,921	2,144	1,799	1,873	1,883	1,888	1,934
Conventional Hydropower	918	1,010	717	647	799	861	746	636	734	837	723	634	822	760	732
Wind	768	748	501	771	821	781	555	783	826	845	599	846	697	735	779
Wood Biomass	118	115	122	119	122	114	125	119	121	116	127	120	119	120	121
Waste Biomass	59	56	56	57	58	59	59	59	58	59	60	59	57	59	59
Geothermal	45	43	44	43	45	44	45	46	46	45	45	46	44	45	45
Solar	101	185	175	120	132	209	204	133	136	242	245	168	145	170	198
Pumped Storage Hydropower	-16	-16	-22	-17	-15	-13	-18	-14	-13	-12	-18	-14	-18	-15	-14
Other Nonrenewable Fuels (b)	35	35	38	35	36	37	39	37	36	37	39	37	36	37	37
Total Generation	10,579	10,690	12,151	10,566	11,078	10,880	12,363	10,545	11,105	10,956	12,452	10,612	10,999	11,218	11,283
Northeast Census Region															
Coal	154	134	136	139	252	185	213	212	254	181	240	225	141	215	225
Natural Gas	486	482	637	492	486	577	754	578	577	595	750	593	525	599	629
Petroleum (a)	4	2	3	11	35	3	4	4	13	3	4	4	5	11	6
Other Gases	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Nuclear	539	476	549	529	508	430	468	434	442	409	435	395	523	460	420
Hydropower (c)	102	107	99	99	87	86	88	92	88	89	92	94	102	88	91
Other Renewables (d)	72	76	68	74	79	72	66	78	81	73	67	81	73	74	75
Other Nonrenewable Fuels (b)	11	11	12	12	11	12	12	12	11	12	12	12	11	12	12
Total Generation	1,370	1,290	1,506	1,359	1,460	1,367	1,607	1,412	1,468	1,363	1,603	1,406	1,381	1,462	1,460
South Census Region															
Coal	1,330	1,416	1,681	1,293	1,358	1,296	1,627	1,237	1,391	1,269	1,559	1,189	1,431	1,380	1,352
Natural Gas	1,763	2,087	2,565	1,922	1,994	2,277	2,673	1,998	2,020	2,290	2,755	2,043	2,086	2,237	2,278
Petroleum (a)	25	22	23	21	41	25	28	22	30	26	28	22	23	29	26
Other Gases	15	15	15	13	13	15	14	13	13	14	14	12	14	14	13
Nuclear	973	888	1,003	1,012	1,002	917	997	944	974	914	993	941	969	965	956
Hydropower (c)	128	138	99	103	104	113	91	97	106	117	96	99	117	101	104
Other Renewables (d)	401	403	323	391	434	443	366	418	448	499	418	470	379	415	459
Other Nonrenewable Fuels (b)	15	15	16	15	15	16	16	15	15	16	16	15	15	16	16
Total Generation	4,650	4,984	5,726	4,769	4,962	5,101	5,813	4,744	4,997	5,144	5,880	4,792	5,034	5,156	5,204
Midwest Census Region															
Coal	1,288	1,177	1,394	1,216	1,276	1,100	1,330	1,128	1,271	1,099	1,316	1,105	1,269	1,208	1,198
Natural Gas	289	272	407	349	384	374	507	399	414	384	527	410	330	416	434
Petroleum (a)	7	7	7	8	10	9	10	8	10	9	10	8	7	9	9
Other Gases	17	16	17	15	17	16	17	15	18	17	18	16	16	16	17
Nuclear	555	543	580	535	584	530	577	546	564	529	575	545	553	559	553
Hydropower (c)	52	58	37	36	47	47	33	34	48	49	34	35	46	40	42
Other Renewables (d)	315	304	198	340	348	304	208	339	343	320	220	367	289	299	312
Other Nonrenewable Fuels (b)	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Total Generation	2,528	2,381	2,643	2,503	2,670	2,385	2,686	2,474	2,672	2,412	2,705	2,491	2,514	2,553	2,570
West Census Region															
Coal	470	373	551	480	427	345	451	441	485	394	472	447	469	416	450
Natural Gas	430	446	751	558	458	456	687	528	440	425	686	524	547	533	519
Petroleum (a)	23	22	23	22	22	21	22	22	22	21	22	21	23	22	22
Other Gases	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Nuclear	175	127	171	167	204	203	221	209	215	201	219	207	160	209	211
Hydropower (c)	619	692	460	392	546	602	516	398	478	570	483	391	540	515	480
Other Renewables (d)	302	364	308	305	318	388	348	305	316	414	371	321	320	340	356
Other Nonrenewable Fuels (b)	5	5	6	5	6	5	6	5	6	5	6	5	5	5	5
Total Generation	2,031	2,035	2,277	1,934	1,986	2,027	2,257	1,914	1,968	2,037	2,265	1,924	2,069	2,047	2,049

(a) Residual fuel oil, distillate fuel oil, petroleum coke, and other petroleum liquids.

(b) Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, nonrenewable waste, and miscellaneous technologies.

(c) Conventional hydroelectric and pumped storage generation.

(d) Wind, biomass, geothermal, and solar generation.

Notes: Data reflect generation supplied by electricity-only and combined-heat-and-power (CHP) plants operated by electric utilities, independent power producers, and the commercial and industrial sectors. The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Historical data: Latest data available from U.S. Energy Information Administration *Electric Power Monthly* and *Electric Power Annual*.

Projections: EIA Regional Short-Term Energy Model.

Table 7e. U.S. Regional Fuel Consumption for Electricity Generation, All Sectors

U.S. Energy Information Administration | Short-Term Energy Outlook - April 2018

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
Fuel Consumption for Electricity Generation, All Sectors															
United States															
Coal (thousand st/d)	1,777	1,692	2,068	1,731	1,784	1,560	1,955	1,644	1,806	1,568	1,937	1,617	1,818	1,736	1,732
Natural Gas (million cf/d)	21,452	24,555	32,799	24,545	24,349	27,514	34,912	25,730	25,182	27,574	35,635	26,192	25,865	28,148	28,668
Petroleum (thousand b/d)	107	100	105	111	191	105	115	101	135	106	116	101	106	128	114
Residual Fuel Oil	26	27	28	33	55	26	30	26	39	26	29	26	29	34	30
Distillate Fuel Oil	28	24	23	32	74	24	23	26	32	24	23	26	27	37	26
Petroleum Coke (a)	49	45	48	42	51	52	59	46	58	53	59	46	46	52	54
Other Petroleum Liquids (b)	4	4	7	5	11	3	4	4	5	3	4	4	5	6	4
Northeast Census Region															
Coal (thousand st/d)	75	63	66	65	121	87	105	103	121	86	118	109	67	104	108
Natural Gas (million cf/d)	3,603	3,640	4,893	3,706	3,586	4,345	5,783	4,300	4,275	4,464	5,733	4,389	3,963	4,509	4,718
Petroleum (thousand b/d)	7	4	7	18	58	4	7	6	23	4	7	7	9	19	10
South Census Region															
Coal (thousand st/d)	715	761	902	705	695	669	855	657	708	654	822	634	771	719	704
Natural Gas (million cf/d)	12,471	15,401	19,033	14,045	14,499	16,828	19,940	14,481	14,492	16,913	20,547	14,790	15,252	16,446	16,697
Petroleum (thousand b/d)	47	42	43	40	75	46	51	42	57	47	52	42	43	53	49
Midwest Census Region															
Coal (thousand st/d)	717	655	787	688	721	608	738	630	698	606	730	617	712	674	663
Natural Gas (million cf/d)	2,186	2,134	3,249	2,676	2,890	2,892	4,035	3,037	3,148	2,983	4,211	3,134	2,564	3,216	3,371
Petroleum (thousand b/d)	15	16	16	16	21	19	20	17	20	19	20	17	16	19	19
West Census Region															
Coal (thousand st/d)	269	213	313	273	247	197	257	255	279	223	268	258	267	239	257
Natural Gas (million cf/d)	3,192	3,378	5,624	4,117	3,374	3,448	5,153	3,912	3,267	3,214	5,145	3,879	4,085	3,977	3,881
Petroleum (thousand b/d)	39	37	39	37	37	35	37	36	36	35	37	36	38	36	36
End-of-period U.S. Fuel Inventories Held by Electric Power Sector															
Coal (million short tons)	161.7	157.8	139.4	137.2	126.6	123.9	111.5	119.8	119.4	116.8	110.9	120.4	137.2	119.8	120.4
Residual Fuel Oil (mmb)	12.5	11.9	11.4	11.0	10.8	11.0	11.1	11.7	11.6	11.6	11.6	12.1	11.0	11.7	12.1
Distillate Fuel Oil (mmb)	17.0	16.6	16.4	15.8	15.0	15.1	15.3	15.9	16.1	16.1	16.1	16.5	15.8	15.9	16.5
Petroleum Coke (mmb)	4.3	4.3	4.9	5.6	4.9	4.9	4.8	4.7	4.7	4.6	4.6	4.5	5.6	4.7	4.5

(a) Petroleum coke consumption converted from short tons to barrels by multiplying by five.

(b) Other petroleum liquids include jet fuel, kerosene, and waste oil.

Notes: Data reflect generation supplied by electricity-only and combined-heat-and-power (CHP) plants operated by electric utilities, independent power producers, and the commercial and industrial sectors. Data include fuel consumed only for generation of electricity. Values do not include consumption by CHP plants for useful thermal output.

The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Physical Units: st/d = short tons per day; b/d = barrels per day; cf/d = cubic feet per day; mmb = million barrels.

Historical data: Latest data available from U.S. Energy Information Administration *Electric Power Monthly* and *Electric Power Annual*.

Projections: EIA Regional Short-Term Energy Model.

Table 8a. U.S. Renewable Energy Consumption (Quadrillion Btu)
 U.S. Energy Information Administration | Short-Term Energy Outlook - April 2018

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
Electric Power Sector															
Geothermal	0.037	0.036	0.037	0.037	0.037	<i>0.037</i>	<i>0.038</i>	<i>0.039</i>	<i>0.038</i>	<i>0.038</i>	<i>0.038</i>	<i>0.039</i>	0.147	<i>0.151</i>	<i>0.153</i>
Hydroelectric Power (a)	0.759	0.844	0.605	0.546	0.666	<i>0.726</i>	<i>0.636</i>	<i>0.542</i>	<i>0.611</i>	<i>0.706</i>	<i>0.616</i>	<i>0.540</i>	2.755	<i>2.570</i>	<i>2.473</i>
Solar (b)	0.084	0.155	0.148	0.101	0.110	<i>0.175</i>	<i>0.173</i>	<i>0.112</i>	<i>0.112</i>	<i>0.202</i>	<i>0.208</i>	<i>0.142</i>	0.488	<i>0.570</i>	<i>0.664</i>
Waste Biomass (c)	0.070	0.066	0.068	0.068	0.069	<i>0.070</i>	<i>0.072</i>	<i>0.072</i>	<i>0.069</i>	<i>0.071</i>	<i>0.073</i>	<i>0.072</i>	0.272	<i>0.283</i>	<i>0.285</i>
Wood Biomass	0.061	0.059	0.064	0.063	0.063	<i>0.058</i>	<i>0.068</i>	<i>0.062</i>	<i>0.062</i>	<i>0.059</i>	<i>0.071</i>	<i>0.064</i>	0.247	<i>0.251</i>	<i>0.257</i>
Wind	0.644	0.634	0.429	0.660	0.688	<i>0.662</i>	<i>0.475</i>	<i>0.670</i>	<i>0.692</i>	<i>0.716</i>	<i>0.513</i>	<i>0.724</i>	2.367	<i>2.496</i>	<i>2.645</i>
Subtotal	1.654	1.794	1.352	1.475	1.633	<i>1.728</i>	<i>1.463</i>	<i>1.496</i>	<i>1.585</i>	<i>1.792</i>	<i>1.519</i>	<i>1.581</i>	6.276	<i>6.321</i>	<i>6.477</i>
Industrial Sector															
Biofuel Losses and Co-products (d)	0.203	0.199	0.204	0.211	0.205	<i>0.202</i>	<i>0.205</i>	<i>0.205</i>	<i>0.202</i>	<i>0.207</i>	<i>0.209</i>	<i>0.209</i>	0.817	<i>0.817</i>	<i>0.828</i>
Geothermal	0.001	0.001	0.001	0.001	0.001	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	0.004	<i>0.004</i>	<i>0.004</i>
Hydroelectric Power (a)	0.003	0.004	0.003	0.003	0.003	<i>0.004</i>	<i>0.003</i>	<i>0.003</i>	<i>0.003</i>	<i>0.004</i>	<i>0.003</i>	<i>0.003</i>	0.013	<i>0.013</i>	<i>0.013</i>
Solar (b)	0.005	0.007	0.007	0.005	0.006	<i>0.008</i>	<i>0.008</i>	<i>0.006</i>	<i>0.006</i>	<i>0.010</i>	<i>0.010</i>	<i>0.007</i>	0.024	<i>0.028</i>	<i>0.033</i>
Waste Biomass (c)	0.044	0.040	0.038	0.044	0.042	<i>0.040</i>	<i>0.040</i>	<i>0.043</i>	<i>0.042</i>	<i>0.041</i>	<i>0.041</i>	<i>0.042</i>	0.165	<i>0.165</i>	<i>0.166</i>
Wood Biomass	0.370	0.361	0.375	0.374	0.359	<i>0.349</i>	<i>0.359</i>	<i>0.360</i>	<i>0.349</i>	<i>0.347</i>	<i>0.358</i>	<i>0.360</i>	1.480	<i>1.427</i>	<i>1.414</i>
Subtotal	0.625	0.609	0.625	0.638	0.615	<i>0.600</i>	<i>0.613</i>	<i>0.617</i>	<i>0.602</i>	<i>0.604</i>	<i>0.617</i>	<i>0.620</i>	2.498	<i>2.445</i>	<i>2.443</i>
Commercial Sector															
Geothermal	0.005	0.005	0.005	0.005	0.005	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	0.020	<i>0.020</i>	<i>0.020</i>
Solar (b)	0.015	0.023	0.023	0.016	0.020	<i>0.029</i>	<i>0.030</i>	<i>0.022</i>	<i>0.025</i>	<i>0.036</i>	<i>0.037</i>	<i>0.027</i>	0.077	<i>0.101</i>	<i>0.125</i>
Waste Biomass (c)	0.012	0.011	0.011	0.011	0.011	<i>0.011</i>	<i>0.011</i>	<i>0.011</i>	<i>0.011</i>	<i>0.011</i>	<i>0.011</i>	<i>0.011</i>	0.045	<i>0.045</i>	<i>0.045</i>
Wood Biomass	0.021	0.021	0.021	0.021	0.021	<i>0.021</i>	<i>0.021</i>	<i>0.021</i>	<i>0.021</i>	<i>0.021</i>	<i>0.021</i>	<i>0.021</i>	0.084	<i>0.084</i>	<i>0.084</i>
Subtotal	0.059	0.067	0.068	0.061	0.063	<i>0.074</i>	<i>0.075</i>	<i>0.066</i>	<i>0.068</i>	<i>0.081</i>	<i>0.082</i>	<i>0.071</i>	0.254	<i>0.278</i>	<i>0.302</i>
Residential Sector															
Geothermal	0.010	0.010	0.010	0.010	0.013	<i>0.013</i>	<i>0.013</i>	<i>0.013</i>	<i>0.013</i>	<i>0.013</i>	<i>0.013</i>	<i>0.013</i>	0.040	<i>0.052</i>	<i>0.053</i>
Solar (e)	0.037	0.057	0.058	0.041	0.044	<i>0.068</i>	<i>0.070</i>	<i>0.050</i>	<i>0.053</i>	<i>0.080</i>	<i>0.082</i>	<i>0.059</i>	0.192	<i>0.232</i>	<i>0.273</i>
Wood Biomass	0.082	0.083	0.084	0.084	0.103	<i>0.103</i>	<i>0.104</i>	<i>0.104</i>	<i>0.105</i>	<i>0.105</i>	<i>0.105</i>	<i>0.105</i>	0.334	<i>0.413</i>	<i>0.420</i>
Subtotal	0.129	0.150	0.152	0.135	0.160	<i>0.183</i>	<i>0.187</i>	<i>0.167</i>	<i>0.171</i>	<i>0.198</i>	<i>0.200</i>	<i>0.177</i>	0.566	<i>0.697</i>	<i>0.746</i>
Transportation Sector															
Biomass-based Diesel (f)	0.054	0.079	0.080	0.066	0.061	<i>0.081</i>	<i>0.092</i>	<i>0.095</i>	<i>0.069</i>	<i>0.088</i>	<i>0.100</i>	<i>0.104</i>	0.279	<i>0.329</i>	<i>0.361</i>
Ethanol (f)	0.270	0.290	0.293	0.291	0.283	<i>0.291</i>	<i>0.297</i>	<i>0.289</i>	<i>0.277</i>	<i>0.299</i>	<i>0.303</i>	<i>0.294</i>	1.145	<i>1.160</i>	<i>1.173</i>
Subtotal	0.324	0.370	0.373	0.357	0.340	<i>0.372</i>	<i>0.389</i>	<i>0.384</i>	<i>0.345</i>	<i>0.387</i>	<i>0.403</i>	<i>0.398</i>	1.423	<i>1.485</i>	<i>1.533</i>
All Sectors Total															
Biomass-based Diesel (f)	0.054	0.079	0.080	0.066	0.061	<i>0.081</i>	<i>0.092</i>	<i>0.095</i>	<i>0.069</i>	<i>0.088</i>	<i>0.100</i>	<i>0.104</i>	0.279	<i>0.329</i>	<i>0.361</i>
Biofuel Losses and Co-products (d)	0.203	0.199	0.204	0.211	0.205	<i>0.202</i>	<i>0.205</i>	<i>0.205</i>	<i>0.202</i>	<i>0.207</i>	<i>0.209</i>	<i>0.209</i>	0.817	<i>0.817</i>	<i>0.828</i>
Ethanol (f)	0.281	0.301	0.304	0.302	0.300	<i>0.302</i>	<i>0.308</i>	<i>0.300</i>	<i>0.287</i>	<i>0.310</i>	<i>0.315</i>	<i>0.306</i>	1.189	<i>1.211</i>	<i>1.218</i>
Geothermal	0.053	0.052	0.053	0.053	0.056	<i>0.056</i>	<i>0.057</i>	<i>0.058</i>	<i>0.057</i>	<i>0.057</i>	<i>0.057</i>	<i>0.058</i>	0.211	<i>0.227</i>	<i>0.230</i>
Hydroelectric Power (a)	0.763	0.849	0.609	0.550	0.670	<i>0.730</i>	<i>0.639</i>	<i>0.545</i>	<i>0.615</i>	<i>0.710</i>	<i>0.620</i>	<i>0.543</i>	2.770	<i>2.585</i>	<i>2.488</i>
Solar (b)(e)	0.139	0.239	0.235	0.162	0.174	<i>0.280</i>	<i>0.282</i>	<i>0.190</i>	<i>0.196</i>	<i>0.328</i>	<i>0.337</i>	<i>0.234</i>	0.775	<i>0.926</i>	<i>1.094</i>
Waste Biomass (c)	0.126	0.117	0.117	0.122	0.121	<i>0.122</i>	<i>0.124</i>	<i>0.126</i>	<i>0.122</i>	<i>0.123</i>	<i>0.125</i>	<i>0.126</i>	0.482	<i>0.493</i>	<i>0.496</i>
Wood Biomass	0.534	0.524	0.543	0.543	0.545	<i>0.530</i>	<i>0.552</i>	<i>0.547</i>	<i>0.537</i>	<i>0.532</i>	<i>0.555</i>	<i>0.551</i>	2.145	<i>2.174</i>	<i>2.175</i>
Wind	0.644	0.634	0.429	0.660	0.688	<i>0.662</i>	<i>0.475</i>	<i>0.670</i>	<i>0.692</i>	<i>0.716</i>	<i>0.513</i>	<i>0.724</i>	2.367	<i>2.496</i>	<i>2.645</i>
Total Consumption	2.791	2.990	2.571	2.666	2.766	<i>2.958</i>	<i>2.727</i>	<i>2.730</i>	<i>2.772</i>	<i>3.061</i>	<i>2.821</i>	<i>2.847</i>	11.017	<i>11.181</i>	<i>11.501</i>

- = no data available

(a) Conventional hydroelectric power only. Hydroelectricity generated by pumped storage is not included in renewable energy.

(b) Solar consumption in the electric power, commercial, and industrial sectors includes energy produced from large scale (>1 MW) solar thermal and photovoltaic generators and small-scale (<1 MW) distributed solar photovoltaic systems.

(c) Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass.

(d) Losses and co-products from the production of fuel ethanol and biomass-based diesel

(e) Solar consumption in the residential sector includes energy from small-scale (<1 MW) solar photovoltaic systems. Also includes solar heating consumption in all sectors.

(f) Fuel ethanol and biomass-based diesel consumption in the transportation sector includes production, stock change, and imports less exports. Some biomass-based diesel may be consumed in the residential sector in heating oil.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Historical data: Latest data available from EIA databases supporting the following reports: *Electric Power Monthly*, DOE/EIA-0226 and *Renewable Energy Annual*, DOE/EIA-0603; *Petroleum Supply Monthly*, DOE/EIA-0109.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 8b. U.S. Renewable Electricity Generation and Capacity
 U.S. Energy Information Administration | Short-Term Energy Outlook - April 2018

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
Renewable Energy Electric Generating Capacity (megawatts, end of period)															
Electric Power Sector (a)															
Biomass	7,310	7,345	7,399	7,391	7,445	7,431	7,429	7,463	7,623	7,623	7,623	7,623	7,391	7,463	7,623
Waste	4,183	4,218	4,221	4,219	4,273	4,260	4,258	4,291	4,293	4,293	4,293	4,293	4,219	4,291	4,293
Wood	3,127	3,127	3,177	3,172	3,172	3,172	3,172	3,172	3,330	3,330	3,330	3,330	3,172	3,172	3,330
Conventional Hydroelectric	79,573	79,581	79,682	79,684	79,696	79,737	79,858	79,879	79,912	79,940	79,893	79,927	79,684	79,879	79,927
Geothermal	2,456	2,456	2,456	2,493	2,509	2,509	2,509	2,509	2,517	2,517	2,517	2,552	2,493	2,509	2,552
Large-Scale Solar (b)	22,542	23,570	24,072	26,329	27,904	28,796	29,351	31,424	32,810	34,684	35,959	42,151	26,329	31,424	42,151
Wind	82,908	83,377	84,098	87,464	88,503	88,837	89,799	94,172	95,484	96,132	97,112	103,954	87,464	94,172	103,954
Other Sectors (c)															
Biomass	6,766	6,779	6,779	6,768	6,768	6,769	6,778	6,778	6,790	6,767	6,767	6,781	6,768	6,778	6,781
Waste	885	889	889	878	878	878	878	878	890	892	892	906	878	878	906
Wood	5,882	5,891	5,891	5,891	5,891	5,892	5,900	5,900	5,900	5,875	5,875	5,875	5,891	5,900	5,875
Conventional Hydroelectric	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357
Large-Scale Solar (b)	322	338	338	343	350	350	350	349	349	349	349	349	343	349	349
Small-Scale Solar (d)	13,722	14,543	15,341	16,224	17,417	18,342	19,330	20,374	21,381	22,463	23,617	24,830	16,224	20,374	24,830
Residential Sector	8,124	8,618	9,105	9,574	10,154	10,739	11,340	11,962	12,604	13,271	13,959	14,667	9,574	11,962	14,667
Commercial Sector	4,286	4,555	4,797	5,146	5,692	5,973	6,298	6,655	6,960	7,311	7,708	8,140	5,146	6,655	8,140
Industrial Sector	1,312	1,370	1,438	1,504	1,572	1,630	1,692	1,757	1,817	1,881	1,950	2,023	1,504	1,757	2,023
Wind	93	91	91	96	104	104	104	104	104	104	104	104	96	104	104
Renewable Electricity Generation (thousand megawatthours per day)															
Electric Power Sector (a)															
Biomass	90	86	90	90	92	89	96	92	92	90	99	93	89	92	94
Waste	49	47	47	47	48	50	50	50	49	50	51	50	48	50	50
Wood	41	39	43	43	44	39	46	42	43	40	48	43	41	43	44
Conventional Hydroelectric	913	1,005	713	643	794	856	742	632	729	832	719	629	818	755	727
Geothermal	45	43	44	43	45	44	45	46	46	45	45	46	44	45	45
Large-Scale Solar (b)	100	182	173	118	131	206	202	131	134	239	242	165	143	168	195
Wind	767	748	501	770	821	780	554	782	825	844	598	845	696	734	778
Other Sectors (c)															
Biomass	87	84	88	86	88	84	88	86	88	84	88	86	86	87	87
Waste	78	75	79	77	79	75	79	77	79	75	79	77	77	77	77
Wood	10	9	9	9	9	9	9	9	9	9	9	9	9	9	9
Conventional Hydroelectric	5	5	4	4	5	5	4	4	5	5	4	4	5	5	5
Large-Scale Solar (b)	1	2	2	1	2	2	3	2	3	3	3	3	2	2	3
Small-Scale Solar (d)	51	79	80	55	67	100	101	72	82	122	124	87	66	85	104
Residential Sector	29	46	46	31	38	58	59	42	47	71	72	51	38	49	60
Commercial Sector	17	25	25	18	22	33	33	23	27	40	40	28	21	28	34
Industrial Sector	5	8	8	6	7	10	10	7	8	11	11	8	7	8	9
Wind	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1

-- = no data available

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

(a) Power plants larger than or equal to one megawatt in size that are operated by electric utilities or independent power producers.

(b) Solar thermal and photovoltaic generating units at power plants larger than or equal to one megawatt.

(c) Businesses or individual households not primarily engaged in electric power production for sale to the public, whose generating capacity is at least one megawatt (except for small-scale solar photovoltaic data, which consists of systems smaller than one megawatt).

(d) Solar photovoltaic systems smaller than one megawatt, as measured in alternating current.

Historical data: Latest data available from EIA databases supporting the Electric Power Monthly, DOE/EIA-0226.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA-860M database, EIA-826 Solar PV database, and EIA Regional Short-Term Energy Model.

Table 9a. U.S. Macroeconomic Indicators and CO₂ Emissions

U.S. Energy Information Administration | Short-Term Energy Outlook - April 2018

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
Macroeconomic															
Real Gross Domestic Product (billion chained 2009 dollars - SAAR)	16,903	17,031	17,164	17,272	17,347	<i>17,481</i>	<i>17,619</i>	<i>17,753</i>	<i>17,875</i>	<i>17,986</i>	<i>18,085</i>	<i>18,186</i>	17,092	<i>17,550</i>	<i>18,033</i>
Real Personal Consumption Expend. (billion chained 2009 dollars - SAAR)	11,758	11,853	11,917	12,028	12,078	<i>12,166</i>	<i>12,240</i>	<i>12,318</i>	<i>12,391</i>	<i>12,465</i>	<i>12,535</i>	<i>12,606</i>	11,889	<i>12,201</i>	<i>12,499</i>
Real Fixed Investment (billion chained 2009 dollars - SAAR)	2,876	2,898	2,916	2,973	2,974	<i>3,014</i>	<i>3,058</i>	<i>3,099</i>	<i>3,144</i>	<i>3,185</i>	<i>3,225</i>	<i>3,266</i>	2,916	<i>3,036</i>	<i>3,205</i>
Business Inventory Change (billion chained 2009 dollars - SAAR)	0	5	42	7	60	<i>61</i>	<i>77</i>	<i>82</i>	<i>83</i>	<i>84</i>	<i>81</i>	<i>77</i>	13	<i>70</i>	<i>81</i>
Real Government Expenditures (billion chained 2009 dollars - SAAR)	2,897	2,895	2,900	2,921	2,928	<i>2,947</i>	<i>2,966</i>	<i>2,989</i>	<i>3,006</i>	<i>3,015</i>	<i>3,021</i>	<i>3,023</i>	2,903	<i>2,958</i>	<i>3,016</i>
Real Exports of Goods & Services (billion chained 2009 dollars - SAAR)	2,162	2,181	2,192	2,230	2,238	<i>2,259</i>	<i>2,293</i>	<i>2,330</i>	<i>2,366</i>	<i>2,404</i>	<i>2,443</i>	<i>2,483</i>	2,192	<i>2,280</i>	<i>2,424</i>
Real Imports of Goods & Services (billion chained 2009 dollars - SAAR)	2,785	2,795	2,790	2,883	2,924	<i>2,957</i>	<i>3,004</i>	<i>3,054</i>	<i>3,104</i>	<i>3,159</i>	<i>3,214</i>	<i>3,265</i>	2,813	<i>2,985</i>	<i>3,186</i>
Real Disposable Personal Income (billion chained 2009 dollars - SAAR)	12,680	12,766	12,788	12,823	12,972	<i>13,068</i>	<i>13,190</i>	<i>13,314</i>	<i>13,486</i>	<i>13,590</i>	<i>13,691</i>	<i>13,795</i>	12,764	<i>13,136</i>	<i>13,641</i>
Non-Farm Employment (millions)	145.9	146.3	146.9	147.4	148.1	<i>148.6</i>	<i>149.3</i>	<i>150.1</i>	<i>150.8</i>	<i>151.4</i>	<i>151.9</i>	<i>152.3</i>	146.6	<i>149.0</i>	<i>151.6</i>
Civilian Unemployment Rate (percent)	4.7	4.3	4.3	4.1	4.1	<i>4.0</i>	<i>3.9</i>	<i>3.8</i>	<i>3.6</i>	<i>3.6</i>	<i>3.6</i>	<i>3.7</i>	4.4	<i>3.9</i>	<i>3.6</i>
Housing Starts (millions - SAAR)	1.24	1.17	1.17	1.26	1.31	<i>1.31</i>	<i>1.32</i>	<i>1.34</i>	<i>1.35</i>	<i>1.35</i>	<i>1.37</i>	<i>1.38</i>	1.21	<i>1.32</i>	<i>1.36</i>
Industrial Production Indices (Index, 2012=100)															
Total Industrial Production	103.7	105.1	104.8	106.9	107.5	<i>108.1</i>	<i>108.8</i>	<i>109.7</i>	<i>110.5</i>	<i>111.2</i>	<i>111.9</i>	<i>112.6</i>	105.1	<i>108.6</i>	<i>111.6</i>
Manufacturing	103.7	104.5	104.0	105.7	106.1	<i>106.6</i>	<i>107.3</i>	<i>108.2</i>	<i>109.0</i>	<i>109.6</i>	<i>110.1</i>	<i>110.7</i>	104.5	<i>107.1</i>	<i>109.9</i>
Food	110.1	111.2	112.9	112.9	112.9	<i>113.5</i>	<i>114.0</i>	<i>114.5</i>	<i>115.1</i>	<i>115.6</i>	<i>116.1</i>	<i>116.6</i>	111.8	<i>113.7</i>	<i>115.8</i>
Paper	96.3	95.5	95.1	95.5	95.9	<i>95.7</i>	<i>95.7</i>	<i>95.7</i>	<i>95.6</i>	<i>95.6</i>	<i>95.6</i>	<i>95.7</i>	95.6	<i>95.7</i>	<i>95.6</i>
Petroleum and Coal Products	102.5	106.1	101.4	104.3	104.7	<i>105.1</i>	<i>105.6</i>	<i>106.0</i>	<i>106.4</i>	<i>106.6</i>	<i>106.8</i>	<i>107.1</i>	103.5	<i>105.4</i>	<i>106.7</i>
Chemicals	97.6	98.8	98.2	100.7	101.3	<i>102.5</i>	<i>103.4</i>	<i>104.2</i>	<i>105.1</i>	<i>105.9</i>	<i>106.7</i>	<i>107.6</i>	98.9	<i>102.8</i>	<i>106.3</i>
Nonmetallic Mineral Products	116.7	115.3	115.2	118.8	118.8	<i>119.8</i>	<i>120.7</i>	<i>121.8</i>	<i>122.7</i>	<i>123.3</i>	<i>123.8</i>	<i>124.2</i>	116.5	<i>120.3</i>	<i>123.5</i>
Primary Metals	96.8	95.4	95.3	96.4	97.8	<i>98.8</i>	<i>99.5</i>	<i>99.7</i>	<i>99.8</i>	<i>99.9</i>	<i>99.9</i>	<i>100.2</i>	95.9	<i>99.0</i>	<i>99.9</i>
Coal-weighted Manufacturing (a)	102.6	102.7	101.4	103.5	103.9	<i>104.7</i>	<i>105.4</i>	<i>106.0</i>	<i>106.4</i>	<i>106.9</i>	<i>107.3</i>	<i>107.9</i>	102.6	<i>105.0</i>	<i>107.1</i>
Distillate-weighted Manufacturing (a)	108.5	108.8	108.3	110.6	110.8	<i>111.5</i>	<i>112.2</i>	<i>113.0</i>	<i>113.6</i>	<i>114.1</i>	<i>114.5</i>	<i>115.1</i>	109.1	<i>111.9</i>	<i>114.3</i>
Electricity-weighted Manufacturing (a)	103.1	103.6	102.5	104.7	105.2	<i>106.1</i>	<i>106.8</i>	<i>107.6</i>	<i>108.2</i>	<i>108.8</i>	<i>109.4</i>	<i>110.1</i>	103.5	<i>106.4</i>	<i>109.1</i>
Natural Gas-weighted Manufacturing (a) ...	103.0	104.3	102.0	104.9	104.9	<i>106.1</i>	<i>107.1</i>	<i>107.9</i>	<i>108.7</i>	<i>109.4</i>	<i>110.1</i>	<i>111.0</i>	103.6	<i>106.5</i>	<i>109.8</i>
Price Indexes															
Consumer Price Index (all urban consumers) (index, 1982-1984=1.00)	2.44	2.44	2.45	2.47	2.50	<i>2.50</i>	<i>2.52</i>	<i>2.52</i>	<i>2.54</i>	<i>2.55</i>	<i>2.57</i>	<i>2.58</i>	2.45	<i>2.51</i>	<i>2.56</i>
Producer Price Index: All Commodities (index, 1982=1.00)	1.93	1.92	1.92	1.97	2.00	<i>2.01</i>	<i>2.02</i>	<i>2.04</i>	<i>2.04</i>	<i>2.05</i>	<i>2.06</i>	<i>2.07</i>	1.94	<i>2.02</i>	<i>2.05</i>
Producer Price Index: Petroleum (index, 1982=1.00)	1.66	1.67	1.75	1.91	2.00	<i>2.03</i>	<i>1.96</i>	<i>1.88</i>	<i>1.85</i>	<i>1.94</i>	<i>1.97</i>	<i>1.95</i>	1.75	<i>1.97</i>	<i>1.93</i>
GDP Implicit Price Deflator (index, 2009=100)	112.8	113.0	113.6	114.3	115.0	<i>115.4</i>	<i>116.0</i>	<i>116.7</i>	<i>117.5</i>	<i>118.3</i>	<i>119.1</i>	<i>119.8</i>	113.4	<i>115.8</i>	<i>118.7</i>
Miscellaneous															
Vehicle Miles Traveled (b) (million miles/day)	8,301	9,164	9,015	8,676	8,331	<i>9,269</i>	<i>9,152</i>	<i>8,813</i>	<i>8,469</i>	<i>9,414</i>	<i>9,279</i>	<i>8,934</i>	8,791	<i>8,893</i>	<i>9,026</i>
Air Travel Capacity (Available ton-miles/day, thousands)	567	619	661	631	569	<i>588</i>	<i>644</i>	<i>626</i>	<i>573</i>	<i>589</i>	<i>646</i>	<i>630</i>	620	<i>607</i>	<i>610</i>
Aircraft Utilization (Revenue ton-miles/day, thousands)	344	390	398	382	353	<i>371</i>	<i>391</i>	<i>393</i>	<i>357</i>	<i>372</i>	<i>395</i>	<i>398</i>	378	<i>377</i>	<i>381</i>
Airline Ticket Price Index (index, 1982-1984=100)	277.8	297.0	264.9	263.4	265.0	<i>306.5</i>	<i>295.4</i>	<i>309.5</i>	<i>316.0</i>	<i>336.8</i>	<i>313.3</i>	<i>324.3</i>	275.8	<i>294.1</i>	<i>322.6</i>
Raw Steel Production (million short tons per day)	0.248	0.247	0.250	0.245	0.252	<i>0.256</i>	<i>0.243</i>	<i>0.211</i>	<i>0.268</i>	<i>0.265</i>	<i>0.244</i>	<i>0.209</i>	0.248	<i>0.240</i>	<i>0.246</i>
Carbon Dioxide (CO₂) Emissions (million metric tons)															
Petroleum	565	588	593	592	574	<i>588</i>	<i>601</i>	<i>594</i>	<i>580</i>	<i>595</i>	<i>608</i>	<i>601</i>	2,338	<i>2,357</i>	<i>2,384</i>
Natural Gas	422	311	335	405	458	<i>334</i>	<i>348</i>	<i>407</i>	<i>469</i>	<i>338</i>	<i>354</i>	<i>410</i>	1,472	<i>1,548</i>	<i>1,571</i>
Coal	321	309	377	323	322	<i>286</i>	<i>360</i>	<i>316</i>	<i>329</i>	<i>287</i>	<i>357</i>	<i>312</i>	1,331	<i>1,285</i>	<i>1,285</i>
Total Energy (c)	1,311	1,211	1,308	1,323	1,357	<i>1,211</i>	<i>1,313</i>	<i>1,320</i>	<i>1,381</i>	<i>1,223</i>	<i>1,321</i>	<i>1,326</i>	5,153	<i>5,202</i>	<i>5,251</i>

- = no data available

SAAR = Seasonally-adjusted annual rate

 (a) Fuel share weights of individual sector indices based on EIA *Manufacturing Energy Consumption Survey* .

(b) Total highway travel includes gasoline and diesel fuel vehicles.

(c) Includes electric power sector use of geothermal energy and non-biomass waste.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Historical data: Latest data available from U.S. Department of Commerce, Bureau of Economic Analysis; Federal Reserve System, Statistical release G17; Federal Highway Administration; and Federal Aviation Administration. Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model. U.S. macroeconomic projections are based on the IHS Markit model of the U.S. Economy.

Table 9b. U.S. Regional Macroeconomic Data

U.S. Energy Information Administration | Short-Term Energy Outlook - April 2018

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
Real Gross State Product (Billion \$2009)															
New England	888	893	901	905	908	914	921	926	931	936	940	945	897	917	938
Middle Atlantic	2,483	2,496	2,516	2,528	2,536	2,553	2,570	2,586	2,597	2,609	2,619	2,631	2,506	2,561	2,614
E. N. Central	2,318	2,336	2,354	2,365	2,373	2,388	2,403	2,418	2,432	2,443	2,454	2,464	2,343	2,395	2,448
W. N. Central	1,070	1,075	1,081	1,086	1,089	1,096	1,103	1,110	1,116	1,121	1,126	1,132	1,078	1,099	1,124
S. Atlantic	3,008	3,029	3,050	3,068	3,084	3,109	3,135	3,160	3,185	3,205	3,223	3,241	3,039	3,122	3,213
E. S. Central	761	767	771	776	779	784	789	795	800	804	809	813	769	787	806
W. S. Central	2,021	2,050	2,071	2,091	2,104	2,125	2,147	2,167	2,187	2,204	2,220	2,235	2,058	2,136	2,212
Mountain	1,082	1,092	1,100	1,109	1,115	1,125	1,135	1,146	1,156	1,165	1,174	1,182	1,096	1,130	1,169
Pacific	3,168	3,188	3,213	3,237	3,252	3,279	3,307	3,335	3,361	3,387	3,409	3,432	3,201	3,293	3,397
Industrial Output, Manufacturing (Index, Year 2012=100)															
New England	98.5	98.9	98.5	100.0	100.3	100.5	100.9	101.5	101.9	102.3	102.6	103.0	99.0	100.8	102.5
Middle Atlantic	98.7	99.2	98.6	99.3	99.5	99.8	100.3	101.0	101.5	102.0	102.3	102.7	98.9	100.2	102.1
E. N. Central	106.0	107.0	106.3	107.9	108.4	109.1	109.9	110.7	111.7	112.5	113.0	113.7	106.8	109.5	112.7
W. N. Central	102.8	103.5	103.3	105.2	105.6	106.2	106.9	107.8	108.6	109.3	109.8	110.4	103.7	106.6	109.5
S. Atlantic	107.4	108.2	107.7	109.5	109.8	110.3	110.8	111.7	112.3	113.0	113.4	114.0	108.2	110.6	113.2
E. S. Central	109.6	110.1	109.3	110.8	111.2	111.9	112.6	113.6	114.4	115.1	115.7	116.4	110.0	112.3	115.4
W. S. Central	96.7	97.7	97.6	98.9	99.5	100.3	101.3	102.5	103.4	104.2	104.8	105.5	97.7	100.9	104.5
Mountain	108.3	109.7	110.0	112.3	112.7	113.2	113.9	114.9	115.7	116.4	116.9	117.7	110.1	113.7	116.7
Pacific	104.0	104.4	103.6	105.7	106.1	106.5	107.3	108.2	108.9	109.4	109.9	110.5	104.4	107.0	109.7
Real Personal Income (Billion \$2009)															
New England	774	776	779	782	784	788	794	800	808	813	818	823	778	791	815
Middle Atlantic	1,965	1,976	1,986	1,994	1,997	2,005	2,020	2,035	2,053	2,064	2,076	2,088	1,980	2,014	2,070
E. N. Central	2,107	2,109	2,118	2,127	2,133	2,142	2,158	2,175	2,195	2,209	2,221	2,235	2,115	2,152	2,215
W. N. Central	989	993	995	999	1,003	1,009	1,018	1,028	1,038	1,047	1,055	1,064	994	1,015	1,051
S. Atlantic	2,776	2,787	2,799	2,811	2,825	2,840	2,866	2,895	2,927	2,952	2,975	2,998	2,793	2,856	2,963
E. S. Central	778	780	783	785	788	792	798	805	813	819	824	829	781	796	821
W. S. Central	1,703	1,711	1,720	1,730	1,739	1,751	1,769	1,788	1,810	1,826	1,842	1,859	1,716	1,762	1,834
Mountain	976	981	984	990	995	1,001	1,011	1,022	1,034	1,044	1,053	1,063	983	1,007	1,049
Pacific	2,397	2,425	2,434	2,448	2,457	2,470	2,493	2,518	2,544	2,565	2,585	2,605	2,426	2,484	2,575
Households (Thousands)															
New England	5,859	5,868	5,888	5,896	5,907	5,916	5,926	5,936	5,946	5,957	5,967	5,977	5,896	5,936	5,977
Middle Atlantic	15,899	15,915	15,967	15,982	16,006	16,027	16,051	16,075	16,098	16,121	16,145	16,171	15,982	16,075	16,171
E. N. Central	18,823	18,840	18,900	18,918	18,948	18,980	19,012	19,042	19,067	19,097	19,129	19,164	18,918	19,042	19,164
W. N. Central	8,518	8,536	8,574	8,595	8,622	8,649	8,674	8,696	8,718	8,741	8,764	8,788	8,595	8,696	8,788
S. Atlantic	25,184	25,275	25,434	25,531	25,640	25,743	25,846	25,945	26,044	26,141	26,236	26,334	25,531	25,945	26,334
E. S. Central	7,602	7,617	7,649	7,665	7,687	7,707	7,728	7,747	7,767	7,787	7,807	7,829	7,665	7,747	7,829
W. S. Central	14,579	14,625	14,704	14,750	14,804	14,857	14,917	14,977	15,037	15,098	15,160	15,223	14,750	14,977	15,223
Mountain	9,036	9,074	9,132	9,172	9,219	9,264	9,309	9,353	9,396	9,439	9,482	9,526	9,172	9,353	9,526
Pacific	18,697	18,753	18,846	18,897	18,958	19,016	19,079	19,136	19,196	19,253	19,311	19,371	18,897	19,136	19,371
Total Non-farm Employment (Millions)															
New England	7.4	7.4	7.4	7.4	7.4	7.5	7.5	7.5	7.5	7.5	7.6	7.6	7.4	7.5	7.6
Middle Atlantic	19.5	19.5	19.6	19.7	19.7	19.8	19.8	19.9	20.0	20.0	20.1	20.1	19.6	19.8	20.0
E. N. Central	21.9	22.0	22.0	22.0	22.1	22.2	22.3	22.3	22.4	22.5	22.6	22.6	22.0	22.2	22.5
W. N. Central	10.6	10.6	10.7	10.7	10.7	10.7	10.8	10.8	10.9	10.9	10.9	10.9	10.6	10.8	10.9
S. Atlantic	28.0	28.1	28.2	28.3	28.4	28.6	28.7	28.9	29.1	29.2	29.3	29.4	28.2	28.7	29.2
E. S. Central	8.1	8.1	8.1	8.1	8.2	8.2	8.2	8.3	8.3	8.3	8.4	8.4	8.1	8.2	8.3
W. S. Central	17.0	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	18.0	17.1	17.4	17.8
Mountain	10.4	10.5	10.6	10.6	10.7	10.7	10.8	10.9	11.0	11.0	11.1	11.1	10.5	10.8	11.1
Pacific	22.8	22.9	23.0	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	24.0	23.0	23.4	23.9

- = no data available

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Regions refer to U.S. Census divisions.

 See "Census division" in EIA's Energy Glossary (<http://www.eia.doe.gov/glossary/index.html>) for a list of States in each region.

Historical data: Latest data available from U.S. Department of Commerce, Bureau of Economic Analysis; Federal Reserve System, Statistical release G17.

Minor discrepancies with published historical data are due to independent rounding.

Projections: Macroeconomic projections are based on the IHS Markit model of the U.S. Economy.

Table 9c. U.S. Regional Weather Data

U.S. Energy Information Administration | Short-Term Energy Outlook - April 2018

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
Heating Degree Days															
New England	2,982	800	93	2,175	3,018	835	126	2,161	3,133	868	126	2,161	6,051	6,140	6,288
Middle Atlantic	2,656	600	73	2,002	2,905	665	81	1,982	2,927	693	81	1,982	5,332	5,634	5,684
E. N. Central	2,691	627	106	2,263	3,111	711	125	2,224	3,148	732	125	2,224	5,687	6,171	6,229
W. N. Central	2,813	661	138	2,386	3,405	690	161	2,402	3,226	703	161	2,403	5,997	6,659	6,493
South Atlantic	1,148	125	15	946	1,410	183	13	982	1,449	194	13	981	2,234	2,589	2,637
E. S. Central	1,376	154	24	1,280	1,794	235	20	1,311	1,844	243	20	1,312	2,834	3,361	3,418
W. S. Central	774	65	4	740	1,179	67	4	786	1,121	80	4	786	1,583	2,037	1,992
Mountain	2,058	698	153	1,666	2,207	654	141	1,831	2,187	697	141	1,830	4,575	4,834	4,855
Pacific	1,560	530	68	1,031	1,450	580	90	1,218	1,527	604	90	1,219	3,189	3,339	3,440
U.S. Average	1,858	427	65	1,481	2,108	472	74	1,529	2,121	491	74	1,527	3,832	4,182	4,213
Heating Degree Days, Prior 10-year Average															
New England	3,201	831	122	2,125	3,172	818	119	2,121	3,162	813	117	2,108	6,279	6,230	6,200
Middle Atlantic	2,983	661	81	1,941	2,947	646	81	1,949	2,952	641	80	1,934	5,665	5,623	5,608
E. N. Central	3,254	701	114	2,197	3,209	692	117	2,210	3,186	686	118	2,187	6,267	6,228	6,177
W. N. Central	3,302	707	142	2,380	3,264	705	144	2,379	3,253	689	144	2,360	6,531	6,492	6,446
South Atlantic	1,502	188	12	966	1,476	177	12	974	1,477	173	13	965	2,667	2,639	2,627
E. S. Central	1,906	231	16	1,287	1,868	217	18	1,301	1,860	213	18	1,290	3,440	3,404	3,380
W. S. Central	1,227	88	4	799	1,181	80	4	801	1,182	77	4	795	2,119	2,066	2,058
Mountain	2,216	734	142	1,862	2,195	737	144	1,842	2,173	720	141	1,843	4,954	4,917	4,877
Pacific	1,462	598	89	1,205	1,465	592	84	1,181	1,445	585	83	1,185	3,354	3,322	3,299
U.S. Average	2,192	487	71	1,527	2,160	478	71	1,524	2,148	470	70	1,513	4,277	4,233	4,202
Cooling Degree Days															
New England	0	76	364	11	0	88	416	1	0	81	416	1	451	505	499
Middle Atlantic	0	138	501	22	0	154	536	4	0	152	536	4	662	695	692
E. N. Central	1	212	479	15	0	217	527	7	0	217	527	7	707	751	751
W. N. Central	9	265	624	14	0	268	658	10	3	264	658	10	911	936	935
South Atlantic	159	671	1,157	262	149	656	1,154	224	114	648	1,155	225	2,250	2,183	2,141
E. S. Central	65	480	963	74	22	520	1,042	64	26	524	1,042	63	1,582	1,647	1,656
W. S. Central	213	829	1,460	216	99	921	1,501	200	93	869	1,502	200	2,718	2,721	2,664
Mountain	37	467	919	119	7	442	933	76	19	413	934	76	1,541	1,459	1,441
Pacific	30	220	700	98	32	169	579	58	28	165	579	58	1,049	838	829
U.S. Average	70	403	838	114	49	407	846	91	42	396	847	91	1,425	1,393	1,377
Cooling Degree Days, Prior 10-year Average															
New England	0	81	433	1	0	81	433	1	0	80	439	1	515	515	520
Middle Atlantic	0	169	566	6	0	166	567	5	0	163	572	6	741	738	741
E. N. Central	3	234	542	8	3	228	532	7	3	230	537	7	788	770	777
W. N. Central	7	281	672	12	7	277	659	11	7	281	666	12	973	953	965
South Atlantic	117	666	1,167	230	119	675	1,161	227	122	677	1,168	233	2,179	2,182	2,200
E. S. Central	33	544	1,056	65	34	539	1,031	63	34	541	1,037	65	1,698	1,667	1,678
W. S. Central	90	876	1,527	205	100	887	1,532	204	101	889	1,546	208	2,698	2,722	2,744
Mountain	23	424	930	81	24	426	922	84	23	432	925	83	1,458	1,456	1,463
Pacific	30	180	608	74	30	185	621	78	31	184	616	75	892	914	906
U.S. Average	43	405	857	94	45	408	855	94	46	410	862	96	1,399	1,402	1,413

- = no data available

Notes: Regional degree days for each period are calculated by EIA as contemporaneous period population-weighted averages of state degree day data published by the National Oceanic and Atmospheric Administration (NOAA).

See *Change in Regional and U.S. Degree-Day Calculations* (http://www.eia.gov/forecasts/steo/special/pdf/2012_sp_04.pdf) for more information.

The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Regions refer to U.S. Census divisions. See "Census division" in EIA's Energy Glossary (<http://www.eia.gov/tools/glossary/>) for a list of states in each region.

Historical data: Latest data available from U.S. Department of Commerce, National Oceanic and Atmospheric Association (NOAA).

Projections: Based on forecasts by the NOAA Climate Prediction Center (<http://www.cpc.ncep.noaa.gov/pacdir/DDdir/NHOME3.shtml>).

Appendix

This appendix is prepared in fulfillment of section 1245(d)(4)(A) of the National Defense Authorization Act (NDAA) for Fiscal Year 2012, as amended. The law requires the U.S. Energy Information Administration (EIA), the statistical and analytical agency within the U.S. Department of Energy, to submit to Congress a report on the availability and price of petroleum and petroleum products produced in countries other than Iran in the two-month period preceding the submission of the report. By law, EIA's data, analyses, and forecasts are independent of approval by any other officer or employee of the U.S. Government. The data in this appendix, therefore, should not be construed as representing those of the U.S. Department of Energy or other federal agencies.

EIA consulted with the U.S. Department of the Treasury, the U.S. Department of State, and the intelligence community in the process of developing the NDAA report, which was previously published as a stand-alone report. Detailed background and contextual information not repeated here can be found in [early editions of the NDAA report](#).

Table a1. Summary of Estimated Petroleum and Other Liquids Quantities

	February 2018	March 2018	February-March 2018 Average	February-March 2017 Average	2015 – 2017 Average
Global Petroleum and Other Liquids (million barrels per day)					
Global Petroleum and Other Liquids Production (a)	98.7	99.0	98.8	97.2	97.3
Global Petroleum and Other Liquids Consumption (b)	100.9	99.7	100.2	98.3	96.9
Biofuels Production (c)	1.8	1.8	1.8	1.8	2.1
Biofuels Consumption (c)	2.1	2.1	2.1	2.1	2.1
Iran Liquid Fuels Production	4.7	4.7	4.7	4.6	4.1
Iran Liquid Fuels Consumption	1.7	1.8	1.8	1.8	1.8
Petroleum and Petroleum Products Produced and Consumed in Countries Other Than Iran (million barrels per day)					
Production (d)	92.2	92.4	92.4	90.8	91.0
Consumption (d)	97.0	95.8	96.4	94.5	93.0
Production minus Consumption	-4.8	-3.4	-4.0	-3.7	-2.0
World Inventory Net Withdrawals Including Iran	2.2	0.7	1.4	1.1	-0.4
Estimated OECD Inventory Level (e) (million barrels)	2,803	2,784	2,793	3,026	2,963
OPEC Surplus Crude Oil Production Capacity (f)	2.0	2.0	2.0	2.3	1.6

Note: The term "petroleum and other liquids" encompasses crude oil, lease condensate, natural gas liquids, biofuels, coal-to-liquids, gas-to-liquids, and refinery processing gains, which are important to consider in concert due to the inter-related supply, demand, and price dynamics of petroleum, petroleum products, and related fuels.

(a) Production includes crude oil (including lease condensates), natural gas liquids, other liquids, and refinery processing gains.

(b) Consumption of petroleum by the OECD countries is synonymous with "products supplied," defined in the glossary of the EIA Petroleum Supply Monthly, DOE/EIA-0109. Consumption of petroleum by the non-OECD countries is "apparent consumption," which includes internal consumption, refinery fuel, and loss, and bunkering.

(c) Biofuels production and consumption are based on EIA estimates as published in the International Energy Statistics. Biofuels production in the third quarter tends to be at its highest level in the year as ethanol production in Brazil reaches its seasonal peak and is typically lowest in the first quarter as seasonal production falls in the South/South-Central region of Brazil.

(d) Global production of petroleum and petroleum products outside of Iran is derived by subtracting biofuels production and Iran liquid fuels production from global liquid fuels production. The same method is used to calculate global consumption outside of Iran.

(e) Estimated inventory level is for OECD countries only.

(f) EIA defines surplus oil production capacity as potential oil production that could be brought online within 30 days and sustained for at least 90 days, consistent with sound business practices. This does not include oil production increases that could not be sustained without degrading the future production capacity of a field.

Source: U.S. Energy Information Administration.

Table a2. Crude Oil and Petroleum Product Price Data

Item	February 2018	March 2018	February-March 2018	February-March 2017	2015-2017 Average
Brent Front Month Futures Price (\$ per barrel)	65.73	66.72	66.25	54.11	51.16
WTI Front Month Futures Price (\$ per barrel)	62.18	62.77	62.49	51.38	47.69
Dubai Front Month Futures Price (\$ per barrel)	62.95	63.54	63.26	53.08	48.82
Brent 1st - 13th Month Futures Spread (\$ per barrel)	4.07	4.02	4.04	-0.62	-3.90
WTI 1st - 13th Month Futures Spread (\$ per barrel)	4.97	4.66	4.81	-1.81	-4.26
RBOB Front Month Futures Price (\$ per gallon)	1.77	1.95	1.87	1.59	1.55
Heating Oil Front Month Futures Price (\$ per gallon)	1.94	1.93	1.94	1.58	1.56
RBOB - Brent Futures Crack Spread (\$ per gallon)	0.21	0.36	0.29	0.30	0.34
Heating Oil - Brent Futures Crack Spread (\$ per gallon)	0.38	0.34	0.36	0.30	0.34

(a) Brent refers to Brent crude oil traded on the Intercontinental Exchange (ICE).

(b) WTI refers to West Texas Intermediate crude oil traded on the New York Mercantile Exchange (NYMEX), owned by Chicago Mercantile Exchange (CME) Group.

(c) RBOB refers to reformulated blendstock for oxygenate blending traded on the NYMEX.

Source: U.S. Energy Information Administration, based on Chicago Mercantile Exchange (CME), Intercontinental Exchange (ICE), and Dubai Mercantile Exchange (DME).