



Short-Term Energy Outlook (STEO)

Forecast highlights

Global liquid fuels

- Brent crude oil spot prices averaged \$77 per barrel (b) in May, an increase of \$5/b from the April level and the highest monthly average price since November 2014. EIA forecasts Brent spot prices will average \$71/b in 2018 and \$68/b in 2019. The 2019 forecast price is \$2/b higher than in the May STEO. EIA expects West Texas Intermediate (WTI) crude oil prices will average almost \$7/b lower than Brent prices in 2018 and \$6/b lower than Brent prices in 2019. NYMEX WTI futures and options contract values for September 2018 delivery traded during the five-day period ending June 7, 2018, suggest a range of \$52/b to \$81/b encompasses the market expectation for September WTI prices at the 95% confidence level.
- For the 2018 April–September summer driving season, EIA forecasts U.S. regular gasoline retail prices to average \$2.87/gallon (gal), up from an average of \$2.41/gal last summer. The higher forecast gasoline prices are primarily the result of higher forecast crude oil prices. Monthly average gasoline prices are expected to reach a summer peak in June of \$2.92/gal and are forecast to decline gradually afterwards to \$2.84/gal in September.
- EIA estimates that U.S. crude oil production averaged 10.7 million barrels per day (b/d) in May, up 80,000 b/d from the April level. EIA projects that U.S. crude oil production will average 10.8 million b/d in 2018, up from [9.4 million b/d in 2017](#), and will average 11.8 million b/d in 2019.
- EIA forecasts that total U.S. crude oil and petroleum product net imports will fall from an annual average of 3.7 million b/d in 2017 to an average of 2.5 million b/d in 2018 and to 1.6 million b/d in 2019, which would be the lowest level of net oil imports since 1959.
- EIA forecasts crude oil production from the Organization of the Petroleum Exporting Countries (OPEC) will average 32.0 million b/d in 2018, a decrease of 0.4 million b/d from the 2017 level. OPEC crude oil production is expected to increase slightly to an average of 32.1 million b/d in 2019. The increase in production in 2019 is expected to occur despite falling production in Venezuela and Iran. EIA assumes these decreases will be offset by increasing production from Persian Gulf producers, primarily Saudi Arabia.

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 81.2 Bcf/d in 2018, establishing a new record. EIA expects natural gas production will rise again in 2019 to 83.8 Bcf/d.
- Growing forecast U.S. natural gas production supports increasing forecast liquefied natural gas (LNG) exports. LNG exports averaged 1.9 Bcf/d in 2017. EIA forecasts LNG exports to average 3.0 Bcf/d in 2018 and 5.1 Bcf/d in 2019. [Dominion Energy's Cove Point LNG facility](#) is ramping up exports. In April, the facility exported an estimated 13.4 Bcf, implying baseload utilization of 65%, and in May, it exported an estimated 23.5 Bcf, implying baseload utilization of 94%.
- EIA expects Henry Hub natural gas spot prices to average \$2.99/million British thermal units (MMBtu) in 2018 and \$3.08/MMBtu in 2019. NYMEX futures and options contract values for September 2018 delivery that traded during the five-day period ending June 7, 2018, suggest that a range of \$2.38/MMBtu to \$3.57/MMBtu encompasses the market expectation for September Henry Hub natural gas prices at the 95% confidence level.

Electricity, coal, renewables, and emissions

- 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 2019. The forecast electricity generation share from coal averages 28% in 2018 and 2019, down from 30% in 2017. The nuclear share of generation was 20% in 2017 and is forecast to be 20% in 2018 and 19% in 2019. Nonhydropower renewables provided slightly less than 10% of electricity generation in 2017 and are expected to provide more than 10% in 2018 and nearly 11% in 2019. The generation share of hydropower was 7% in 2017 and is forecast to be about the same in 2018 and 2019.
- EIA forecasts coal production to decline by 2% to 756 million short tons (MMst) in 2018. The production decrease is largely attributable to a forecast decline of 5% in domestic coal consumption in 2018, with most of the decline is expected to be in the electric power sector. A forecast decline of 4% in coal exports also contributes to lower expected coal production in 2018. EIA expects coal production to decline by 2% in 2019.
- In 2017, EIA estimates that wind generation averaged 697,000 megawatt-hours per day (MWh/d). EIA forecasts that wind generation will rise to 746,000 MWh/d in 2018 and to 777,000 MWh/d in 2019. If factors such as precipitation and snowpack remain as forecast, conventional hydropower is forecast to generate 752,000 MWh/d in 2019, [which would make it the first year that wind generation exceeds hydropower generation in the United States.](#)

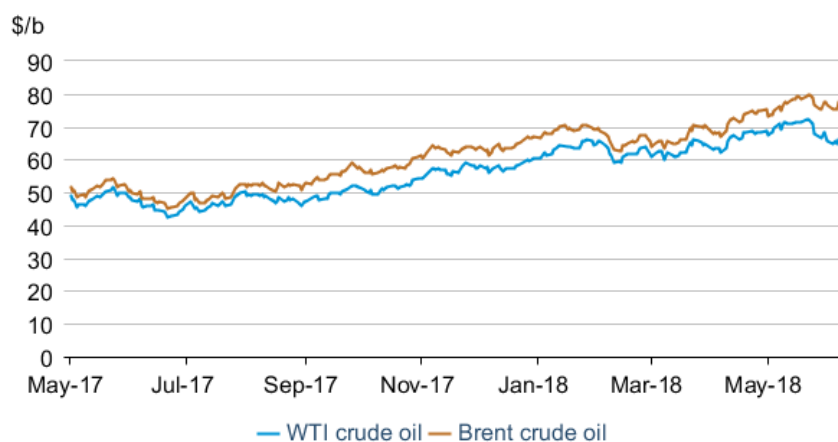
- After declining by 0.9% in 2017, EIA forecasts that energy-related carbon dioxide (CO₂) emissions will rise by 1.1% in 2018 and by 0.2% in 2019. Energy-related CO₂ emissions are sensitive to changes in weather, economic growth, energy prices, and fuel mix.

Petroleum and natural gas markets review

Crude oil

Prices: The front-month futures price for Brent crude oil settled at \$77.32 per barrel (b) on June 7, an increase of \$4.19/b from May 1. Front-month futures prices for West Texas Intermediate (WTI) crude oil for delivery at Cushing, Oklahoma, decreased by \$1.30/b during the same period, settling at \$65.95/b on June 7 (**Figure 1**). May Brent and WTI monthly average spot prices were \$4.87/b and \$3.73/b higher, respectively, than the April average spot prices.

Figure 1. Crude oil front-month futures prices



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

Brent crude oil prices traded above \$80/b on an intraday basis briefly in late May before declining during the first week of June. Prices increased in May as crude oil production declined for several members of the Organization of the Petroleum Exporting Countries (OPEC), including Venezuela and Nigeria, and as markets accounted for the uncertainty surrounding Iran's future crude oil production levels. In early May, the United States announced it would withdraw from the [Joint Comprehensive Plan of Action \(JCPOA\)](#) and reinstitute sanctions on companies doing business with Iran. Even though essentially no U.S. companies are directly involved with Iranian companies, many European and Asian banks, insurers, and oil companies announced they might reduce commercial activity with Iran in light of potential U.S. sanctions. Sanctions will likely have a direct effect on the Iranian oil sector, which would limit crude oil exports and production from the country by the end of 2018.

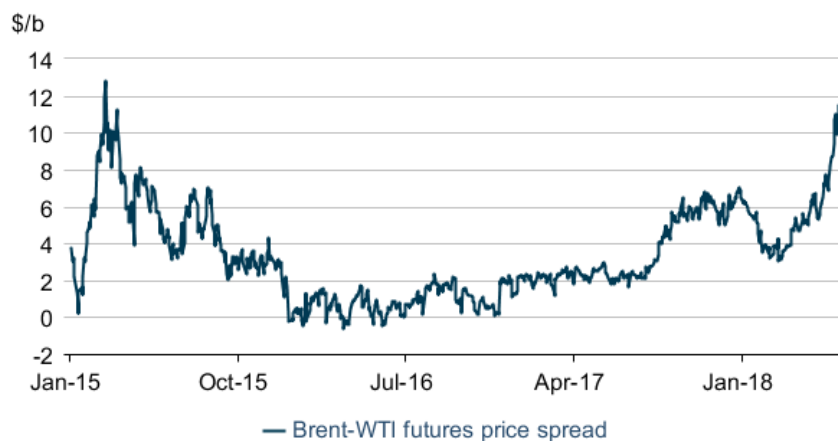
OPEC, Russia, and other non-OPEC countries meet on June 22, 2018, to [assess current oil market conditions](#) as they relate to their existing crude oil production reductions, which are scheduled to continue through the end of 2018. Oil ministers from Saudi Arabia and Russia have

announced they will re-evaluate the production reduction agreement given the accelerated output declines from Venezuela and the uncertainty surrounding Iran’s production levels. In this forecast, EIA assumes some supply increases from major oil producers in 2019. However, depending on the outcome of the June 22 meeting, the magnitude of any supply response is uncertain. Currently, EIA forecasts global oil inventories will increase by 210,000 barrels per day (b/d) in 2019, which EIA expects will put modest downward pressure on crude oil prices in the second half of 2018 and in 2019.

U.S. crude oil prices in the Permian region as well as in Cushing, Oklahoma, traded lower than Brent in May. This continued the trend of lower prices for inland U.S. crude oils as a result of constraints in pipeline capacity for transporting crude oil to the U.S. Gulf Coast for refining or for export, as discussed in the [May](#) and [April](#) STEOs. The Brent–WTI front-month futures price spread, in particular, widened to \$11.43/b on June 7, its widest level since February 2015 (**Figure 2**). Although transportation constraints to the U.S. Gulf Coast are primarily affecting Permian Basin crude oils, the rapid increase in the Brent–WTI futures price spread in May and early June suggests some constraints are developing in crude oil transported from Cushing, Oklahoma (where the WTI futures contract is delivered), to the Gulf Coast.

Because transportation options out of Cushing are limited, it remains uncertain how much the spread could narrow if Gulf Coast refiners increase refinery runs, which were lower than expected in May. In addition, U.S. crude oil exports are currently limited to [higher cost options](#) which, unless port infrastructure buildout is expanded, will likely maintain a wide Brent–WTI spread. EIA is increasing the forecast of the Brent–WTI spot price spread for the second half of 2018 and 2019, from \$5.49/b to \$7.67/b and \$5.12/b to \$5.79/b, respectively.

Figure 2. Brent-WTI futures price spread



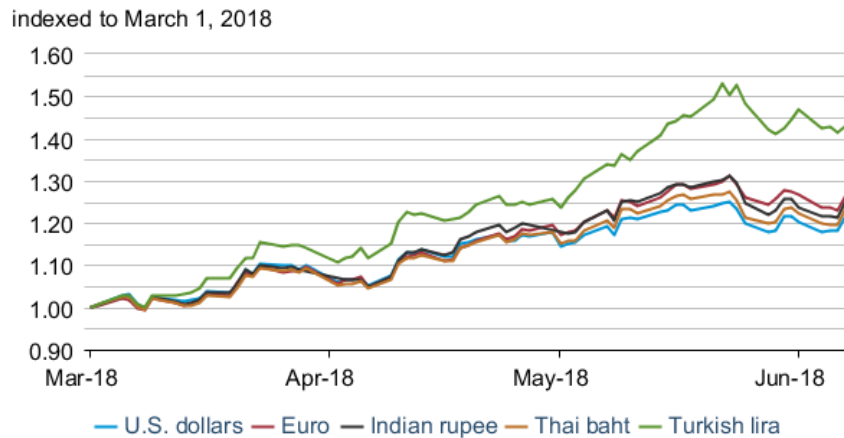
 CME Group and Intercontinental Exchange, as compiled by Bloomberg L.P.

Oil prices by currency: The currencies of several crude oil importing countries depreciated against the U.S. dollar in recent weeks, reversing some of the [appreciation](#) from the second half of 2017 through the first quarter of 2018. In U.S. dollars, Brent crude oil prices increased by 21%

from March 1 through June 7. However, crude oil prices increased by 23% in Thai baht, 25% in Indian rupees, 26% in euros, and 43% in Turkish lira during the same period **(Figure 3)**.

Even though most [leading economic indicators](#) point to continuing economic growth in Europe and emerging markets, political uncertainty in several countries could be contributing to currency depreciation, which makes crude oil imports more expensive. Some emerging market economies reduced energy subsidies when oil prices fell in 2014–16, and the increase in prices during the past year has led some to call for a reinstatement of subsidies. Trade disputes between the United States and other countries would also affect the demand for other countries’ goods and could have contributed to U.S. dollar appreciation. In addition, concerns about sovereign debt levels in several European countries led to a significant increase in bond yields and depreciation of the euro in late May.

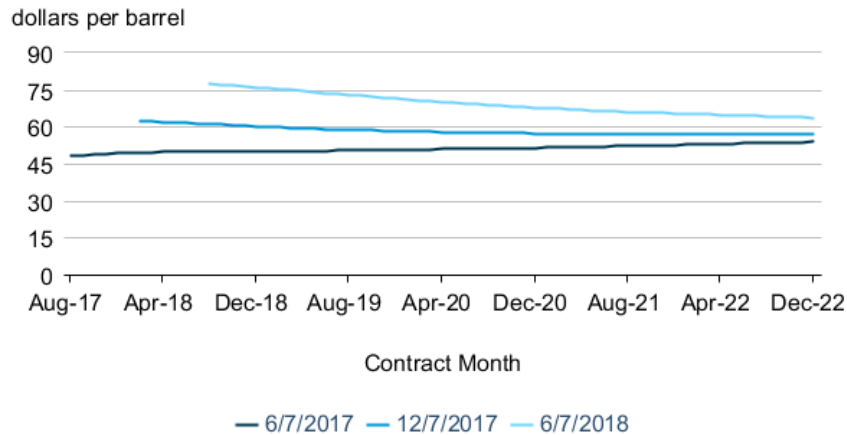
Figure 3. Brent crude oil prices in various currencies



eia Bloomberg, L.P.

Long-dated futures prices: Prices for longer-dated futures contracts have increased by a larger percentage during the past six months than they did during the second half of 2017. Brent crude oil prices for December 2022 delivery, for example, increased by 6% from June 7, 2017, to December 7, 2017. In the following six months from December 7, 2017, to June 7, 2018, the price of the same December 2022 contract increased by 12%, settling at more than \$60/b **(Figure 4)**. Upstream crude oil production projects with long lead times and investment periods often use futures prices several years in advance to aid final investment decisions. Higher prices for longer-dated futures contracts could trigger increased investment interest in upstream projects that would begin producing oil in future years.

Figure 4. Brent futures curves



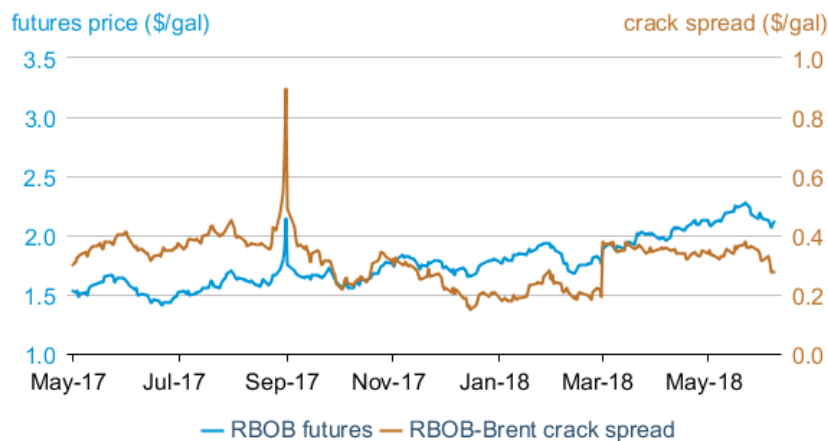
eia Bloomberg, Intercontinental Exchange

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) settled at \$2.11 per gallon (gal) on June 7 (**Figure 5**), an increase of 3 cents/gal from May 1. The RBOB–Brent crack spread (the difference between the price of RBOB and the price of Brent crude oil) declined by 7 cents/gal to settle at 27 cents/gal over the same period.

Higher-than-average U.S. gasoline inventories continue to put downward pressure on the gasoline crack spread, despite EIA estimates that U.S gasoline consumption neared or surpassed monthly five-year highs from March through May. STEO estimates U.S. gasoline inventories were 239.0 million barrels at the end of May, 9.5 million barrels higher than the five-year average for May.

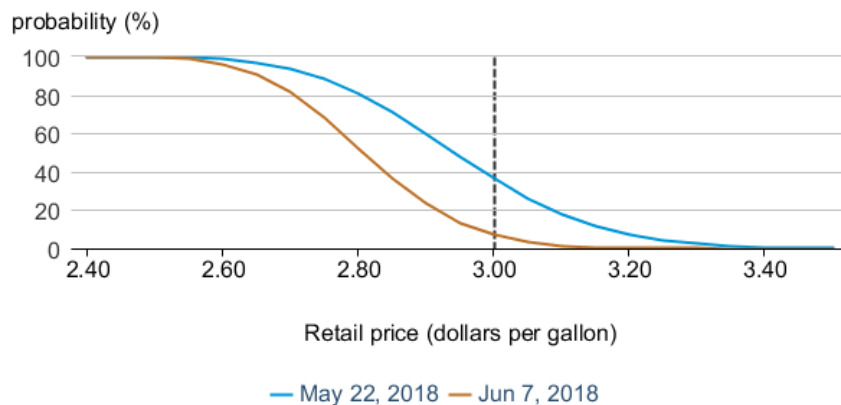
Figure 5. Historical RBOB front-month futures prices and crack spread



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

This forecast estimates that the U.S. average retail price of regular grade gasoline will reach its peak this year in June at an average of \$2.92/gal and then begin to decline. The U.S. average retail gasoline price is forecast to fall to an average of \$2.91/gal in July. A probability calculated using futures and options data indicates that there is roughly a 7% chance of U.S. retail gasoline prices reaching an average of \$3.00/gal in July. In the five trading days ending June 7, the July 2018 RBOB futures contract averaged \$2.11/gal. Options prices imply this contract has a 7% probability of exceeding \$2.30/gal, which typically leads to a retail price of \$3.00/gal at the contract's expiration at that time of year (**Figure 6**). The probability of reaching \$3.00/gal was at 36% on May 22, when RBOB prices reached the highest level since late 2014.

Figure 6. Probability of July 2018 retail gasoline exceeding different price levels at expiration



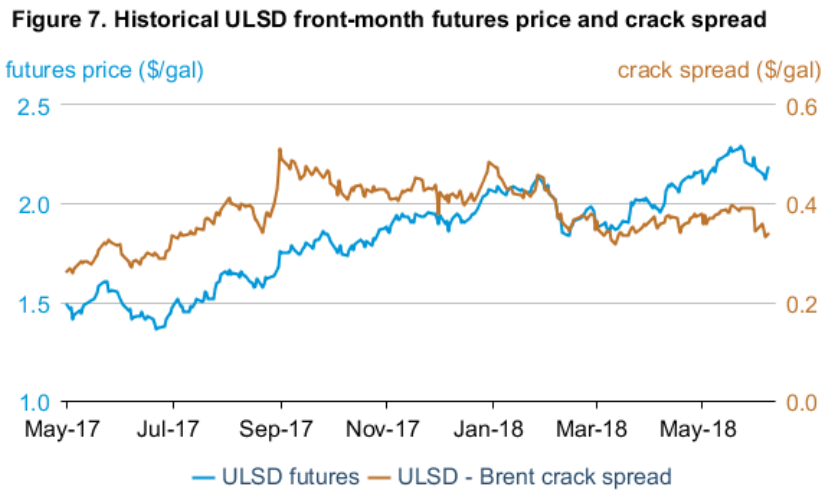
 U.S. Energy Information Administration, CME Group

Ultra-low sulfur diesel prices: The ultra-low sulfur diesel (ULSD) front-month futures price increased 8 cents/gal from May 1 to settle at \$2.18/gal on June 7. The ULSD–Brent crack spread (the difference between the price of ULSD and the price of Brent crude oil) declined 2 cents/gal to settle at 34 cents/gal over the same period (**Figure 7**).

The ULSD crack spread fell sharply on May 31. This decline may have been caused by a rise in [U.S. distillate stocks](#) during that week, in contrast to a decline in crude oil stocks, and also potentially by lower-than-normal trading volumes for futures contracts at the end of every month as they expire. The [rise in U.S. refinery utilization](#) at the end of May, particularly on the U.S. Gulf Coast, could have been responsible for the rise in petroleum product inventories.

Despite increased production contributing to a lower ULSD crack spread, U.S. distillate consumption is still robust, even as this year's heating season ended. In the June STEO, EIA estimates that distillate consumption in May was 4.0 million b/d, the highest for the month since 2007, and it also estimates that distillate consumption will be near five-year highs through the summer months. Distillate consumption is likely supported by continued growth in U.S. industrial activity. U.S. industrial production [reached a record high](#) in April, surpassing the previous record set in late 2014. Further, several trucking indicators show increased [trucking](#)

tonnage and trucking demand in the United States this year, which supports increased demand for diesel fuel.

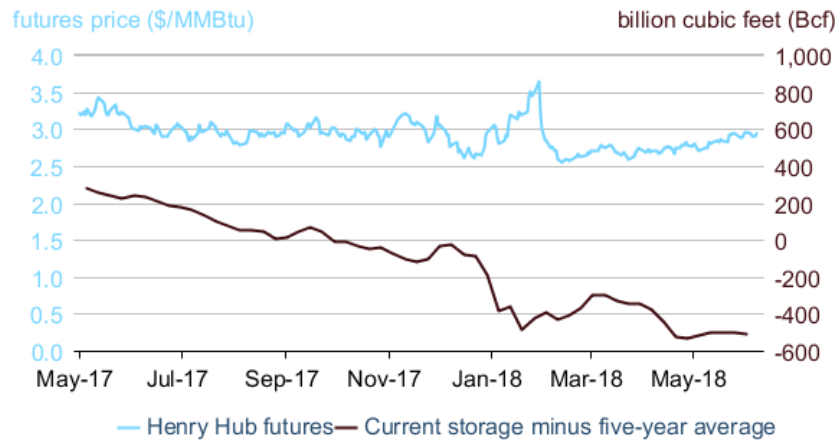


eia CME Group, as compiled by Bloomberg L.P., ULSD=ultra-low sulfur diesel

Natural Gas

Prices: The front-month natural gas futures contract for delivery at the Henry Hub settled at \$2.93/million British thermal units (MMBtu) on June 7, an increase of 13 cents/MMBtu from May 1 (**Figure 8**). This year, the coldest April in the past 21 years resulted in a delayed start to the summer injection season. The 2018 summer injection season did not start until April 27, four weeks later than in 2017. Working natural gas stocks as of June 1 were 1,817 billion cubic feet (Bcf), 31% lower than the year-ago level and 22% lower than the five-year (2013–17) average for that time of year. The large working natural gas inventory deficit and the late start to the storage injection season contributed to higher Henry Hub prices despite record production growth. EIA estimates that dry natural gas production in May reached 81.3 Bcf per day, 13% higher than in May 2017. EIA projects dry natural gas production to increase by 10% in 2018 and by 3% in 2019. The Henry Hub natural gas spot price averaged \$2.80/MMBtu in May, the same price as in April.

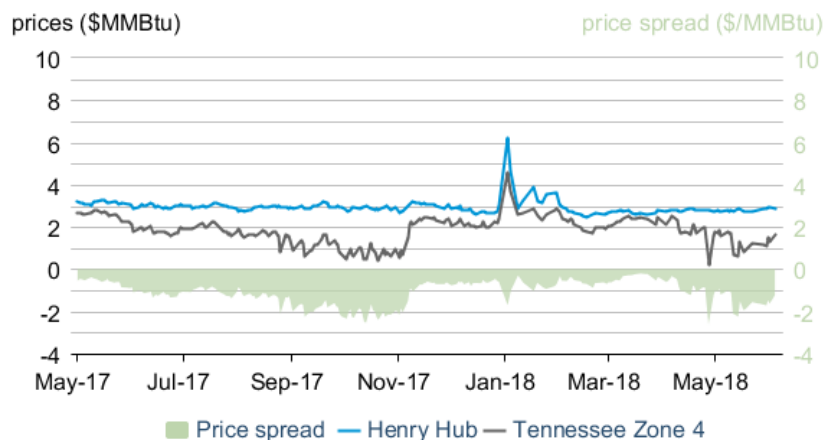
Figure 8. U.S. natural gas front-month futures prices and storage



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

The difference between the Henry Hub and Tennessee Zone 4 (TZ4) spot prices, which reflect prices in northeast Pennsylvania, narrowed in November 2017 but began widening again in April 2018, falling below $-\$2/\text{MMBtu}$ before settling at $-\$1.23/\text{MMBtu}$ on June 4 (**Figure 9**). The TZ4 to Henry Hub spot price spread tends to narrow during winter months when regional demand is higher and to widen during the summer season when demand is lower. The spread also may be widening because pipeline takeaway capacity is constrained in northeast Pennsylvania. The [Atlantic Sunrise project](#), which will connect producing regions in northeastern Pennsylvania to markets in the U.S. Mid-Atlantic and U.S. Southeast, is under construction with an expected start date of mid-2018. Once that project is completed, the TZ4 to Henry Hub spot price spread is likely to narrow.

Figure 9. Henry Hub and Tennessee Zone 4 natural gas spot prices



eia U.S. Energy Information Administration, Bloomberg L.P.

Notable forecast changes

- EIA forecasts that the Brent–West Texas Intermediate (WTI) crude oil price spread will average almost \$7 per barrel (b) in 2018 and \$6/b in 2019, compared with a forecast of about \$5/b in both years in the May STEO. The wider spread reflects growing U.S. crude oil production, particularly in West Texas, that has led to transportation constraints between the U.S. Gulf Coast and both West Texas and Cushing, Oklahoma (the delivery point for the WTI crude oil futures contract). These transportation constraints reflect the current shortage of available pipeline capacity to meet the growing demand for moving crude oil from Cushing to the Gulf Coast.
- EIA forecasts crude oil production from the Organization of the Petroleum Exporting Countries (OPEC) will average 32.0 million barrels per day (b/d) in 2018 and 32.1 million b/d in 2019. Those levels are 0.2 million b/d and 0.3 million b/d lower, respectively, than forecast in the May STEO. The lower forecast production levels reflect lower expected crude oil production in Venezuela and Iran.
- For more information, see the [detailed table of STEO forecast changes](#).

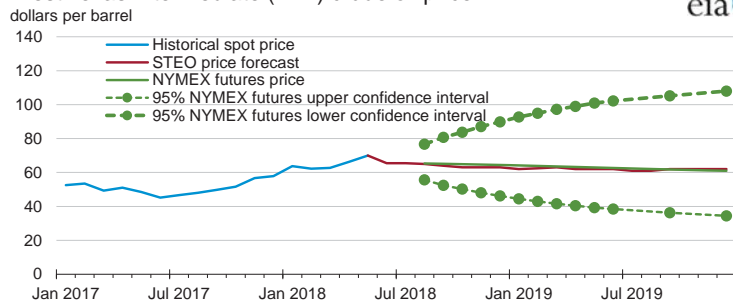
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Short-Term Energy Outlook

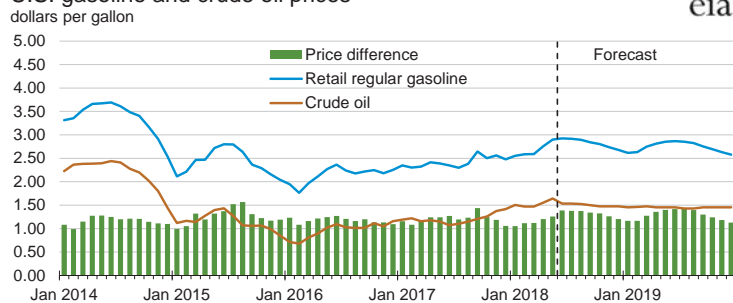
Chart Gallery for June 2018

West Texas Intermediate (WTI) crude oil price



Note: Confidence interval derived from options market information for the 5 trading days ending Jun 7, 2018. Intervals not calculated for months with sparse trading in near-the-money options contracts.
Source: Short-Term Energy Outlook, June 2018, and CME Group.

U.S. gasoline and crude oil prices

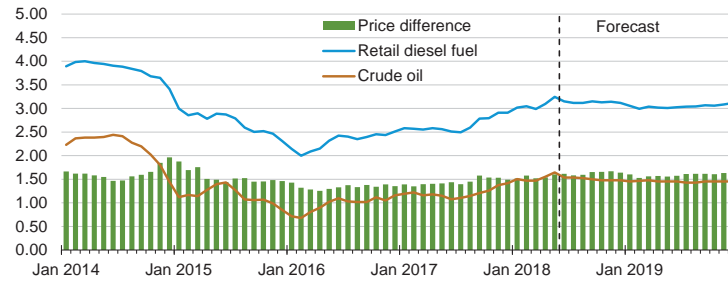


Crude oil price is composite refiner acquisition cost. Retail prices include state and federal taxes.

Source: Short-Term Energy Outlook, June 2018.

U.S. diesel fuel and crude oil prices

dollars per gallon

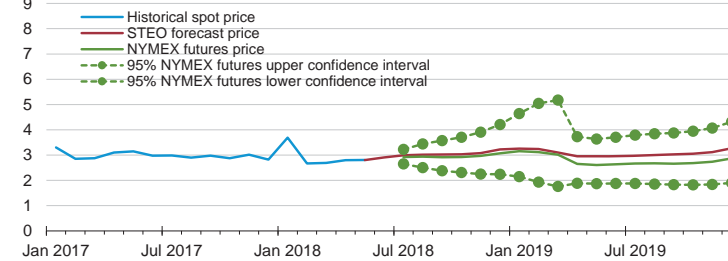


Crude oil price is composite refiner acquisition cost. Retail prices include state and federal taxes.

Source: Short-Term Energy Outlook, June 2018.

Henry Hub natural gas price

dollars per million Btu

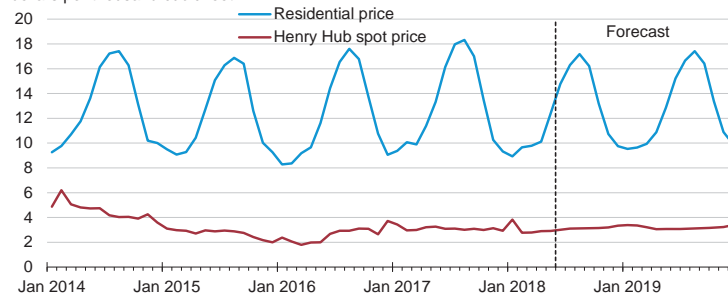


Note: Confidence interval derived from options market information for the 5 trading days ending Jun 7, 2018. Intervals not calculated for months with sparse trading in near-the-money options contracts.

Source: Short-Term Energy Outlook, June 2018, and CME Group.

U.S. natural gas prices

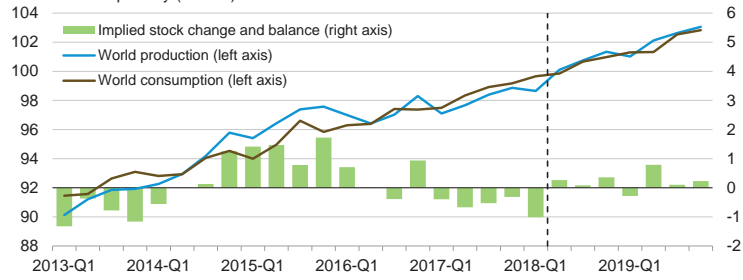
dollars per thousand cubic feet



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

World liquid fuels production and consumption balance

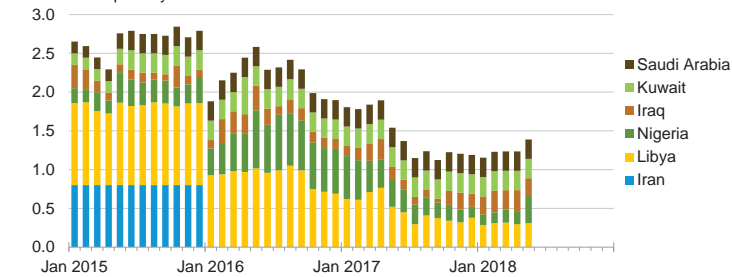
million barrels per day (MMb/d)



Source: Short-Term Energy Outlook, June 2018.

Estimated historical unplanned OPEC crude oil production outages

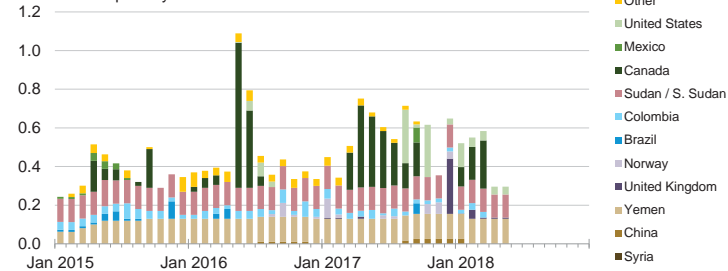
million barrels per day



Source: Short-Term Energy Outlook, June 2018.

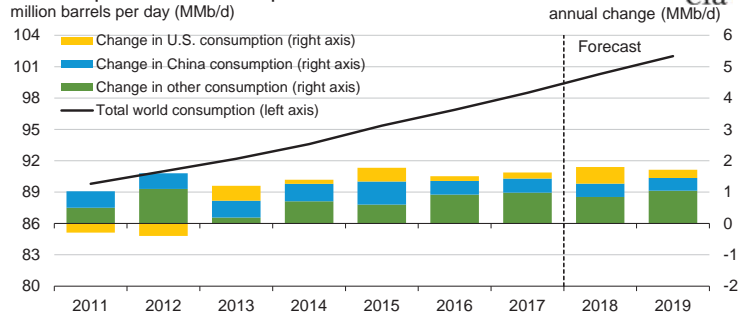
Estimated historical unplanned non-OPEC liquid fuels production outages

million barrels per day



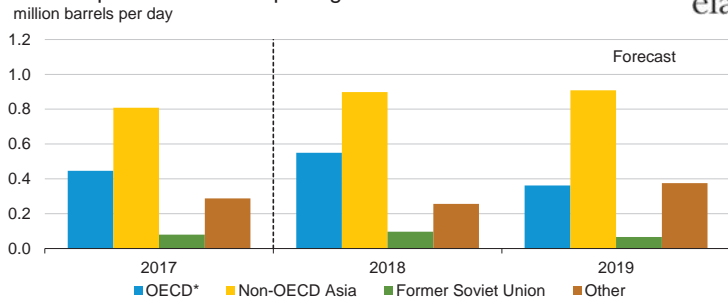
Source: Short-Term Energy Outlook, June 2018.

World liquid fuels consumption



Source: Short-Term Energy Outlook, June 2018.

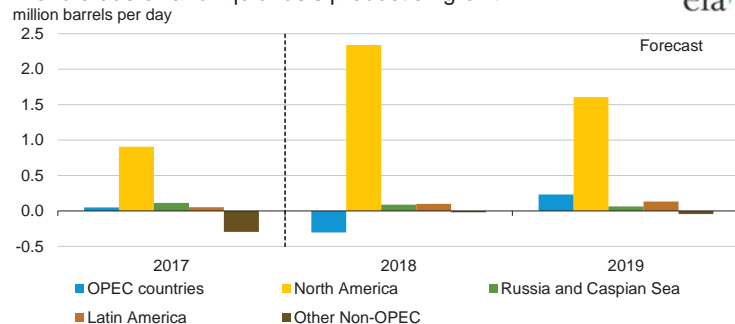
World liquid fuels consumption growth



* Countries belonging to the Organization for Economic Cooperation and Development

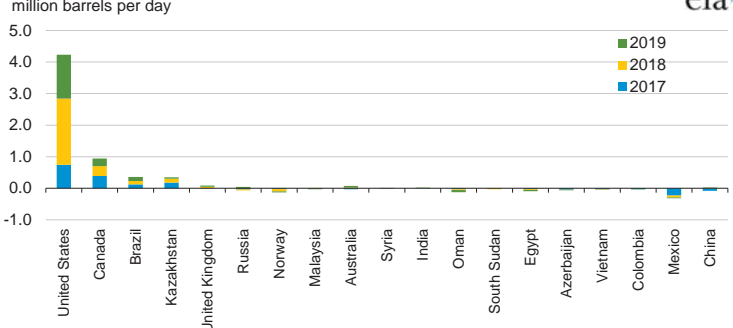
Source: Short-Term Energy Outlook, June 2018.

World crude oil and liquid fuels production growth



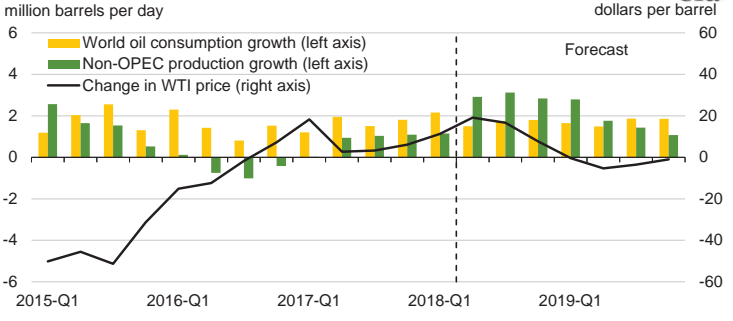
Source: Short-Term Energy Outlook, June 2018.

Non-OPEC crude oil and liquid fuels production growth



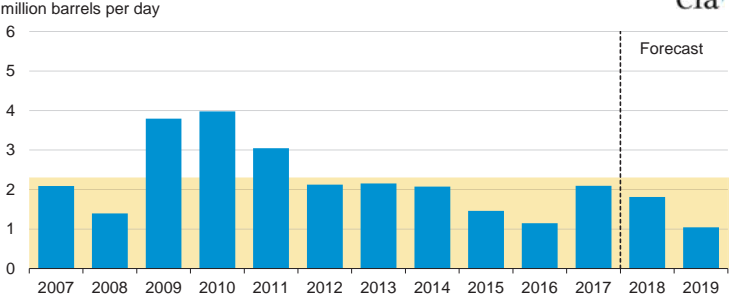
Source: Short-Term Energy Outlook, June 2018.

World consumption and non-OPEC production growth



Source: Short-Term Energy Outlook, June 2018.

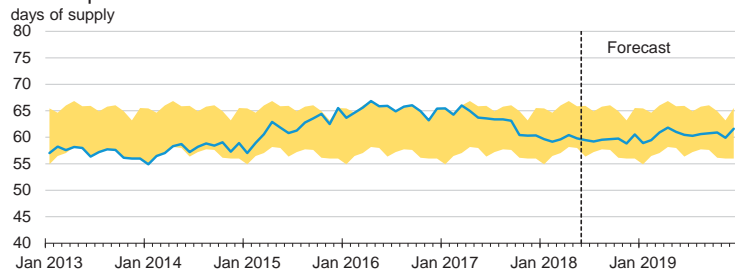
OPEC surplus crude oil production capacity



Note: Shaded area represents 2007-2017 average (2.3 million barrels per day).

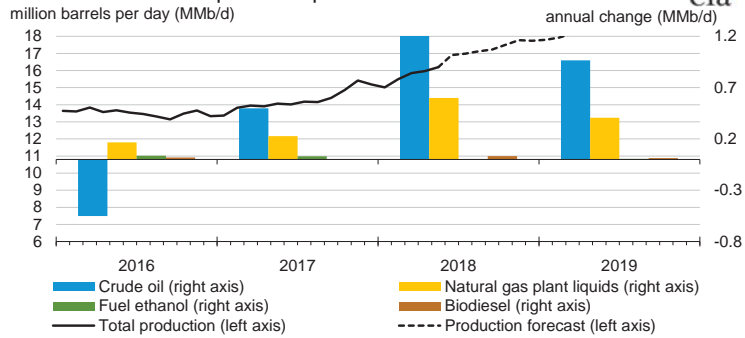
Source: Short-Term Energy Outlook, June 2018.

OECD commercial stocks of crude oil and other liquids



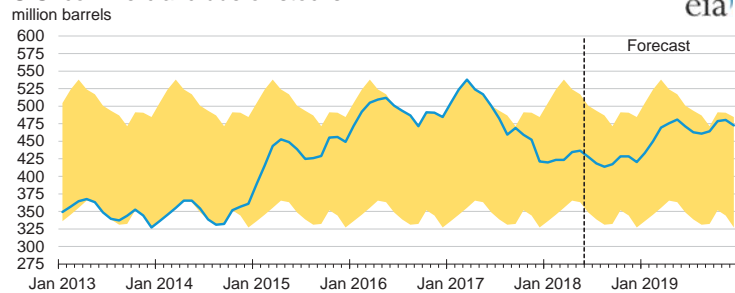
Note: Colored band around days of supply of crude oil and other liquids stocks represents the range between the minimum and maximum from Jan. 2013 - Dec. 2017.
 Source: Short-Term Energy Outlook, June 2018.

U.S. crude oil and liquid fuels production



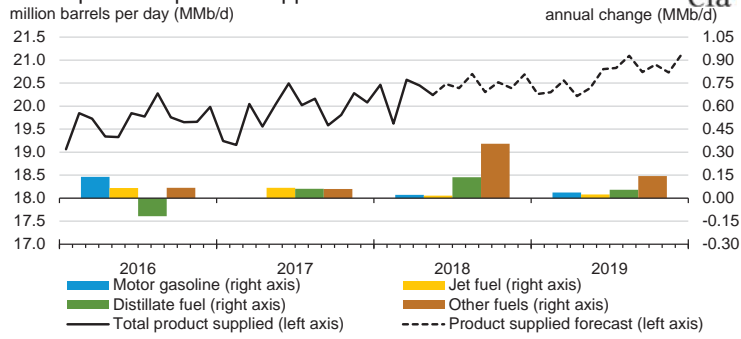
Source: Short-Term Energy Outlook, June 2018.

U.S. commercial crude oil stocks



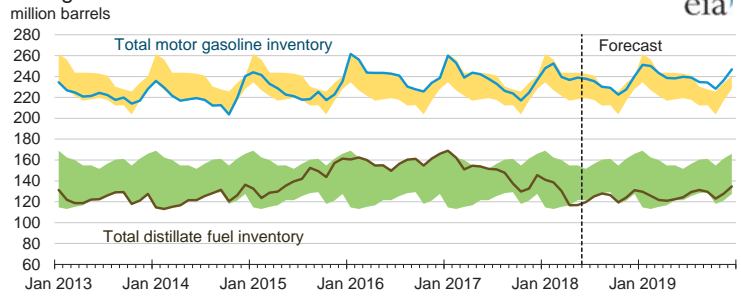
Note: Colored band around storage levels represents the range between the minimum and maximum from Jan. 2013 - Dec. 2017.
 Source: Short-Term Energy Outlook, June 2018.

U.S. liquid fuels product supplied



Source: Short-Term Energy Outlook, June 2018.

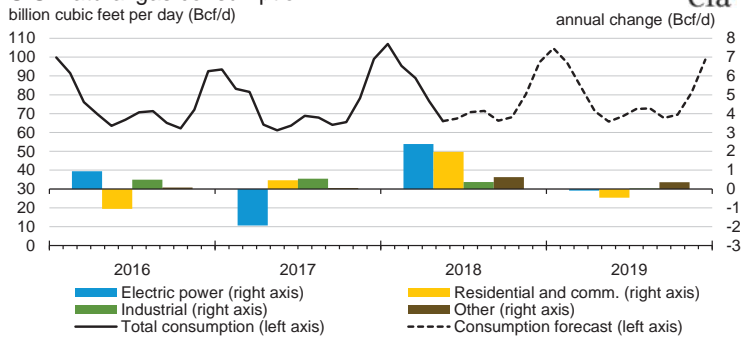
U.S. gasoline and distillate inventories



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

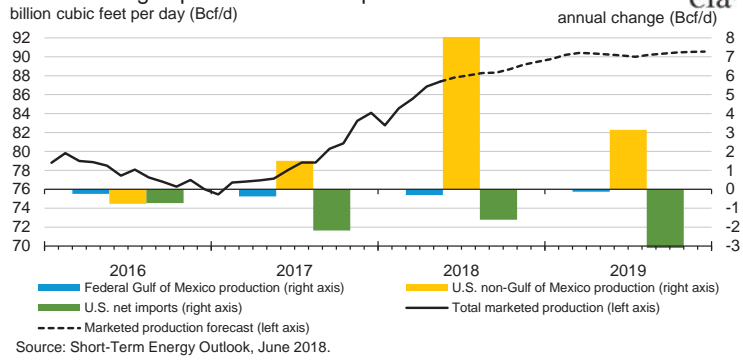
Source: Short-Term Energy Outlook, June 2018.

U.S. natural gas consumption

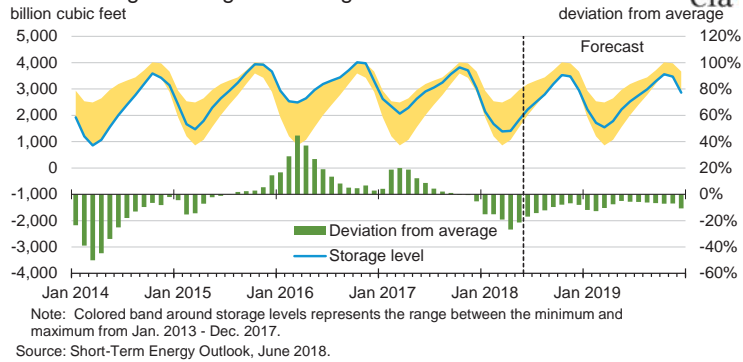


Source: Short-Term Energy Outlook, June 2018.

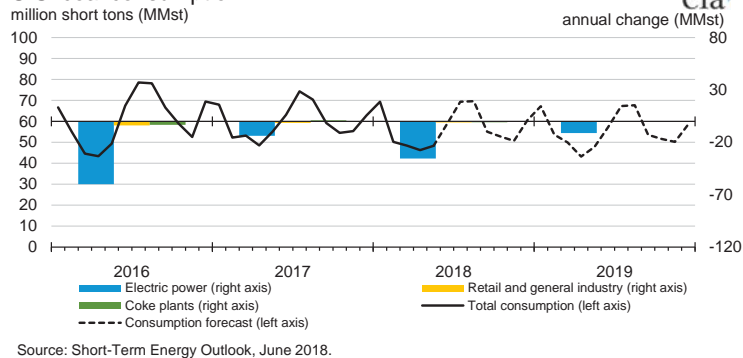
U.S. natural gas production and imports



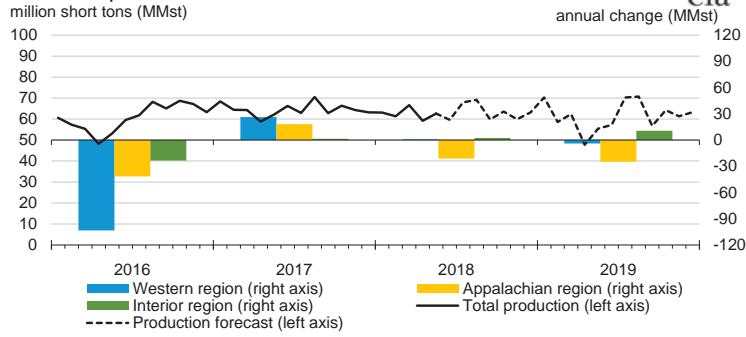
U.S. working natural gas in storage



U.S. coal consumption

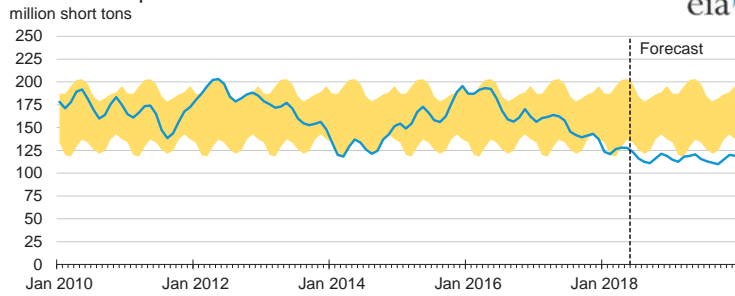


U.S. coal production



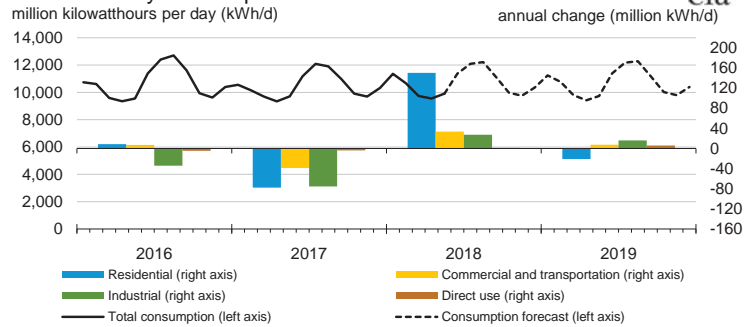
Source: Short-Term Energy Outlook, June 2018.

U.S. electric power coal stocks



Source: Short-Term Energy Outlook, June 2018.

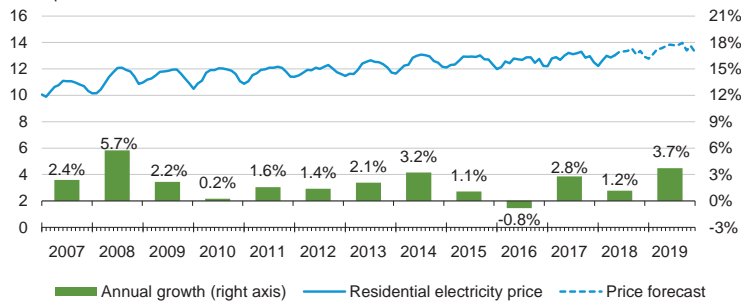
U.S. electricity consumption



Source: Short-Term Energy Outlook, June 2018.

U.S. residential electricity price

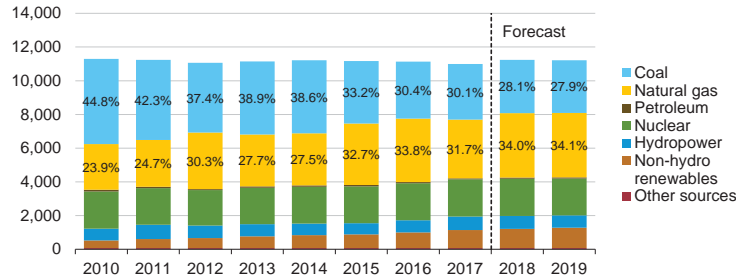
cents per kilowatthour



Source: Short-Term Energy Outlook, June 2018.

U.S. electricity generation by fuel, all sectors

thousand megawatthours per day

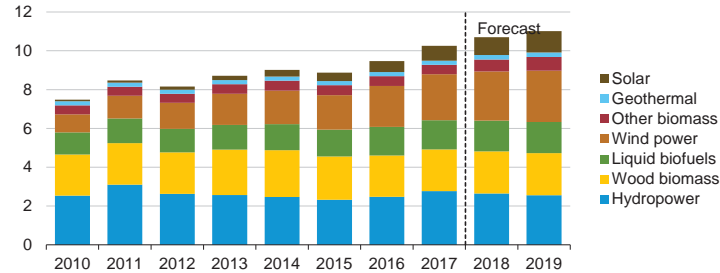


Note: Labels show percentage share of total generation provided by coal and natural gas.

Source: Short-Term Energy Outlook, June 2018.

U.S. renewable energy supply

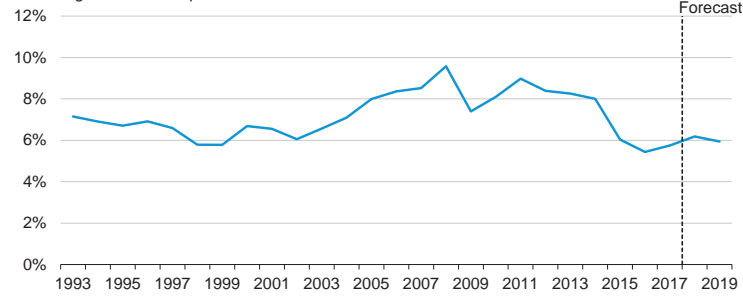
quadrillion British thermal units (Btu)



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.

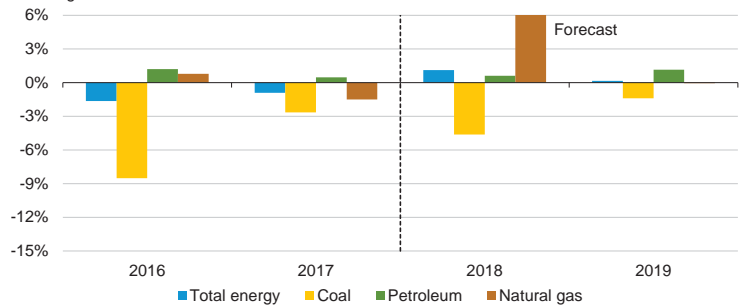
Source: Short-Term Energy Outlook, June 2018.

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



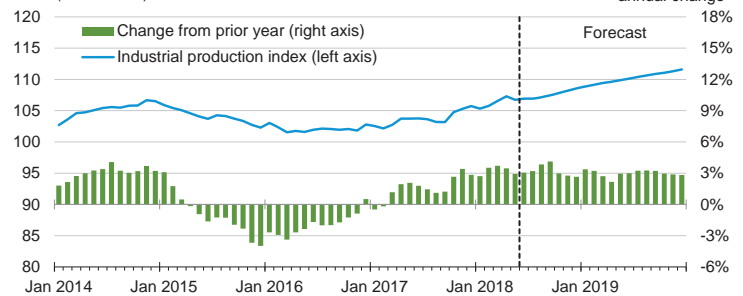
Source: Short-Term Energy Outlook, June 2018.

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



Source: Short-Term Energy Outlook, June 2018.

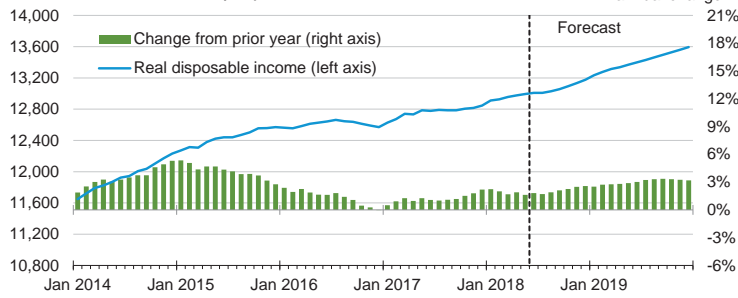
U.S. total industrial production index index (2007 = 100)



Source: Short-Term Energy Outlook, June 2018.

U.S. disposable income

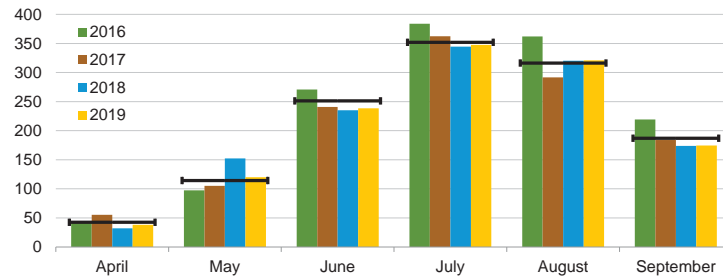
billion 2009 dollars, seasonally adjusted



Source: Short-Term Energy Outlook, June 2018.

U.S. summer cooling degree days

population-weighted

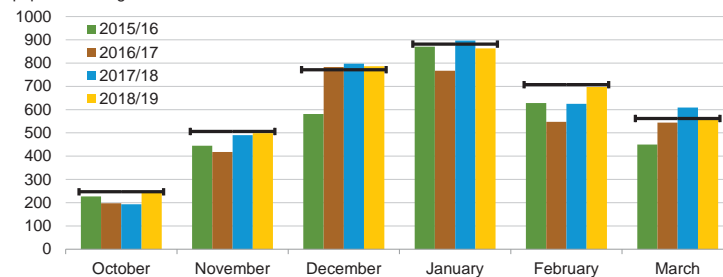


Note: EIA calculations based on from the National Oceanic and Atmospheric Administration data. Horizontal lines indicate each month's prior 10-year average (2008-2017). Projections reflect NOAA's 14-16 month outlook.

Source: Short-Term Energy Outlook, June 2018.

U.S. winter heating degree days

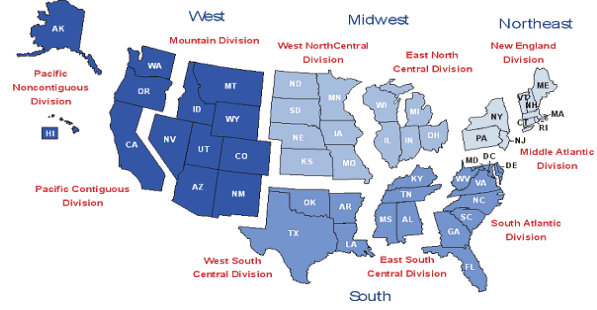
population-weighted



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, June 2018.

U.S. census regions and divisions



Source: Short-Term Energy Outlook, June 2018.

Table 1. U.S. Energy Markets Summary

U.S. Energy Information Administration | Short-Term Energy Outlook - June 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)	9.01	9.13	9.33	9.93	10.24	10.72	10.88	11.31	11.64	11.75	11.67	11.97	9.35	10.79	11.76
Dry Natural Gas Production (billion cubic feet per day)	71.24	72.04	73.97	76.98	78.54	81.31	82.05	82.83	83.73	83.79	83.68	83.93	73.57	81.20	83.78
Coal Production (million short tons)	197	187	196	194	191	181	197	187	191	160	198	189	774	756	738
Energy Consumption															
Liquid Fuels (million barrels per day)	19.49	20.03	19.92	20.05	20.24	20.39	20.47	20.53	20.38	20.47	20.89	20.92	19.88	20.41	20.67
Natural Gas (billion cubic feet per day)	86.15	62.96	66.96	80.94	97.15	69.95	69.54	81.92	95.19	68.49	71.07		74.22	79.57	79.41
Coal (b) (million short tons)	173	167	204	173	168	153	194	164	171	148	189	161	717	679	668
Electricity (billion kilowatt hours per day)	10.13	10.08	11.66	9.98	10.59	10.28	11.81	10.03	10.60	10.18	11.89	10.08	10.47	10.68	10.69
Renewables (c) (quadrillion Btu)	2.79	2.99	2.57	2.66	2.87	3.05	2.73	2.79	2.85	3.14	2.86	2.91	11.02	11.43	11.77
Total Energy Consumption (d) (quadrillion Btu)	25.05	23.25	24.35	25.09	26.15	23.47	24.38	24.89	25.91	23.42	24.71	25.19	97.73	98.90	99.24
Energy Prices															
Crude Oil West Texas Intermediate Spot (dollars per barrel)	51.64	48.15	48.16	55.27	62.90	67.29	64.87	63.00	62.50	62.00	61.31	62.00	50.79	64.53	61.95
Natural Gas Henry Hub Spot (dollars per million Btu)	3.01	3.08	2.95	2.90	3.02	2.84	3.01	3.11	3.20	2.96	3.00	3.14	2.99	2.99	3.08
Coal (dollars per million Btu)	2.08	2.12	2.07	2.04	2.06	2.23	2.24	2.21	2.24	2.22	2.23	2.20	2.08	2.19	2.22
Macroeconomic															
Real Gross Domestic Product (billion chained 2009 dollars - SAAR)	16,903	17,031	17,164	17,286	17,386	17,508	17,634	17,763	17,883	17,986	18,081	18,175	17,096	17,573	18,032
Percent change from prior year	2.0	2.2	2.3	2.6	2.9	2.8	2.7	2.8	2.9	2.7	2.5	2.3	2.3	2.8	2.6
GDP Implicit Price Deflator (Index, 2009=100)	112.8	113.0	113.6	114.3	114.8	115.4	116.0	116.7	117.5	118.3	119.1	119.7	113.4	115.8	118.7
Percent change from prior year	2.0	1.6	1.8	1.9	1.9	2.1	2.1	2.1	2.3	2.5	2.6	2.6	1.8	2.1	2.5
Real Disposable Personal Income (billion chained 2009 dollars - SAAR)	12,680	12,766	12,788	12,822	12,931	12,992	13,031	13,135	13,275	13,369	13,462	13,561	12,764	13,022	13,417
Percent change from prior year	0.9	1.1	1.1	1.8	2.0	1.8	1.9	2.4	2.7	2.9	3.3	3.2	1.2	2.0	3.0
Manufacturing Production Index (Index, 2012=100)	102.0	102.7	102.2	103.6	104.0	104.8	105.1	106.1	106.9	107.5	108.1	108.8	102.6	105.0	107.8
Percent change from prior year	0.6	1.9	1.2	2.1	2.0	2.0	2.8	2.4	2.8	2.6	2.9	2.5	1.5	2.3	2.7
Weather															
U.S. Heating Degree-Days	1,858	428	65	1,480	2,130	542	75	1,534	2,126	484	76	1,532	3,831	4,282	4,218
U.S. Cooling Degree-Days	70	402	838	114	51	420	839	89	40	397	843	90	1,424	1,399	1,370

- = 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 - June 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>67.29</i>	<i>64.87</i>	<i>63.00</i>	<i>62.50</i>	<i>62.00</i>	<i>61.31</i>	<i>62.00</i>	50.79	<i>64.53</i>	<i>61.95</i>
Brent Spot Average	53.57	49.59	52.09	61.42	66.84	<i>74.07</i>	<i>72.52</i>	<i>70.69</i>	<i>69.00</i>	<i>68.00</i>	<i>67.00</i>	<i>67.00</i>	54.15	<i>71.06</i>	<i>67.74</i>
U.S. Imported Average	47.94	46.12	47.49	55.29	58.91	<i>63.71</i>	<i>61.35</i>	<i>59.50</i>	<i>59.01</i>	<i>58.50</i>	<i>57.81</i>	<i>58.50</i>	49.00	<i>60.92</i>	<i>58.45</i>
U.S. Refiner Average Acquisition Cost	49.91	47.66	48.32	56.79	62.21	<i>66.26</i>	<i>63.85</i>	<i>62.00</i>	<i>61.50</i>	<i>61.00</i>	<i>60.32</i>	<i>61.00</i>	50.68	<i>63.60</i>	<i>60.95</i>
U.S. Liquid Fuels (cents per gallon)															
Refiner Prices for Resale															
Gasoline	163	165	172	175	186	<i>216</i>	<i>211</i>	<i>196</i>	<i>192</i>	<i>206</i>	<i>202</i>	<i>185</i>	169	<i>202</i>	<i>196</i>
Diesel Fuel	162	155	169	190	199	<i>216</i>	<i>219</i>	<i>216</i>	<i>208</i>	<i>208</i>	<i>211</i>	<i>214</i>	169	<i>213</i>	<i>210</i>
Heating Oil	154	144	154	179	193	<i>206</i>	<i>210</i>	<i>209</i>	<i>205</i>	<i>197</i>	<i>202</i>	<i>206</i>	160	<i>203</i>	<i>203</i>
Refiner Prices to End Users															
Jet Fuel	158	150	162	181	197	<i>214</i>	<i>216</i>	<i>213</i>	<i>206</i>	<i>204</i>	<i>208</i>	<i>210</i>	163	<i>210</i>	<i>207</i>
No. 6 Residual Fuel Oil (a)	128	120	124	140	149	<i>158</i>	<i>158</i>	<i>154</i>	<i>152</i>	<i>149</i>	<i>149</i>	<i>150</i>	129	<i>155</i>	<i>150</i>
Retail Prices Including Taxes															
Gasoline Regular Grade (b)	233	238	244	251	258	<i>286</i>	<i>289</i>	<i>274</i>	<i>267</i>	<i>285</i>	<i>281</i>	<i>264</i>	242	<i>277</i>	<i>274</i>
Gasoline All Grades (b)	244	250	255	263	270	<i>296</i>	<i>299</i>	<i>285</i>	<i>278</i>	<i>296</i>	<i>293</i>	<i>276</i>	253	<i>288</i>	<i>286</i>
On-highway Diesel Fuel	257	255	263	287	302	<i>316</i>	<i>313</i>	<i>313</i>	<i>303</i>	<i>302</i>	<i>305</i>	<i>309</i>	265	<i>311</i>	<i>305</i>
Heating Oil	247	238	234	265	287	<i>291</i>	<i>296</i>	<i>303</i>	<i>305</i>	<i>289</i>	<i>290</i>	<i>300</i>	251	<i>293</i>	<i>299</i>
Natural Gas															
Henry Hub Spot (dollars per thousand cubic feet)	3.12	3.19	3.06	3.01	3.13	<i>2.94</i>	<i>3.12</i>	<i>3.23</i>	<i>3.32</i>	<i>3.07</i>	<i>3.11</i>	<i>3.26</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	3.02	<i>2.84</i>	<i>3.01</i>	<i>3.11</i>	<i>3.20</i>	<i>2.96</i>	<i>3.00</i>	<i>3.14</i>	2.99	<i>2.99</i>	<i>3.08</i>
U.S. Retail Prices (dollars per thousand cubic feet)															
Industrial Sector	4.50	4.11	3.89	4.00	4.47	<i>3.79</i>	<i>3.96</i>	<i>4.34</i>	<i>4.65</i>	<i>3.99</i>	<i>3.97</i>	<i>4.37</i>	4.14	<i>4.16</i>	<i>4.26</i>
Commercial Sector	7.71	8.33	8.69	7.56	7.66	<i>8.02</i>	<i>8.58</i>	<i>7.89</i>	<i>7.82</i>	<i>8.28</i>	<i>8.67</i>	<i>7.96</i>	7.87	<i>7.89</i>	<i>8.03</i>
Residential Sector	9.73	13.00	17.74	10.19	9.39	<i>11.48</i>	<i>16.55</i>	<i>10.57</i>	<i>9.68</i>	<i>12.29</i>	<i>16.82</i>	<i>10.74</i>	10.92	<i>10.57</i>	<i>10.91</i>
U.S. Electricity															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	2.08	2.12	2.07	2.04	2.06	<i>2.23</i>	<i>2.24</i>	<i>2.21</i>	<i>2.24</i>	<i>2.22</i>	<i>2.23</i>	<i>2.20</i>	2.08	<i>2.19</i>	<i>2.22</i>
Natural Gas	3.69	3.38	3.19	3.38	3.98	<i>3.12</i>	<i>3.29</i>	<i>3.58</i>	<i>3.83</i>	<i>3.25</i>	<i>3.25</i>	<i>3.60</i>	3.38	<i>3.46</i>	<i>3.45</i>
Residual Fuel Oil (c)	11.16	10.60	10.03	11.93	11.47	<i>13.79</i>	<i>13.81</i>	<i>13.44</i>	<i>13.36</i>	<i>13.67</i>	<i>12.90</i>	<i>12.58</i>	10.97	<i>12.85</i>	<i>13.15</i>
Distillate Fuel Oil	12.74	12.23	13.13	14.54	15.83	<i>16.57</i>	<i>16.82</i>	<i>16.79</i>	<i>16.26</i>	<i>16.10</i>	<i>16.28</i>	<i>16.57</i>	13.26	<i>16.28</i>	<i>16.31</i>
Retail Prices (cents per kilowatthour)															
Industrial Sector	6.64	6.89	7.27	6.79	6.79	<i>7.01</i>	<i>7.52</i>	<i>7.05</i>	<i>6.97</i>	<i>7.09</i>	<i>7.60</i>	<i>7.13</i>	6.91	<i>7.10</i>	<i>7.21</i>
Commercial Sector	10.39	10.68	11.03	10.56	10.51	<i>10.75</i>	<i>11.26</i>	<i>10.89</i>	<i>10.80</i>	<i>10.90</i>	<i>11.30</i>	<i>10.93</i>	10.68	<i>10.87</i>	<i>10.99</i>
Residential Sector	12.59	12.99	13.19	12.75	12.57	<i>13.08</i>	<i>13.40</i>	<i>13.11</i>	<i>13.09</i>	<i>13.72</i>	<i>13.85</i>	<i>13.45</i>	12.90	<i>13.05</i>	<i>13.53</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 - June 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	26.95	27.13	28.28	28.55	29.55	29.95	30.79	31.07	31.30	31.29	31.84	27.37	29.72	31.38
U.S. (50 States)	15.02	15.35	15.53	16.49	16.77	17.55	17.94	18.50	18.77	19.04	19.09	19.45	15.60	17.70	19.09
Canada	5.05	4.71	4.99	5.18	5.01	5.28	5.39	5.50	5.51	5.50	5.55	5.59	4.98	5.30	5.54
Mexico	2.35	2.34	2.19	2.16	2.18	2.20	2.20	2.20	2.19	2.17	2.16	2.15	2.26	2.19	2.17
Other OECD	4.70	4.54	4.43	4.44	4.60	4.51	4.41	4.60	4.61	4.59	4.49	4.64	4.53	4.53	4.58
Non-OECD	69.98	70.73	71.26	70.59	70.10	70.57	70.80	70.55	69.95	70.82	71.34	71.22	70.64	70.51	70.84
OPEC	38.84	39.32	39.68	39.28	39.24	38.85	38.93	38.91	38.82	39.09	39.38	39.55	39.28	38.98	39.21
Crude Oil Portion	32.08	32.32	32.89	32.48	32.34	31.90	31.95	31.89	31.77	31.97	32.19	32.29	32.44	32.02	32.06
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	14.30	14.22	14.32	14.33	14.45	14.38	14.51	14.52	14.42	14.44	14.53	14.32	14.42	14.48
China	4.81	4.82	4.74	4.75	4.76	4.79	4.78	4.83	4.77	4.80	4.80	4.84	4.78	4.79	4.80
Other Non-OECD	11.89	12.29	12.62	12.24	11.77	12.47	12.71	12.30	11.84	12.51	12.72	12.30	12.26	12.32	12.34
Total World Supply	97.10	97.67	98.39	98.87	98.65	100.11	100.76	101.34	101.02	102.12	102.64	103.06	98.01	100.22	102.21
Non-OPEC Supply	58.26	58.36	58.71	59.58	59.41	61.26	61.83	62.43	62.20	63.03	63.26	63.50	58.73	61.24	63.00
Consumption (million barrels per day) (c)															
OECD	46.71	46.88	47.44	47.72	47.65	47.10	47.95	48.26	47.93	47.24	48.49	48.75	47.19	47.74	48.10
U.S. (50 States)	19.49	20.03	19.92	20.05	20.24	20.39	20.47	20.53	20.38	20.47	20.89	20.92	19.88	20.41	20.67
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	2.50	2.35	2.33	2.45	2.43	2.39	2.33	2.45	2.43	2.42	2.39	2.40
Europe	13.86	14.29	14.74	14.44	14.06	14.36	14.83	14.53	14.14	14.36	14.88	14.57	14.34	14.45	14.49
Japan	4.33	3.64	3.69	4.12	4.36	3.50	3.62	3.98	4.27	3.45	3.58	3.95	3.94	3.86	3.81
Other OECD	6.52	6.44	6.46	6.53	6.56	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	51.48	51.46	52.01	52.74	52.72	52.72	53.38	54.09	54.04	54.08	51.30	52.55	53.90
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	13.55	13.80	13.46	13.77	14.12	14.30	13.91	14.24	13.17	13.64	14.14
Other Non-OECD	18.86	19.42	19.71	19.21	18.97	19.66	20.01	19.59	19.27	20.02	20.42	20.02	19.30	19.56	19.94
Total World Consumption	97.50	98.35	98.92	99.18	99.66	99.85	100.67	100.98	101.31	101.33	102.53	102.83	98.49	100.29	102.01
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	0.37	-0.23	-0.26	0.41	-0.29	-0.51	-0.23	0.29	0.37	0.07	-0.18
Other OECD	-0.38	0.08	0.34	0.48	-0.09	-0.01	0.06	-0.27	0.20	-0.09	0.04	-0.18	0.13	-0.08	-0.01
Other Stock Draws and Balance	0.77	0.38	-0.14	-1.07	0.73	-0.02	0.11	-0.51	0.37	-0.18	0.08	-0.34	-0.02	0.07	-0.02
Total Stock Draw	0.40	0.67	0.53	0.31	1.01	-0.27	-0.08	-0.36	0.28	-0.79	-0.10	-0.23	0.48	0.07	-0.21
End-of-period Commercial Crude Oil and Other Liquids Inventories (million barrels)															
U.S. Commercial Inventory	1,338	1,330	1,305	1,232	1,196	1,223	1,249	1,215	1,245	1,296	1,321	1,295	1,232	1,215	1,295
OECD Commercial Inventory	3,028	3,012	2,961	2,843	2,814	2,842	2,863	2,853	2,865	2,924	2,945	2,936	2,843	2,853	2,936

- = 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 *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 - June 2018

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
North America	22.43	22.40	22.71	23.83	23.95	<i>25.03</i>	<i>25.54</i>	<i>26.19</i>	<i>26.47</i>	<i>26.71</i>	<i>26.80</i>	<i>27.20</i>	22.85	<i>25.19</i>	<i>26.80</i>
Canada	5.05	4.71	4.99	5.18	5.01	<i>5.28</i>	<i>5.39</i>	<i>5.50</i>	<i>5.51</i>	<i>5.50</i>	<i>5.55</i>	<i>5.59</i>	4.98	<i>5.30</i>	<i>5.54</i>
Mexico	2.35	2.34	2.19	2.16	2.18	<i>2.20</i>	<i>2.20</i>	<i>2.20</i>	<i>2.19</i>	<i>2.17</i>	<i>2.16</i>	<i>2.15</i>	2.26	<i>2.19</i>	<i>2.17</i>
United States	15.02	15.35	15.53	16.49	16.77	<i>17.55</i>	<i>17.94</i>	<i>18.50</i>	<i>18.77</i>	<i>19.04</i>	<i>19.09</i>	<i>19.45</i>	15.60	<i>17.70</i>	<i>19.09</i>
Central and South America	4.91	5.40	5.70	5.31	4.86	<i>5.58</i>	<i>5.83</i>	<i>5.45</i>	<i>5.00</i>	<i>5.71</i>	<i>5.96</i>	<i>5.58</i>	5.33	<i>5.43</i>	<i>5.56</i>
Argentina	0.67	0.67	0.67	0.70	0.66	<i>0.67</i>	<i>0.67</i>	<i>0.69</i>	<i>0.66</i>	<i>0.66</i>	<i>0.66</i>	<i>0.68</i>	0.68	<i>0.67</i>	<i>0.67</i>
Brazil	2.95	3.44	3.73	3.32	2.94	<i>3.61</i>	<i>3.87</i>	<i>3.45</i>	<i>3.06</i>	<i>3.75</i>	<i>4.00</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>0.88</i>	<i>0.86</i>	<i>0.87</i>	<i>0.87</i>	<i>0.88</i>	0.87	<i>0.87</i>	<i>0.87</i>
Other Central and S. America	0.42	0.41	0.42	0.42	0.41	<i>0.42</i>	<i>0.42</i>	<i>0.43</i>	<i>0.42</i>	<i>0.43</i>	<i>0.43</i>	<i>0.44</i>	0.42	<i>0.42</i>	<i>0.43</i>
Europe	4.21	4.05	3.92	3.96	4.08	<i>3.96</i>	<i>3.86</i>	<i>4.03</i>	<i>4.03</i>	<i>3.99</i>	<i>3.88</i>	<i>4.01</i>	4.04	<i>3.98</i>	<i>3.98</i>
Norway	2.08	2.00	1.91	1.92	1.97	<i>1.88</i>	<i>1.87</i>	<i>1.90</i>	<i>1.89</i>	<i>1.87</i>	<i>1.85</i>	<i>1.88</i>	1.98	<i>1.91</i>	<i>1.87</i>
United Kingdom	1.09	1.07	1.00	1.02	1.10	<i>1.11</i>	<i>1.02</i>	<i>1.15</i>	<i>1.15</i>	<i>1.15</i>	<i>1.06</i>	<i>1.16</i>	1.05	<i>1.09</i>	<i>1.13</i>
Eurasia	14.43	14.30	14.22	14.32	14.33	<i>14.45</i>	<i>14.38</i>	<i>14.51</i>	<i>14.52</i>	<i>14.42</i>	<i>14.44</i>	<i>14.53</i>	14.32	<i>14.42</i>	<i>14.48</i>
Azerbaijan	0.79	0.80	0.79	0.81	0.81	<i>0.81</i>	<i>0.79</i>	<i>0.77</i>	<i>0.79</i>	<i>0.79</i>	<i>0.78</i>	<i>0.76</i>	0.80	<i>0.80</i>	<i>0.78</i>
Kazakhstan	1.87	1.87	1.86	1.92	1.90	<i>2.00</i>	<i>2.01</i>	<i>2.08</i>	<i>2.09</i>	<i>1.98</i>	<i>2.02</i>	<i>2.09</i>	1.88	<i>2.00</i>	<i>2.05</i>
Russia	11.32	11.18	11.14	11.16	11.18	<i>11.19</i>	<i>11.12</i>	<i>11.19</i>	<i>11.19</i>	<i>11.21</i>	<i>11.20</i>	<i>11.23</i>	11.20	<i>11.17</i>	<i>11.21</i>
Turkmenistan	0.28	0.28	0.28	0.28	0.27	<i>0.29</i>	<i>0.29</i>	<i>0.29</i>	<i>0.28</i>	<i>0.28</i>	<i>0.28</i>	<i>0.28</i>	0.28	<i>0.28</i>	<i>0.28</i>
Other Eurasia	0.16	0.17	0.16	0.16	0.16	<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	1.08	<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>	1.08	<i>1.07</i>	<i>1.03</i>
Oman	0.98	0.98	0.98	0.98	0.98	<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	9.34	9.27	9.18	9.17	9.27	<i>9.30</i>	<i>9.30</i>	<i>9.34</i>	<i>9.31</i>	<i>9.33</i>	<i>9.34</i>	<i>9.36</i>	9.24	<i>9.30</i>	<i>9.34</i>
Australia	0.35	0.36	0.37	0.35	0.38	<i>0.38</i>	<i>0.38</i>	<i>0.39</i>	<i>0.41</i>	<i>0.42</i>	<i>0.44</i>	<i>0.45</i>	0.36	<i>0.38</i>	<i>0.43</i>
China	4.81	4.82	4.74	4.75	4.76	<i>4.79</i>	<i>4.78</i>	<i>4.83</i>	<i>4.77</i>	<i>4.80</i>	<i>4.80</i>	<i>4.84</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>1.01</i>	<i>1.00</i>	<i>1.01</i>	<i>1.01</i>	<i>1.02</i>	<i>1.01</i>	1.00	<i>1.01</i>	<i>1.01</i>
Indonesia	0.93	0.91	0.91	0.90	0.92	<i>0.91</i>	<i>0.91</i>	<i>0.91</i>	<i>0.91</i>	<i>0.90</i>	<i>0.89</i>	<i>0.88</i>	0.91	<i>0.91</i>	<i>0.89</i>
Malaysia	0.74	0.72	0.71	0.72	0.75	<i>0.73</i>	<i>0.73</i>	<i>0.73</i>	<i>0.73</i>	<i>0.72</i>	<i>0.71</i>	<i>0.70</i>	0.72	<i>0.73</i>	<i>0.72</i>
Vietnam	0.29	0.29	0.28	0.27	0.27	<i>0.26</i>	<i>0.27</i>	<i>0.26</i>	<i>0.26</i>	<i>0.26</i>	<i>0.26</i>	<i>0.26</i>	0.28	<i>0.27</i>	<i>0.26</i>
Africa	1.86	1.86	1.91	1.91	1.84	<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	58.36	58.71	59.58	59.41	<i>61.26</i>	<i>61.83</i>	<i>62.43</i>	<i>62.20</i>	<i>63.03</i>	<i>63.26</i>	<i>63.50</i>	58.73	<i>61.24</i>	<i>63.00</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	65.02	65.36	65.50	66.39	66.30	<i>68.21</i>	<i>68.81</i>	<i>69.45</i>	<i>69.25</i>	<i>70.15</i>	<i>70.44</i>	<i>70.77</i>	65.57	<i>68.20</i>	<i>70.16</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 - June 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	1.00	-	-	-	-	-	-	-	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	10.12	10.10	-	-	-	-	-	-	-	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	32.48	32.34	31.90	31.95	31.89	31.77	31.97	32.19	32.29	32.44	32.02	32.06
Other Liquids (a)	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
Total OPEC Supply	38.84	39.32	39.68	39.28	39.24	38.85	38.93	38.91	38.82	39.09	39.38	39.55	39.28	38.98	39.21
Crude Oil Production Capacity															
Africa	5.04	5.24	5.64	5.64	5.66	5.46	5.48	5.51	5.49	5.51	5.56	5.63	5.39	5.53	5.55
Middle East	26.70	26.69	26.71	26.64	26.51	26.48	26.60	26.54	26.06	26.05	26.08	26.11	26.69	26.53	26.07
South America	2.53	2.51	2.49	2.31	2.09	1.87	1.62	1.51	1.49	1.48	1.48	1.45	2.46	1.77	1.47
OPEC Total	34.27	34.44	34.84	34.58	34.26	33.81	33.70	33.56	33.04	33.04	33.12	33.20	34.54	33.83	33.10
Surplus Crude Oil Production Capacity															
Africa	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
Middle East	2.19	2.13	1.95	2.10	1.91	1.90	1.76	1.67	1.27	1.07	0.93	0.91	2.09	1.81	1.04
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	2.10	1.92	1.90	1.76	1.67	1.27	1.07	0.93	0.91	2.09	1.81	1.04
Unplanned OPEC Production Outages	1.81	1.60	1.17	1.21	1.21	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1.45	n/a	n/a

- = 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 - June 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	24.44	24.49	24.63	24.83	24.91	24.69	24.74	25.26	25.31	24.23	24.72	25.00
Canada	2.35	2.34	2.50	2.50	2.35	2.33	2.45	2.43	2.39	2.33	2.45	2.43	2.42	2.39	2.40
Mexico	1.96	1.98	1.90	1.88	1.89	1.90	1.90	1.94	1.91	1.92	1.92	1.95	1.93	1.91	1.92
United States	19.49	20.03	19.92	20.05	20.24	20.39	20.47	20.53	20.38	20.47	20.89	20.92	19.88	20.41	20.67
Central and South America	6.98	7.04	7.12	7.05	6.83	6.99	7.10	7.11	6.94	7.14	7.27	7.28	7.05	7.01	7.16
Brazil	3.02	3.01	3.09	3.10	3.00	3.08	3.17	3.19	3.11	3.20	3.30	3.34	3.06	3.11	3.24
Europe	14.52	14.95	15.41	15.12	14.73	15.03	15.51	15.22	14.82	15.04	15.58	15.27	15.00	15.13	15.18
Eurasia	4.80	4.79	5.06	4.93	4.83	4.88	5.16	5.03	4.89	4.94	5.22	5.09	4.89	4.98	5.04
Russia	3.61	3.62	3.82	3.69	3.61	3.68	3.89	3.76	3.66	3.73	3.94	3.81	3.68	3.73	3.78
Middle East	8.20	8.74	9.07	8.45	8.33	8.90	9.25	8.63	8.48	9.05	9.40	8.78	8.62	8.78	8.93
Asia and Oceania	34.83	34.17	33.73	34.87	36.01	34.99	34.49	35.58	36.97	35.91	35.35	36.47	34.40	35.27	36.17
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
Japan	4.33	3.64	3.69	4.12	4.36	3.50	3.62	3.98	4.27	3.45	3.58	3.95	3.94	3.86	3.81
India	4.40	4.64	4.42	4.75	4.77	4.93	4.66	4.95	5.20	5.28	4.95	5.26	4.55	4.83	5.17
Africa	4.34	4.30	4.19	4.31	4.43	4.41	4.32	4.48	4.50	4.51	4.44	4.61	4.29	4.41	4.52
Total OECD Liquid Fuels Consumption	46.71	46.88	47.44	47.72	47.65	47.10	47.95	48.26	47.93	47.24	48.49	48.75	47.19	47.74	48.10
Total non-OECD Liquid Fuels Consumption	50.79	51.46	51.48	51.46	52.01	52.74	52.72	52.72	53.38	54.09	54.04	54.08	51.30	52.55	53.90
Total World Liquid Fuels Consumption	97.50	98.35	98.92	99.18	99.66	99.85	100.67	100.98	101.31	101.33	102.53	102.83	98.49	100.29	102.01
Oil-weighted Real Gross Domestic Product (a)															
World Index, 2015 Q1 = 100	105.7	106.5	107.3	108.2	109.2	110.0	110.8	111.7	112.7	113.5	114.3	115.2	106.9	110.4	113.9
Percent change from prior year	3.6	2.9	3.1	3.1	3.3	3.3	3.2	3.2	3.2	3.2	3.2	3.1	3.2	3.3	3.1
OECD Index, 2015 Q1 = 100	103.9	104.5	105.1	105.8	106.5	107.1	107.6	108.3	109.0	109.4	109.8	110.2	104.8	107.4	109.6
Percent change from prior year	3.0	2.1	2.4	2.3	2.6	2.5	2.4	2.3	2.3	2.1	2.1	1.8	2.5	2.4	2.1
Non-OECD Index, 2015 Q1 = 100	107.5	108.5	109.5	110.6	111.8	112.8	113.9	115.1	116.4	117.5	118.7	120.0	109.0	113.4	118.2
Percent change from prior year	4.2	3.6	3.8	3.8	4.0	4.0	4.0	4.1	4.1	4.1	4.2	4.2	3.8	4.1	4.2
Real U.S. Dollar Exchange Rate (a)															
Index, 2015 Q1 = 100	104.95	103.52	102.01	102.38	100.72	101.67	101.76	100.74	100.22	100.00	99.80	99.57	103.22	101.22	99.90
Percent change from prior year	-0.2	0.3	-1.0	-2.4	-4.0	-1.8	-0.2	-1.6	-0.5	-1.6	-1.9	-1.2	-0.8	-1.9	-1.3

- = 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 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 - June 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	1.59	1.67	1.77	1.90	1.88	1.88	1.97	2.03	1.41	1.73	1.94
Propane	1.16	1.21	1.23	1.28	1.29	1.36	1.40	1.43	1.46	1.47	1.48	1.49	1.22	1.37	1.48
Butanes	0.63	0.65	0.67	0.69	0.69	0.72	0.76	0.77	0.78	0.79	0.80	0.80	0.66	0.73	0.79
Natural Gasoline (Pentanes Plus)	0.41	0.45	0.48	0.46	0.44	0.50	0.53	0.52	0.50	0.53	0.55	0.53	0.45	0.50	0.53
Refinery and Blender Net Production															
Ethane/Ethylene	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.00
Propane	0.29	0.32	0.30	0.32	0.30	0.33	0.32	0.31	0.30	0.33	0.32	0.32	0.31	0.31	0.32
Propylene (refinery-grade)	0.27	0.29	0.27	0.30	0.28	0.29	0.28	0.29	0.28	0.29	0.28	0.28	0.29	0.28	0.28
Butanes/Butylenes	-0.09	0.27	0.16	-0.22	-0.11	0.27	0.19	-0.20	-0.08	0.26	0.19	-0.20	0.03	0.04	0.04
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	-0.26	-0.28	-0.28	-0.28	-0.28	-0.30	-0.18	-0.25	-0.28
Propane/Propylene	-0.79	-0.71	-0.68	-0.83	-0.72	-0.81	-0.77	-0.93	-0.85	-0.94	-0.89	-0.95	-0.75	-0.81	-0.91
Butanes/Butylenes	-0.09	-0.12	-0.11	-0.11	-0.10	-0.17	-0.21	-0.18	-0.22	-0.21	-0.19	-0.19	-0.11	-0.16	-0.20
Natural Gasoline (Pentanes Plus)	-0.18	-0.18	-0.16	-0.14	-0.18	-0.22	-0.24	-0.24	-0.26	-0.25	-0.26	-0.26	-0.16	-0.22	-0.26
HGL Refinery and Blender Net Inputs															
Butanes/Butylenes	0.43	0.30	0.33	0.50	0.45	0.31	0.33	0.51	0.41	0.31	0.33	0.51	0.39	0.40	0.39
Natural Gasoline (Pentanes Plus)	0.16	0.18	0.18	0.19	0.15	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	1.44	1.43	1.52	1.64	1.62	1.59	1.71	1.77	1.22	1.51	1.67
Propane	1.05	0.60	0.67	0.85	1.16	0.65	0.66	0.97	1.10	0.59	0.66	0.98	0.79	0.86	0.83
Propylene (refinery-grade)	0.34	0.31	0.28	0.32	0.32	0.30	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	0.20	0.24	0.20	0.20	0.19	0.26	0.25	0.22	0.17	0.21	0.23
Natural Gasoline (Pentanes Plus)	0.10	0.08	0.08	0.15	0.10	0.06	0.07	0.08	0.07	0.07	0.07	0.08	0.10	0.08	0.07
HGL Inventories (million barrels)															
Ethane	49.65	51.89	51.77	57.73	51.41	50.85	49.79	50.08	46.60	49.22	47.49	46.60	52.78	50.53	47.48
Propane	40.23	57.06	71.59	62.37	33.83	52.51	78.18	62.12	42.89	65.23	86.59	74.12	62.37	62.12	74.12
Propylene (refinery-grade)	3.75	4.01	5.21	4.82	3.82	4.56	4.81	5.07	4.18	4.00	4.30	4.95	4.82	5.07	4.95
Butanes/Butylenes	31.68	57.24	76.10	47.95	32.02	56.33	75.29	45.57	35.27	60.11	79.07	49.35	47.95	45.57	49.35
Natural Gasoline (Pentanes Plus)	21.49	20.55	23.40	20.14	19.36	21.90	23.46	22.45	21.23	23.47	24.98	23.81	20.14	22.45	23.81
Refinery and Blender Net Inputs															
Crude Oil	15.91	17.13	16.60	16.72	16.41	17.07	17.37	16.69	16.55	17.50	17.35	16.67	16.59	16.89	17.02
Hydrocarbon Gas Liquids	0.58	0.48	0.51	0.69	0.61	0.48	0.51	0.69	0.58	0.48	0.51	0.69	0.57	0.57	0.57
Other Hydrocarbons/Oxygenates	1.16	1.24	1.22	1.21	1.16	1.28	1.32	1.30	1.21	1.32	1.35	1.33	1.21	1.26	1.30
Unfinished Oils	0.25	0.33	0.38	0.45	0.12	0.44	0.46	0.39	0.26	0.43	0.46	0.38	0.36	0.35	0.38
Motor Gasoline Blend Components	0.39	0.65	0.67	0.22	0.34	0.68	0.64	0.47	0.57	0.84	0.66	0.49	0.49	0.53	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	18.63	19.95	20.29	19.54	19.17	20.57	20.33	19.56	19.21	19.61	19.91
Refinery Processing Gain															
.....	1.09	1.13	1.07	1.12	1.11	1.13	1.14	1.12	1.09	1.13	1.13	1.12	1.10	1.12	1.11
Refinery and Blender Net Production															
Hydrocarbon Gas Liquids	0.48	0.89	0.73	0.40	0.48	0.88	0.80	0.40	0.50	0.88	0.79	0.40	0.63	0.64	0.65
Finished Motor Gasoline	9.57	10.10	10.04	10.13	9.79	10.16	10.27	10.25	9.99	10.44	10.30	10.27	9.96	10.12	10.25
Jet Fuel	1.63	1.74	1.75	1.69	1.72	1.82	1.86	1.74	1.69	1.82	1.87	1.75	1.70	1.79	1.78
Distillate Fuel	4.75	5.18	4.94	5.25	4.81	5.12	5.34	5.22	5.04	5.40	5.37	5.23	5.03	5.12	5.26
Residual Fuel	0.46	0.41	0.43	0.41	0.44	0.40	0.43	0.42	0.46	0.46	0.42	0.42	0.43	0.42	0.44
Other Oils (a)	2.50	2.64	2.56	2.53	2.49	2.70	2.74	2.62	2.57	2.69	2.72	2.60	2.56	2.64	2.65
Total Refinery and Blender Net Production	19.40	20.97	20.46	20.41	19.74	21.08	21.43	20.66	20.26	21.70	21.46	20.68	20.31	20.73	21.03
Refinery Distillation Inputs															
.....	16.23	17.42	16.90	17.00	16.76	17.33	17.56	16.91	16.75	17.59	17.54	16.89	16.89	17.14	17.20
Refinery Operable Distillation Capacity															
.....	18.62	18.58	18.55	18.52	18.57	18.62	18.62	18.62	18.63	18.63	18.67	18.67	18.57	18.61	18.65
Refinery Distillation Utilization Factor															
.....	0.87	0.94	0.91	0.92	0.90	0.93	0.94	0.91	0.90	0.94	0.94	0.90	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 - June 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	186	<i>216</i>	<i>211</i>	<i>196</i>	<i>192</i>	<i>206</i>	<i>202</i>	<i>185</i>	169	<i>202</i>	<i>196</i>
Gasoline Regular Grade Retail Prices Including Taxes															
PADD 1	231	233	241	249	255	<i>282</i>	<i>286</i>	<i>275</i>	<i>269</i>	<i>281</i>	<i>279</i>	<i>266</i>	239	<i>275</i>	<i>274</i>
PADD 2	223	228	232	242	246	<i>275</i>	<i>281</i>	<i>265</i>	<i>257</i>	<i>277</i>	<i>274</i>	<i>255</i>	231	<i>267</i>	<i>266</i>
PADD 3	210	216	222	225	230	<i>260</i>	<i>260</i>	<i>246</i>	<i>241</i>	<i>256</i>	<i>251</i>	<i>235</i>	218	<i>250</i>	<i>246</i>
PADD 4	227	239	245	252	247	<i>285</i>	<i>289</i>	<i>271</i>	<i>251</i>	<i>273</i>	<i>280</i>	<i>260</i>	241	<i>273</i>	<i>266</i>
PADD 5	276	289	290	299	312	<i>341</i>	<i>335</i>	<i>315</i>	<i>305</i>	<i>332</i>	<i>328</i>	<i>303</i>	288	<i>326</i>	<i>317</i>
U.S. Average	233	238	244	251	258	<i>286</i>	<i>289</i>	<i>274</i>	<i>267</i>	<i>285</i>	<i>281</i>	<i>264</i>	242	<i>277</i>	<i>274</i>
Gasoline All Grades Including Taxes	244	250	255	263	270	<i>296</i>	<i>299</i>	<i>285</i>	<i>278</i>	<i>296</i>	<i>293</i>	<i>276</i>	253	<i>288</i>	<i>286</i>
End-of-period Inventories (million barrels)															
Total Gasoline Inventories															
PADD 1	65.3	67.2	58.8	60.6	58.4	<i>66.9</i>	<i>62.7</i>	<i>65.3</i>	<i>66.7</i>	<i>67.3</i>	<i>64.0</i>	<i>67.2</i>	60.6	<i>65.3</i>	<i>67.2</i>
PADD 2	57.0	53.6	50.4	52.2	57.3	<i>52.5</i>	<i>50.0</i>	<i>51.9</i>	<i>54.9</i>	<i>52.8</i>	<i>51.2</i>	<i>53.4</i>	52.2	<i>51.9</i>	<i>53.4</i>
PADD 3	79.1	82.4	78.5	83.2	84.2	<i>80.8</i>	<i>80.6</i>	<i>83.8</i>	<i>83.7</i>	<i>83.2</i>	<i>83.1</i>	<i>86.4</i>	83.2	<i>83.8</i>	<i>86.4</i>
PADD 4	7.9	7.0	6.9	7.6	7.7	<i>7.2</i>	<i>7.3</i>	<i>7.8</i>	<i>7.7</i>	<i>7.6</i>	<i>7.5</i>	<i>8.0</i>	7.6	<i>7.8</i>	<i>8.0</i>
PADD 5	29.7	27.7	29.2	33.1	32.0	<i>30.4</i>	<i>28.8</i>	<i>31.5</i>	<i>30.3</i>	<i>28.6</i>	<i>28.5</i>	<i>31.8</i>	33.1	<i>31.5</i>	<i>31.8</i>
U.S. Total	239.0	237.9	223.8	236.7	239.6	<i>237.8</i>	<i>229.3</i>	<i>240.3</i>	<i>243.3</i>	<i>239.7</i>	<i>234.2</i>	<i>246.9</i>	236.7	<i>240.3</i>	<i>246.9</i>
Finished Gasoline Inventories															
U.S. Total	21.7	22.5	21.8	24.6	23.1	<i>23.9</i>	<i>24.1</i>	<i>27.5</i>	<i>25.0</i>	<i>24.0</i>	<i>24.7</i>	<i>25.4</i>	24.6	<i>27.5</i>	<i>25.4</i>
Gasoline Blending Components Inventories															
U.S. Total	217.2	215.5	202.0	212.1	216.5	<i>213.9</i>	<i>205.1</i>	<i>212.9</i>	<i>218.4</i>	<i>215.7</i>	<i>209.5</i>	<i>221.5</i>	212.1	<i>212.9</i>	<i>221.5</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 - June 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	82.72	84.29	<i>87.35</i>	<i>88.22</i>	<i>89.12</i>	<i>90.13</i>	<i>90.25</i>	<i>90.18</i>	<i>90.51</i>	78.94	<i>87.26</i>	<i>90.27</i>
Alaska	1.01	0.97	0.82	0.98	1.00	<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	2.52	2.58	<i>2.73</i>	<i>2.56</i>	<i>2.60</i>	<i>2.58</i>	<i>2.53</i>	<i>2.42</i>	<i>2.41</i>	2.92	<i>2.62</i>	<i>2.48</i>
Lower 48 States (excl GOM)	72.05	73.40	75.56	79.22	80.72	<i>83.78</i>	<i>84.88</i>	<i>85.58</i>	<i>86.54</i>	<i>86.86</i>	<i>86.98</i>	<i>87.16</i>	75.08	<i>83.76</i>	<i>86.89</i>
Total Dry Gas Production	71.24	72.04	73.97	76.98	78.54	<i>81.31</i>	<i>82.05</i>	<i>82.83</i>	<i>83.73</i>	<i>83.79</i>	<i>83.68</i>	<i>83.93</i>	73.57	<i>81.20</i>	<i>83.78</i>
LNG Gross Imports	0.29	0.18	0.17	0.21	0.33	<i>0.14</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>0.23</i>	<i>0.22</i>
LNG Gross Exports	1.63	1.80	1.67	2.64	2.64	<i>2.95</i>	<i>2.94</i>	<i>3.31</i>	<i>3.99</i>	<i>4.40</i>	<i>5.24</i>	<i>6.60</i>	1.94	<i>2.96</i>	<i>5.07</i>
Pipeline Gross Imports	8.89	7.76	7.74	8.10	8.72	<i>7.74</i>	<i>7.42</i>	<i>7.78</i>	<i>8.39</i>	<i>7.38</i>	<i>7.59</i>	<i>8.29</i>	8.12	<i>7.91</i>	<i>7.91</i>
Pipeline Gross Exports	7.24	6.49	6.43	6.81	6.96	<i>6.53</i>	<i>7.04</i>	<i>7.99</i>	<i>9.22</i>	<i>8.09</i>	<i>7.95</i>	<i>8.57</i>	6.74	<i>7.13</i>	<i>8.46</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>0.18</i>	0.15	<i>0.17</i>	<i>0.17</i>
Net Inventory Withdrawals	13.74	-9.02	-7.20	5.77	18.28	<i>-9.16</i>	<i>-10.51</i>	<i>2.60</i>	<i>15.65</i>	<i>-10.84</i>	<i>-8.33</i>	<i>4.69</i>	0.78	<i>0.23</i>	<i>0.24</i>
Total Supply	85.45	62.80	66.74	81.78	96.44	<i>70.72</i>	<i>69.34</i>	<i>82.35</i>	<i>95.04</i>	<i>68.18</i>	<i>70.09</i>	<i>82.13</i>	74.16	<i>79.65</i>	<i>78.80</i>
Balancing Item (b)	0.70	0.16	0.22	-0.84	0.71	<i>-0.77</i>	<i>0.20</i>	<i>-0.42</i>	<i>0.15</i>	<i>0.31</i>	<i>0.98</i>	<i>0.98</i>	0.06	<i>-0.07</i>	<i>0.61</i>
Total Primary Supply	86.15	62.96	66.96	80.94	97.15	<i>69.95</i>	<i>69.54</i>	<i>81.92</i>	<i>95.19</i>	<i>68.49</i>	<i>71.07</i>	<i>83.12</i>	74.22	<i>79.57</i>	<i>79.41</i>
Consumption (billion cubic feet per day)															
Residential	22.17	6.65	3.55	16.26	25.67	<i>8.42</i>	<i>3.66</i>	<i>16.40</i>	<i>24.93</i>	<i>7.55</i>	<i>3.83</i>	<i>16.69</i>	12.12	<i>13.49</i>	<i>13.20</i>
Commercial	13.50	5.83	4.55	11.01	15.31	<i>6.71</i>	<i>4.60</i>	<i>10.70</i>	<i>14.85</i>	<i>6.31</i>	<i>4.68</i>	<i>10.77</i>	8.70	<i>9.30</i>	<i>9.13</i>
Industrial	22.96	20.45	20.34	22.85	24.35	<i>20.88</i>	<i>20.39</i>	<i>22.50</i>	<i>23.65</i>	<i>21.21</i>	<i>20.66</i>	<i>22.67</i>	21.65	<i>22.02</i>	<i>22.04</i>
Electric Power (c)	20.95	24.00	32.28	24.03	24.53	<i>27.14</i>	<i>34.05</i>	<i>25.11</i>	<i>24.11</i>	<i>26.34</i>	<i>34.69</i>	<i>25.34</i>	25.34	<i>27.73</i>	<i>27.64</i>
Lease and Plant Fuel	4.26	4.32	4.43	4.62	4.71	<i>4.88</i>	<i>4.92</i>	<i>4.97</i>	<i>5.03</i>	<i>5.04</i>	<i>5.03</i>	<i>5.05</i>	4.41	<i>4.87</i>	<i>5.04</i>
Pipeline and Distribution Use	2.19	1.60	1.70	2.05	2.47	<i>1.81</i>	<i>1.80</i>	<i>2.12</i>	<i>2.50</i>	<i>1.91</i>	<i>2.06</i>	<i>2.47</i>	1.88	<i>2.05</i>	<i>2.23</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	62.96	66.96	80.94	97.15	<i>69.95</i>	<i>69.54</i>	<i>81.92</i>	<i>95.19</i>	<i>68.49</i>	<i>71.07</i>	<i>83.12</i>	74.22	<i>79.57</i>	<i>79.41</i>
End-of-period Inventories (billion cubic feet)															
Working Gas Inventory	2,063	2,907	3,567	3,032	1,389	<i>2,223</i>	<i>3,189</i>	<i>2,950</i>	<i>1,542</i>	<i>2,528</i>	<i>3,294</i>	<i>2,862</i>	3,032	<i>2,950</i>	<i>2,862</i>
East Region (d)	260	563	866	710	229	<i>467</i>	<i>781</i>	<i>687</i>	<i>224</i>	<i>525</i>	<i>812</i>	<i>642</i>	710	<i>687</i>	<i>642</i>
Midwest Region (d)	477	701	993	829	261	<i>470</i>	<i>870</i>	<i>766</i>	<i>280</i>	<i>551</i>	<i>895</i>	<i>772</i>	829	<i>766</i>	<i>772</i>
South Central Region (d)	938	1,139	1,137	1,016	612	<i>844</i>	<i>992</i>	<i>995</i>	<i>672</i>	<i>944</i>	<i>1,012</i>	<i>949</i>	1,016	<i>995</i>	<i>949</i>
Mountain Region (d)	142	184	218	177	87	<i>148</i>	<i>215</i>	<i>201</i>	<i>139</i>	<i>175</i>	<i>210</i>	<i>174</i>	177	<i>201</i>	<i>174</i>
Pacific Region (d)	219	288	314	264	169	<i>261</i>	<i>299</i>	<i>268</i>	<i>193</i>	<i>300</i>	<i>332</i>	<i>293</i>	264	<i>268</i>	<i>293</i>
Alaska	27	32	39	36	31	<i>33</i>	<i>33</i>	<i>33</i>	<i>33</i>	<i>33</i>	<i>33</i>	<i>33</i>	36	<i>33</i>	<i>33</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 - June 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	<i>2.94</i>	<i>3.12</i>	<i>3.23</i>	<i>3.32</i>	<i>3.07</i>	<i>3.11</i>	<i>3.26</i>	3.10	<i>3.10</i>	<i>3.19</i>
Residential Retail															
New England	12.85	14.08	18.12	13.57	14.56	<i>14.40</i>	<i>17.13</i>	<i>13.57</i>	<i>13.06</i>	<i>13.98</i>	<i>17.19</i>	<i>13.64</i>	13.60	<i>14.43</i>	<i>13.65</i>
Middle Atlantic	9.92	12.18	17.11	11.33	10.15	<i>11.53</i>	<i>16.22</i>	<i>10.84</i>	<i>9.97</i>	<i>11.95</i>	<i>16.59</i>	<i>11.08</i>	11.17	<i>10.95</i>	<i>11.03</i>
E. N. Central	7.77	11.52	17.80	7.81	7.20	<i>10.02</i>	<i>16.36</i>	<i>8.81</i>	<i>7.99</i>	<i>10.92</i>	<i>16.61</i>	<i>8.93</i>	8.86	<i>8.63</i>	<i>9.21</i>
W. N. Central	8.32	11.85	18.79	9.56	8.17	<i>10.49</i>	<i>17.62</i>	<i>10.05</i>	<i>9.23</i>	<i>12.05</i>	<i>17.77</i>	<i>9.92</i>	9.80	<i>9.59</i>	<i>10.37</i>
S. Atlantic	12.29	20.05	26.86	13.20	11.09	<i>15.42</i>	<i>22.17</i>	<i>12.77</i>	<i>11.18</i>	<i>16.19</i>	<i>22.50</i>	<i>12.97</i>	14.63	<i>12.94</i>	<i>13.12</i>
E. S. Central	10.53	15.83	20.82	11.32	9.71	<i>13.73</i>	<i>19.69</i>	<i>12.28</i>	<i>9.96</i>	<i>14.47</i>	<i>20.63</i>	<i>12.93</i>	12.05	<i>11.51</i>	<i>11.92</i>
W. S. Central	10.33	16.49	22.10	13.09	9.34	<i>13.58</i>	<i>19.76</i>	<i>11.59</i>	<i>8.39</i>	<i>13.95</i>	<i>20.30</i>	<i>11.83</i>	13.18	<i>11.51</i>	<i>11.09</i>
Mountain	8.21	10.17	13.91	8.76	8.22	<i>9.81</i>	<i>13.64</i>	<i>9.22</i>	<i>9.07</i>	<i>10.37</i>	<i>13.99</i>	<i>9.33</i>	9.14	<i>9.20</i>	<i>9.76</i>
Pacific	12.02	12.64	12.90	11.30	11.62	<i>12.01</i>	<i>12.88</i>	<i>11.65</i>	<i>12.50</i>	<i>12.61</i>	<i>12.92</i>	<i>11.80</i>	12.01	<i>11.85</i>	<i>12.35</i>
U.S. Average	9.73	13.00	17.74	10.19	9.39	<i>11.48</i>	<i>16.55</i>	<i>10.57</i>	<i>9.68</i>	<i>12.29</i>	<i>16.82</i>	<i>10.74</i>	10.92	<i>10.57</i>	<i>10.91</i>
Commercial Retail															
New England	9.55	9.97	10.61	9.53	11.09	<i>11.20</i>	<i>10.83</i>	<i>10.38</i>	<i>10.44</i>	<i>10.45</i>	<i>10.28</i>	<i>10.07</i>	9.71	<i>10.88</i>	<i>10.32</i>
Middle Atlantic	7.66	7.42	6.82	7.38	8.10	<i>7.79</i>	<i>7.05</i>	<i>7.57</i>	<i>7.71</i>	<i>7.57</i>	<i>7.02</i>	<i>7.61</i>	7.43	<i>7.76</i>	<i>7.57</i>
E. N. Central	6.63	7.90	8.98	6.21	6.19	<i>7.29</i>	<i>8.87</i>	<i>7.00</i>	<i>6.75</i>	<i>7.73</i>	<i>9.06</i>	<i>7.09</i>	6.84	<i>6.80</i>	<i>7.17</i>
W. N. Central	6.96	7.80	9.11	7.04	7.00	<i>7.26</i>	<i>8.90</i>	<i>7.42</i>	<i>7.63</i>	<i>7.99</i>	<i>9.02</i>	<i>7.45</i>	7.28	<i>7.31</i>	<i>7.74</i>
S. Atlantic	8.89	10.00	9.56	8.91	8.32	<i>8.82</i>	<i>9.56</i>	<i>8.76</i>	<i>8.60</i>	<i>9.49</i>	<i>9.91</i>	<i>8.99</i>	9.16	<i>8.68</i>	<i>9.02</i>
E. S. Central	9.05	10.28	10.76	9.30	8.69	<i>9.50</i>	<i>10.12</i>	<i>9.10</i>	<i>8.65</i>	<i>9.64</i>	<i>10.13</i>	<i>9.07</i>	9.53	<i>9.09</i>	<i>9.09</i>
W. S. Central	7.63	8.20	8.86	8.18	7.24	<i>7.50</i>	<i>8.39</i>	<i>7.82</i>	<i>7.35</i>	<i>7.77</i>	<i>8.33</i>	<i>7.74</i>	8.09	<i>7.60</i>	<i>7.68</i>
Mountain	6.88	7.37	8.27	7.21	6.99	<i>7.38</i>	<i>8.30</i>	<i>7.32</i>	<i>7.53</i>	<i>7.79</i>	<i>8.51</i>	<i>7.45</i>	7.22	<i>7.30</i>	<i>7.66</i>
Pacific	9.09	9.06	9.08	8.54	8.91	<i>8.49</i>	<i>8.82</i>	<i>8.54</i>	<i>8.78</i>	<i>8.84</i>	<i>9.12</i>	<i>8.80</i>	8.92	<i>8.70</i>	<i>8.85</i>
U.S. Average	7.71	8.33	8.69	7.56	7.66	<i>8.02</i>	<i>8.58</i>	<i>7.89</i>	<i>7.82</i>	<i>8.28</i>	<i>8.67</i>	<i>7.96</i>	7.87	<i>7.89</i>	<i>8.03</i>
Industrial Retail															
New England	7.81	7.04	6.39	7.05	9.05	<i>8.12</i>	<i>6.91</i>	<i>7.92</i>	<i>8.35</i>	<i>7.60</i>	<i>7.04</i>	<i>8.10</i>	7.19	<i>8.18</i>	<i>7.90</i>
Middle Atlantic	7.69	7.59	7.62	7.18	8.29	<i>7.79</i>	<i>7.48</i>	<i>7.67</i>	<i>8.04</i>	<i>7.39</i>	<i>7.39</i>	<i>7.66</i>	7.53	<i>7.96</i>	<i>7.76</i>
E. N. Central	5.86	5.96	5.59	5.30	5.74	<i>5.47</i>	<i>5.99</i>	<i>6.03</i>	<i>6.60</i>	<i>6.20</i>	<i>6.06</i>	<i>6.00</i>	5.66	<i>5.81</i>	<i>6.29</i>
W. N. Central	5.01	4.29	4.25	4.68	5.04	<i>4.31</i>	<i>4.64</i>	<i>5.29</i>	<i>5.75</i>	<i>4.86</i>	<i>4.64</i>	<i>5.26</i>	4.60	<i>4.87</i>	<i>5.18</i>
S. Atlantic	5.35	5.00	4.88	4.93	5.39	<i>4.64</i>	<i>4.84</i>	<i>5.20</i>	<i>5.50</i>	<i>4.90</i>	<i>4.88</i>	<i>5.28</i>	5.05	<i>5.05</i>	<i>5.16</i>
E. S. Central	5.06	4.59	4.40	4.56	4.99	<i>4.26</i>	<i>4.38</i>	<i>4.84</i>	<i>5.01</i>	<i>4.52</i>	<i>4.48</i>	<i>4.91</i>	4.67	<i>4.64</i>	<i>4.75</i>
W. S. Central	3.42	3.42	3.30	3.14	3.33	<i>3.10</i>	<i>3.39</i>	<i>3.49</i>	<i>3.56</i>	<i>3.26</i>	<i>3.36</i>	<i>3.50</i>	3.32	<i>3.32</i>	<i>3.42</i>
Mountain	5.31	5.36	5.61	5.50	5.41	<i>5.36</i>	<i>5.91</i>	<i>5.99</i>	<i>6.08</i>	<i>5.74</i>	<i>5.97</i>	<i>6.04</i>	5.43	<i>5.66</i>	<i>5.97</i>
Pacific	7.31	6.71	6.32	6.35	7.05	<i>6.43</i>	<i>6.56</i>	<i>6.70</i>	<i>7.11</i>	<i>6.52</i>	<i>6.64</i>	<i>6.74</i>	6.71	<i>6.70</i>	<i>6.77</i>
U.S. Average	4.50	4.11	3.89	4.00	4.47	<i>3.79</i>	<i>3.96</i>	<i>4.34</i>	<i>4.65</i>	<i>3.99</i>	<i>3.97</i>	<i>4.37</i>	4.14	<i>4.16</i>	<i>4.26</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 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 - June 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	<i>181.5</i>	<i>197.0</i>	<i>186.7</i>	<i>191.2</i>	<i>160.4</i>	<i>197.7</i>	<i>188.7</i>	774.1	<i>756.2</i>	<i>738.0</i>
Appalachia	50.7	51.2	46.3	50.2	50.5	<i>47.3</i>	<i>41.3</i>	<i>38.1</i>	<i>42.4</i>	<i>36.7</i>	<i>36.7</i>	<i>36.7</i>	198.5	<i>177.3</i>	<i>152.5</i>
Interior	38.5	36.4	34.9	35.6	35.3	<i>33.5</i>	<i>39.2</i>	<i>39.8</i>	<i>43.7</i>	<i>33.2</i>	<i>40.5</i>	<i>40.9</i>	145.4	<i>147.7</i>	<i>158.3</i>
Western	107.8	99.4	115.0	108.0	105.2	<i>100.7</i>	<i>116.5</i>	<i>108.8</i>	<i>105.1</i>	<i>90.4</i>	<i>120.6</i>	<i>111.1</i>	430.2	<i>431.2</i>	<i>427.2</i>
Primary Inventory Withdrawals	0.1	1.8	1.4	0.9	-2.8	<i>2.4</i>	<i>1.3</i>	<i>-0.1</i>	<i>-3.6</i>	<i>1.9</i>	<i>1.7</i>	<i>-2.5</i>	4.2	<i>0.8</i>	<i>-2.5</i>
Imports	1.9	2.2	2.3	1.4	1.4	<i>1.8</i>	<i>2.6</i>	<i>2.4</i>	<i>1.4</i>	<i>2.3</i>	<i>2.9</i>	<i>2.6</i>	7.8	<i>8.2</i>	<i>9.3</i>
Exports	22.3	21.8	24.6	28.2	27.2	<i>25.0</i>	<i>21.1</i>	<i>19.5</i>	<i>21.9</i>	<i>20.9</i>	<i>21.6</i>	<i>21.6</i>	97.0	<i>92.8</i>	<i>86.0</i>
Metallurgical Coal	12.2	13.5	14.8	14.8	14.9	<i>14.1</i>	<i>13.4</i>	<i>12.7</i>	<i>13.5</i>	<i>13.1</i>	<i>13.4</i>	<i>13.0</i>	55.3	<i>55.0</i>	<i>53.0</i>
Steam Coal	10.1	8.3	9.8	13.4	12.3	<i>10.9</i>	<i>7.7</i>	<i>6.9</i>	<i>8.4</i>	<i>7.8</i>	<i>8.3</i>	<i>8.6</i>	41.7	<i>37.8</i>	<i>33.1</i>
Total Primary Supply	176.8	169.2	175.3	167.9	162.5	<i>160.7</i>	<i>179.8</i>	<i>169.4</i>	<i>167.1</i>	<i>143.6</i>	<i>180.7</i>	<i>167.3</i>	689.1	<i>672.4</i>	<i>658.7</i>
Secondary Inventory Withdrawals	1.0	3.7	18.2	2.4	11.1	<i>3.0</i>	<i>11.9</i>	<i>-7.8</i>	<i>1.3</i>	<i>2.2</i>	<i>5.5</i>	<i>-9.2</i>	25.2	<i>18.1</i>	<i>-0.2</i>
Waste Coal (a)	2.5	1.8	2.3	2.1	2.4	<i>2.4</i>	<i>2.4</i>	<i>2.4</i>	<i>2.4</i>	<i>2.4</i>	<i>2.4</i>	<i>2.4</i>	8.7	<i>9.6</i>	<i>9.6</i>
Total Supply	180.3	174.8	195.8	172.3	175.9	<i>166.1</i>	<i>194.1</i>	<i>164.0</i>	<i>170.8</i>	<i>148.1</i>	<i>188.6</i>	<i>160.5</i>	723.1	<i>700.1</i>	<i>668.1</i>
Consumption (million short tons)															
Coke Plants	4.2	4.3	4.5	4.5	4.2	<i>3.4</i>	<i>4.1</i>	<i>5.0</i>	<i>3.7</i>	<i>3.4</i>	<i>4.2</i>	<i>5.3</i>	17.5	<i>16.7</i>	<i>16.6</i>
Electric Power Sector (b)	160.3	154.2	190.6	159.6	155.0	<i>141.8</i>	<i>181.9</i>	<i>150.5</i>	<i>158.3</i>	<i>136.6</i>	<i>176.3</i>	<i>146.8</i>	664.7	<i>629.2</i>	<i>618.1</i>
Retail and Other Industry	8.9	8.3	8.8	8.7	8.8	<i>8.2</i>	<i>8.1</i>	<i>8.4</i>	<i>8.8</i>	<i>8.1</i>	<i>8.1</i>	<i>8.4</i>	34.7	<i>33.6</i>	<i>33.4</i>
Residential and Commercial	0.4	0.2	0.2	0.3	0.3	<i>0.1</i>	<i>0.1</i>	<i>0.2</i>	<i>0.2</i>	<i>0.1</i>	<i>0.1</i>	<i>0.2</i>	1.1	<i>0.7</i>	<i>0.5</i>
Other Industrial	8.5	8.1	8.6	8.4	8.6	<i>8.1</i>	<i>8.0</i>	<i>8.2</i>	<i>8.5</i>	<i>8.0</i>	<i>8.1</i>	<i>8.2</i>	33.6	<i>32.9</i>	<i>32.9</i>
Total Consumption	173.5	166.8	203.9	172.7	168.0	<i>153.4</i>	<i>194.1</i>	<i>164.0</i>	<i>170.8</i>	<i>148.1</i>	<i>188.6</i>	<i>160.5</i>	717.0	<i>679.5</i>	<i>668.1</i>
Discrepancy (c)	6.8	7.9	-8.1	-0.4	7.9	<i>12.8</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	6.2	<i>20.7</i>	<i>0.0</i>
End-of-period Inventories (million short tons)															
Primary Inventories (d)	25.2	23.4	22.0	21.1	23.9	<i>21.5</i>	<i>20.2</i>	<i>20.3</i>	<i>23.9</i>	<i>22.0</i>	<i>20.3</i>	<i>22.9</i>	21.1	<i>20.3</i>	<i>22.9</i>
Secondary Inventories	166.6	163.0	144.8	142.4	131.4	<i>128.4</i>	<i>116.5</i>	<i>124.3</i>	<i>123.1</i>	<i>120.9</i>	<i>115.4</i>	<i>124.5</i>	142.4	<i>124.3</i>	<i>124.5</i>
Electric Power Sector	161.7	157.7	139.3	137.2	126.4	<i>123.1</i>	<i>111.1</i>	<i>119.0</i>	<i>118.1</i>	<i>115.6</i>	<i>109.8</i>	<i>119.1</i>	137.2	<i>119.0</i>	<i>119.1</i>
Retail and General Industry	3.2	3.3	3.5	3.2	3.4	<i>3.3</i>	<i>3.5</i>	<i>3.4</i>	<i>3.5</i>	<i>3.5</i>	<i>3.6</i>	<i>3.6</i>	3.2	<i>3.4</i>	<i>3.6</i>
Coke Plants	1.4	1.6	1.7	1.7	1.3	<i>1.6</i>	<i>1.6</i>	<i>1.7</i>	<i>1.2</i>	<i>1.5</i>	<i>1.6</i>	<i>1.6</i>	1.7	<i>1.7</i>	<i>1.6</i>
Coal Market Indicators															
Coal Miner Productivity															
(Tons per hour)	6.19	6.19	6.19	6.19	6.10	<i>6.10</i>	<i>6.10</i>	<i>6.10</i>	<i>6.02</i>	<i>6.02</i>	<i>6.02</i>	<i>6.02</i>	6.19	<i>6.10</i>	<i>6.02</i>
Total Raw Steel Production															
(Million short tons per day)	0.248	0.247	0.250	0.245	0.251	<i>0.253</i>	<i>0.237</i>	<i>0.207</i>	<i>0.261</i>	<i>0.258</i>	<i>0.239</i>	<i>0.207</i>	0.248	<i>0.237</i>	<i>0.241</i>
Cost of Coal to Electric Utilities															
(Dollars per million Btu)	2.08	2.12	2.07	2.04	2.06	<i>2.23</i>	<i>2.24</i>	<i>2.21</i>	<i>2.24</i>	<i>2.22</i>	<i>2.23</i>	<i>2.20</i>	2.08	<i>2.19</i>	<i>2.22</i>

- = 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 - June 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	11.11	<i>10.99</i>	<i>12.33</i>	<i>10.54</i>	<i>11.01</i>	<i>10.83</i>	<i>12.42</i>	<i>10.60</i>	11.00	<i>11.24</i>	<i>11.22</i>
Electric Power Sector (a)	10.15	10.27	11.71	10.14	10.67	<i>10.57</i>	<i>11.88</i>	<i>10.12</i>	<i>10.57</i>	<i>10.40</i>	<i>11.97</i>	<i>10.17</i>	10.57	<i>10.81</i>	<i>10.78</i>
Comm. and Indus. Sectors (b)	0.43	0.42	0.44	0.42	0.43	<i>0.42</i>	<i>0.44</i>	<i>0.43</i>	<i>0.44</i>	<i>0.43</i>	<i>0.45</i>	<i>0.43</i>	0.43	<i>0.43</i>	<i>0.44</i>
Net Imports	0.13	0.14	0.15	0.13	0.14	<i>0.18</i>	<i>0.21</i>	<i>0.16</i>	<i>0.17</i>	<i>0.17</i>	<i>0.19</i>	<i>0.15</i>	0.14	<i>0.17</i>	<i>0.17</i>
Total Supply	10.71	10.83	12.30	10.70	11.25	<i>11.17</i>	<i>12.53</i>	<i>10.70</i>	<i>11.18</i>	<i>11.00</i>	<i>12.61</i>	<i>10.75</i>	11.14	<i>11.41</i>	<i>11.39</i>
Losses and Unaccounted for (c)	0.58	0.76	0.63	0.72	0.66	<i>0.89</i>	<i>0.72</i>	<i>0.67</i>	<i>0.58</i>	<i>0.82</i>	<i>0.72</i>	<i>0.68</i>	0.67	<i>0.74</i>	<i>0.70</i>
Electricity Consumption (billion kilowatthours per day unless noted)															
Retail Sales	9.75	9.70	11.28	9.60	10.20	<i>9.90</i>	<i>11.42</i>	<i>9.66</i>	<i>10.21</i>	<i>9.80</i>	<i>11.49</i>	<i>9.69</i>	10.09	<i>10.30</i>	<i>10.30</i>
Residential Sector	3.71	3.43	4.46	3.51	4.09	<i>3.54</i>	<i>4.54</i>	<i>3.54</i>	<i>4.08</i>	<i>3.43</i>	<i>4.57</i>	<i>3.55</i>	3.78	<i>3.93</i>	<i>3.91</i>
Commercial Sector	3.51	3.64	4.08	3.55	3.59	<i>3.67</i>	<i>4.10</i>	<i>3.56</i>	<i>3.60</i>	<i>3.66</i>	<i>4.13</i>	<i>3.57</i>	3.70	<i>3.73</i>	<i>3.74</i>
Industrial Sector	2.50	2.62	2.72	2.53	2.50	<i>2.68</i>	<i>2.76</i>	<i>2.54</i>	<i>2.52</i>	<i>2.70</i>	<i>2.77</i>	<i>2.55</i>	2.59	<i>2.62</i>	<i>2.64</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	0.38	<i>0.37</i>	<i>0.39</i>	<i>0.38</i>	<i>0.38</i>	<i>0.38</i>	<i>0.40</i>	<i>0.38</i>	0.38	<i>0.38</i>	<i>0.39</i>
Total Consumption	10.13	10.08	11.66	9.98	10.59	<i>10.28</i>	<i>11.81</i>	<i>10.03</i>	<i>10.60</i>	<i>10.18</i>	<i>11.89</i>	<i>10.08</i>	10.47	<i>10.68</i>	<i>10.69</i>
Average residential electricity usage per customer (kWh)	2,532	2,365	3,109	2,446	2,760	<i>2,480</i>	<i>3,132</i>	<i>2,438</i>	<i>2,720</i>	<i>2,311</i>	<i>3,118</i>	<i>2,422</i>	10,453	<i>10,809</i>	<i>10,571</i>
Prices															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	2.08	2.12	2.07	2.04	2.06	<i>2.23</i>	<i>2.24</i>	<i>2.21</i>	<i>2.24</i>	<i>2.22</i>	<i>2.23</i>	<i>2.20</i>	2.08	<i>2.19</i>	<i>2.22</i>
Natural Gas	3.69	3.38	3.19	3.38	3.98	<i>3.12</i>	<i>3.29</i>	<i>3.58</i>	<i>3.83</i>	<i>3.25</i>	<i>3.25</i>	<i>3.60</i>	3.38	<i>3.46</i>	<i>3.45</i>
Residual Fuel Oil	11.16	10.60	10.03	11.93	11.47	<i>13.79</i>	<i>13.81</i>	<i>13.44</i>	<i>13.36</i>	<i>13.67</i>	<i>12.90</i>	<i>12.58</i>	10.97	<i>12.85</i>	<i>13.15</i>
Distillate Fuel Oil	12.74	12.23	13.13	14.54	15.83	<i>16.57</i>	<i>16.82</i>	<i>16.79</i>	<i>16.26</i>	<i>16.10</i>	<i>16.28</i>	<i>16.57</i>	13.26	<i>16.28</i>	<i>16.31</i>
Retail Prices (cents per kilowatthour)															
Residential Sector	12.59	12.99	13.19	12.75	12.57	<i>13.08</i>	<i>13.40</i>	<i>13.11</i>	<i>13.09</i>	<i>13.72</i>	<i>13.85</i>	<i>13.45</i>	12.90	<i>13.05</i>	<i>13.53</i>
Commercial Sector	10.39	10.68	11.03	10.56	10.51	<i>10.75</i>	<i>11.26</i>	<i>10.89</i>	<i>10.80</i>	<i>10.90</i>	<i>11.30</i>	<i>10.93</i>	10.68	<i>10.87</i>	<i>10.99</i>
Industrial Sector	6.64	6.89	7.27	6.79	6.79	<i>7.01</i>	<i>7.52</i>	<i>7.05</i>	<i>6.97</i>	<i>7.09</i>	<i>7.60</i>	<i>7.13</i>	6.91	<i>7.10</i>	<i>7.21</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 - June 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	141	115	150	126	141	112	149	126	133	133	132
Middle Atlantic	368	307	403	327	394	323	412	323	391	311	411	322	351	363	359
E. N. Central	507	435	545	475	552	465	563	469	542	443	561	467	491	512	504
W. N. Central	298	246	303	261	327	261	317	265	319	243	321	268	277	292	288
S. Atlantic	891	891	1,131	889	1,040	935	1,140	895	1,041	889	1,147	898	951	1,002	994
E. S. Central	305	277	368	288	368	291	382	293	367	276	385	293	310	333	330
W. S. Central	501	536	760	516	608	549	788	531	598	546	805	539	579	619	622
Mountain	245	259	347	232	239	256	353	234	244	257	356	237	271	271	274
Pacific contiguous	439	346	447	381	411	331	426	388	421	337	425	389	404	389	393
AK and HI	14	12	12	13	14	11	12	13	14	11	12	13	13	13	12
Total	3,712	3,428	4,458	3,507	4,093	3,537	4,544	3,536	4,077	3,425	4,571	3,552	3,778	3,928	3,907
Commercial Sector															
New England	155	150	168	149	142	134	164	146	139	131	159	140	156	147	143
Middle Atlantic	423	404	462	412	431	415	462	408	429	409	460	407	425	429	426
E. N. Central	489	486	537	482	499	499	542	480	498	493	543	480	498	505	504
W. N. Central	272	270	302	269	282	272	306	271	283	268	308	273	278	283	283
S. Atlantic	785	853	941	807	811	855	941	805	808	846	944	806	847	853	851
E. S. Central	225	241	275	229	241	243	277	228	241	241	280	230	243	248	248
W. S. Central	471	522	598	501	498	536	618	515	509	552	639	526	523	542	557
Mountain	246	265	301	249	249	266	304	250	251	267	306	252	265	268	269
Pacific contiguous	431	431	480	438	423	430	470	437	423	432	469	438	445	440	441
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	3,592	3,666	4,100	3,558	3,597	3,655	4,125	3,568	3,696	3,730	3,738
Industrial Sector															
New England	46	46	49	47	42	45	47	45	41	44	46	44	47	45	44
Middle Atlantic	192	194	204	195	196	196	207	196	198	197	208	197	196	199	200
E. N. Central	495	504	522	489	499	534	533	491	502	535	533	491	502	514	515
W. N. Central	228	240	253	235	232	243	260	240	239	250	266	246	239	244	250
S. Atlantic	362	386	390	372	366	378	387	367	362	373	382	362	377	375	370
E. S. Central	267	275	280	262	260	269	277	257	257	265	274	254	271	266	263
W. S. Central	480	503	511	484	466	524	526	496	477	536	538	507	495	503	515
Mountain	210	228	245	210	209	237	250	213	213	241	254	216	223	227	231
Pacific contiguous	211	230	253	220	213	241	259	222	214	242	260	223	229	234	235
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	2,497	2,682	2,760	2,541	2,517	2,698	2,774	2,555	2,593	2,620	2,636
Total All Sectors (a)															
New England	345	317	362	323	327	296	363	319	323	288	356	312	337	326	320
Middle Atlantic	994	915	1,079	943	1,033	945	1,091	936	1,028	927	1,090	936	983	1,001	995
E. N. Central	1,493	1,427	1,605	1,447	1,552	1,499	1,640	1,442	1,545	1,473	1,638	1,440	1,493	1,533	1,524
W. N. Central	798	755	857	765	842	776	883	776	841	762	895	787	794	819	821
S. Atlantic	2,042	2,134	2,465	2,070	2,220	2,172	2,472	2,071	2,215	2,112	2,476	2,070	2,179	2,234	2,219
E. S. Central	797	793	924	779	870	803	936	778	866	782	938	778	823	846	841
W. S. Central	1,452	1,561	1,869	1,501	1,572	1,610	1,932	1,543	1,585	1,635	1,983	1,572	1,597	1,665	1,694
Mountain	701	752	893	691	697	759	908	699	709	765	916	706	760	766	774
Pacific contiguous	1,084	1,010	1,184	1,042	1,049	1,004	1,156	1,050	1,059	1,013	1,156	1,052	1,080	1,065	1,070
AK and HI	43	41	43	43	42	40	43	42	42	40	42	42	42	42	42
Total	9,750	9,704	11,280	9,605	10,205	9,905	11,424	9,655	10,213	9,798	11,491	9,695	10,088	10,299	10,301

- = 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 - June 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	18.92	18.97	19.28	20.42	19.92	19.46	20.15	21.50	21.17	20.57	21.10	18.93	19.98	21.07
Middle Atlantic	15.55	16.27	16.43	15.87	15.62	16.35	16.67	16.29	16.10	16.96	17.16	16.70	16.04	16.23	16.73
E. N. Central	12.90	13.58	13.28	13.19	12.94	13.76	13.73	13.88	13.71	14.58	14.33	14.34	13.23	13.56	14.22
W. N. Central	10.94	12.66	13.16	11.51	10.91	12.64	13.42	11.92	11.41	13.29	13.78	12.16	12.07	12.21	12.65
S. Atlantic	11.69	12.01	12.26	11.81	11.61	11.87	12.39	12.14	12.07	12.47	12.81	12.42	11.96	12.01	12.45
E. S. Central	11.08	11.44	11.32	11.20	10.86	11.37	11.62	11.85	11.62	11.99	11.78	11.86	11.26	11.41	11.80
W. S. Central	10.54	10.93	10.87	10.76	10.53	11.01	10.95	10.94	10.88	11.43	11.24	11.16	10.79	10.86	11.18
Mountain	11.28	12.16	12.31	11.82	11.57	12.36	12.58	12.15	11.96	12.80	12.96	12.46	11.94	12.21	12.59
Pacific	14.51	14.69	16.50	14.37	14.86	15.31	16.75	14.30	15.04	16.00	17.64	14.89	15.07	15.33	15.91
U.S. Average	12.59	12.99	13.19	12.75	12.57	13.08	13.40	13.11	13.09	13.72	13.85	13.45	12.90	13.05	13.53
Commercial Sector															
New England	14.64	14.65	15.30	15.20	16.56	15.42	15.54	15.53	16.41	14.93	15.07	15.31	14.95	15.75	15.42
Middle Atlantic	12.07	12.75	13.34	12.08	12.07	12.45	13.28	12.12	12.03	12.41	13.28	12.27	12.58	12.50	12.52
E. N. Central	10.02	10.24	10.05	9.99	10.09	10.24	10.30	10.39	10.49	10.54	10.43	10.43	10.08	10.26	10.47
W. N. Central	9.12	10.11	10.57	9.26	9.17	10.29	10.87	9.60	9.45	10.62	11.14	9.86	9.79	10.01	10.29
S. Atlantic	9.44	9.38	9.55	9.53	9.56	9.43	9.75	9.88	10.14	9.81	9.94	9.96	9.48	9.66	9.96
E. S. Central	10.58	10.56	10.62	10.57	10.51	10.73	11.15	11.37	10.96	10.98	11.05	11.17	10.58	10.94	11.04
W. S. Central	8.37	8.40	8.38	8.28	8.38	8.39	8.37	8.30	8.09	8.01	8.04	8.25	8.36	8.36	8.09
Mountain	9.14	9.92	10.04	9.49	9.25	10.11	10.28	9.75	9.29	10.15	10.32	9.83	9.67	9.88	9.92
Pacific	12.53	13.56	15.36	13.61	12.86	13.94	16.19	14.29	13.68	14.51	16.66	14.47	13.82	14.38	14.88
U.S. Average	10.39	10.68	11.03	10.56	10.51	10.75	11.26	10.89	10.80	10.90	11.30	10.93	10.68	10.87	10.99
Industrial Sector															
New England	12.38	12.19	12.55	12.37	13.49	12.77	13.09	12.85	14.15	13.16	13.36	13.02	12.37	13.04	13.41
Middle Atlantic	6.94	6.94	6.88	6.81	7.20	6.79	6.96	6.94	7.11	6.71	6.91	6.91	6.89	6.97	6.91
E. N. Central	7.03	7.05	7.04	6.96	7.08	7.06	7.24	7.21	7.26	7.12	7.30	7.28	7.02	7.15	7.24
W. N. Central	6.89	7.35	8.07	6.87	7.05	7.56	8.34	7.11	7.25	7.67	8.46	7.21	7.31	7.54	7.67
S. Atlantic	6.31	6.39	6.79	6.34	6.45	6.59	7.12	6.68	6.65	6.64	7.17	6.73	6.46	6.72	6.80
E. S. Central	5.90	5.96	6.18	5.89	5.73	6.02	6.46	6.21	6.06	6.15	6.57	6.33	5.98	6.11	6.28
W. S. Central	5.28	5.55	5.72	5.41	5.43	5.71	6.02	5.70	5.60	5.75	6.09	5.81	5.50	5.72	5.82
Mountain	6.08	6.54	7.12	6.13	6.10	6.53	7.19	6.23	6.28	6.71	7.39	6.41	6.50	6.55	6.73
Pacific	8.23	9.35	10.73	9.73	8.63	9.61	10.93	9.87	8.72	9.70	11.01	9.92	9.57	9.82	9.90
U.S. Average	6.64	6.89	7.27	6.79	6.79	7.01	7.52	7.05	6.97	7.09	7.60	7.13	6.91	7.10	7.21
All Sectors (a)															
New England	15.93	15.87	16.35	16.35	17.80	16.79	16.82	16.95	18.30	17.05	17.13	17.30	16.13	17.09	17.45
Middle Atlantic	12.35	12.68	13.26	12.29	12.48	12.61	13.35	12.46	12.62	12.71	13.52	12.65	12.67	12.74	12.90
E. N. Central	10.00	10.13	10.16	10.01	10.13	10.24	10.48	10.44	10.57	10.51	10.74	10.62	10.08	10.32	10.61
W. N. Central	9.15	10.06	10.75	9.29	9.26	10.26	11.04	9.62	9.57	10.50	11.29	9.81	9.84	10.07	10.32
S. Atlantic	9.86	9.93	10.35	9.93	10.00	10.01	10.55	10.29	10.47	10.37	10.84	10.46	10.04	10.22	10.55
E. S. Central	9.20	9.27	9.55	9.23	9.23	9.43	9.95	9.85	9.78	9.70	10.05	9.85	9.32	9.62	9.85
W. S. Central	8.10	8.35	8.67	8.21	8.34	8.46	8.78	8.37	8.39	8.41	8.81	8.46	8.35	8.50	8.54
Mountain	8.97	9.67	10.12	9.25	9.11	9.79	10.32	9.48	9.30	9.96	10.54	9.66	9.55	9.72	9.91
Pacific	12.48	12.98	14.79	13.06	12.78	13.38	15.21	13.35	13.21	13.84	15.73	13.65	13.38	13.73	14.15
U.S. Average	10.26	10.47	10.98	10.37	10.42	10.61	11.21	10.69	10.76	10.83	11.42	10.85	10.54	10.75	10.99

- = 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 - June 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	3,127	<i>2,890</i>	<i>3,643</i>	<i>2,983</i>	<i>3,279</i>	<i>2,789</i>	<i>3,526</i>	<i>2,903</i>	3,309	<i>3,162</i>	<i>3,125</i>
Natural Gas	2,969	3,286	4,359	3,322	3,442	<i>3,721</i>	<i>4,601</i>	<i>3,516</i>	<i>3,408</i>	<i>3,636</i>	<i>4,702</i>	<i>3,559</i>	3,487	<i>3,823</i>	<i>3,829</i>
Petroleum (a)	59	54	56	62	101	<i>57</i>	<i>63</i>	<i>56</i>	<i>74</i>	<i>57</i>	<i>64</i>	<i>56</i>	58	<i>69</i>	<i>63</i>
Other Gases	40	39	40	36	37	<i>39</i>	<i>40</i>	<i>36</i>	<i>37</i>	<i>39</i>	<i>40</i>	<i>36</i>	39	<i>38</i>	<i>38</i>
Nuclear	2,242	2,034	2,302	2,243	2,294	<i>2,129</i>	<i>2,273</i>	<i>2,146</i>	<i>2,240</i>	<i>2,097</i>	<i>2,272</i>	<i>2,135</i>	2,205	<i>2,210</i>	<i>2,186</i>
Renewable Energy Sources:	2,008	2,157	1,615	1,757	2,084	<i>2,128</i>	<i>1,684</i>	<i>1,783</i>	<i>1,948</i>	<i>2,186</i>	<i>1,797</i>	<i>1,892</i>	1,883	<i>1,918</i>	<i>1,955</i>
Conventional Hydropower	918	1,010	717	647	854	<i>920</i>	<i>697</i>	<i>647</i>	<i>760</i>	<i>884</i>	<i>723</i>	<i>644</i>	822	<i>779</i>	<i>752</i>
Wind	768	748	501	771	867	<i>783</i>	<i>555</i>	<i>781</i>	<i>825</i>	<i>838</i>	<i>595</i>	<i>853</i>	697	<i>746</i>	<i>777</i>
Wood Biomass	118	115	122	119	122	<i>113</i>	<i>123</i>	<i>117</i>	<i>120</i>	<i>114</i>	<i>125</i>	<i>119</i>	119	<i>119</i>	<i>120</i>
Waste Biomass	59	56	56	57	58	<i>59</i>	<i>60</i>	<i>59</i>	<i>58</i>	<i>59</i>	<i>60</i>	<i>59</i>	57	<i>59</i>	<i>59</i>
Geothermal	45	43	44	43	45	<i>44</i>	<i>45</i>	<i>45</i>	<i>46</i>	<i>45</i>	<i>45</i>	<i>46</i>	44	<i>45</i>	<i>45</i>
Solar	101	185	175	120	138	<i>209</i>	<i>204</i>	<i>134</i>	<i>139</i>	<i>246</i>	<i>249</i>	<i>171</i>	145	<i>171</i>	<i>201</i>
Pumped Storage Hydropower	-16	-16	-22	-17	-15	<i>-13</i>	<i>-18</i>	<i>-14</i>	<i>-13</i>	<i>-12</i>	<i>-18</i>	<i>-14</i>	-18	<i>-15</i>	<i>-14</i>
Other Nonrenewable Fuels (b)	35	35	38	35	36	<i>38</i>	<i>39</i>	<i>37</i>	<i>35</i>	<i>37</i>	<i>39</i>	<i>37</i>	36	<i>37</i>	<i>37</i>
Total Generation	10,579	10,690	12,151	10,566	11,107	<i>10,989</i>	<i>12,326</i>	<i>10,543</i>	<i>11,008</i>	<i>10,830</i>	<i>12,422</i>	<i>10,604</i>	10,999	<i>11,242</i>	<i>11,218</i>
Northeast Census Region															
Coal	154	134	136	139	149	<i>153</i>	<i>187</i>	<i>158</i>	<i>147</i>	<i>102</i>	<i>166</i>	<i>155</i>	141	<i>162</i>	<i>142</i>
Natural Gas	486	482	637	492	500	<i>551</i>	<i>716</i>	<i>566</i>	<i>561</i>	<i>585</i>	<i>746</i>	<i>590</i>	525	<i>584</i>	<i>621</i>
Petroleum (a)	4	2	3	11	32	<i>2</i>	<i>4</i>	<i>4</i>	<i>12</i>	<i>2</i>	<i>4</i>	<i>4</i>	5	<i>10</i>	<i>6</i>
Other Gases	2	2	2	2	2	<i>2</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>2</i>	2	<i>2</i>	<i>2</i>
Nuclear	539	476	549	529	552	<i>497</i>	<i>532</i>	<i>495</i>	<i>512</i>	<i>476</i>	<i>507</i>	<i>463</i>	523	<i>519</i>	<i>489</i>
Hydropower (c)	102	107	99	99	103	<i>91</i>	<i>88</i>	<i>94</i>	<i>100</i>	<i>89</i>	<i>92</i>	<i>94</i>	102	<i>94</i>	<i>94</i>
Other Renewables (d)	72	76	68	74	80	<i>72</i>	<i>65</i>	<i>78</i>	<i>80</i>	<i>72</i>	<i>66</i>	<i>80</i>	73	<i>74</i>	<i>74</i>
Other Nonrenewable Fuels (b)	11	11	12	12	11	<i>12</i>	<i>12</i>	<i>12</i>	<i>11</i>	<i>12</i>	<i>12</i>	<i>12</i>	11	<i>12</i>	<i>12</i>
Total Generation	1,370	1,290	1,506	1,359	1,430	<i>1,381</i>	<i>1,606</i>	<i>1,408</i>	<i>1,425</i>	<i>1,340</i>	<i>1,595</i>	<i>1,399</i>	1,381	<i>1,457</i>	<i>1,440</i>
South Census Region															
Coal	1,330	1,416	1,681	1,293	1,261	<i>1,304</i>	<i>1,604</i>	<i>1,225</i>	<i>1,318</i>	<i>1,191</i>	<i>1,525</i>	<i>1,157</i>	1,431	<i>1,349</i>	<i>1,298</i>
Natural Gas	1,763	2,087	2,565	1,922	2,052	<i>2,287</i>	<i>2,656</i>	<i>1,994</i>	<i>1,992</i>	<i>2,245</i>	<i>2,748</i>	<i>2,038</i>	2,086	<i>2,248</i>	<i>2,257</i>
Petroleum (a)	25	22	23	21	38	<i>25</i>	<i>27</i>	<i>22</i>	<i>29</i>	<i>25</i>	<i>28</i>	<i>22</i>	23	<i>28</i>	<i>26</i>
Other Gases	15	15	15	13	13	<i>15</i>	<i>15</i>	<i>13</i>	<i>12</i>	<i>14</i>	<i>14</i>	<i>12</i>	14	<i>14</i>	<i>13</i>
Nuclear	973	888	1,003	1,012	1,008	<i>947</i>	<i>1,017</i>	<i>965</i>	<i>1,009</i>	<i>948</i>	<i>1,032</i>	<i>978</i>	969	<i>984</i>	<i>992</i>
Hydropower (c)	128	138	99	103	126	<i>120</i>	<i>91</i>	<i>100</i>	<i>122</i>	<i>117</i>	<i>96</i>	<i>99</i>	117	<i>109</i>	<i>108</i>
Other Renewables (d)	401	403	323	391	453	<i>443</i>	<i>365</i>	<i>415</i>	<i>445</i>	<i>492</i>	<i>414</i>	<i>470</i>	379	<i>419</i>	<i>455</i>
Other Nonrenewable Fuels (b)	15	15	16	15	16	<i>17</i>	<i>17</i>	<i>16</i>	<i>15</i>	<i>16</i>	<i>16</i>	<i>15</i>	15	<i>16</i>	<i>16</i>
Total Generation	4,650	4,984	5,726	4,769	4,968	<i>5,157</i>	<i>5,792</i>	<i>4,748</i>	<i>4,942</i>	<i>5,046</i>	<i>5,873</i>	<i>4,791</i>	5,034	<i>5,167</i>	<i>5,165</i>
Midwest Census Region															
Coal	1,288	1,177	1,394	1,216	1,302	<i>1,090</i>	<i>1,304</i>	<i>1,114</i>	<i>1,267</i>	<i>1,106</i>	<i>1,316</i>	<i>1,106</i>	1,269	<i>1,202</i>	<i>1,198</i>
Natural Gas	289	272	407	349	400	<i>426</i>	<i>545</i>	<i>430</i>	<i>415</i>	<i>384</i>	<i>526</i>	<i>410</i>	330	<i>450</i>	<i>434</i>
Petroleum (a)	7	7	7	8	9	<i>9</i>	<i>10</i>	<i>8</i>	<i>10</i>	<i>9</i>	<i>10</i>	<i>8</i>	7	<i>9</i>	<i>9</i>
Other Gases	17	16	17	15	15	<i>16</i>	<i>17</i>	<i>15</i>	<i>16</i>	<i>17</i>	<i>18</i>	<i>16</i>	16	<i>16</i>	<i>17</i>
Nuclear	555	543	580	535	571	<i>526</i>	<i>557</i>	<i>527</i>	<i>553</i>	<i>519</i>	<i>564</i>	<i>534</i>	553	<i>545</i>	<i>542</i>
Hydropower (c)	52	58	37	36	54	<i>50</i>	<i>33</i>	<i>35</i>	<i>53</i>	<i>49</i>	<i>34</i>	<i>35</i>	46	<i>43</i>	<i>43</i>
Other Renewables (d)	315	304	198	340	360	<i>306</i>	<i>209</i>	<i>340</i>	<i>349</i>	<i>327</i>	<i>225</i>	<i>379</i>	289	<i>303</i>	<i>320</i>
Other Nonrenewable Fuels (b)	3	4	4	4	4	<i>4</i>	<i>4</i>	<i>4</i>	<i>4</i>	<i>4</i>	<i>4</i>	<i>4</i>	4	<i>4</i>	<i>4</i>
Total Generation	2,528	2,381	2,643	2,503	2,714	<i>2,426</i>	<i>2,679</i>	<i>2,473</i>	<i>2,667</i>	<i>2,415</i>	<i>2,697</i>	<i>2,492</i>	2,514	<i>2,573</i>	<i>2,568</i>
West Census Region															
Coal	470	373	551	480	415	<i>344</i>	<i>548</i>	<i>487</i>	<i>547</i>	<i>391</i>	<i>519</i>	<i>486</i>	469	<i>449</i>	<i>486</i>
Natural Gas	430	446	751	558	490	<i>457</i>	<i>684</i>	<i>527</i>	<i>441</i>	<i>422</i>	<i>682</i>	<i>522</i>	547	<i>540</i>	<i>517</i>
Petroleum (a)	23	22	23	22	21	<i>21</i>	<i>23</i>	<i>22</i>	<i>22</i>	<i>21</i>	<i>22</i>	<i>22</i>	23	<i>22</i>	<i>22</i>
Other Gases	6	6	6	6	7	<i>6</i>	<i>6</i>	<i>6</i>	<i>7</i>	<i>6</i>	<i>6</i>	<i>6</i>	6	<i>6</i>	<i>6</i>
Nuclear	175	127	171	167	164	<i>158</i>	<i>167</i>	<i>159</i>	<i>165</i>	<i>155</i>	<i>169</i>	<i>160</i>	160	<i>162</i>	<i>162</i>
Hydropower (c)	619	692	460	392	557	<i>645</i>	<i>468</i>	<i>403</i>	<i>471</i>	<i>617</i>	<i>483</i>	<i>401</i>	540	<i>518</i>	<i>493</i>
Other Renewables (d)	302	364	308	305	337	<i>387</i>	<i>348</i>	<i>304</i>	<i>314</i>	<i>411</i>	<i>369</i>	<i>318</i>	320	<i>344</i>	<i>353</i>
Other Nonrenewable Fuels (b)	5	5	6	5	5	<i>5</i>	<i>6</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>6</i>	<i>5</i>	5	<i>5</i>	<i>5</i>
Total Generation	2,031	2,035	2,277	1,934	1,995	<i>2,025</i>	<i>2,250</i>	<i>1,913</i>	<i>1,973</i>	<i>2,029</i>	<i>2,257</i>	<i>1,921</i>	2,069	<i>2,046</i>	<i>2,045</i>

(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 - June 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	1,719	1,555	1,973	1,630	1,752	1,495	1,912	1,590	1,818	1,720	1,687
Natural Gas (million cf/d)	21,452	24,555	32,799	24,545	25,006	27,728	34,674	25,780	24,767	27,038	35,364	26,021	25,865	28,317	28,320
Petroleum (thousand b/d)	107	100	105	111	178	102	114	101	133	103	114	101	106	123	113
Residual Fuel Oil	26	27	28	33	51	26	30	26	39	26	29	26	29	33	30
Distillate Fuel Oil	28	24	23	32	71	24	22	25	32	23	23	26	27	35	26
Petroleum Coke (a)	49	45	48	42	47	50	58	46	57	51	59	46	46	50	53
Other Petroleum Liquids (b)	4	4	7	5	9	3	4	4	5	3	4	4	5	5	4
Northeast Census Region															
Coal (thousand st/d)	75	63	66	65	76	74	93	78	72	50	83	77	67	80	70
Natural Gas (million cf/d)	3,603	3,640	4,893	3,706	3,635	4,142	5,482	4,200	4,130	4,366	5,676	4,347	3,963	4,369	4,633
Petroleum (thousand b/d)	7	4	7	18	53	4	7	6	22	4	7	7	9	17	10
South Census Region															
Coal (thousand st/d)	715	761	902	705	659	678	846	651	672	616	805	617	771	709	678
Natural Gas (million cf/d)	12,471	15,401	19,033	14,045	14,832	16,877	19,777	14,439	14,266	16,533	20,433	14,720	15,252	16,489	16,500
Petroleum (thousand b/d)	47	42	43	40	70	45	50	41	55	45	51	42	43	52	48
Midwest Census Region															
Coal (thousand st/d)	717	655	787	688	745	606	724	622	696	609	730	617	712	674	663
Natural Gas (million cf/d)	2,186	2,134	3,249	2,676	2,915	3,244	4,275	3,228	3,089	2,930	4,120	3,076	2,564	3,419	3,306
Petroleum (thousand b/d)	15	16	16	16	19	18	20	17	19	19	20	17	16	18	19
West Census Region															
Coal (thousand st/d)	269	213	313	273	240	197	311	279	312	221	294	279	267	257	276
Natural Gas (million cf/d)	3,192	3,378	5,624	4,117	3,625	3,466	5,140	3,913	3,281	3,208	5,135	3,877	4,085	4,040	3,881
Petroleum (thousand b/d)	39	37	39	37	36	35	37	37	37	35	37	36	38	36	36
End-of-period U.S. Fuel Inventories Held by Electric Power Sector															
Coal (million short tons)	161.7	157.7	139.3	137.2	126.4	123.1	111.1	119.0	118.1	115.6	109.8	119.1	137.2	119.0	119.1
Residual Fuel Oil (mmb)	12.5	11.9	11.4	11.0	10.3	10.3	10.5	11.2	11.1	11.1	11.1	11.6	11.0	11.2	11.6
Distillate Fuel Oil (mmb)	17.0	16.6	16.4	15.8	15.0	15.0	15.2	15.7	15.9	15.8	15.8	16.2	15.8	15.7	16.2
Petroleum Coke (mmb)	4.3	4.3	4.9	5.6	5.3	5.2	5.1	5.0	4.9	4.9	4.8	4.8	5.6	5.0	4.8

(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 - June 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	0.038	0.037	0.038	0.039	0.038	0.038	0.038	0.039	0.147	0.151	0.153
Hydroelectric Power (a)	0.759	0.844	0.605	0.546	0.708	0.776	0.594	0.551	0.633	0.746	0.616	0.548	2.755	2.630	2.543
Solar (b)	0.084	0.155	0.148	0.101	0.114	0.175	0.173	0.113	0.114	0.206	0.211	0.144	0.488	0.575	0.675
Waste Biomass (c)	0.070	0.066	0.068	0.068	0.081	0.074	0.077	0.077	0.075	0.075	0.078	0.077	0.272	0.309	0.306
Wood Biomass	0.061	0.059	0.064	0.063	0.061	0.055	0.066	0.059	0.059	0.057	0.068	0.062	0.247	0.241	0.247
Wind	0.644	0.634	0.429	0.660	0.727	0.664	0.475	0.669	0.692	0.710	0.509	0.730	2.367	2.534	2.641
Subtotal	1.654	1.794	1.352	1.475	1.729	1.781	1.423	1.507	1.612	1.832	1.521	1.601	6.276	6.439	6.566
Industrial Sector															
Biofuel Losses and Co-products (d)	0.203	0.199	0.204	0.211	0.207	0.203	0.206	0.205	0.201	0.205	0.208	0.209	0.817	0.821	0.824
Geothermal	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.004	0.004
Hydroelectric Power (a)	0.003	0.004	0.003	0.003	0.003	0.004	0.003	0.003	0.003	0.004	0.003	0.003	0.013	0.013	0.013
Solar (b)	0.005	0.007	0.007	0.005	0.006	0.008	0.008	0.006	0.006	0.009	0.009	0.007	0.024	0.028	0.032
Waste Biomass (c)	0.044	0.040	0.038	0.044	0.043	0.043	0.044	0.048	0.048	0.045	0.045	0.048	0.165	0.178	0.186
Wood Biomass	0.370	0.361	0.375	0.374	0.366	0.355	0.360	0.361	0.349	0.346	0.358	0.360	1.480	1.442	1.413
Subtotal	0.625	0.609	0.625	0.638	0.625	0.611	0.619	0.622	0.607	0.606	0.620	0.626	2.498	2.476	2.459
Commercial Sector															
Geothermal	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.020	0.020	0.020
Solar (b)	0.015	0.023	0.023	0.016	0.019	0.028	0.029	0.021	0.024	0.035	0.035	0.025	0.077	0.097	0.119
Waste Biomass (c)	0.012	0.011	0.011	0.011	0.011	0.036	0.044	0.052	0.060	0.049	0.053	0.055	0.045	0.143	0.217
Wood Biomass	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.084	0.084	0.084
Subtotal	0.059	0.067	0.068	0.061	0.063	0.097	0.106	0.106	0.116	0.117	0.122	0.113	0.254	0.372	0.468
Residential Sector															
Geothermal	0.010	0.010	0.010	0.010	0.011	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.040	0.050	0.053
Solar (e)	0.036	0.057	0.058	0.040	0.043	0.066	0.069	0.048	0.051	0.079	0.081	0.057	0.191	0.227	0.269
Wood Biomass	0.082	0.083	0.084	0.084	0.097	0.103	0.104	0.104	0.105	0.105	0.105	0.105	0.334	0.408	0.420
Subtotal	0.128	0.150	0.152	0.134	0.151	0.182	0.186	0.165	0.169	0.197	0.200	0.175	0.565	0.685	0.742
Transportation Sector															
Biomass-based Diesel (f)	0.054	0.079	0.080	0.066	0.057	0.080	0.092	0.095	0.069	0.088	0.100	0.104	0.279	0.323	0.361
Ethanol (f)	0.270	0.290	0.293	0.291	0.272	0.295	0.300	0.291	0.276	0.297	0.302	0.295	1.145	1.158	1.171
Subtotal	0.324	0.370	0.373	0.357	0.330	0.375	0.392	0.386	0.345	0.385	0.402	0.399	1.423	1.483	1.531
All Sectors Total															
Biomass-based Diesel (f)	0.054	0.079	0.080	0.066	0.057	0.080	0.092	0.095	0.069	0.088	0.100	0.104	0.279	0.323	0.361
Biofuel Losses and Co-products (d)	0.203	0.199	0.204	0.211	0.207	0.203	0.206	0.205	0.201	0.205	0.208	0.209	0.817	0.821	0.824
Ethanol (f)	0.281	0.301	0.304	0.302	0.283	0.308	0.312	0.302	0.287	0.309	0.313	0.307	1.189	1.205	1.215
Geothermal	0.053	0.052	0.053	0.053	0.055	0.056	0.057	0.058	0.057	0.057	0.057	0.058	0.211	0.225	0.229
Hydroelectric Power (a)	0.763	0.849	0.609	0.550	0.712	0.780	0.598	0.555	0.637	0.750	0.620	0.552	2.770	2.645	2.559
Solar (b)(e)	0.138	0.240	0.235	0.161	0.184	0.278	0.279	0.188	0.196	0.329	0.338	0.234	0.774	0.928	1.095
Waste Biomass (c)	0.126	0.117	0.117	0.122	0.125	0.153	0.164	0.177	0.183	0.170	0.176	0.180	0.482	0.619	0.709
Wood Biomass	0.534	0.524	0.543	0.543	0.546	0.534	0.551	0.545	0.534	0.529	0.552	0.548	2.145	2.175	2.164
Wind	0.644	0.634	0.429	0.660	0.727	0.664	0.475	0.669	0.692	0.710	0.509	0.730	2.367	2.534	2.641
Total Consumption	2.791	2.990	2.571	2.665	2.874	3.045	2.725	2.786	2.849	3.138	2.864	2.914	11.016	11.431	11.766

- = 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 - June 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	7,233	7,269	7,325	7,318	7,294	7,331	7,330	7,363	7,526	7,526	7,526	7,526	7,318	7,363	7,526
Waste	4,202	4,238	4,241	4,239	4,215	4,252	4,251	4,284	4,288	4,288	4,288	4,288	4,239	4,284	4,288
Wood	3,031	3,031	3,085	3,079	3,079	3,079	3,079	3,079	3,238	3,238	3,238	3,238	3,079	3,079	3,238
Conventional Hydroelectric	79,487	79,494	79,595	79,592	79,604	79,613	79,746	79,765	79,796	79,824	79,779	79,813	79,592	79,765	79,813
Geothermal	2,449	2,449	2,449	2,486	2,502	2,502	2,502	2,502	2,510	2,510	2,510	2,545	2,486	2,502	2,545
Large-Scale Solar (b)	22,593	23,626	24,140	26,503	27,806	28,826	29,365	31,749	33,455	35,312	36,602	43,308	26,503	31,749	43,308
Wind	82,915	83,374	84,105	87,491	88,522	89,210	89,930	94,138	95,013	95,585	96,744	104,296	87,491	94,138	104,296
Other Sectors (c)															
Biomass	6,693	6,700	6,699	6,688	6,682	6,662	6,671	6,672	6,672	6,649	6,649	6,663	6,688	6,672	6,663
Waste	885	889	889	878	878	877	877	877	877	879	879	893	878	877	893
Wood	5,808	5,811	5,811	5,811	5,805	5,786	5,794	5,795	5,795	5,771	5,771	5,771	5,811	5,795	5,771
Conventional Hydroelectric	357	357	357	357	357	357	357	364	364	364	364	364	357	364	364
Large-Scale Solar (b)	322	340	340	348	348	356	356	355	355	355	355	355	348	355	355
Small-Scale Solar (d)	13,722	14,543	15,341	16,224	16,972	18,067	19,057	20,097	21,098	22,174	23,321	24,526	16,224	20,097	24,526
Residential Sector	8,124	8,618	9,105	9,574	10,170	10,776	11,399	12,039	12,699	13,385	14,092	14,821	9,574	12,039	14,821
Commercial Sector	4,286	4,555	4,797	5,146	5,290	5,706	6,011	6,346	6,629	6,955	7,326	7,730	5,146	6,346	7,730
Industrial Sector	1,312	1,370	1,438	1,504	1,512	1,586	1,647	1,712	1,770	1,834	1,903	1,975	1,504	1,712	1,975
Wind	94	93	93	97	100	104	104	104	104	104	104	104	97	104	104
Renewable Electricity Generation (thousand megawatthours per day)															
Electric Power Sector (a)															
Biomass	90	86	90	90	92	87	95	90	90	89	97	92	89	91	92
Waste	49	47	47	47	49	50	51	50	49	50	51	50	48	50	50
Wood	41	39	43	43	43	37	44	40	41	39	46	42	41	41	42
Conventional Hydroelectric	913	1,005	713	643	850	915	693	643	755	879	719	640	818	774	748
Geothermal	45	43	44	43	45	44	45	45	46	45	45	46	44	45	45
Large-Scale Solar (b)	100	182	173	118	136	206	202	131	136	243	246	168	143	169	199
Wind	767	748	501	770	866	783	554	780	825	837	594	852	696	745	776
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	1	2	3	2	3	3	3	3	2	2	3
Small-Scale Solar (d)	51	79	80	55	65	97	99	70	80	120	121	86	66	83	102
Residential Sector	29	46	46	31	37	56	58	41	47	71	72	51	38	48	60
Commercial Sector	17	25	25	18	21	31	31	22	26	38	38	27	21	26	32
Industrial Sector	5	8	8	6	6	9	9	7	7	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 - June 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	17,286	17,386	<i>17,508</i>	<i>17,634</i>	<i>17,763</i>	<i>17,883</i>	<i>17,986</i>	<i>18,081</i>	<i>18,175</i>	17,096	<i>17,573</i>	<i>18,032</i>
Real Personal Consumption Expend. (billion chained 2009 dollars - SAAR)	11,758	11,853	11,917	12,035	12,067	<i>12,143</i>	<i>12,206</i>	<i>12,272</i>	<i>12,334</i>	<i>12,396</i>	<i>12,465</i>	<i>12,542</i>	11,891	<i>12,172</i>	<i>12,434</i>
Real Fixed Investment (billion chained 2009 dollars - SAAR)	2,876	2,898	2,916	2,974	3,007	<i>3,039</i>	<i>3,082</i>	<i>3,121</i>	<i>3,164</i>	<i>3,201</i>	<i>3,235</i>	<i>3,266</i>	2,916	<i>3,062</i>	<i>3,217</i>
Business Inventory Change (billion chained 2009 dollars - SAAR)	0	5	42	16	37	<i>51</i>	<i>58</i>	<i>69</i>	<i>83</i>	<i>90</i>	<i>90</i>	<i>88</i>	16	<i>54</i>	<i>88</i>
Real Government Expenditures (billion chained 2009 dollars - SAAR)	2,897	2,895	2,900	2,922	2,930	<i>2,945</i>	<i>2,966</i>	<i>2,993</i>	<i>3,012</i>	<i>3,024</i>	<i>3,032</i>	<i>3,035</i>	2,903	<i>2,958</i>	<i>3,026</i>
Real Exports of Goods & Services (billion chained 2009 dollars - SAAR)	2,162	2,181	2,192	2,230	2,256	<i>2,289</i>	<i>2,327</i>	<i>2,368</i>	<i>2,402</i>	<i>2,441</i>	<i>2,484</i>	<i>2,531</i>	2,191	<i>2,310</i>	<i>2,465</i>
Real Imports of Goods & Services (billion chained 2009 dollars - SAAR)	2,785	2,795	2,790	2,884	2,902	<i>2,947</i>	<i>2,993</i>	<i>3,045</i>	<i>3,096</i>	<i>3,152</i>	<i>3,212</i>	<i>3,277</i>	2,813	<i>2,972</i>	<i>3,185</i>
Real Disposable Personal Income (billion chained 2009 dollars - SAAR)	12,680	12,766	12,788	12,822	12,931	<i>12,992</i>	<i>13,031</i>	<i>13,135</i>	<i>13,275</i>	<i>13,369</i>	<i>13,462</i>	<i>13,561</i>	12,764	<i>13,022</i>	<i>13,417</i>
Non-Farm Employment (millions)	145.9	146.3	146.9	147.4	148.1	<i>148.6</i>	<i>149.3</i>	<i>149.9</i>	<i>150.4</i>	<i>150.9</i>	<i>151.2</i>	<i>151.4</i>	146.6	<i>149.0</i>	<i>151.0</i>
Civilian Unemployment Rate (percent)	4.7	4.3	4.3	4.1	4.1	<i>3.9</i>	<i>3.8</i>	<i>3.7</i>	<i>3.6</i>	<i>3.5</i>	<i>3.6</i>	<i>3.7</i>	4.4	<i>3.9</i>	<i>3.6</i>
Housing Starts (millions - SAAR)	1.23	1.17	1.17	1.26	1.32	<i>1.31</i>	<i>1.34</i>	<i>1.37</i>	<i>1.38</i>	<i>1.38</i>	<i>1.40</i>	<i>1.40</i>	1.21	<i>1.33</i>	<i>1.39</i>
Industrial Production Indices (Index, 2012=100)															
Total Industrial Production	102.5	103.7	103.3	105.3	105.9	<i>107.0</i>	<i>107.2</i>	<i>108.2</i>	<i>109.1</i>	<i>109.9</i>	<i>110.6</i>	<i>111.3</i>	103.7	<i>107.1</i>	<i>110.2</i>
Manufacturing	102.0	102.7	102.2	103.6	104.0	<i>104.8</i>	<i>105.1</i>	<i>106.1</i>	<i>106.9</i>	<i>107.5</i>	<i>108.1</i>	<i>108.8</i>	102.6	<i>105.0</i>	<i>107.8</i>
Food	109.2	110.1	112.1	112.5	114.1	<i>114.4</i>	<i>114.5</i>	<i>115.0</i>	<i>115.5</i>	<i>116.1</i>	<i>116.6</i>	<i>117.1</i>	111.0	<i>114.5</i>	<i>116.3</i>
Paper	97.8	96.9	96.4	96.1	95.5	<i>95.6</i>	<i>95.5</i>	<i>95.5</i>	<i>95.4</i>	<i>95.4</i>	<i>95.4</i>	<i>95.7</i>	96.8	<i>95.5</i>	<i>95.5</i>
Petroleum and Coal Products	105.5	108.9	104.7	107.4	106.3	<i>107.1</i>	<i>107.5</i>	<i>107.9</i>	<i>108.2</i>	<i>108.5</i>	<i>108.9</i>	<i>109.4</i>	106.6	<i>107.2</i>	<i>108.8</i>
Chemicals	94.2	95.9	94.7	97.7	96.8	<i>98.2</i>	<i>98.7</i>	<i>99.6</i>	<i>100.4</i>	<i>101.2</i>	<i>102.0</i>	<i>103.0</i>	95.6	<i>98.3</i>	<i>101.6</i>
Nonmetallic Mineral Products	114.0	113.2	113.6	117.1	119.5	<i>121.3</i>	<i>121.8</i>	<i>122.6</i>	<i>123.6</i>	<i>124.5</i>	<i>125.4</i>	<i>126.5</i>	114.5	<i>121.3</i>	<i>125.0</i>
Primary Metals	94.0	92.9	93.6	95.2	95.9	<i>97.4</i>	<i>98.3</i>	<i>98.9</i>	<i>98.9</i>	<i>99.0</i>	<i>99.3</i>	<i>99.9</i>	93.9	<i>97.6</i>	<i>99.3</i>
Coal-weighted Manufacturing (a)	101.7	102.1	101.1	103.3	103.4	<i>104.4</i>	<i>105.0</i>	<i>105.6</i>	<i>106.0</i>	<i>106.6</i>	<i>107.2</i>	<i>108.0</i>	102.0	<i>104.6</i>	<i>106.9</i>
Distillate-weighted Manufacturing (a)	107.8	108.2	108.2	110.1	111.0	<i>111.9</i>	<i>112.5</i>	<i>113.2</i>	<i>113.7</i>	<i>114.3</i>	<i>114.9</i>	<i>115.7</i>	108.6	<i>112.1</i>	<i>114.7</i>
Electricity-weighted Manufacturing (a)	102.1	102.8	101.9	103.9	104.0	<i>105.0</i>	<i>105.6</i>	<i>106.4</i>	<i>107.0</i>	<i>107.6</i>	<i>108.4</i>	<i>109.3</i>	102.7	<i>105.3</i>	<i>108.1</i>
Natural Gas-weighted Manufacturing (a) ...	101.7	103.5	101.6	104.5	103.6	<i>104.7</i>	<i>105.3</i>	<i>106.2</i>	<i>106.9</i>	<i>107.6</i>	<i>108.5</i>	<i>109.6</i>	102.9	<i>104.9</i>	<i>108.1</i>
Price Indexes															
Consumer Price Index (all urban consumers) (index, 1982-1984=1.00)	2.44	2.44	2.45	2.47	2.49	<i>2.51</i>	<i>2.53</i>	<i>2.54</i>	<i>2.55</i>	<i>2.56</i>	<i>2.58</i>	<i>2.59</i>	2.45	<i>2.52</i>	<i>2.57</i>
Producer Price Index: All Commodities (index, 1982=1.00)	1.93	1.92	1.92	1.97	2.01	<i>2.03</i>	<i>2.04</i>	<i>2.05</i>	<i>2.05</i>	<i>2.06</i>	<i>2.07</i>	<i>2.08</i>	1.94	<i>2.03</i>	<i>2.06</i>
Producer Price Index: Petroleum (index, 1982=1.00)	1.66	1.67	1.75	1.91	2.00	<i>2.17</i>	<i>2.16</i>	<i>2.08</i>	<i>2.03</i>	<i>2.09</i>	<i>2.08</i>	<i>2.01</i>	1.75	<i>2.10</i>	<i>2.05</i>
GDP Implicit Price Deflator (index, 2009=100)	112.8	113.0	113.6	114.3	114.8	<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>119.7</i>	113.4	<i>115.8</i>	<i>118.7</i>
Miscellaneous															
Vehicle Miles Traveled (b) (million miles/day)	8,210	9,202	9,057	8,730	8,238	<i>9,318</i>	<i>9,173</i>	<i>8,846</i>	<i>8,462</i>	<i>9,428</i>	<i>9,286</i>	<i>8,967</i>	8,802	<i>8,896</i>	<i>9,038</i>
Air Travel Capacity (Available ton-miles/day, thousands)	567	619	661	631	602	<i>577</i>	<i>611</i>	<i>627</i>	<i>624</i>	<i>577</i>	<i>609</i>	<i>628</i>	620	<i>604</i>	<i>609</i>
Aircraft Utilization (Revenue ton-miles/day, thousands)	344	390	398	382	366	<i>371</i>	<i>370</i>	<i>393</i>	<i>390</i>	<i>367</i>	<i>371</i>	<i>396</i>	378	<i>375</i>	<i>381</i>
Airline Ticket Price Index (index, 1982-1984=100)	277.8	297.0	264.9	263.4	262.8	<i>291.6</i>	<i>285.8</i>	<i>306.6</i>	<i>327.7</i>	<i>346.6</i>	<i>310.2</i>	<i>322.1</i>	275.8	<i>286.7</i>	<i>326.7</i>
Raw Steel Production (million short tons per day)	0.248	0.247	0.250	0.245	0.251	<i>0.253</i>	<i>0.237</i>	<i>0.207</i>	<i>0.261</i>	<i>0.258</i>	<i>0.239</i>	<i>0.207</i>	0.248	<i>0.237</i>	<i>0.241</i>
Carbon Dioxide (CO₂) Emissions (million metric tons)															
Petroleum	565	588	593	592	575	<i>586</i>	<i>598</i>	<i>594</i>	<i>580</i>	<i>591</i>	<i>605</i>	<i>603</i>	2,338	<i>2,353</i>	<i>2,380</i>
Natural Gas	422	311	334	405	473	<i>346</i>	<i>347</i>	<i>410</i>	<i>466</i>	<i>338</i>	<i>355</i>	<i>416</i>	1,472	<i>1,576</i>	<i>1,575</i>
Coal	319	307	375	317	310	<i>283</i>	<i>359</i>	<i>305</i>	<i>318</i>	<i>274</i>	<i>349</i>	<i>299</i>	1,318	<i>1,257</i>	<i>1,240</i>
Total Energy (c)	1,309	1,209	1,305	1,318	1,361	<i>1,217</i>	<i>1,307</i>	<i>1,312</i>	<i>1,367</i>	<i>1,206</i>	<i>1,312</i>	<i>1,321</i>	5,140	<i>5,198</i>	<i>5,207</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 - June 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	889	892	903	909	913	919	924	929	934	938	942	947	898	921	940
Middle Atlantic	2,492	2,499	2,519	2,527	2,539	2,553	2,568	2,582	2,594	2,605	2,615	2,627	2,509	2,561	2,610
E. N. Central	2,317	2,324	2,346	2,362	2,373	2,385	2,399	2,414	2,428	2,438	2,448	2,458	2,337	2,393	2,443
W. N. Central	1,078	1,089	1,084	1,088	1,092	1,098	1,104	1,112	1,117	1,122	1,127	1,132	1,085	1,102	1,125
S. Atlantic	3,007	3,020	3,047	3,069	3,089	3,111	3,135	3,159	3,183	3,201	3,218	3,234	3,036	3,124	3,209
E. S. Central	759	762	767	773	776	781	786	791	796	800	804	808	765	784	802
W. S. Central	2,019	2,040	2,052	2,076	2,093	2,114	2,135	2,156	2,176	2,192	2,208	2,221	2,047	2,125	2,199
Mountain	1,082	1,092	1,110	1,118	1,127	1,136	1,146	1,156	1,166	1,175	1,182	1,190	1,101	1,141	1,178
Pacific	3,157	3,209	3,229	3,258	3,277	3,302	3,327	3,354	3,379	3,404	3,424	3,446	3,213	3,315	3,413
Industrial Output, Manufacturing (Index, Year 2012=100)															
New England	96.8	97.2	96.8	98.5	98.2	98.9	98.9	99.6	100.1	100.5	100.9	101.3	97.3	98.9	100.7
Middle Atlantic	97.0	97.5	96.9	97.5	97.5	98.1	98.3	99.1	99.7	100.0	100.5	100.9	97.2	98.3	100.3
E. N. Central	104.3	105.2	104.4	106.0	105.9	106.8	107.2	108.3	109.2	109.9	110.5	111.2	105.0	107.1	110.2
W. N. Central	101.1	101.8	101.5	103.0	103.7	104.5	104.8	105.8	106.6	107.3	107.9	108.6	101.8	104.7	107.6
S. Atlantic	105.6	106.4	105.8	107.1	107.7	108.4	108.6	109.6	110.3	110.9	111.4	112.1	106.2	108.6	111.2
E. S. Central	107.8	108.3	107.4	108.5	108.7	109.6	109.9	111.0	111.9	112.5	113.2	113.9	108.0	109.8	112.9
W. S. Central	95.1	96.0	95.9	96.8	97.3	98.3	98.8	100.0	100.9	101.7	102.4	103.1	95.9	98.6	102.0
Mountain	106.5	107.8	108.1	110.0	111.3	112.1	112.4	113.5	114.4	115.1	115.8	116.6	108.1	112.3	115.4
Pacific	102.2	102.7	101.7	103.0	103.9	104.7	105.0	106.1	106.8	107.4	108.0	108.6	102.4	104.9	107.7
Real Personal Income (Billion \$2009)															
New England	774	776	782	786	789	792	794	800	807	812	816	821	779	794	814
Middle Atlantic	1,965	1,977	1,986	1,993	1,999	2,007	2,012	2,024	2,042	2,052	2,063	2,075	1,980	2,010	2,058
E. N. Central	2,106	2,109	2,121	2,130	2,140	2,148	2,154	2,168	2,188	2,200	2,212	2,226	2,117	2,153	2,207
W. N. Central	990	994	989	992	996	1,001	1,004	1,012	1,021	1,029	1,037	1,046	991	1,003	1,034
S. Atlantic	2,775	2,786	2,798	2,811	2,824	2,839	2,850	2,873	2,905	2,926	2,947	2,970	2,793	2,847	2,937
E. S. Central	778	780	781	785	787	790	792	798	806	811	816	821	781	792	814
W. S. Central	1,703	1,712	1,716	1,725	1,735	1,746	1,755	1,772	1,794	1,810	1,825	1,842	1,714	1,752	1,818
Mountain	976	980	991	997	1,002	1,009	1,013	1,023	1,035	1,044	1,052	1,061	986	1,012	1,048
Pacific	2,396	2,424	2,433	2,445	2,454	2,467	2,476	2,498	2,523	2,542	2,560	2,580	2,425	2,474	2,551
Households (Thousands)															
New England	5,859	5,868	5,888	5,896	5,905	5,914	5,922	5,930	5,939	5,948	5,957	5,966	5,896	5,930	5,966
Middle Atlantic	15,899	15,915	15,967	15,982	16,002	16,021	16,040	16,059	16,079	16,098	16,117	16,140	15,982	16,059	16,140
E. N. Central	18,823	18,840	18,900	18,917	18,943	18,973	18,998	19,023	19,044	19,069	19,096	19,127	18,917	19,023	19,127
W. N. Central	8,518	8,536	8,574	8,594	8,620	8,646	8,667	8,688	8,708	8,728	8,749	8,771	8,594	8,688	8,771
S. Atlantic	25,184	25,275	25,434	25,530	25,632	25,734	25,827	25,919	26,013	26,103	26,191	26,283	25,530	25,919	26,283
E. S. Central	7,602	7,617	7,649	7,665	7,685	7,705	7,722	7,739	7,757	7,776	7,794	7,814	7,665	7,739	7,814
W. S. Central	14,579	14,625	14,704	14,749	14,800	14,852	14,906	14,962	15,019	15,077	15,134	15,194	14,749	14,962	15,194
Mountain	9,036	9,074	9,132	9,172	9,216	9,261	9,303	9,344	9,385	9,426	9,466	9,508	9,172	9,344	9,508
Pacific	18,697	18,753	18,846	18,896	18,953	19,010	19,066	19,117	19,172	19,226	19,280	19,336	18,896	19,117	19,336
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	7.5	7.5	7.4	7.5	7.5
Middle Atlantic	19.5	19.5	19.6	19.7	19.7	19.8	19.8	19.9	19.9	20.0	20.0	20.0	19.6	19.8	20.0
E. N. Central	21.9	22.0	22.0	22.0	22.1	22.2	22.2	22.3	22.4	22.4	22.4	22.5	22.0	22.2	22.4
W. N. Central	10.6	10.6	10.7	10.7	10.7	10.7	10.8	10.8	10.8	10.8	10.9	10.9	10.6	10.7	10.9
S. Atlantic	28.0	28.1	28.2	28.3	28.4	28.6	28.7	28.8	29.0	29.1	29.1	29.2	28.2	28.6	29.1
E. S. Central	8.1	8.1	8.1	8.1	8.1	8.2	8.2	8.2	8.3	8.3	8.3	8.3	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	17.7	17.8	17.9	17.1	17.4	17.8
Mountain	10.4	10.5	10.6	10.6	10.7	10.8	10.8	10.9	10.9	11.0	11.0	11.1	10.5	10.8	11.0
Pacific	22.8	22.9	23.0	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.8	23.9	23.0	23.4	23.8

- = 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 - June 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	2,984	804	93	2,170	3,058	962	130	2,161	3,152	858	131	2,161	6,052	6,311	6,301
Middle Atlantic	2,657	600	73	2,000	2,940	778	84	1,987	2,934	683	86	1,987	5,330	5,789	5,691
E. N. Central	2,691	628	105	2,263	3,210	904	130	2,228	3,142	727	130	2,228	5,688	6,472	6,227
W. N. Central	2,812	661	137	2,385	3,419	912	163	2,402	3,227	701	163	2,403	5,996	6,896	6,493
South Atlantic	1,148	125	15	946	1,444	220	14	1,000	1,460	192	14	999	2,234	2,678	2,665
E. S. Central	1,376	154	24	1,280	1,814	342	21	1,329	1,856	241	21	1,329	2,835	3,506	3,447
W. S. Central	776	66	4	741	1,195	164	4	814	1,187	83	4	813	1,586	2,177	2,088
Mountain	2,057	698	154	1,666	2,124	593	142	1,821	2,179	683	142	1,821	4,575	4,680	4,825
Pacific	1,559	532	68	1,029	1,438	504	88	1,197	1,486	584	89	1,198	3,187	3,227	3,356
U.S. Average	1,858	428	65	1,480	2,130	542	75	1,534	2,126	484	76	1,532	3,831	4,282	4,218
Heating Degree Days, Prior 10-year Average															
New England	3,201	831	122	2,125	3,172	818	119	2,121	3,166	826	117	2,108	6,279	6,230	6,218
Middle Atlantic	2,983	661	81	1,941	2,947	646	81	1,949	2,956	653	80	1,934	5,665	5,623	5,623
E. N. Central	3,255	701	114	2,198	3,209	692	116	2,211	3,196	705	119	2,188	6,267	6,228	6,208
W. N. Central	3,302	707	142	2,380	3,264	705	144	2,379	3,255	711	144	2,360	6,531	6,492	6,470
South Atlantic	1,502	188	12	966	1,476	177	12	974	1,480	177	13	967	2,667	2,639	2,636
E. S. Central	1,906	231	16	1,287	1,868	217	18	1,301	1,862	223	19	1,291	3,440	3,404	3,395
W. S. Central	1,228	88	4	799	1,182	80	4	801	1,184	87	4	798	2,119	2,067	2,072
Mountain	2,216	734	142	1,862	2,195	737	144	1,842	2,165	714	141	1,842	4,954	4,917	4,862
Pacific	1,462	598	89	1,205	1,465	593	84	1,181	1,444	578	83	1,183	3,354	3,322	3,288
U.S. Average	2,193	487	71	1,527	2,160	478	71	1,524	2,151	478	71	1,513	4,277	4,233	4,212
Cooling Degree Days															
New England	0	74	363	11	0	101	407	1	0	86	404	1	448	509	492
Middle Atlantic	0	139	501	22	0	180	523	4	0	154	523	4	662	708	682
E. N. Central	1	210	480	15	0	242	518	6	0	217	520	6	707	766	744
W. N. Central	9	265	624	14	2	336	654	10	3	265	659	10	911	1,002	936
South Atlantic	158	670	1,156	262	135	702	1,140	222	111	644	1,145	222	2,247	2,199	2,123
E. S. Central	65	481	964	73	37	547	1,025	62	26	519	1,033	62	1,583	1,671	1,640
W. S. Central	212	826	1,459	216	124	838	1,498	197	83	864	1,519	198	2,713	2,658	2,664
Mountain	36	466	918	121	21	461	936	75	18	424	933	76	1,541	1,493	1,450
Pacific	30	219	700	98	31	160	581	58	28	167	574	58	1,047	831	827
U.S. Average	70	402	838	114	51	420	839	89	40	397	843	90	1,424	1,399	1,370
Cooling Degree Days, Prior 10-year Average															
New England	0	81	433	1	0	81	433	1	0	81	437	1	515	515	520
Middle Atlantic	0	169	566	6	0	166	567	5	0	166	571	6	741	738	742
E. N. Central	3	234	542	8	3	228	533	7	3	233	536	7	788	770	779
W. N. Central	7	281	672	12	7	277	659	11	7	288	665	12	973	954	972
South Atlantic	117	666	1,167	230	119	675	1,161	227	120	682	1,167	233	2,179	2,182	2,202
E. S. Central	33	544	1,056	65	34	539	1,031	63	36	544	1,035	65	1,698	1,667	1,680
W. S. Central	90	876	1,528	205	100	887	1,532	203	103	880	1,546	208	2,698	2,722	2,737
Mountain	23	424	930	81	24	426	922	84	25	433	926	83	1,458	1,456	1,467
Pacific	30	180	608	74	30	185	621	78	31	183	617	75	892	914	905
U.S. Average	43	405	857	94	45	408	855	94	46	411	861	96	1,399	1,402	1,414

- = 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 to the June 2018 Short-Term Energy Outlook

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 the views 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](#).

This appendix is published in the *Short-Term Energy Outlook* in even numbered months.

Table a1. Summary of Estimated Petroleum and Other Liquids Quantities

	April 2018	May 2018	April-May 2018 Average	April-May 2017 Average	2015 – 2017 Average
Global Petroleum and Other Liquids (million barrels per day)					
Global Petroleum and Other Liquids Production (a)	99.6	100.2	99.9	97.2	97.3
Global Petroleum and Other Liquids Consumption (b)	99.4	99.2	99.3	97.5	96.9
Biofuels Production (c)	2.3	2.3	2.3	2.1	2.1
Biofuels Consumption (c)	2.1	2.2	2.1	2.1	2.1
Iran Liquid Fuels Production	4.7	4.7	4.7	4.8	4.1
Iran Liquid Fuels Consumption	1.8	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)	92.6	93.2	92.9	90.3	91.1
Consumption (d)	95.5	95.2	95.4	93.6	93.0
Production minus Consumption	-2.9	-2.0	-2.5	-3.3	-1.9
World Inventory Net Withdrawals Including Iran	-0.3	-1.0	-0.6	0.3	-0.4
Estimated OECD Inventory Level (e) (million barrels)	2,815	2,840	2,828	3,048	2,968
OPEC Surplus Crude Oil Production Capacity (f)	2.0	1.9	2.0	2.2	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	April 2018	May 2018	April-May 2018 Average	April-May 2017 Average	2015 – 2017 Average
Brent Front Month Futures Price (\$ per barrel)	71.76	77.01	74.45	52.52	51.16
WTI Front Month Futures Price (\$ per barrel)	66.33	69.98	68.20	49.74	47.69
Dubai Front Month Futures Price (\$ per barrel)	68.49	74.60	71.62	51.43	48.82
Brent 1st - 13th Month Futures Spread (\$ per barrel)	5.56	4.92	5.23	-0.95	-3.90
WTI 1st - 13th Month Futures Spread (\$ per barrel)	5.50	5.39	5.44	-1.45	-4.26
RBOB Front Month Futures Price (\$ per gallon)	2.05	2.18	2.12	1.63	1.55
Heating Oil Front Month Futures Price (\$ per gallon)	2.07	2.22	2.15	1.55	1.56
RBOB - Brent Futures Crack Spread (\$ per gallon)	0.34	0.35	0.34	0.38	0.34
Heating Oil - Brent Futures Crack Spread (\$ per gallon)	0.37	0.38	0.37	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).