Independent Statistics & Analysis
U.S. Energy Information Administration

June 2017

Short-Term Energy Outlook (STEO)

Forecast highlights

Global liquid fuels

- North Sea Brent crude oil spot prices averaged $50 per barrel (b) in May, $2/b lower than the April average. EIA forecasts Brent spot prices to average $53/b in 2017 and $56/b in 2018. West Texas Intermediate (WTI) crude oil prices are forecast to average $2/b less than Brent prices in both 2017 and 2018. NYMEX contract values for September 2017 delivery that traded during the five-day period ending June 1 suggest that a range of $39/b to $64/b encompasses the market expectation for WTI prices in September 2017 at the 95% confidence level.

- The Organization of the Petroleum Exporting Countries (OPEC) met on May 25 and announced an extension to voluntary production cuts through March 2018 that were originally set to end in June 2017. EIA forecasts OPEC crude oil production will average 32.3 million barrels per day (b/d) in 2017 and 32.8 million b/d in 2018.

- EIA forecasts that implied global petroleum and liquid fuels inventories will decline by about 0.2 million b/d in 2017 and then increase by an average of 0.1 million b/d in 2018.

- U.S. crude oil production averaged an estimated 8.9 million b/d in 2016. U.S. crude oil production is forecast to average 9.3 million b/d in 2017 and 10.0 million b/d in 2018. The 2018 forecast exceeds the previous record level of 9.6 million b/d set in 1970.

- For the 2017 summer driving season (April–September), U.S. regular gasoline retail prices are forecast to average $2.46/gallon (gal), compared with $2.23/gal last summer. The higher forecast gasoline price is primarily the result of a higher forecast crude oil price. The forecast annual average price for regular gasoline in 2017 is $2.38/gal.

Natural gas

- U.S. dry natural gas production is forecast to average 73.3 billion cubic feet per day (Bcf/d) in 2017, a 1.0 Bcf/d increase from the 2016 level. This forecast increase would reverse a 2016 production decline, which was the first annual decline since 2005. Natural gas production in 2018 is forecast to be 3.3 Bcf/d above the 2017 level.

- In May, the average Henry Hub natural gas spot price was $3.15 per million British thermal units (MMBtu), 5 cents/MMBtu higher than in April. New natural gas export

capabilities and growing domestic natural gas consumption contribute to the forecast Henry Hub natural gas spot price rising from an average of $3.16/MMBtu in 2017 to $3.41/MMBtu in 2018. NYMEX contract values for September 2017 delivery that traded during the five-day period ending June 1 suggest that a range of $2.30/MMBtu to $4.41/MMBtu encompasses the market expectation for Henry Hub natural gas prices in September 2017 at the 95% confidence level.

Electricity, coal, renewables, and emissions

- Electricity generation from utility-scale plants was 11,150 gigawatthours per day in 2016. Warmer-than-normal temperatures in the first quarter of 2017 contributed to a 1.2% year-over-year decline in generation during that time. Forecast cooler summer temperatures compared with last year contribute to an expected 3.3% year-over-year decline in generation in the third quarter of 2017. Overall, forecast generation falls by 1.2% in 2017 and then grows by 1.6% in 2018.

- EIA expects the share of U.S. total utility-scale electricity generation from natural gas to fall from an average of 34% in 2016 to less than 32% in both 2017 and 2018 as a result of higher expected natural gas prices. Coal's forecast generation share rises from 30% in 2016 to 31% in 2017 and 2018. Nonhydropower renewables are forecast to provide 9% of electricity generation in 2017 and nearly 10% in 2018. The generation share of hydropower is forecast to be nearly 8% in 2017 and 7% in 2018. The nuclear share of generation remains just under 20% in both 2017 and 2018.

- Coal exports for the first quarter of 2017 were 58% higher than in the same quarter last year, with steam coal exports increasing by 6 million short tons (MMst). Coal producers that have completed bankruptcy reorganizations and companies that purchased bankrupt assets have increased both exports and production in 2017. EIA expects growth in coal exports to slow in the coming months, with exports for all of 2017 forecast at 72 MMst, 11 MMst (19%) above the 2016 level. The increase in coal exports contributes to an expected 8% increase in coal production in 2017.

- Wind electricity generating capacity at the end of 2016 was 81 gigawatts (GW). EIA expects wind capacity additions in the forecast will bring total wind capacity to 88 GW by the end of 2017 and 102 GW by the end of 2018.

- Total utility-scale solar electricity generating capacity at the 2016 was 21 GW. EIA expects solar capacity additions in the forecast will bring total utility-scale solar capacity to 29 GW by the end of 2017 and 32 GW by the end of 2018.

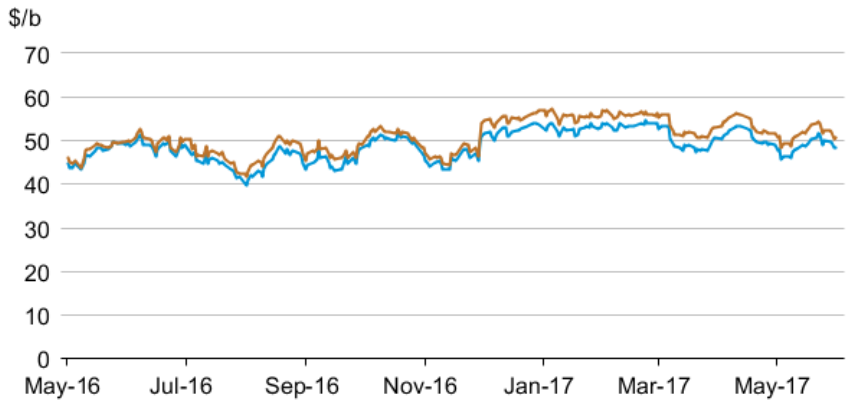
- After declining by 1.7% in 2016, energy-related carbon dioxide (CO2) emissions are projected to decrease by 0.7% in 2017 and then increase by 2.2% in 2018. Energy-related CO2 emissions are sensitive to changes in weather, economic growth, and energy prices.

Petroleum and natural gas markets review

Crude oil

Prices: Brent front-month crude oil prices declined by 89 cents per barrel (b) since May 1, settling at $50.63/b on June 1. The West Texas Intermediate (WTI) front-month crude oil price declined by 48 cents/b during the same period, settling at $48.36/b on June 1 **(Figure 1)**. May Brent and WTI monthly average spot prices were $1.98/b and $2.54/b lower, respectively, than the April averages.

Figure 1. Crude oil front-month futures prices



eia Bloomberg L.P.

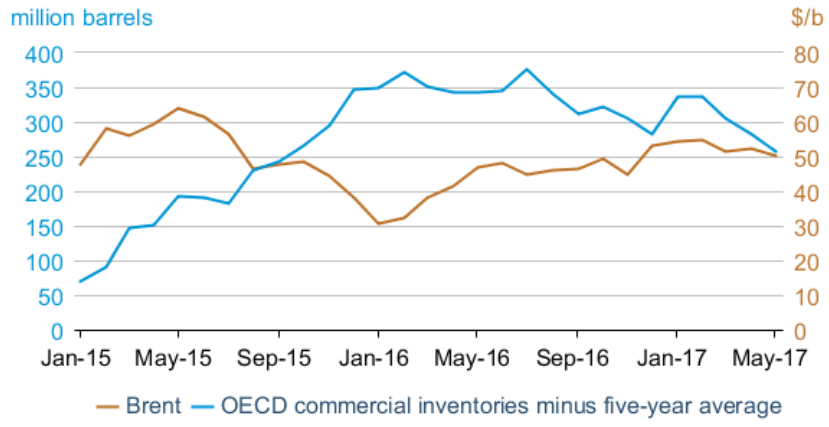
The Organization of the Petroleum Exporting Countries (OPEC) met on May 25 and announced an extension to voluntary production cuts that were originally set to end this month. The agreed-upon OPEC crude oil production target will remain at 32.5 million barrels per day (b/d) through the end of the first quarter of 2018. The non-OPEC countries that participated in the original six-month agreement met with OPEC ministers on the same day, with Russia being the only non-OPEC member that has formally agreed to remain a party to the extended cuts.

The expectations of oil market participants regarding the OPEC announcement were likely already settled in the weeks leading up to the meeting, as various OPEC ministers made public comments about extending the cuts. Although front-month crude oil prices declined by almost 5% on the day of the announcement, suggesting many participants were expecting a larger or longer cut, prices continued trading within a range established over the past 6-8 months around the $50/b level.

Concerns regarding the high level of global liquid fuels inventories relative to their five-year average level appeared to be a significant consideration in OPEC's decision to extend production cuts through March 2018. Commercial liquid fuels inventories in countries in the Organization of Economic Cooperation and Development (OECD) remain 257 million barrels higher than the five-year average, based on estimates in the current STEO, a 79-million-barrel reduction in the

excess relative to the five-year average since January 2017 **(Figure 2)**. However, voluntary production cuts from OPEC and non-OPEC countries are being partially offset by production growth in other countries, moderating the pace of global liquid fuels inventory draws in 2017.

Figure 2. OECD commercial liquids inventories and Brent price



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

EIA now forecasts OPEC crude oil production to average 32.3 million b/d in 2017 and 32.8 million b/d in 2018, about 0.2 million b/d and 0.4 million b/d, respectively, lower than previously forecast. With lower forecast OPEC production, EIA expects global oil inventories to decline by an average of almost 0.2 million b/d in 2017. The largest draws are expected during the third quarter of 2017, when global oil inventories are forecast to fall by an average of 0.4 million b/d.

If inventory draws of this magnitude materialize in the coming months and gross U.S. refinery runs remain above 17 million b/d, the possibility exists for some upward pressure on crude oil prices. EIA expects Brent spot prices to average $54/b in the third quarter of 2017, up from an average of $50/b in May. However, because U.S. tight oil production is relatively responsive to changes in oil price, and given an estimated six-month lag between a change in oil prices and realized production, higher crude oil prices in mid-2017 have the potential to raise U.S. production in 2018.

The expectation of supply growth in 2018 could contribute to oil price weakness in late 2017 and early 2018. The current forecast assumes OPEC's cuts are extended beyond next March, but that non-compliance, which begins to grow in late-2017, increases somewhat in the second half of 2018. Without a further extension of the OPEC agreement, EIA would expect larger inventory builds in 2018 than are included in this forecast.

EIA expects that supply growth from the United States, Brazil, and OPEC in 2018 will contribute to global oil inventories increasing by 0.1 million b/d in 2018, with the largest builds expected in the second quarter of 2018. The possibility of a return to modest oversupply in global oil markets contributes to the Brent spot price forecast averaging $56/b in 2018, $1/b lower than in the May STEO. However, some upward price pressures could emerge in the second half of 2018

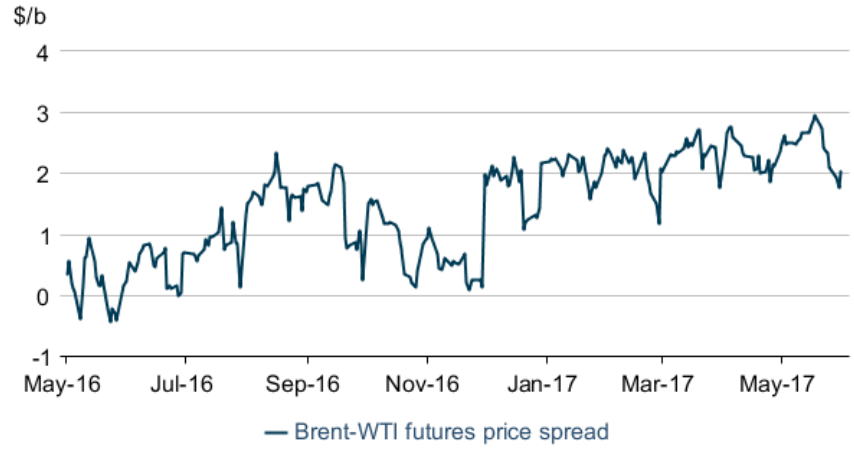
if EIA's forecast that global inventories will decline during that period materializes and if the market expects global oil inventory withdrawals into 2019.

EIA's OPEC production figures this month do not include Equatorial Guinea, which joined OPEC on May 25. EIA will include Equatorial Guinea in OPEC starting in the July 2017 STEO.

EIA forecasts U.S. crude oil production to average 9.3 million b/d in 2017 and 10.0 million b/d in 2018. Growth in U.S. production has been the largest contributor to the 0.8 million b/d of non-OPEC liquids supply growth from January through May 2017. Continued increases in drilling activity in U.S. shale basins, particularly a recent resumption in production growth from the Eagle Ford region in Texas, support production growth throughout the forecast.

After reaching a trough of 316 oil-directed active rigs in May 2016, the U.S. oil-directed rig count has more than doubled to 733 active rigs at the beginning of June. Rapid U.S. crude oil production growth could be a contributing factor in lowering WTI crude oil prices in Cushing, Oklahoma, the main trading hub and delivery point for WTI crude oil contracts, compared with Brent crude oil prices. The Brent premium to WTI closed at a 17-month high on May 19 at $2.94/b before falling to $2.03/b on June 1 **(Figure 3)**. A wide Brent-WTI price spread can open opportunities for U.S. producers to export light sweet crude oil.

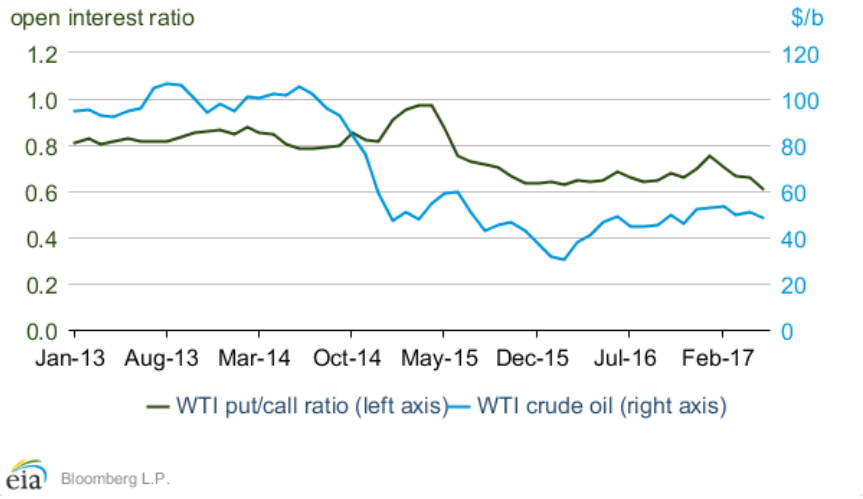
Figure 3. Brent-WTI futures price spread



Recent activity in crude oil options trading suggests market participants may have been anticipating an increase in prices. The monthly average ratio of open interest in put option contracts compared with call option contracts for WTI crude oil fell to 0.61 in May, an all-time low **(Figure 4)**. The put-call open interest ratio measures the total number of put contracts divided by the total number of call options outstanding. A put option gives the owner the right, but not the obligation, to sell a commodity for a given price by a certain date, whereas a call option gives the owner the right to buy a commodity at a given price by a certain date.

Monthly average open interest in call options increased by 464,000 contracts from January through May 2017, whereas open interest in put options increased by 78,000 contracts. Market participants may have been expecting the possibility of an increase in prices following the OPEC meeting, which could have driven the increase in call option trading.

Figure 4. Monthly average aggregate WTI option open interest ratio



Petroleum products

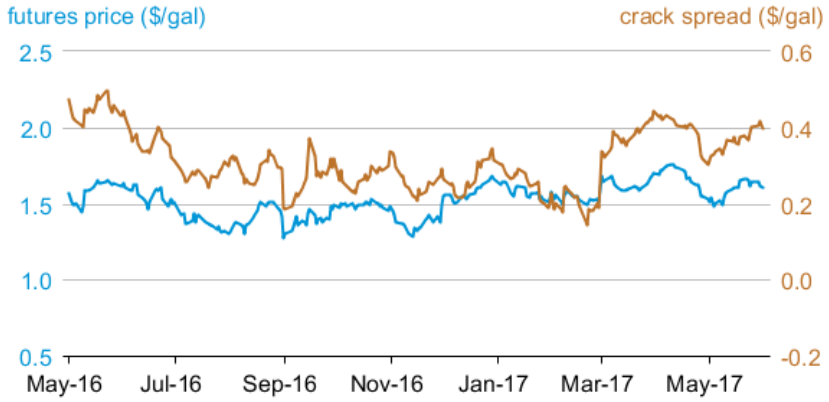
Gasoline prices: The front-month futures price of reformulated blendstock for oxygenate blending (RBOB, the petroleum component of gasoline used in many parts of the country) rose by 7 cents per gallon (gal) since May 1, settling at $1.60/gal on June 1 **(Figure 5)**. The RBOB-Brent crack spread (the difference between the price of RBOB and the price of Brent crude oil) rose by 10 cents/gal, settling at 40 cents/gal on June 1.

The average gasoline crack spread in May was 9 cents/gal lower compared with the same time last year, continuing a trend seen for much of 2017. The lower gasoline crack spread may be reflecting both smaller declines in gasoline stocks this year, as well as lowered expectations of U.S. gasoline consumption growth this summer compared with the strong growth in consumption seen in 2015 and 2016. Despite lower growth projections for gasoline consumption this year, EIA still forecasts gasoline consumption to reach a record high this summer. Gasoline stocks in the Petroleum Administration of Defense District (PADD) 1B, which includes the New York Harbor delivery point of the RBOB futures contract, declined by 0.3 million barrels from April 28 to May 26, according to EIA's *Weekly Petroleum Status Report (WPSR).* Over the past five years, however, gasoline stocks in PADD 1B have declined an average of 1.7 million barrels during that period, according to EIA's *Petroleum Supply Monthly (PSM)*.

Initial estimates from the WPSR show that U.S. gasoline consumption in May was 9.6 million b/d, which was 0.16 million b/d higher than gasoline consumption in May 2016, as shown in the PSM. As the traditional U.S. peak driving season begins, the degree to which gasoline consumption increases compared with last year will affect the gasoline crack spread this

summer. U.S. gasoline consumption from June to August is forecast to be 0.4% higher than the same months in 2016.

Figure 5. Historical RBOB futures prices and crack spread

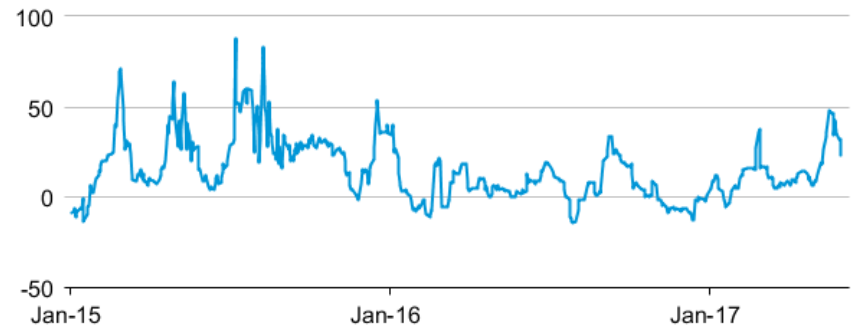


eia Bloomberg L.P., RBOB=reformulated blendstock for oxygenate blending

Gasoline spot market: The gasoline spot price premium for California RBOB (CARBOB) in San Francisco over the RBOB front-month futures contract rose in May because of unplanned refinery outages coinciding with planned maintenance. On May 18, the San Francisco CARBOB price premium reached a 17-month high **(Figure 6)**. In early May, Valero Energy Corporation's refinery in Benicia, California, near the San Francisco Bay area, experienced an unplanned outage. In addition, several refineries are undergoing or expected to undergo planned maintenance, including Tesoro's refineries in Martinez, California, and Carson, California, along with PBF Energy's refinery in Torrance, California. As a result, gasoline prices, particularly in the San Francisco Bay area, rose because of anticipated tight gasoline supply in the California market.

Gasoline prices on the U.S. West Coast are more susceptible to sharp price increases after supply disruptions because its geographic isolation and unique fuel specifications can make it difficult to quickly resupply the area. Initial estimates from the California Energy Commission show a 9% decline in refinery input of crude oil in California after the unplanned outage at Valero's refinery occurred. Further, the production of California Air Resources Board (CARB) reformulated gasoline (RFG) has been declining for three weeks since the outage. The increased premium of San Francisco gasoline prices began to attract gasoline imports. Weekly imports of total motor gasoline into the U.S. West Coast rose towards the end of May. Once the gasoline supply constraints begin to ease, the premium of San Francisco CARBOB will likely decline closer to more normal levels.

Figure 6. San Francisco CARBOB spot price - RBOB front-month futures price

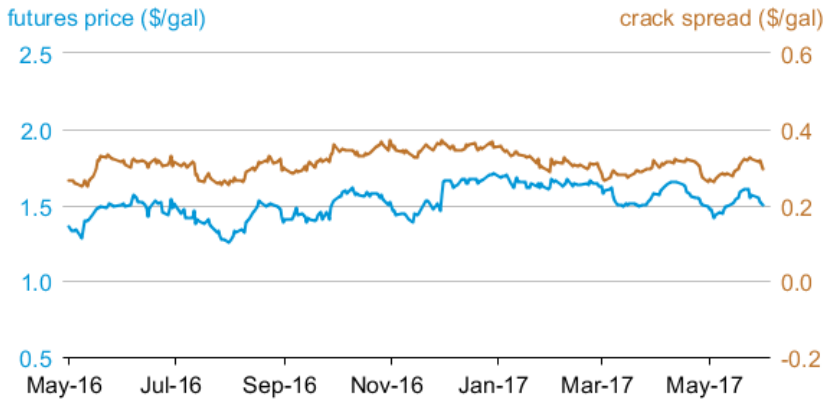


eia Bloomberg L.P., RBOB=reformulated blendstock for oxygenate blending

Ultra-low sulfur diesel prices: The ultra-low sulfur diesel (ULSD) futures price rose by 1 cent/gal since May 1, settling at $1.50/gal on June 1. The ULSD-Brent crack spread (the difference between the price of ULSD and the price of Brent crude oil) increased by 4 cents/gal, settling at 30 cents/gal over the same period **(Figure 7)**. The monthly average crack spread for distillate has remained between 28 cents/gal and 33 cents/gal since January 2017, likely reflecting the consistent levels of distillate exports so far this year and the rebound in U.S. distillate consumption.

In the WPSR, U.S. distillate inventories declined by 3.6 million barrels from April 28 to May 26. In contrast, distillate inventories rose by 2.1 million barrels on average during the same period over the past five years, according to the PSM. The decline in inventories came as domestic distillate consumption rose to a four-week average of 4.2 million b/d in May, according to the WPSR. Domestic distillate consumption has been rising as U.S. industrial activity increases. The U.S. manufacturing sector continues to expand, and U.S. industrial production rose 1% in April, the largest monthly increase in three years.

Figure 7. Historical ULSD futures price and crack spread

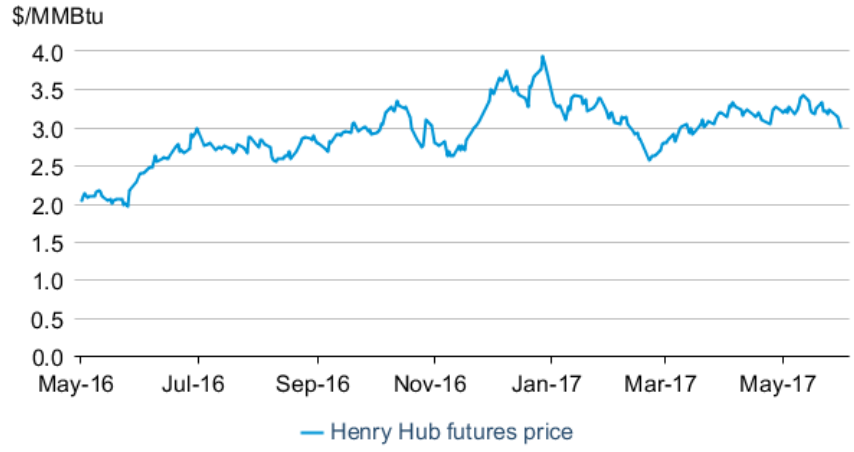


eia Bloomberg L.P., ULSD=ultra-low sulfur diesel

Natural Gas

Prices: The front-month natural gas futures contract for delivery at Henry Hub settled at $3.01/MMBtu on June 1, a decrease of 21 cents/MMBtu from May 1 **(Figure 8)**. Inventory levels that are above the five-year average and forecasts of moderate temperatures are contributing to lower prices. For the week ending May 26, natural gas inventories increased to 2,525 billion cubic feet (Bcf), 10% above the five-year average for that time of year, but 13% below last year's record highs at the end of May. The Henry Hub natural gas spot price averaged $3.15/MMBtu in May, 5 cents/MMBtu higher than in April.

Figure 8. Historical front month U.S. natural gas prices

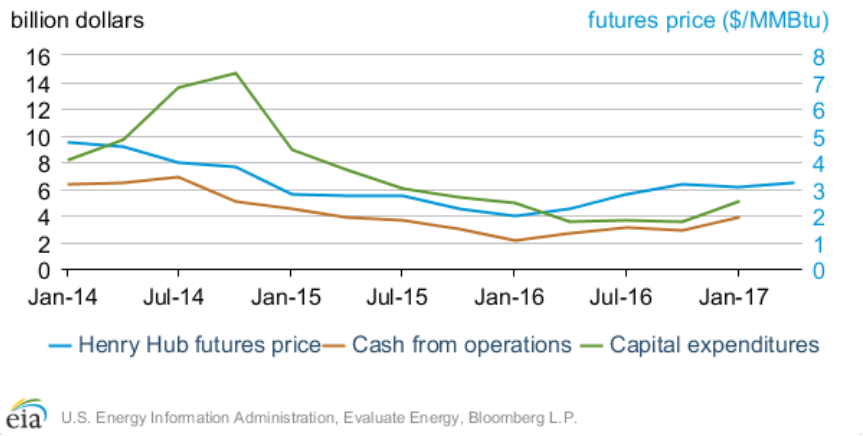


eia Bloomberg L.P.

Capital expenditures for 22 U.S. natural gas producers increased year-over-year in the first quarter of 2017 after almost two years of annual declines **(Figure 9)**. After averaging $1.98/MMBtu in the first quarter of 2016, natural gas futures prices rose to $3.06/MMBtu in the

first quarter of 2017, a 55% year-on-year increase. Higher prices increased cash flow, which helped to stabilize and eventually increase capital expenditures. With natural gas prices projected to rise by the fourth quarter of 2017, producers are continuing to add drilling rigs. For the week ending June 2, natural gas-directed drilling rig count was 100 rigs higher than this time last year. Increases in rig counts and drilling efficiencies are contributing to EIA's forecast of dry natural gas production rising to an average of 76.6 Bcf/d in 2018, up from an expected 73.3 Bcf/d in 2017.

Figure 9. Cash flow and capital expenditures for 22 U.S. natural gas producers



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

Notable forecast changes

- OPEC crude oil production is expected to average 32.3 million b/d in 2017 and 32.8 million b/d in 2018, levels that are roughly 0.2 million b/d and 0.4 million b/d lower, respectively, compared with last month's STEO. The lower forecast takes into account OPEC's May 25 announcement regarding the extension of its production cuts.
- For more information, see the detailed STEO table of forecast changes.

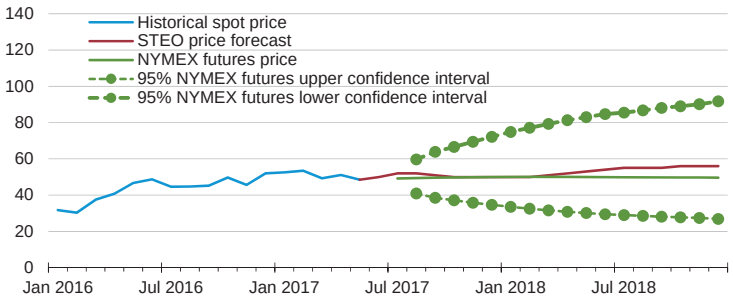
U.S. Energy Information Administration
Independent Statistics & Analysis

Short-Term Energy Outlook

Chart Gallery for June 2017

West Texas Intermediate (WTI) crude oil price

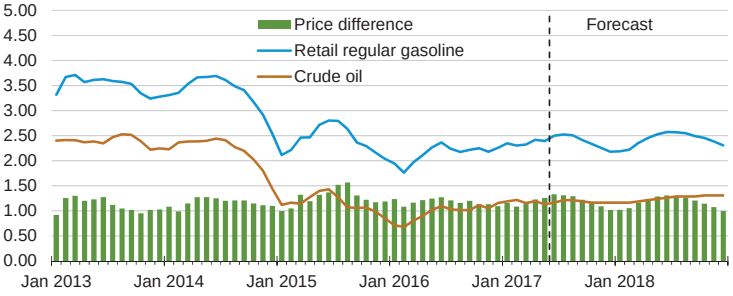
dollars per barrel



Note: Confidence interval derived from options market information for the 5 trading days ending Jun 1, 2017. Intervals not calculated for months with sparse trading in near-the-money options contracts.
Source: Short-Term Energy Outlook, June 2017.

U.S. gasoline and crude oil prices

dollars per gallon

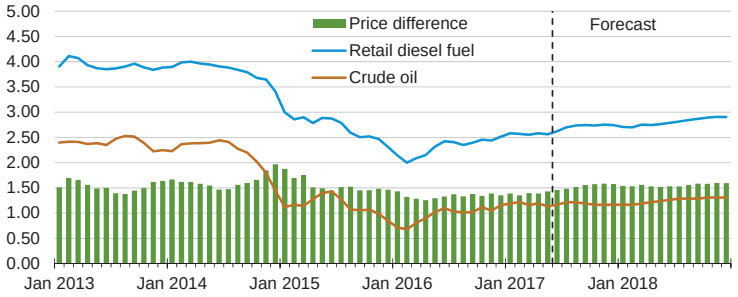


Crude oil price is composite refiner acquisition cost. Retail prices include state and federal taxes.

Source: Short-Term Energy Outlook, June 2017.

U.S. diesel fuel and crude oil prices

dollars per gallon

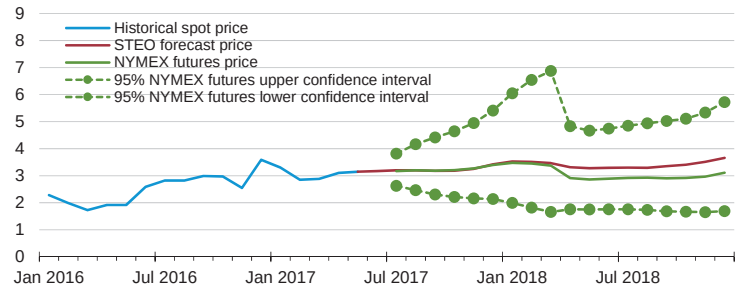


Crude oil price is composite refiner acquisition cost. Retail prices include state and federal taxes.

Source: Short-Term Energy Outlook, June 2017.

Henry Hub natural gas price

dollars per million Btu

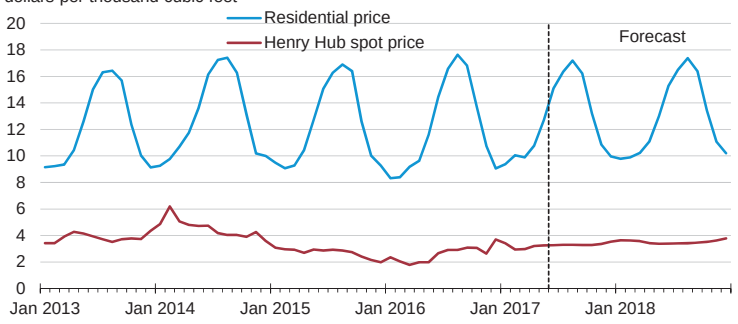


Note: Confidence interval derived from options market information for the 5 trading days ending Jun 1, 2017. Intervals not calculated for months with sparse trading in near-the-money options contracts.

Source: Short-Term Energy Outlook, June 2017.

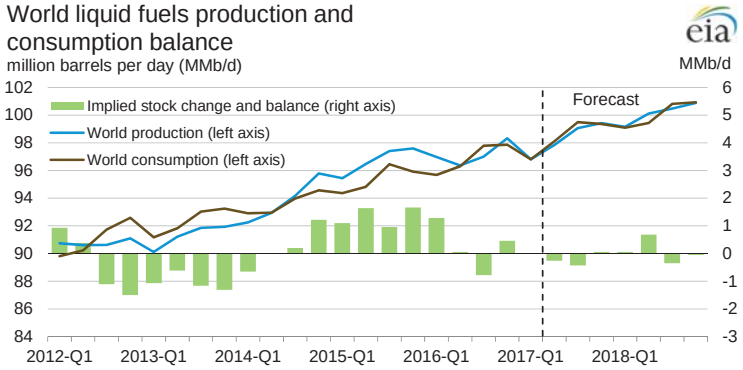
U.S. natural gas prices

dollars per thousand cubic feet



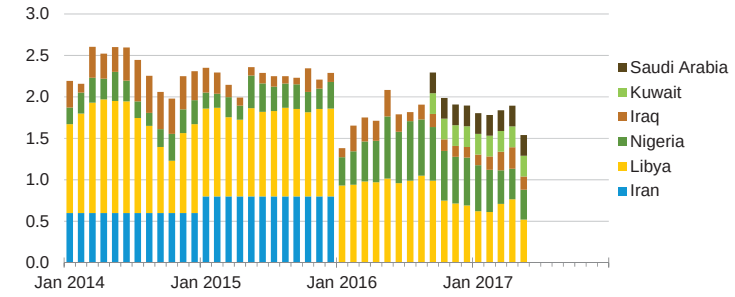
Source: Short-Term Energy Outlook, June 2017.

World liquid fuels production and consumption balance



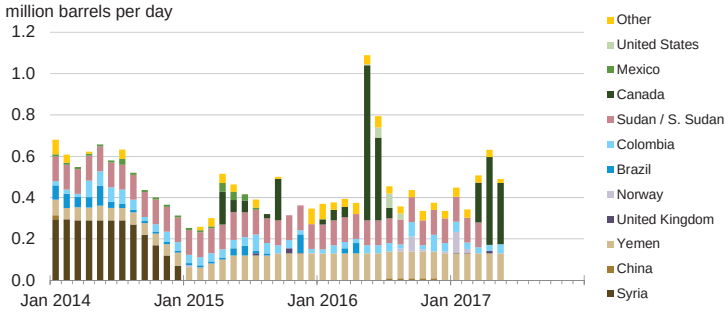
Source: Short-Term Energy Outlook, June 2017.

Estimated historical unplanned OPEC crude oil production outages



Source: Short-Term Energy Outlook, June 2017.

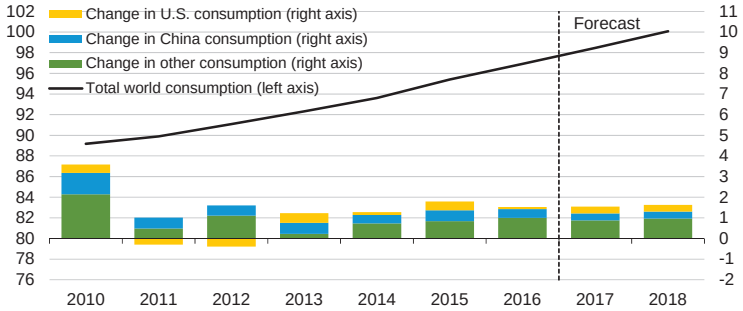
Estimated historical unplanned non-OPEC liquid fuels production outages



Source: Short-Term Energy Outlook, June 2017.

World liquid fuels consumption

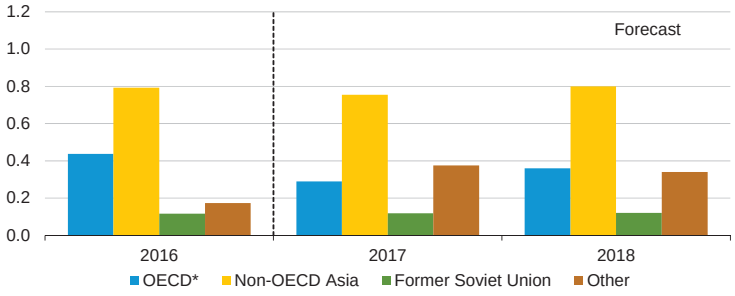
million barrels per day (MMb/d)



Source: Short-Term Energy Outlook, June 2017.

World liquid fuels consumption growth

million barrels per day

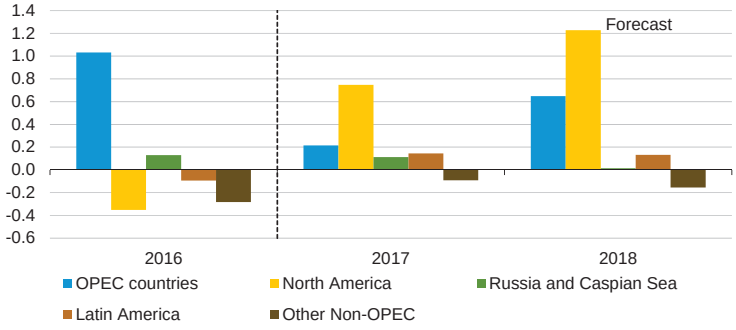


* Countries belonging to the Organization for Economic Cooperation and Development

Source: Short-Term Energy Outlook, June 2017.

World crude oil and liquid fuels production growth

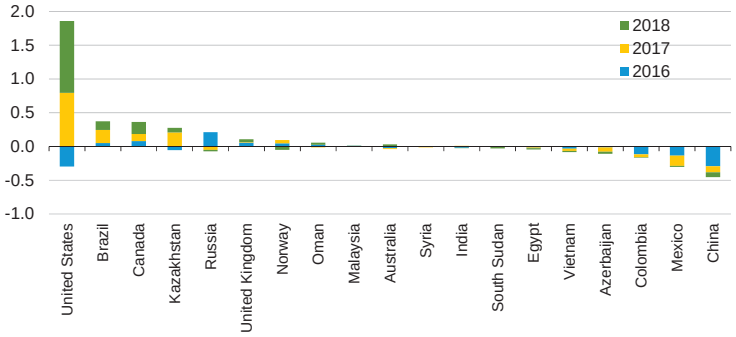
million barrels per day



Source: Short-Term Energy Outlook, June 2017.

Non-OPEC crude oil and liquid fuels production growth

million barrels per day

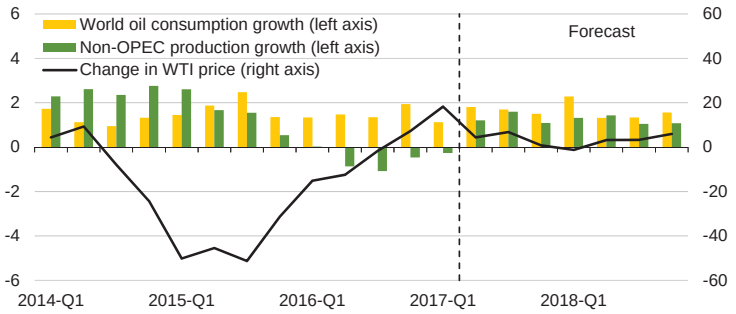


Source: Short-Term Energy Outlook, June 2017.

World consumption and non-OPEC production growth

million barrels per day

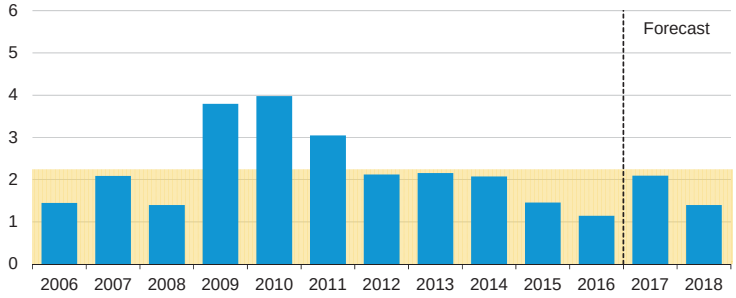
dollars per barrel



Source: Short-Term Energy Outlook, June 2017.

OPEC surplus crude oil production capacity

million barrels per day

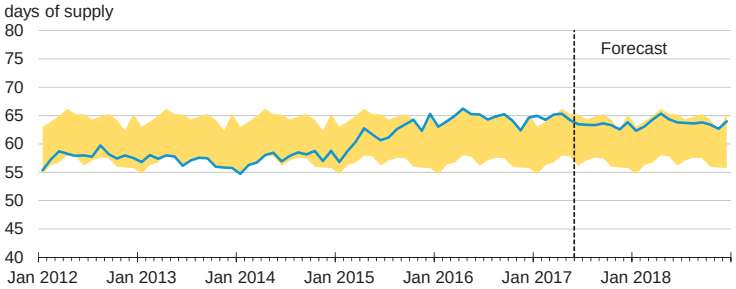


Note: Shaded area represents 2006-2016 average (2.2 million barrels per day).

Source: Short-Term Energy Outlook, June 2017.

OECD commercial stocks of crude oil and other liquids

days of supply



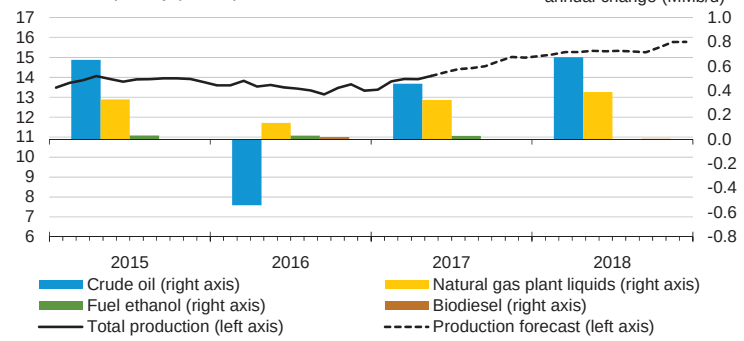
Note: Colored band around days of supply of crude oil and other liquids stocks represents the range between the minimum and maximum from Jan. 2012 - Dec. 2016.

Source: Short-Term Energy Outlook, June 2017.

U.S. crude oil and liquid fuels production

million barrels per day (MMb/d)

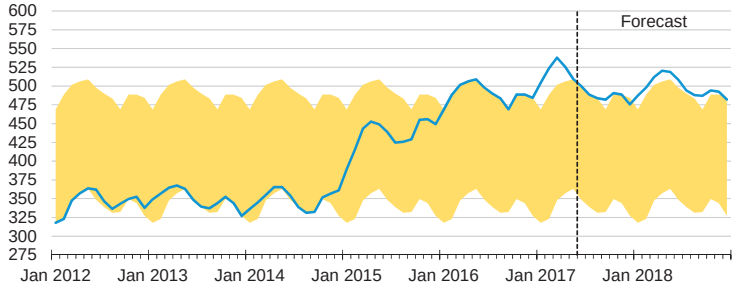
annual change (MMb/d)



Source: Short-Term Energy Outlook, June 2017.

U.S. commercial crude oil stocks

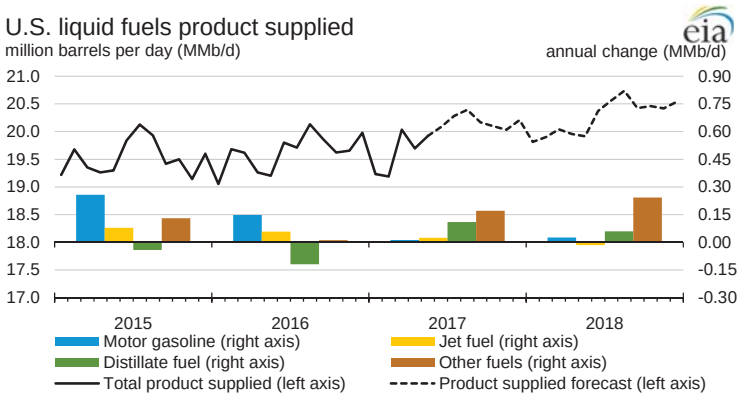
million barrels



Note: Colored band around storage levels represents the range between the minimum and maximum from Jan. 2012 - Dec. 2016.

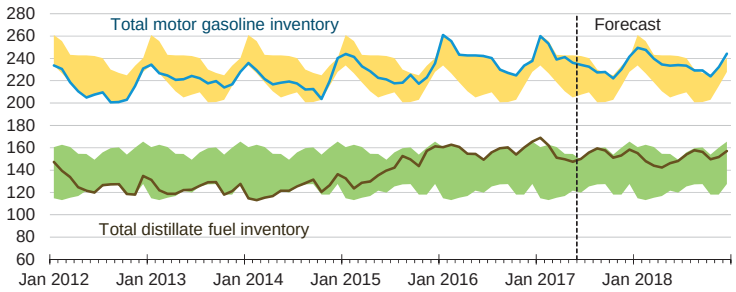
Source: Short-Term Energy Outlook, June 2017.

U.S. liquid fuels product supplied



Source: Short-Term Energy Outlook, June 2017.

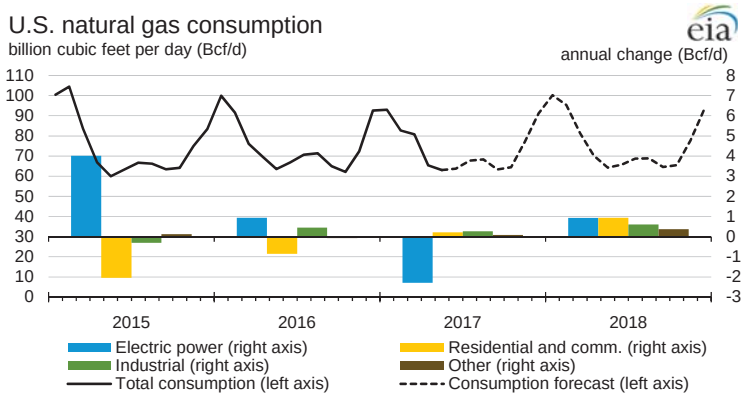
U.S. gasoline and distillate inventories



Note: Colored bands around storage levels represent the range between the minimum and maximum from Jan. 2012 - Dec. 2016.

Source: Short-Term Energy Outlook, June 2017.

U.S. natural gas consumption

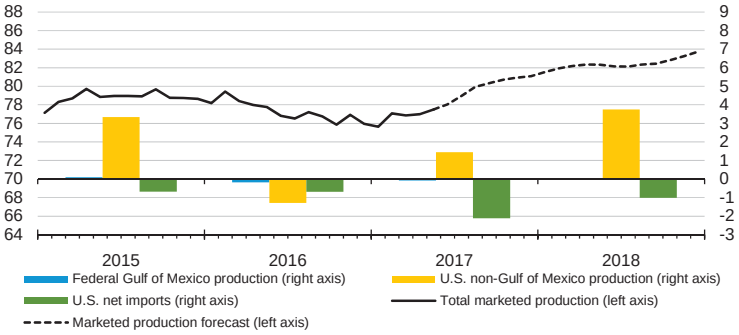


Source: Short-Term Energy Outlook, June 2017.

U.S. natural gas production and imports

billion cubic feet per day (Bcf/d)

annual change (Bcf/d)

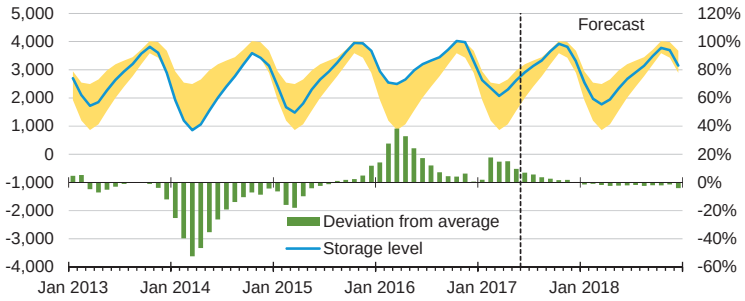


Source: Short-Term Energy Outlook, June 2017.

U.S. working natural gas in storage

billion cubic feet

deviation from average



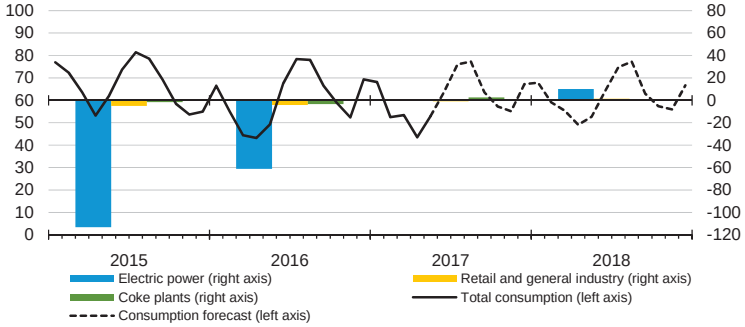
Note: Colored band around storage levels represents the range between the minimum and maximum from Jan. 2012 - Dec. 2016.

Source: Short-Term Energy Outlook, June 2017.

U.S. coal consumption

million short tons (MMst)

annual change (MMst)

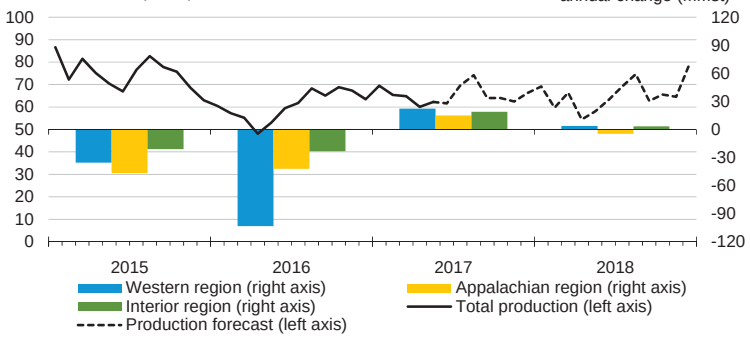


Source: Short-Term Energy Outlook, June 2017.

U.S. coal production

million short tons (MMst)

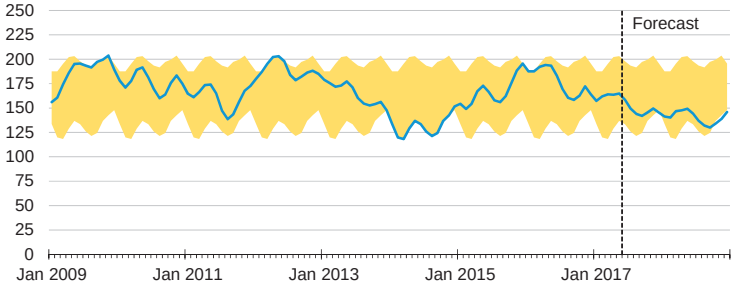
annual change (MMst)



Source: Short-Term Energy Outlook, June 2017.

U.S. electric power coal stocks

million short tons



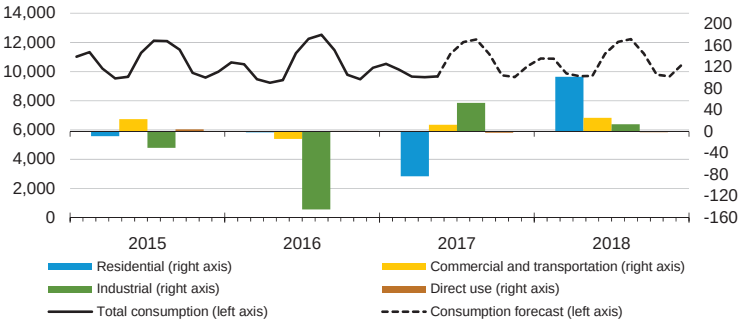
Note: Colored band around stock levels represents the range between the minimum and maximum from Jan. 2009 - Dec. 2016.

Source: Short-Term Energy Outlook, June 2017.

U.S. electricity consumption

million kilowatthours per day (kWh/d)

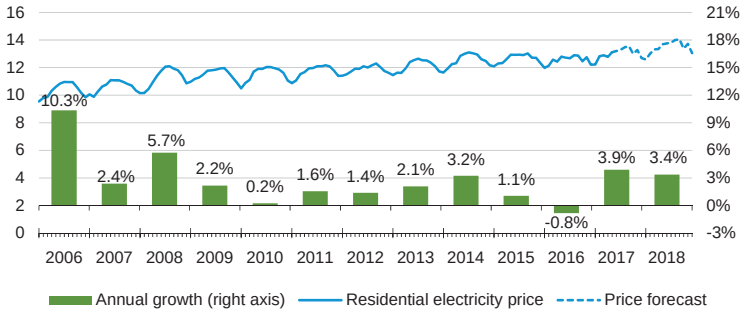
annual change (million kWh/d)



Source: Short-Term Energy Outlook, June 2017.

U.S. residential electricity price

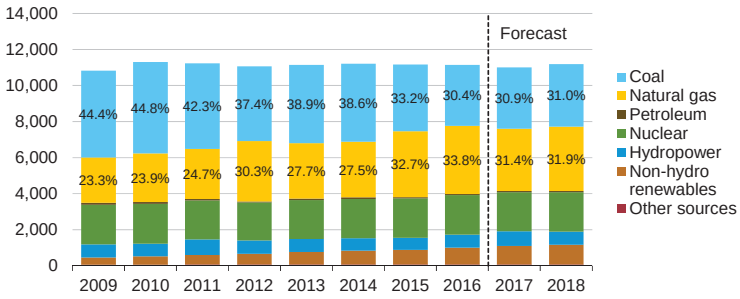
cents per kilowatthour



Source: Short-Term Energy Outlook, June 2017.

U.S. electricity generation by fuel, all sectors

thousand megawatthours per day

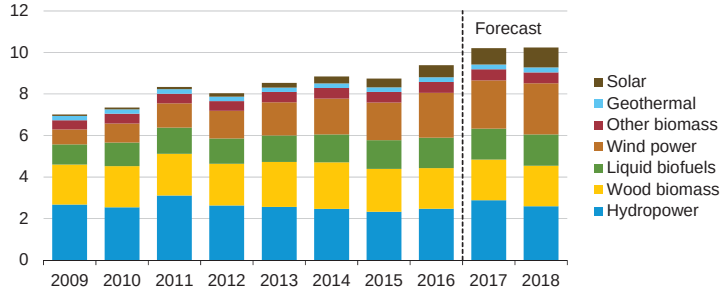


Note: Labels show percentage share of total generation provided by coal and natural gas.

Source: Short-Term Energy Outlook, June 2017.

U.S. renewable energy supply

quadrillion British thermal units (Btu)

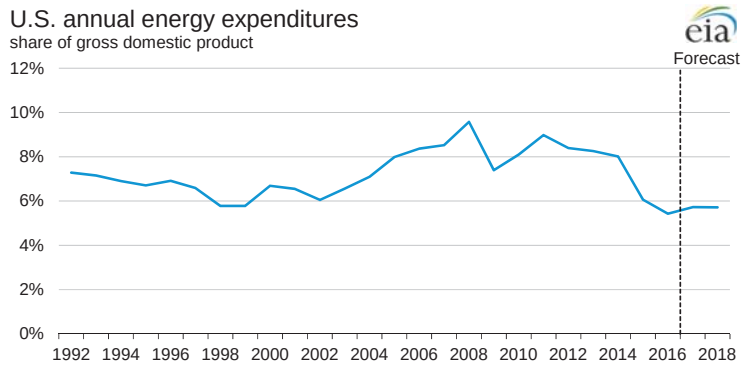


Note: Hydropower excludes pumped storage generation. Liquid biofuels include ethanol and biodiesel. Other biomass includes municipal waste from biogenic sources, landfill gas, and other non-wood waste.

Source: Short-Term Energy Outlook, June 2017.

U.S. annual energy expenditures

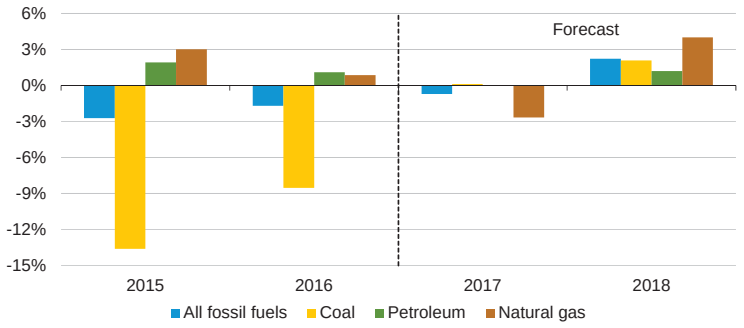
share of gross domestic product



Source: Short-Term Energy Outlook, June 2017.

U.S. energy-related carbon dioxide emissions

annual growth

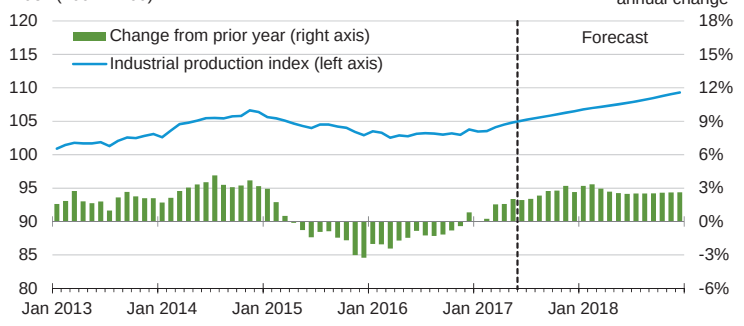


Source: Short-Term Energy Outlook, June 2017.

U.S. total industrial production index

index (2007 = 100)

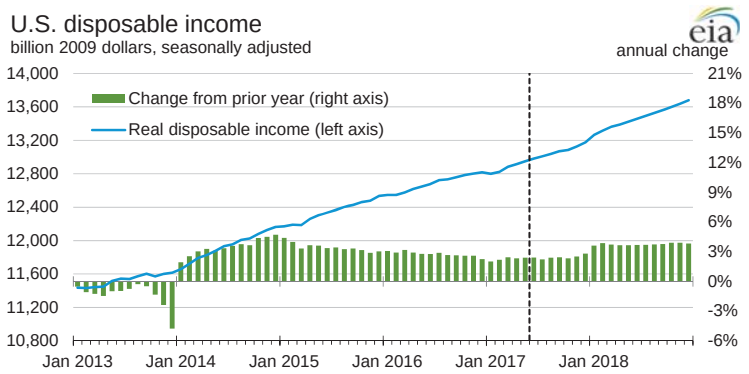
annual change



Source: Short-Term Energy Outlook, June 2017.

U.S. disposable income

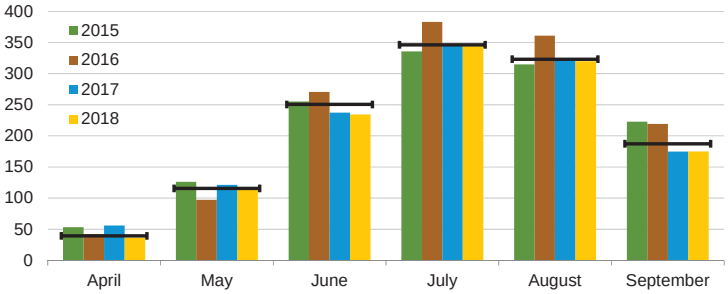
billion 2009 dollars, seasonally adjusted



Source: Short-Term Energy Outlook, June 2017.

U.S. summer cooling degree days

population-weighted

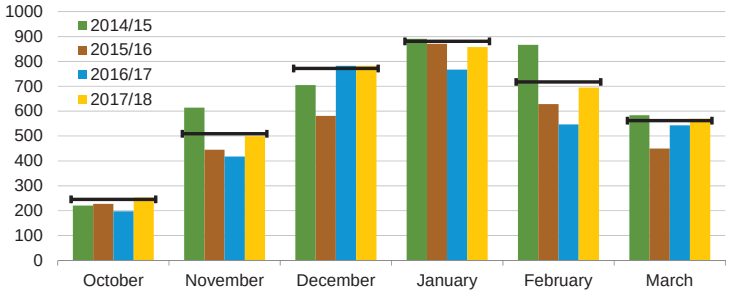


Note: EIA calculations based on from the National Oceanic and Atmospheric Administration data. Horizontal lines indicate each month's prior 10-year average (2007-2016). Projections reflect NOAA's 14-16 month outlook.

Source: Short-Term Energy Outlook, June 2017.

U.S. winter heating degree days

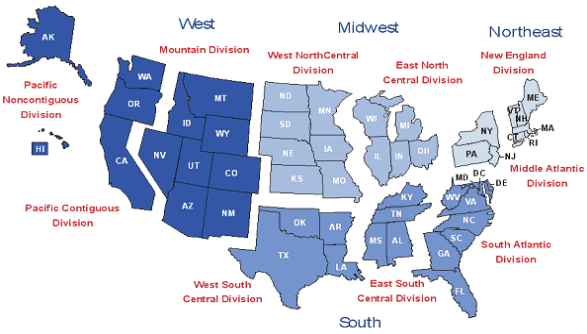
population-weighted



Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data. Horizontal lines indicate each month's prior 10-year average (Oct 2007 - Mar 2017). Projections reflect NOAA's 14-16 month outlook.

Source: Short-Term Energy Outlook, June 2017.

U.S. census regions and divisions



Source: Short-Term Energy Outlook, June 2017.

Table SF01. U.S. Motor Gasoline Summer Outlook

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2017

	2016			2017			Year-over-year Change (percent)		
	Q2	Q3	Season	Q2	Q3	Season	Q2	Q3	Season
Nominal Prices (dollars per gallon)									
WTI Crude Oil (Spot) [a]	**1.08**	**1.07**	**1.08**	*1.19*	*1.23*	*1.21*	*9.6*	*15.2*	*12.4*
Brent Crude Oil Price (Spot)	**1.08**	**1.09**	**1.09**	*1.23*	*1.28*	*1.25*	*13.1*	*17.2*	*15.1*
U.S. Refiner Average Crude Oil Cost	**1.01**	**1.02**	**1.01**	*1.16*	*1.21*	*1.18*	*15.6*	*18.1*	*16.9*
Wholesale Gasoline Price [b]	**1.58**	**1.50**	**1.54**	*1.75*	*1.73*	*1.74*	*10.5*	*15.3*	*12.9*
Wholesale Diesel Fuel Price [b]	**1.41**	**1.45**	**1.43**	*1.61*	*1.73*	*1.67*	*14.7*	*19.9*	*17.3*
Regular Gasoline Retail Price [c]	**2.25**	**2.21**	**2.23**	*2.44*	*2.48*	*2.46*	*8.2*	*12.3*	*10.2*
Diesel Fuel Retail Price [c]	**2.30**	**2.38**	**2.34**	*2.59*	*2.73*	*2.66*	*12.6*	*14.4*	*13.5*
Gasoline Consumption/Supply (million barrels per day)									
Total Consumption	**9.437**	**9.562**	**9.500**	*9.471*	*9.603*	*9.538*	*0.4*	*0.4*	*0.4*
Total Refinery and Blender Net Supply [d]	**8.313**	**8.343**	**8.328**	*8.453*	*8.524*	*8.489*	*1.7*	*2.2*	*1.9*
Fuel Ethanol Blending	**0.936**	**0.958**	**0.947**	*0.956*	*0.972*	*0.964*	*2.1*	*1.5*	*1.8*
Total Stock Withdrawal [e]	**0.014**	**0.164**	**0.089**	*0.052*	*0.071*	*0.061*			
Net Imports [e]	**0.175**	**0.098**	**0.136**	*0.010*	*0.036*	*0.023*	*-94.0*	*-62.8*	*-82.8*
Refinery Utilization (percent)	**89.9**	**91.6**	**90.7**	*92.8*	*91.7*	*92.3*			
Gasoline Stocks, Including Blending Components (million barrels)									
Beginning	**243.3**	**242.1**	**243.3**	*239.0*	*234.2*	*239.0*			
Ending	**242.1**	**227.0**	**227.0**	*234.2*	*227.7*	*227.7*			
Economic Indicators (annualized billion 2000 dollars)									
Real GDP	**16,583**	**16,727**	**16,655**	*16,984*	*17,107*	*17,045*	*2.4*	*2.3*	*2.3*
Real Income	**12,647**	**12,738**	**12,693**	*12,949*	*13,039*	*12,994*	*2.4*	*2.4*	*2.4*

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

[b] Price product sold by refiners to resellers.

[c] Average pump price including taxes.

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

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

GDP = gross domestic product.

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

Sources: Historical data: latest data available from: EIA, *Petroleum Supply Monthly* , DOE/EIA-0109; Monthly Energy Review, DOE/EIA-0035; U.S. Department of Commerce, Bureau of Economic Analysis (GDP and income); Reuters News Service (WTI and Brent crude oil spot prices)

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

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2017

	2012	2013	2014	2015	2016	Forecast 2017	Change from 2016
United States							
Usage (kWh)	3,354	3,130	3,038	3,165	3,316	**3,129**	-5.7%
Price (cents/kWh)	12.09	12.58	13.04	12.92	12.77	**13.32**	4.3%
Expenditures	$405	$394	$396	$409	$423	**$417**	-1.6%
New England							
Usage (kWh)	2,189	2,173	1,930	1,982	2,080	**2,018**	-3.0%
Price (cents/kWh)	15.50	16.04	17.63	18.65	18.44	**19.49**	5.7%
Expenditures	$339	$348	$340	$370	$384	**$393**	2.5%
Middle Atlantic							
Usage (kWh)	2,548	2,447	2,234	2,376	2,551	**2,410**	-5.5%
Price (cents/kWh)	15.63	16.39	16.90	16.37	15.99	**16.55**	3.5%
Expenditures	$398	$401	$378	$389	$408	**$399**	-2.2%
East North Central							
Usage (kWh)	3,048	2,618	2,505	2,565	2,903	**2,694**	-7.2%
Price (cents/kWh)	12.08	12.57	13.24	13.27	12.92	**13.52**	4.6%
Expenditures	$368	$329	$332	$340	$375	**$364**	-2.9%
West North Central							
Usage (kWh)	3,547	3,099	3,041	3,075	3,282	**3,116**	-5.0%
Price (cents/kWh)	11.50	12.25	12.42	12.65	12.78	**13.20**	3.3%
Expenditures	$408	$380	$378	$389	$419	**$411**	-1.9%
South Atlantic							
Usage (kWh)	4,002	3,773	3,778	3,999	4,110	**3,822**	-7.0%
Price (cents/kWh)	11.65	11.76	12.09	12.04	11.88	**12.31**	3.6%
Expenditures	$466	$444	$457	$482	$488	**$470**	-3.7%
East South Central							
Usage (kWh)	4,468	4,079	4,034	4,279	4,435	**4,106**	-7.4%
Price (cents/kWh)	10.36	10.71	11.09	10.91	10.89	**11.73**	7.7%
Expenditures	$463	$437	$447	$467	$483	**$482**	-0.3%
West South Central							
Usage (kWh)	4,785	4,509	4,256	4,538	4,609	**4,408**	-4.4%
Price (cents/kWh)	10.27	10.94	11.46	11.03	10.55	**11.30**	7.1%
Expenditures	$491	$493	$488	$501	$486	**$498**	2.4%
Mountain							
Usage (kWh)	3,441	3,382	3,230	3,298	3,427	**3,283**	-4.2%
Price (cents/kWh)	11.55	11.97	12.32	12.33	12.08	**12.36**	2.3%
Expenditures	$397	$405	$398	$407	$414	**$406**	-2.0%
Pacific							
Usage (kWh)	2,079	2,038	2,090	2,051	2,092	**2,009**	-3.9%
Price (cents/kWh)	13.78	14.47	15.17	15.33	15.98	**16.25**	1.7%
Expenditures	$286	$295	$317	$314	$334	**$327**	-2.3%

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

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

Table 1. U.S. Energy Markets Summary

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2017

	2016				2017				2018				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2016	2017	2018
Energy Supply															
Crude Oil Production (a)															
(million barrels per day)	**9.17**	**8.85**	**8.67**	**8.81**	**9.00**	*9.20*	*9.40*	*9.73*	*9.95*	*10.00*	*9.90*	*10.17*	**8.87**	*9.33*	*10.01*
Dry Natural Gas Production															
(billion cubic feet per day)	**73.77**	**72.38**	**71.84**	**71.20**	**71.40**	*72.22*	*74.24*	*75.28*	*76.13*	*76.45*	*76.43*	*77.26*	**72.29**	*73.30*	*76.57*
Coal Production															
(million short tons)	**173**	**161**	**195**	**200**	**200**	*184*	*208*	*193*	*195*	*176*	*206*	*209*	**728**	*784*	*787*
Energy Consumption															
Liquid Fuels															
(million barrels per day)	**19.45**	**19.42**	**19.90**	**19.75**	**19.49**	*19.90*	*20.28*	*20.11*	*19.92*	*20.08*	*20.57*	*20.47*	**19.63**	*19.95*	*20.26*
Natural Gas															
(billion cubic feet per day)	**89.13**	**66.64**	**69.07**	**75.70**	**85.58**	*64.09*	*66.51*	*77.61*	*92.21*	*66.68*	*67.45*		**75.12**	*73.41*	*76.24*
Coal (b)															
(million short tons)	**166**	**160**	**223**	**181**	**174**	*160*	*217*	*180*	*182*	*166*	*215*	*180*	**730**	*731*	*743*
Electricity															
(billion kilowatt hours per day)	**10.19**	**9.96**	**12.09**	**9.84**	**10.11**	*10.16*	*11.81*	*9.92*	*10.54*	*10.20*	*11.84*	*9.99*	**10.52**	*10.50*	*10.64*
Renewables (c)															
(quadrillion Btu)	**2.61**	**2.60**	**2.44**	**2.54**	**2.74**	*3.01*	*2.62*	*2.60*	*2.72*	*2.93*	*2.70*	*2.69*	**10.19**	*10.97*	*11.03*
Total Energy Consumption (d)															
(quadrillion Btu)	**25.23**	**22.95**	**24.76**	**24.45**	**24.72**	*22.79*	*24.35*	*24.41*	*25.52*	*23.23*	*24.61*	*24.75*	**97.40**	*96.27*	*98.11*
Energy Prices															
Crude Oil West Texas Intermediate Spot															
(dollars per barrel)	**33.35**	**45.46**	**44.85**	**49.18**	**51.64**	*49.82*	*51.68*	*50.00*	*50.35*	*53.00*	*55.00*	*56.00*	**43.33**	*50.78*	*53.61*
Natural Gas Henry Hub Spot															
(dollars per million Btu)	**2.00**	**2.14**	**2.88**	**3.04**	**3.01**	*3.14*	*3.20*	*3.29*	*3.50*	*3.29*	*3.32*	*3.53*	**2.51**	*3.16*	*3.41*
Coal															
(dollars per million Btu)	**2.13**	**2.13**	**2.11**	**2.08**	**2.08**	*2.17*	*2.21*	*2.18*	*2.20*	*2.20*	*2.24*	*2.23*	**2.11**	*2.16*	*2.22*
Macroeconomic															
Real Gross Domestic Product															
(billion chained 2009 dollars - SAAR)	**16,525**	**16,583**	**16,727**	**16,813**	**16,842**	*16,984*	*17,107*	*17,212*	*17,320*	*17,421*	*17,527*	*17,632*	**16,662**	*17,036*	*17,475*
Percent change from prior year	**1.6**	**1.3**	**1.7**	**2.0**	**1.9**	*2.4*	*2.3*	*2.4*	*2.8*	*2.6*	*2.5*	*2.4*	**1.6**	*2.2*	*2.6*
GDP Implicit Price Deflator															
(Index, 2009=100)	**110.6**	**111.3**	**111.7**	**112.2**	**112.9**	*113.3*	*114.0*	*114.6*	*115.4*	*116.0*	*116.6*	*117.2*	**111.5**	*113.7*	*116.3*
Percent change from prior year	**1.2**	**1.2**	**1.3**	**1.6**	**2.0**	*1.8*	*2.1*	*2.1*	*2.2*	*2.4*	*2.3*	*2.3*	**1.3**	*2.0*	*2.3*
Real Disposable Personal Income															
(billion chained 2009 dollars - SAAR)	**12,556**	**12,647**	**12,738**	**12,801**	**12,834**	*12,949*	*13,039*	*13,129*	*13,313*	*13,424*	*13,526*	*13,638*	**12,686**	*12,988*	*13,475*
Percent change from prior year	**3.1**	**2.8**	**2.7**	**2.5**	**2.2**	*2.4*	*2.4*	*2.6*	*3.7*	*3.7*	*3.7*	*3.9*	**2.8**	*2.4*	*3.8*
Manufacturing Production Index															
(Index, 2012=100)	**102.9**	**102.6**	**102.7**	**103.1**	**103.8**	*104.1*	*104.7*	*105.4*	*106.1*	*106.5*	*107.1*	*108.0*	**102.8**	*104.5*	*106.9*
Percent change from prior year	**0.3**	**0.1**	**-0.1**	**0.5**	**0.9**	*1.5*	*2.0*	*2.2*	*2.2*	*2.3*	*2.3*	*2.4*	**0.2**	*1.7*	*2.3*
Weather															
U.S. Heating Degree-Days	**1,949**	**481**	**51**	**1,398**	**1,857**	*426*	*75*	*1,534*	*2,122*	*493*	*75*	*1,532*	**3,878**	*3,892*	*4,223*
U.S. Cooling Degree-Days	**53**	**410**	**964**	**128**	**70**	*415*	*844*	*91*	*39*	*386*	*839*	*91*	**1,555**	*1,420*	*1,356*

- = 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. Macroeconomic projections are based on Global Insight 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 2017

	2016				2017				2018				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2016	2017	2018
Crude Oil (dollars per barrel)															
West Texas Intermediate Spot Average	**33.35**	**45.46**	**44.85**	**49.18**	**51.64**	*49.82*	*51.68*	*50.00*	*50.35*	*53.00*	*55.00*	*56.00*	**43.33**	*50.78*	*53.61*
Brent Spot Average	**33.89**	**45.57**	**45.80**	**49.25**	**53.57**	*51.52*	*53.68*	*52.00*	*52.35*	*55.00*	*57.00*	*58.00*	**43.74**	*52.69*	*55.61*
U.S. Imported Average	**28.83**	**40.35**	**41.19**	**44.45**	**47.92**	*46.36*	*48.18*	*46.50*	*46.85*	*49.50*	*51.50*	*52.50*	**38.69**	*47.26*	*50.09*
U.S. Refiner Average Acquisition Cost	**30.84**	**42.23**	**42.90**	**46.56**	**49.83**	*48.84*	*50.68*	*49.00*	*49.35*	*52.01*	*54.00*	*55.00*	**40.69**	*49.59*	*52.63*
U.S. Liquid Fuels (cents per gallon)															
Refiner Prices for Resale															
Gasoline	**119**	**158**	**150**	**153**	**163**	*175*	*173*	*149*	*153*	*176*	*176*	*161*	**145**	*165*	*167*
Diesel Fuel	**109**	**141**	**145**	**156**	**162**	*161*	*173*	*170*	*167*	*173*	*180*	*183*	**138**	*167*	*176*
Heating Oil	**99**	**125**	**132**	**146**	**154**	*151*	*164*	*164*	*165*	*162*	*170*	*177*	**124**	*157*	*169*
Refiner Prices to End Users															
Jet Fuel	**107**	**134**	**137**	**149**	**158**	*156*	*168*	*166*	*164*	*167*	*175*	*179*	**132**	*162*	*171*
No. 6 Residual Fuel Oil (a)	**69**	**89**	**103**	**115**	**128**	*120*	*125*	*122*	*123*	*126*	*133*	*136*	**94**	*124*	*129*
Retail Prices Including Taxes															
Gasoline Regular Grade (b)	**190**	**225**	**221**	**223**	**233**	*244*	*248*	*226*	*226*	*252*	*254*	*238*	**215**	*238*	*243*
Gasoline All Grades (b)	**200**	**235**	**232**	**234**	**244**	*255*	*259*	*237*	*237*	*263*	*265*	*250*	**226**	*249*	*254*
On-highway Diesel Fuel	**208**	**230**	**238**	**247**	**257**	*259*	*273*	*274*	*272*	*276*	*284*	*290*	**231**	*266*	*281*
Heating Oil	**195**	**205**	**211**	**233**	**247**	*244*	*258*	*265*	*268*	*259*	*265*	*275*	**210**	*253*	*269*
Natural Gas															
Henry Hub Spot (dollars per thousand cubic feet)	**2.06**	**2.21**	**2.97**	**3.14**	**3.11**	*3.24*	*3.30*	*3.39*	*3.62*	*3.40*	*3.42*	*3.64*	**2.60**	*3.26*	*3.52*
Henry Hub Spot (dollars per million Btu)	**2.00**	**2.14**	**2.88**	**3.04**	**3.01**	*3.14*	*3.20*	*3.29*	*3.50*	*3.29*	*3.32*	*3.53*	**2.51**	*3.16*	*3.41*
U.S. Retail Prices (dollars per thousand cubic feet)															
Industrial Sector	**3.44**	**2.92**	**3.63**	**4.03**	**4.52**	*4.03*	*4.19*	*4.48*	*4.93*	*4.31*	*4.36*	*4.73*	**3.51**	*4.31*	*4.60*
Commercial Sector	**6.84**	**7.22**	**8.21**	**7.48**	**7.70**	*8.11*	*8.70*	*8.07*	*8.06*	*8.51*	*8.93*	*8.25*	**7.25**	*7.99*	*8.28*
Residential Sector	**8.54**	**11.15**	**16.99**	**10.18**	**9.73**	*12.37*	*16.57*	*10.77*	*9.94*	*12.54*	*16.75*	*11.00*	**10.06**	*11.02*	*11.19*
U.S. Electricity															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	**2.13**	**2.13**	**2.11**	**2.08**	**2.08**	*2.17*	*2.21*	*2.18*	*2.20*	*2.20*	*2.24*	*2.23*	**2.11**	*2.16*	*2.22*
Natural Gas	**2.65**	**2.51**	**3.00**	**3.36**	**3.69**	*3.64*	*3.50*	*3.87*	*4.37*	*3.78*	*3.63*	*4.15*	**2.88**	*3.66*	*3.95*
Residual Fuel Oil (c)	**6.15**	**8.51**	**9.70**	**9.08**	**11.01**	*10.76*	*10.30*	*10.10*	*9.91*	*10.78*	*10.78*	*10.85*	**8.41**	*10.52*	*10.58*
Distillate Fuel Oil	**9.00**	**11.01**	**11.64**	**12.14**	**12.88**	*13.17*	*13.97*	*14.25*	*14.37*	*14.50*	*14.95*	*15.62*	**10.86**	*13.56*	*14.84*
Retail Prices (cents per kilowatthour)															
Industrial Sector	**6.42**	**6.67**	**7.20**	**6.67**	**6.65**	*6.95*	*7.49*	*6.92*	*6.85*	*7.09*	*7.63*	*7.08*	**6.75**	*7.01*	*7.18*
Commercial Sector	**10.12**	**10.34**	**10.68**	**10.27**	**10.38**	*10.40*	*10.80*	*10.52*	*10.64*	*10.55*	*10.91*	*10.65*	**10.37**	*10.53*	*10.70*
Residential Sector	**12.20**	**12.66**	**12.81**	**12.45**	**12.61**	*13.05*	*13.43*	*12.96*	*12.94*	*13.61*	*13.95*	*13.35*	**12.55**	*13.04*	*13.48*

- = 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 2017

	2016				2017				2018				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2016	2017	2018
Supply (million barrels per day) (a)															
OECD	**26.99**	**25.90**	**26.31**	**26.84**	**26.77**	*26.95*	*27.47*	*28.09*	*28.30*	*28.44*	*28.46*	*29.10*	**26.51**	*27.32*	*28.57*
U.S. (50 States)	**14.96**	**14.88**	**14.67**	**14.80**	**15.00**	*15.39*	*15.82*	*16.25*	*16.44*	*16.63*	*16.65*	*17.02*	**14.83**	*15.62*	*16.69*
Canada	**4.73**	**3.99**	**4.70**	**4.95**	**4.70**	*4.52*	*4.78*	*4.78*	*4.80*	*4.82*	*4.90*	*4.98*	**4.59**	*4.69*	*4.87*
Mexico	**2.56**	**2.52**	**2.48**	**2.39**	**2.36**	*2.36*	*2.33*	*2.31*	*2.29*	*2.28*	*2.34*	*2.37*	**2.49**	*2.34*	*2.32*
Other OECD	**4.73**	**4.52**	**4.45**	**4.70**	**4.71**	*4.68*	*4.53*	*4.75*	*4.76*	*4.70*	*4.57*	*4.73*	**4.60**	*4.67*	*4.69*
Non-OECD	**69.98**	**70.46**	**70.70**	**71.49**	**70.04**	*70.90*	*71.59*	*71.34*	*70.86*	*71.68*	*72.02*	*71.78*	**70.66**	*70.97*	*71.59*
OPEC	**38.52**	**38.76**	**39.12**	**39.59**	**38.62**	*39.04*	*39.57*	*39.60*	*39.65*	*39.87*	*39.94*	*39.98*	**39.00**	*39.21*	*39.86*
Crude Oil Portion	**32.08**	**32.31**	**32.60**	**33.11**	**31.93**	*32.10*	*32.60*	*32.58*	*32.62*	*32.80*	*32.83*	*32.83*	**32.53**	*32.30*	*32.77*
Other Liquids (b)	**6.44**	**6.45**	**6.52**	**6.48**	**6.69**	*6.95*	*6.98*	*7.03*	*7.03*	*7.07*	*7.11*	*7.15*	**6.47**	*6.91*	*7.09*
Eurasia	**14.33**	**14.09**	**13.91**	**14.52**	**14.44**	*14.35*	*14.27*	*14.30*	*14.31*	*14.30*	*14.38*	*14.42*	**14.21**	*14.34*	*14.35*
China	**5.01**	**4.90**	**4.78**	**4.76**	**4.82**	*4.78*	*4.74*	*4.77*	*4.68*	*4.70*	*4.70*	*4.73*	**4.86**	*4.78*	*4.70*
Other Non-OECD	**12.12**	**12.71**	**12.89**	**12.62**	**12.17**	*12.73*	*13.01*	*12.67*	*12.23*	*12.80*	*13.01*	*12.65*	**12.59**	*12.65*	*12.67*
Total World Supply	**96.98**	**96.36**	**97.01**	**98.33**	**96.81**	*97.85*	*99.06*	*99.43*	*99.16*	*100.12*	*100.48*	*100.88*	**97.17**	*98.30*	*100.16*
Non-OPEC Supply	**58.45**	**57.60**	**57.89**	**58.74**	**58.19**	*58.81*	*59.48*	*59.82*	*59.51*	*60.24*	*60.54*	*60.90*	**58.17**	*59.08*	*60.30*
Consumption (million barrels per day) (c)															
OECD	**46.69**	**46.02**	**47.29**	**47.38**	**46.72**	*46.56*	*47.63*	*47.61*	*47.43*	*46.69*	*47.85*	*48.00*	**46.85**	*47.14*	*47.50*
U.S. (50 States)	**19.45**	**19.42**	**19.90**	**19.75**	**19.49**	*19.90*	*20.28*	*20.11*	*19.92*	*20.08*	*20.57*	*20.47*	**19.63**	*19.95*	*20.26*
U.S. Territories	**0.28**	**0.28**	**0.28**	**0.28**	**0.29**	*0.29*	*0.29*	*0.29*	*0.31*	*0.31*	*0.31*	*0.31*	**0.28**	*0.29*	*0.31*
Canada	**2.39**	**2.37**	**2.52**	**2.46**	**2.41**	*2.34*	*2.46*	*2.44*	*2.40*	*2.34*	*2.46*	*2.44*	**2.43**	*2.41*	*2.41*
Europe	**13.70**	**14.00**	**14.52**	**14.27**	**13.83**	*14.18*	*14.61*	*14.25*	*14.10*	*14.15*	*14.56*	*14.30*	**14.13**	*14.22*	*14.28*
Japan	**4.43**	**3.66**	**3.75**	**4.13**	**4.28**	*3.50*	*3.61*	*3.99*	*4.19*	*3.42*	*3.53*	*3.91*	**3.99**	*3.84*	*3.76*
Other OECD	**6.45**	**6.28**	**6.32**	**6.49**	**6.42**	*6.35*	*6.39*	*6.54*	*6.51*	*6.39*	*6.43*	*6.58*	**6.39**	*6.42*	*6.48*
Non-OECD	**49.00**	**50.29**	**50.51**	**50.48**	**50.10**	*51.55*	*51.86*	*51.76*	*51.67*	*52.74*	*52.97*	*52.93*	**50.07**	*51.32*	*52.58*
Eurasia	**4.68**	**4.61**	**4.88**	**4.87**	**4.79**	*4.72*	*4.99*	*4.98*	*4.90*	*4.82*	*5.11*	*5.09*	**4.76**	*4.87*	*4.98*
Europe	**0.69**	**0.70**	**0.72**	**0.72**	**0.70**	*0.71*	*0.73*	*0.73*	*0.71*	*0.72*	*0.74*	*0.74*	**0.71**	*0.72*	*0.73*
China	**12.26**	**12.47**	**12.38**	**12.65**	**12.69**	*12.82*	*12.75*	*12.88*	*13.02*	*13.16*	*13.03*	*13.27*	**12.44**	*12.78*	*13.12*
Other Asia	**12.90**	**13.11**	**12.61**	**13.00**	**13.05**	*13.62*	*13.10*	*13.49*	*13.77*	*14.01*	*13.47*	*13.87*	**12.91**	*13.32*	*13.78*
Other Non-OECD	**18.46**	**19.40**	**19.92**	**19.25**	**18.86**	*19.69*	*20.29*	*19.68*	*19.26*	*20.03*	*20.63*	*19.97*	**19.26**	*19.64*	*19.98*
Total World Consumption	**95.69**	**96.30**	**97.79**	**97.87**	**96.82**	*98.12*	*99.49*	*99.37*	*99.10*	*99.43*	*100.82*	*100.93*	**96.92**	*98.46*	*100.08*
Total Crude Oil and Other Liquids Inventory Net Withdrawals (million barrels per day)															
U.S. (50 States)	**-0.41**	**-0.28**	**-0.01**	**0.18**	**-0.02**	*0.12*	*-0.01*	*0.50*	*-0.02*	*-0.40*	*-0.02*	*0.47*	**-0.13**	*0.15*	*0.01*
Other OECD	**0.03**	**-0.13**	**-0.10**	**0.60**	**-0.63**	*0.05*	*0.15*	*-0.19*	*-0.01*	*-0.10*	*0.12*	*-0.14*	**0.10**	*-0.15*	*-0.03*
Other Stock Draws and Balance	**-0.92**	**0.35**	**0.89**	**-1.24**	**0.66**	*0.10*	*0.29*	*-0.36*	*-0.03*	*-0.19*	*0.24*	*-0.28*	**-0.23**	*0.17*	*-0.06*
Total Stock Draw	**-1.29**	**-0.06**	**0.78**	**-0.46**	**0.01**	*0.26*	*0.43*	*-0.06*	*-0.06*	*-0.68*	*0.35*	*0.05*	**-0.25**	*0.16*	*-0.09*
End-of-period Commercial Crude Oil and Other Liquids Inventories															
U.S. Commercial Inventory	**1,326**	**1,352**	**1,353**	**1,336**	**1,341**	*1,340*	*1,344*	*1,304*	*1,312*	*1,354*	*1,361*	*1,324*	**1,336**	*1,304*	*1,324*
OECD Commercial Inventory	**2,997**	**3,037**	**3,043**	**2,967**	**3,026**	*3,020*	*3,011*	*2,989*	*2,998*	*3,048*	*3,044*	*3,020*	**2,967**	*2,989*	*3,020*

- = 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, 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 2017

	2016				2017				2018				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2016	2017	2018
North America	**22.25**	**21.38**	**21.85**	**22.14**	**22.06**	*22.27*	*22.93*	*23.34*	*23.53*	*23.73*	*23.88*	*24.37*	**21.91**	*22.65*	*23.88*
Canada	**4.73**	**3.99**	**4.70**	**4.95**	**4.70**	*4.52*	*4.78*	*4.78*	*4.80*	*4.82*	*4.90*	*4.98*	**4.59**	*4.69*	*4.87*
Mexico	**2.56**	**2.52**	**2.48**	**2.39**	**2.36**	*2.36*	*2.33*	*2.31*	*2.29*	*2.28*	*2.34*	*2.37*	**2.49**	*2.34*	*2.32*
United States	**14.96**	**14.88**	**14.67**	**14.80**	**15.00**	*15.39*	*15.82*	*16.25*	*16.44*	*16.63*	*16.65*	*17.02*	**14.83**	*15.62*	*16.69*
Central and South America	**4.72**	**5.39**	**5.62**	**5.29**	**4.93**	*5.52*	*5.74*	*5.40*	*5.04*	*5.65*	*5.88*	*5.55*	**5.26**	*5.40*	*5.53*
Argentina	**0.70**	**0.68**	**0.70**	**0.69**	**0.67**	*0.69*	*0.70*	*0.69*	*0.67*	*0.69*	*0.70*	*0.69*	**0.69**	*0.69*	*0.69*
Brazil	**2.63**	**3.36**	**3.63**	**3.32**	**2.97**	*3.53*	*3.76*	*3.44*	*3.09*	*3.66*	*3.90*	*3.57*	**3.23**	*3.43*	*3.56*
Colombia	**0.98**	**0.93**	**0.87**	**0.87**	**0.87**	*0.89*	*0.86*	*0.86*	*0.86*	*0.88*	*0.85*	*0.86*	**0.91**	*0.87*	*0.86*
Other Central and S. America	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	*0.42*	*0.41*	*0.41*	*0.43*	*0.42*	*0.43*	*0.43*	**0.42**	*0.42*	*0.43*
Europe	**4.22**	**4.02**	**3.92**	**4.20**	**4.22**	*4.14*	*3.99*	*4.20*	*4.21*	*4.14*	*3.99*	*4.13*	**4.09**	*4.14*	*4.12*
Norway	**2.04**	**1.95**	**1.91**	**2.12**	**2.10**	*2.05*	*1.99*	*2.08*	*2.06*	*1.98*	*1.95*	*2.03*	**2.00**	*2.05*	*2.00*
United Kingdom	**1.13**	**1.09**	**1.01**	**1.03**	**1.09**	*1.09*	*0.99*	*1.11*	*1.14*	*1.17*	*1.05*	*1.10*	**1.06**	*1.07*	*1.11*
Eurasia	**14.33**	**14.09**	**13.91**	**14.51**	**14.43**	*14.35*	*14.27*	*14.29*	*14.30*	*14.30*	*14.37*	*14.41*	**14.21**	*14.34*	*14.35*
Azerbaijan	**0.87**	**0.87**	**0.84**	**0.80**	**0.79**	*0.80*	*0.77*	*0.76*	*0.77*	*0.76*	*0.74*	*0.72*	**0.84**	*0.78*	*0.75*
Kazakhstan	**1.76**	**1.63**	**1.57**	**1.83**	**1.88**	*1.91*	*1.90*	*1.93*	*1.96*	*1.94*	*1.97*	*2.02*	**1.70**	*1.91*	*1.97*
Russia	**11.27**	**11.17**	**11.08**	**11.45**	**11.32**	*11.17*	*11.13*	*11.14*	*11.11*	*11.14*	*11.20*	*11.22*	**11.24**	*11.19*	*11.17*
Turkmenistan	**0.27**	**0.26**	**0.26**	**0.28**	**0.28**	*0.29*	*0.29*	*0.29*	*0.29*	*0.29*	*0.29*	*0.29*	**0.27**	*0.29*	*0.29*
Other Eurasia	**0.17**	**0.17**	**0.16**	**0.16**	**0.16**	*0.18*	*0.18*	*0.18*	*0.17*	*0.17*	*0.17*	*0.17*	**0.16**	*0.17*	*0.17*
Middle East	**1.14**	**1.14**	**1.14**	**1.14**	**1.08**	*1.08*	*1.13*	*1.13*	*1.14*	*1.15*	*1.15*	*1.15*	**1.14**	*1.11*	*1.15*
Oman	**1.02**	**1.01**	**1.02**	**1.02**	**0.98**	*0.97*	*1.03*	*1.02*	*1.03*	*1.03*	*1.04*	*1.04*	**1.02**	*1.00*	*1.03*
Asia and Oceania	**9.71**	**9.50**	**9.39**	**9.36**	**9.39**	*9.35*	*9.30*	*9.32*	*9.24*	*9.24*	*9.23*	*9.26*	**9.49**	*9.34*	*9.24*
Australia	**0.39**	**0.37**	**0.40**	**0.37**	**0.35**	*0.38*	*0.38*	*0.38*	*0.39*	*0.39*	*0.40*	*0.42*	**0.38**	*0.37*	*0.40*
China	**5.01**	**4.90**	**4.78**	**4.76**	**4.82**	*4.78*	*4.74*	*4.77*	*4.68*	*4.70*	*4.70*	*4.73*	**4.86**	*4.78*	*4.70*
India	**0.99**	**0.99**	**0.99**	**0.99**	**1.01**	*1.00*	*0.99*	*1.00*	*1.00*	*0.99*	*0.99*	*0.99*	**0.99**	*1.00*	*0.99*
Indonesia	**0.94**	**0.93**	**0.94**	**0.93**	**0.93**	*0.92*	*0.91*	*0.89*	*0.88*	*0.86*	*0.85*	*0.83*	**0.94**	*0.91*	*0.86*
Malaysia	**0.76**	**0.75**	**0.73**	**0.74**	**0.75**	*0.73*	*0.75*	*0.75*	*0.75*	*0.75*	*0.74*	*0.74*	**0.75**	*0.74*	*0.75*
Vietnam	**0.33**	**0.33**	**0.31**	**0.31**	**0.30**	*0.29*	*0.28*	*0.28*	*0.27*	*0.27*	*0.27*	*0.27*	**0.32**	*0.29*	*0.27*
Africa	**2.07**	**2.07**	**2.06**	**2.09**	**2.07**	*2.10*	*2.12*	*2.13*	*2.03*	*2.03*	*2.03*	*2.03*	**2.07**	*2.11*	*2.03*
Egypt	**0.70**	**0.69**	**0.69**	**0.69**	**0.68**	*0.68*	*0.68*	*0.67*	*0.67*	*0.66*	*0.66*	*0.65*	**0.69**	*0.68*	*0.66*
Equatorial Guinea	**0.24**	**0.24**	**0.24**	**0.24**	**0.22**	*0.22*	*0.22*	*0.22*	*0.20*	*0.20*	*0.20*	*0.20*	**0.24**	*0.22*	*0.20*
South Sudan	**0.15**	**0.16**	**0.15**	**0.15**	**0.15**	*0.15*	*0.15*	*0.15*	*0.12*	*0.12*	*0.12*	*0.12*	**0.15**	*0.15*	*0.12*
Total non-OPEC liquids	**58.45**	**57.60**	**57.89**	**58.74**	**58.19**	*58.81*	*59.48*	*59.82*	*59.51*	*60.24*	*60.54*	*60.90*	**58.17**	*59.08*	*60.30*
OPEC non-crude liquids	**6.44**	**6.45**	**6.52**	**6.48**	**6.69**	*6.95*	*6.98*	*7.03*	*7.03*	*7.07*	*7.11*	*7.15*	**6.47**	*6.91*	*7.09*
Non-OPEC + OPEC non-crude	**64.89**	**64.05**	**64.41**	**65.22**	**64.87**	*65.76*	*66.46*	*66.85*	*66.54*	*67.31*	*67.65*	*68.05*	**64.64**	*65.99*	*67.39*
Unplanned non-OPEC Production Outages	**0.38**	**0.76**	**0.42**	**0.34**	**0.43**	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	**0.47**	*n/a*	*n/a*

- = no data available

OPEC = Organization of the Petroleum Exporting Countries: Algeria, Angola, Ecuador, 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 2017

	2016				2017				2018				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2016	2017	2018
Crude Oil															
Algeria	**1.05**	**1.04**	**1.05**	**1.05**	**1.04**	-	-	-	-	-	-	-	**1.05**	-	-
Angola	**1.78**	**1.79**	**1.79**	**1.64**	**1.64**	-	-	-	-	-	-	-	**1.75**	-	-
Ecudaor	**0.54**	**0.55**	**0.55**	**0.55**	**0.53**	-	-	-	-	-	-	-	**0.55**	-	-
Gabon	**0.21**	**0.21**	**0.21**	**0.21**	**0.19**	-	-	-	-	-	-	-	**0.21**	-	-
Iran	**3.25**	**3.61**	**3.67**	**3.73**	**3.80**	-	-	-	-	-	-	-	**3.57**	-	-
Iraq	**4.29**	**4.39**	**4.43**	**4.61**	**4.46**	-	-	-	-	-	-	-	**4.43**	-	-
Kuwait	**2.88**	**2.79**	**2.91**	**2.92**	**2.74**	-	-	-	-	-	-	-	**2.87**	-	-
Libya	**0.35**	**0.31**	**0.29**	**0.58**	**0.65**	-	-	-	-	-	-	-	**0.38**	-	-
Nigeria	**1.73**	**1.44**	**1.28**	**1.44**	**1.38**	-	-	-	-	-	-	-	**1.47**	-	-
Qatar	**0.66**	**0.68**	**0.66**	**0.66**	**0.62**	-	-	-	-	-	-	-	**0.67**	-	-
Saudi Arabia	**10.20**	**10.33**	**10.60**	**10.55**	**9.98**	-	-	-	-	-	-	-	**10.42**	-	-
United Arab Emirates	**2.85**	**2.93**	**3.06**	**3.09**	**2.92**	-	-	-	-	-	-	-	**2.98**	-	-
Venezuela	**2.30**	**2.23**	**2.11**	**2.07**	**1.99**	-	-	-	-	-	-	-	**2.18**	-	-
OPEC Total	**32.08**	**32.31**	**32.60**	**33.11**	**31.93**	*32.10*	*32.60*	*32.58*	*32.62*	*32.80*	*32.83*	*32.83*	**32.53**	*32.30*	*32.77*
Other Liquids (a)	**6.44**	**6.45**	**6.52**	**6.48**	**6.69**	*6.95*	*6.98*	*7.03*	*7.03*	*7.07*	*7.11*	*7.15*	**6.47**	*6.91*	*7.09*
Total OPEC Supply	**38.52**	**38.76**	**39.12**	**39.59**	**38.62**	*39.04*	*39.57*	*39.60*	*39.65*	*39.87*	*39.94*	*39.98*	**39.00**	*39.21*	*39.86*
Crude Oil Production Capacity															
Africa	**5.11**	**4.80**	**4.62**	**4.93**	**4.91**	*5.12*	*5.35*	*5.40*	*5.40*	*5.37*	*5.16*	*5.17*	**4.87**	*5.20*	*5.27*
Middle East	**25.54**	**25.95**	**26.27**	**26.56**	**26.70**	*26.69*	*26.72*	*26.74*	*26.74*	*26.38*	*26.54*	*26.56*	**26.08**	*26.71*	*26.55*
South America	**2.84**	**2.78**	**2.66**	**2.62**	**2.52**	*2.49*	*2.47*	*2.47*	*2.40*	*2.35*	*2.32*	*2.30*	**2.73**	*2.49*	*2.35*
OPEC Total	**33.50**	**33.53**	**33.56**	**34.11**	**34.14**	*34.30*	*34.54*	*34.61*	*34.53*	*34.10*	*34.03*	*34.03*	**33.68**	*34.40*	*34.17*
Surplus Crude Oil Production Capacity															
Africa	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	**0.00**	*0.00*	*0.00*
Middle East	**1.42**	**1.22**	**0.95**	**1.00**	**2.19**	*2.20*	*1.94*	*2.04*	*1.91*	*1.30*	*1.20*	*1.20*	**1.15**	*2.09*	*1.40*
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	**1.42**	**1.22**	**0.95**	**1.00**	**2.21**	*2.20*	*1.94*	*2.04*	*1.91*	*1.30*	*1.20*	*1.20*	**1.15**	*2.10*	*1.40*
Unplanned OPEC Production Outages	**2.09**	**2.44**	**2.34**	**1.93**	**1.81**	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	**2.20**	*n/a*	*n/a*

- = no data available

OPEC = Organization of the Petroleum Exporting Countries: Algeria, Angola, Gabon, Libya, and Nigeria (Africa); Ecuador and Venezuela (South America); Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the Unite 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 2017

	2016				2017				2018						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017	2018
North America	**23.82**	**23.75**	**24.36**	**24.17**	**23.80**	*24.17*	*24.64*	*24.46*	*24.24*	*24.35*	*24.93*	*24.82*	**24.03**	*24.27*	*24.59*
Canada	**2.39**	**2.37**	**2.52**	**2.46**	**2.41**	*2.34*	*2.46*	*2.44*	*2.40*	*2.34*	*2.46*	*2.44*	**2.43**	*2.41*	*2.41*
Mexico	**1.98**	**1.94**	**1.93**	**1.95**	**1.88**	*1.92*	*1.89*	*1.90*	*1.90*	*1.92*	*1.89*	*1.90*	**1.95**	*1.90*	*1.90*
United States	**19.45**	**19.42**	**19.90**	**19.75**	**19.49**	*19.90*	*20.28*	*20.11*	*19.92*	*20.08*	*20.57*	*20.47*	**19.63**	*19.95*	*20.26*
Central and South America	**7.05**	**7.21**	**7.31**	**7.30**	**7.00**	*7.18*	*7.32*	*7.32*	*6.97*	*7.16*	*7.29*	*7.29*	**7.22**	*7.20*	*7.18*
Brazil	**2.87**	**2.93**	**3.00**	**3.00**	**2.79**	*2.87*	*2.96*	*2.98*	*2.73*	*2.80*	*2.89*	*2.91*	**2.95**	*2.90*	*2.83*
Europe	**14.39**	**14.70**	**15.24**	**14.99**	**14.53**	*14.89*	*15.33*	*14.97*	*14.81*	*14.87*	*15.30*	*15.03*	**14.83**	*14.93*	*15.00*
Eurasia	**4.68**	**4.61**	**4.88**	**4.87**	**4.79**	*4.72*	*4.99*	*4.98*	*4.90*	*4.82*	*5.11*	*5.09*	**4.76**	*4.87*	*4.98*
Russia	**3.54**	**3.49**	**3.69**	**3.68**	**3.63**	*3.58*	*3.80*	*3.78*	*3.73*	*3.68*	*3.90*	*3.88*	**3.60**	*3.70*	*3.80*
Middle East	**8.11**	**8.86**	**9.35**	**8.55**	**8.45**	*9.13*	*9.65*	*8.91*	*8.78*	*9.38*	*9.91*	*9.11*	**8.72**	*9.04*	*9.30*
Asia and Oceania	**33.49**	**33.01**	**32.55**	**33.77**	**33.96**	*33.74*	*33.32*	*34.39*	*34.97*	*34.43*	*33.92*	*35.11*	**33.20**	*33.85*	*34.61*
China	**12.26**	**12.47**	**12.38**	**12.65**	**12.69**	*12.82*	*12.75*	*12.88*	*13.02*	*13.16*	*13.03*	*13.27*	**12.44**	*12.78*	*13.12*
Japan	**4.43**	**3.66**	**3.75**	**4.13**	**4.28**	*3.50*	*3.61*	*3.99*	*4.19*	*3.42*	*3.53*	*3.91*	**3.99**	*3.84*	*3.76*
India	**4.59**	**4.56**	**4.17**	**4.53**	**4.55**	*4.86*	*4.46*	*4.82*	*5.06*	*5.04*	*4.62*	*5.00*	**4.46**	*4.67*	*4.93*
Africa	**4.15**	**4.18**	**4.10**	**4.21**	**4.29**	*4.29*	*4.23*	*4.34*	*4.43*	*4.42*	*4.37*	*4.48*	**4.16**	*4.29*	*4.43*
Total OECD Liquid Fuels Consumption	**46.69**	**46.02**	**47.29**	**47.38**	**46.72**	*46.56*	*47.63*	*47.61*	*47.43*	*46.69*	*47.85*	*48.00*	**46.85**	*47.14*	*47.50*
Total non-OECD Liquid Fuels Consumption	**49.00**	**50.29**	**50.51**	**50.48**	**50.10**	*51.55*	*51.86*	*51.76*	*51.67*	*52.74*	*52.97*	*52.93*	**50.07**	*51.32*	*52.58*
Total World Liquid Fuels Consumption	**95.69**	**96.30**	**97.79**	**97.87**	**96.82**	*98.12*	*99.49*	*99.37*	*99.10*	*99.43*	*100.82*	*100.93*	**96.92**	*98.46*	*100.08*
Oil-weighted Real Gross Domestic Product (a)															
World Index, 2010 Q1 = 100	**119.7**	**120.4**	**121.2**	**122.0**	**122.7**	*123.7*	*124.6*	*125.6*	*126.5*	*127.5*	*128.4*	*129.4*	**120.8**	*124.2*	*128.0*
Percent change from prior year	**2.2**	**2.3**	**2.3**	**2.5**	**2.5**	*2.7*	*2.8*	*2.9*	*3.0*	*3.1*	*3.1*	*3.1*	**2.3**	*2.7*	*3.1*
OECD Index, 2010 Q1 = 100	**111.9**	**112.3**	**113.0**	**113.6**	**114.0**	*114.6*	*115.3*	*115.9*	*116.5*	*117.1*	*117.7*	*118.3*	**112.7**	*114.9*	*117.4*
Percent change from prior year	**1.7**	**1.6**	**1.7**	**1.9**	**1.9**	*2.1*	*2.1*	*2.0*	*2.2*	*2.1*	*2.1*	*2.1*	**1.7**	*2.0*	*2.1*
Non-OECD Index, 2010 Q1 = 100	**129.4**	**130.5**	**131.3**	**132.5**	**133.6**	*135.0*	*136.2*	*137.7*	*139.0*	*140.6*	*141.9*	*143.4*	**130.9**	*135.6*	*141.2*
Percent change from prior year	**2.9**	**3.1**	**3.1**	**3.2**	**3.3**	*3.4*	*3.7*	*3.9*	*4.0*	*4.2*	*4.2*	*4.2*	**3.1**	*3.6*	*4.1*
Real U.S. Dollar Exchange Rate (a)															
Index, January 2010 = 100	**128.50**	**127.76**	**128.25**	**131.39**	**132.08**	*131.62*	*132.93*	*134.34*	*135.44*	*136.01*	*136.04*	*135.95*	**128.98**	*132.75*	*135.86*
Percent change from prior year	**8.0**	**7.1**	**4.6**	**5.6**	**2.8**	*3.0*	*3.7*	*2.2*	*2.5*	*3.3*	*2.3*	*1.2*	**6.3**	*2.9*	*2.3*

- = 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.

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

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

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

Projections: EIA Regional Short-Term Energy Model.

Table 4a. U.S. Petroleum and Other Liquids Supply, Consumption, and Inventories

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2017

	2016				2017				2018				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2016	2017	2018
Supply (million barrels per day)															
Crude Oil Supply															
Domestic Production (a)	**9.17**	**8.85**	**8.67**	**8.81**	**9.00**	*9.20*	*9.40*	*9.73*	*9.95*	*10.00*	*9.90*	*10.17*	**8.87**	*9.33*	*10.01*
Alaska	**0.51**	**0.49**	**0.45**	**0.51**	**0.52**	*0.46*	*0.43*	*0.49*	*0.51*	*0.48*	*0.44*	*0.49*	**0.49**	*0.48*	*0.48*
Federal Gulf of Mexico (b)	**1.61**	**1.58**	**1.57**	**1.67**	**1.76**	*1.73*	*1.65*	*1.80*	*1.92*	*1.94*	*1.83*	*1.93*	**1.61**	*1.73*	*1.90*
Lower 48 States (excl GOM)	**7.05**	**6.78**	**6.65**	**6.63**	**6.72**	*7.01*	*7.31*	*7.44*	*7.52*	*7.58*	*7.64*	*7.75*	**6.78**	*7.12*	*7.62*
Crude Oil Net Imports (c)	**7.46**	**7.19**	**7.45**	**7.33**	**7.24**	*7.23*	*6.98*	*6.08*	*6.05*	*6.41*	*6.31*	*5.76*	**7.36**	*6.88*	*6.13*
SPR Net Withdrawals	**0.00**	**0.00**	**0.00**	**0.00**	**0.04**	*0.10*	*0.04*	*0.06*	*0.06*	*0.06*	*0.06*	*0.06*	**0.00**	*0.06*	*0.06*
Commercial Inventory Net Withdrawals	**-0.57**	**0.04**	**0.31**	**-0.17**	**-0.60**	*0.42*	*0.20*	*0.07*	*-0.40*	*0.04*	*0.23*	*0.05*	**-0.10**	*0.02*	*-0.02*
Crude Oil Adjustment (d)	**-0.06**	**0.14**	**0.09**	**0.09**	**0.23**	*0.05*	*0.21*	*0.15*	*0.19*	*0.19*	*0.21*	*0.15*	**0.07**	*0.16*	*0.19*
Total Crude Oil Input to Refineries	**16.00**	**16.22**	**16.53**	**16.06**	**15.91**	*17.01*	*16.82*	*16.09*	*15.85*	*16.70*	*16.72*	*16.20*	**16.20**	*16.46*	*16.37*
Other Supply															
Refinery Processing Gain	**1.07**	**1.10**	**1.15**	**1.11**	**1.09**	*1.08*	*1.11*	*1.09*	*1.05*	*1.09*	*1.11*	*1.09*	**1.11**	*1.09*	*1.09*
Natural Gas Plant Liquids Production	**3.38**	**3.57**	**3.46**	**3.49**	**3.54**	*3.73*	*3.91*	*4.03*	*4.05*	*4.14*	*4.22*	*4.35*	**3.48**	*3.80*	*4.19*
Renewables and Oxygenate Production (e)	**1.12**	**1.13**	**1.17**	**1.18**	**1.16**	*1.14*	*1.17*	*1.18*	*1.15*	*1.16*	*1.17*	*1.17*	**1.15**	*1.16*	*1.16*
Fuel Ethanol Production	**0.99**	**0.97**	**1.01**	**1.02**	**1.03**	*1.01*	*1.03*	*1.03*	*1.02*	*1.02*	*1.03*	*1.03*	**1.00**	*1.03*	*1.02*
Petroleum Products Adjustment (f)	**0.21**	**0.22**	**0.22**	**0.21**	**0.21**	*0.23*	*0.23*	*0.23*	*0.23*	*0.25*	*0.24*	*0.24*	**0.22**	*0.23*	*0.24*
Product Net Imports (c)	**-2.48**	**-2.51**	**-2.31**	**-2.65**	**-2.96**	*-2.89*	*-2.72*	*-2.87*	*-2.74*	*-2.75*	*-2.58*	*-2.93*	**-2.49**	*-2.86*	*-2.75*
Hydrocarbon Gas Liquids	**-1.00**	**-1.10**	**-0.93**	**-1.12**	**-1.20**	*-1.28*	*-1.29*	*-1.43*	*-1.32*	*-1.36*	*-1.35*	*-1.48*	**-1.04**	*-1.30*	*-1.38*
Unfinished Oils	**0.30**	**0.41**	**0.37**	**0.33**	**0.37**	*0.33*	*0.39*	*0.34*	*0.37*	*0.41*	*0.42*	*0.32*	**0.36**	*0.35*	*0.38*
Other HC/Oxygenates	**-0.10**	**-0.08**	**-0.05**	**-0.05**	**-0.12**	*-0.07*	*-0.05*	*-0.06*	*-0.10*	*-0.07*	*-0.05*	*-0.05*	**-0.07**	*-0.08*	*-0.07*
Motor Gasoline Blend Comp.	**0.34**	**0.65**	**0.59**	**0.51**	**0.43**	*0.50*	*0.45*	*0.44*	*0.46*	*0.64*	*0.48*	*0.46*	**0.52**	*0.46*	*0.51*
Finished Motor Gasoline	**-0.56**	**-0.47**	**-0.49**	**-0.76**	**-0.66**	*-0.49*	*-0.42*	*-0.57*	*-0.72*	*-0.56*	*-0.36*	*-0.64*	**-0.57**	*-0.53*	*-0.57*
Jet Fuel	**-0.03**	**-0.04**	**-0.02**	**-0.03**	**-0.04**	*-0.01*	*-0.02*	*-0.01*	*0.03*	*0.04*	*0.01*	*-0.01*	**-0.03**	*-0.02*	*0.02*
Distillate Fuel Oil	**-0.85**	**-1.21**	**-1.13**	**-0.99**	**-1.01**	*-1.13*	*-1.18*	*-0.98*	*-0.88*	*-1.13*	*-1.11*	*-0.91*	**-1.04**	*-1.08*	*-1.01*
Residual Fuel Oil	**-0.06**	**-0.06**	**-0.07**	**-0.06**	**-0.10**	*-0.08*	*-0.06*	*-0.08*	*-0.06*	*-0.12*	*-0.08*	*-0.09*	**-0.06**	*-0.08*	*-0.09*
Other Oils (g)	**-0.52**	**-0.62**	**-0.58**	**-0.48**	**-0.61**	*-0.66*	*-0.54*	*-0.52*	*-0.51*	*-0.60*	*-0.53*	*-0.53*	**-0.55**	*-0.58*	*-0.54*
Product Inventory Net Withdrawals	**0.17**	**-0.32**	**-0.32**	**0.35**	**0.53**	*-0.40*	*-0.25*	*0.37*	*0.32*	*-0.50*	*-0.31*	*0.36*	**-0.03**	*0.06*	*-0.03*
Total Supply	**19.47**	**19.42**	**19.90**	**19.75**	**19.50**	*19.90*	*20.28*	*20.11*	*19.92*	*20.08*	*20.57*	*20.47*	**19.64**	*19.95*	*20.26*
Consumption (million barrels per day)															
Hydrocarbon Gas Liquids	**2.73**	**2.25**	**2.40**	**2.59**	**2.79**	*2.36*	*2.55*	*2.83*	*3.02*	*2.63*	*2.78*	*3.08*	**2.49**	*2.63*	*2.87*
Unfinished Oils	**0.01**	**-0.06**	**-0.05**	**-0.03**	**0.02**	*-0.02*	*-0.03*	*0.01*	*0.00*	*-0.03*	*-0.03*	*0.01*	**-0.03**	*-0.01*	*-0.01*
Motor Gasoline	**9.09**	**9.44**	**9.56**	**9.22**	**8.95**	*9.47*	*9.60*	*9.33*	*8.99*	*9.51*	*9.63*	*9.33*	**9.33**	*9.34*	*9.37*
Fuel Ethanol blended into Motor Gasoline	**0.91**	**0.94**	**0.96**	**0.94**	**0.89**	*0.96*	*0.97*	*0.95*	*0.90*	*0.96*	*0.97*	*0.94*	**0.94**	*0.94*	*0.94*
Jet Fuel	**1.50**	**1.61**	**1.68**	**1.63**	**1.60**	*1.67*	*1.65*	*1.61*	*1.55*	*1.65*	*1.65*	*1.62*	**1.61**	*1.63*	*1.62*
Distillate Fuel Oil	**3.90**	**3.80**	**3.79**	**4.02**	**3.95**	*4.03*	*3.93*	*4.04*	*4.11*	*3.96*	*3.97*	*4.14*	**3.88**	*3.99*	*4.05*
Residual Fuel Oil	**0.31**	**0.40**	**0.36**	**0.35**	**0.37**	*0.34*	*0.35*	*0.31*	*0.35*	*0.32*	*0.34*	*0.31*	**0.36**	*0.34*	*0.33*
Other Oils (g)	**1.89**	**1.98**	**2.16**	**1.99**	**1.83**	*2.05*	*2.23*	*1.99*	*1.90*	*2.04*	*2.24*	*1.99*	**2.00**	*2.02*	*2.04*
Total Consumption	**19.45**	**19.42**	**19.90**	**19.75**	**19.49**	*19.90*	*20.28*	*20.11*	*19.92*	*20.08*	*20.57*	*20.47*	**19.63**	*19.95*	*20.26*
Total Petroleum and Other Liquids Net Imports	**4.97**	**4.68**	**5.15**	**4.68**	**4.29**	*4.34*	*4.26*	*3.21*	*3.31*	*3.66*	*3.73*	*2.83*	**4.87**	*4.02*	*3.38*
End-of-period Inventories (million barrels)															
Commercial Inventory															
Crude Oil (excluding SPR)	**501.5**	**498.0**	**469.1**	**484.3**	**537.9**	*500.0*	*481.9*	*475.6*	*512.1*	*508.4*	*487.1*	*482.2*	**484.3**	*475.6*	*482.2*
Hydrocarbon Gas Liquids	**154.4**	**211.8**	**251.6**	**203.5**	**151.5**	*195.4*	*228.3*	*185.1*	*153.8*	*203.6*	*237.7*	*194.7*	**203.5**	*185.1*	*194.7*
Unfinished Oils	**91.4**	**86.7**	**83.3**	**80.6**	**89.3**	*91.0*	*85.8*	*79.7*	*89.7*	*88.7*	*86.1*	*79.5*	**80.6**	*79.7*	*79.5*
Other HC/Oxygenates	**28.2**	**27.7**	**27.1**	**28.4**	**32.6**	*31.5*	*30.7*	*31.4*	*33.1*	*32.1*	*31.4*	*32.0*	**28.4**	*31.4*	*32.0*
Total Motor Gasoline	**243.3**	**242.1**	**227.0**	**237.7**	**239.0**	*234.2*	*227.7*	*241.6*	*239.7*	*234.1*	*229.3*	*244.2*	**237.7**	*241.6*	*244.2*
Finished Motor Gasoline	**26.5**	**24.9**	**25.1**	**28.6**	**21.7**	*25.3*	*26.3*	*28.0*	*25.2*	*23.8*	*24.4*	*26.0*	**28.6**	*28.0*	*26.0*
Motor Gasoline Blend Comp.	**216.9**	**217.2**	**201.9**	**209.1**	**217.2**	*208.9*	*201.4*	*213.6*	*214.5*	*210.3*	*205.0*	*218.2*	**209.1**	*213.6*	*218.2*
Jet Fuel	**43.8**	**40.4**	**44.7**	**42.8**	**42.3**	*43.8*	*45.0*	*42.2*	*41.7*	*42.9*	*44.3*	*42.0*	**42.8**	*42.2*	*42.0*
Distillate Fuel Oil	**160.6**	**149.2**	**160.4**	**165.5**	**151.1**	*150.0*	*157.6*	*158.3*	*144.0*	*148.1*	*156.2*	*156.9*	**165.5**	*158.3*	*156.9*
Residual Fuel Oil	**44.5**	**40.3**	**38.8**	**41.5**	**40.8**	*39.0*	*38.6*	*39.1*	*41.1*	*41.2*	*40.1*	*40.3*	**41.5**	*39.1*	*40.3*
Other Oils (g)	**58.4**	**55.6**	**50.5**	**51.3**	**56.6**	*54.7*	*48.9*	*51.4*	*56.9*	*55.0*	*49.2*	*51.7*	**51.3**	*51.4*	*51.7*
Total Commercial Inventory	**1,326**	**1,352**	**1,353**	**1,336**	**1,341**	*1,340*	*1,344*	*1,304*	*1,312*	*1,354*	*1,361*	*1,324*	**1,336**	*1,304*	*1,324*
Crude Oil in SPR	**695**	**695**	**695**	**695**	**692**	*682*	*679*	*673*	*667*	*661*	*656*	*650*	**695**	*673*	*650*

- = no data available

(a) Includes lease condensate.

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

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

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

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

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

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

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

SPR: Strategic Petroleum Reserve

HC: Hydrocarbons

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

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

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2017

	2016				2017				2018				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2016	2017	2018
HGL Production															
Natural Gas Processing Plants															
Ethane	**1.20**	**1.34**	**1.19**	**1.29**	**1.33**	*1.42*	*1.50*	*1.63*	*1.67*	*1.69*	*1.73*	*1.81*	**1.25**	*1.47*	*1.73*
Propane	**1.15**	**1.17**	**1.17**	**1.15**	**1.16**	*1.21*	*1.24*	*1.26*	*1.26*	*1.28*	*1.29*	*1.33*	**1.16**	*1.22*	*1.29*
Butanes	**0.63**	**0.63**	**0.64**	**0.63**	**0.63**	*0.65*	*0.68*	*0.69*	*0.68*	*0.70*	*0.71*	*0.72*	**0.63**	*0.66*	*0.70*
Natural Gasoline (Pentanes Plus)	**0.41**	**0.43**	**0.46**	**0.43**	**0.41**	*0.45*	*0.48*	*0.46*	*0.44*	*0.48*	*0.50*	*0.48*	**0.43**	*0.45*	*0.47*
Refinery and Blender Net Production															
Ethane/Ethylene	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	*0.01*	*0.00*	*0.00*	*0.00*	*0.01*	*0.00*	*0.00*	**0.00**	*0.00*	*0.00*
Propane/Propylene	**0.58**	**0.60**	**0.58**	**0.58**	**0.57**	*0.59*	*0.60*	*0.58*	*0.58*	*0.62*	*0.60*	*0.59*	**0.58**	*0.59*	*0.59*
Butanes/Butylenes	**-0.11**	**0.26**	**0.20**	**-0.20**	**-0.09**	*0.25*	*0.19*	*-0.17*	*-0.06*	*0.25*	*0.18*	*-0.18*	**0.04**	*0.04*	*0.05*
Renewable Fuels and Oxygenate Plant Net Production															
Natural Gasoline (Pentanes Plus)	**-0.02**	**-0.02**	**-0.02**	**-0.02**	**-0.02**	*-0.02*	*-0.02*	*-0.02*	*-0.02*	*-0.02*	*-0.02*	*-0.02*	**-0.02**	*-0.02*	*-0.02*
HGL Net Imports															
Ethane	**-0.08**	**-0.09**	**-0.10**	**-0.11**	**-0.15**	*-0.21*	*-0.25*	*-0.28*	*-0.29*	*-0.29*	*-0.29*	*-0.31*	**-0.09**	*-0.22*	*-0.29*
Propane/Propylene	**-0.65**	**-0.68**	**-0.56**	**-0.77**	**-0.79**	*-0.74*	*-0.65*	*-0.80*	*-0.73*	*-0.72*	*-0.67*	*-0.83*	**-0.67**	*-0.75*	*-0.74*
Butanes/Butylenes	**-0.07**	**-0.12**	**-0.08**	**-0.10**	**-0.09**	*-0.12*	*-0.15*	*-0.12*	*-0.07*	*-0.13*	*-0.14*	*-0.10*	**-0.09**	*-0.12*	*-0.11*
Natural Gasoline (Pentanes Plus)	**-0.20**	**-0.21**	**-0.19**	**-0.15**	**-0.18**	*-0.21*	*-0.24*	*-0.23*	*-0.23*	*-0.22*	*-0.25*	*-0.24*	**-0.19**	*-0.21*	*-0.23*
HGL Refinery and Blender Net Inputs															
Butanes/Butylenes	**0.43**	**0.28**	**0.32**	**0.52**	**0.43**	*0.28*	*0.32*	*0.48*	*0.41*	*0.30*	*0.32*	*0.49*	**0.39**	*0.38*	*0.38*
Natural Gasoline (Pentanes Plus)	**0.14**	**0.15**	**0.14**	**0.14**	**0.16**	*0.15*	*0.16*	*0.16*	*0.15*	*0.16*	*0.16*	*0.16*	**0.15**	*0.16*	*0.16*
HGL Consumption															
Ethane/Ethylene	**1.10**	**1.08**	**1.11**	**1.13**	**1.18**	*1.17*	*1.28*	*1.37*	*1.37*	*1.38*	*1.46*	*1.53*	**1.11**	*1.25*	*1.44*
Propane/Propylene	**1.41**	**0.88**	**0.98**	**1.18**	**1.39**	*0.89*	*0.98*	*1.16*	*1.37*	*0.91*	*1.00*	*1.21*	**1.11**	*1.10*	*1.12*
Butanes/Butylenes	**0.18**	**0.25**	**0.24**	**0.17**	**0.12**	*0.24*	*0.22*	*0.23*	*0.22*	*0.27*	*0.25*	*0.26*	**0.21**	*0.21*	*0.25*
Natural Gasoline (Pentanes Plus)	**0.04**	**0.04**	**0.07**	**0.11**	**0.10**	*0.06*	*0.06*	*0.07*	*0.05*	*0.06*	*0.06*	*0.07*	**0.07**	*0.07*	*0.06*
HGL Inventories (million barrels)															
Ethane/Ethylene	**33.76**	**45.19**	**50.71**	**53.65**	**52.99**	*58.00*	*57.03*	*57.04*	*56.19*	*59.17*	*57.47*	*56.83*	**45.86**	*56.28*	*57.42*
Propane/Propylene	**66.38**	**85.18**	**103.83**	**84.10**	**43.98**	*59.26*	*78.11*	*66.82*	*42.83*	*66.40*	*86.00*	*74.66*	**84.10**	*66.82*	*74.66*
Butanes/Butylenes	**32.39**	**54.10**	**73.35**	**40.33**	**31.68**	*54.79*	*70.44*	*40.99*	*33.34*	*55.83*	*71.48*	*42.03*	**40.33**	*40.99*	*42.03*
Natural Gasoline (Pentanes Plus)	**20.40**	**20.94**	**24.86**	**25.03**	**21.49**	*22.62*	*22.84*	*21.57*	*20.26*	*21.94*	*22.94*	*22.63*	**25.03**	*21.57*	*22.63*
Refinery and Blender Net Inputs															
Crude Oil	**16.00**	**16.22**	**16.53**	**16.06**	**15.91**	*17.01*	*16.82*	*16.09*	*15.85*	*16.70*	*16.72*	*16.20*	**16.20**	*16.46*	*16.37*
Hydrocarbon Gas Liquids	**0.57**	**0.43**	**0.46**	**0.66**	**0.58**	*0.44*	*0.48*	*0.64*	*0.56*	*0.46*	*0.48*	*0.65*	**0.53**	*0.53*	*0.54*
Other Hydrocarbons/Oxygenates	**1.15**	**1.22**	**1.23**	**1.20**	**1.16**	*1.26*	*1.29*	*1.27*	*1.19*	*1.27*	*1.30*	*1.28*	**1.20**	*1.24*	*1.26*
Unfinished Oils	**0.19**	**0.53**	**0.46**	**0.39**	**0.25**	*0.33*	*0.48*	*0.40*	*0.25*	*0.45*	*0.48*	*0.38*	**0.39**	*0.36*	*0.39*
Motor Gasoline Blend Components	**0.31**	**0.82**	**0.91**	**0.47**	**0.39**	*0.74*	*0.73*	*0.51*	*0.67*	*0.91*	*0.74*	*0.51*	**0.63**	*0.59*	*0.71*
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	**18.22**	**19.22**	**19.60**	**18.78**	**18.30**	*19.78*	*19.79*	*18.91*	*18.53*	*19.79*	*19.72*	*19.03*	**18.96**	*19.20*	*19.27*
Refinery Processing Gain	**1.07**	**1.10**	**1.15**	**1.11**	**1.09**	*1.08*	*1.11*	*1.09*	*1.05*	*1.09*	*1.11*	*1.09*	**1.11**	*1.09*	*1.09*
Refinery and Blender Net Production															
Hydrocarbon Gas Liquids	**0.47**	**0.86**	**0.78**	**0.38**	**0.48**	*0.85*	*0.79*	*0.41*	*0.52*	*0.87*	*0.78*	*0.41*	**0.62**	*0.63*	*0.65*
Finished Motor Gasoline	**9.68**	**10.06**	**10.19**	**10.02**	**9.57**	*10.14*	*10.21*	*10.10*	*9.88*	*10.26*	*10.18*	*10.17*	**9.99**	*10.01*	*10.12*
Jet Fuel	**1.57**	**1.61**	**1.75**	**1.64**	**1.63**	*1.70*	*1.68*	*1.59*	*1.52*	*1.62*	*1.66*	*1.60*	**1.64**	*1.65*	*1.60*
Distillate Fuel	**4.70**	**4.80**	**4.93**	**4.95**	**4.75**	*5.08*	*5.11*	*4.96*	*4.76*	*5.06*	*5.10*	*4.99*	**4.84**	*4.98*	*4.98*
Residual Fuel	**0.40**	**0.42**	**0.42**	**0.44**	**0.46**	*0.40*	*0.41*	*0.40*	*0.44*	*0.44*	*0.40*	*0.40*	**0.42**	*0.42*	*0.42*
Other Oils (a)	**2.47**	**2.57**	**2.68**	**2.47**	**2.50**	*2.68*	*2.70*	*2.53*	*2.47*	*2.62*	*2.70*	*2.55*	**2.55**	*2.61*	*2.59*
Total Refinery and Blender Net Production	**19.29**	**20.32**	**20.75**	**19.89**	**19.40**	*20.86*	*20.91*	*19.99*	*19.58*	*20.88*	*20.83*	*20.12*	**20.07**	*20.29*	*20.35*
Refinery Distillation Inputs	**16.27**	**16.50**	**16.89**	**16.41**	**16.23**	*17.28*	*17.08*	*16.38*	*16.13*	*16.90*	*16.99*	*16.48*	**16.52**	*16.74*	*16.63*
Refinery Operable Distillation Capacity	**18.31**	**18.36**	**18.44**	**18.49**	**18.62**	*18.62*	*18.62*	*18.62*	*18.62*	*18.66*	*18.66*	*18.66*	**18.40**	*18.62*	*18.65*
Refinery Distillation Utilization Factor	**0.89**	**0.90**	**0.92**	**0.89**	**0.87**	*0.93*	*0.92*	*0.88*	*0.87*	*0.91*	*0.91*	*0.88*	**0.90**	*0.90*	*0.89*

- = 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 2017

	2016				2017				2018				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2016	2017	2018
Prices (cents per gallon)															
Refiner Wholesale Price	**119**	**158**	**150**	**153**	**163**	*175*	*173*	*149*	*153*	*176*	*176*	*161*	**145**	*165*	*167*
Gasoline Regular Grade Retail Prices Including Taxes															
PADD 1	**187**	**220**	**215**	**223**	**231**	*239*	*246*	*228*	*228*	*248*	*251*	*240*	**212**	*236*	*242*
PADD 2	**176**	**221**	**215**	**212**	**223**	*235*	*241*	*217*	*217*	*245*	*247*	*230*	**207**	*229*	*235*
PADD 3	**167**	**201**	**199**	**201**	**210**	*220*	*223*	*200*	*201*	*225*	*225*	*211*	**192**	*213*	*216*
PADD 4	**184**	**221**	**226**	**220**	**227**	*239*	*250*	*225*	*209*	*239*	*253*	*236*	**213**	*236*	*235*
PADD 5	**241**	**265**	**264**	**263**	**276**	*290*	*288*	*262*	*262*	*298*	*299*	*277*	**259**	*279*	*284*
U.S. Average	**190**	**225**	**221**	**223**	**233**	*244*	*248*	*226*	*226*	*252*	*254*	*238*	**215**	*238*	*243*
Gasoline All Grades Including Taxes	**200**	**235**	**232**	**234**	**244**	*255*	*259*	*237*	*237*	*263*	*265*	*250*	**226**	*249*	*254*
End-of-period Inventories (million barrels)															
Total Gasoline Inventories															
PADD 1	**65.9**	**73.0**	**58.6**	**65.0**	**65.3**	*67.0*	*62.2*	*65.1*	*66.3*	*66.0*	*62.9*	*66.1*	**65.0**	*65.1*	*66.1*
PADD 2	**56.7**	**53.3**	**50.6**	**52.8**	**57.0**	*51.9*	*49.3*	*52.6*	*53.6*	*50.9*	*49.6*	*52.6*	**52.8**	*52.6*	*52.6*
PADD 3	**83.0**	**80.4**	**83.3**	**82.7**	**79.1**	*79.8*	*80.7*	*84.5*	*82.3*	*81.6*	*81.4*	*86.1*	**82.7**	*84.5*	*86.1*
PADD 4	**8.4**	**7.5**	**6.9**	**7.9**	**7.9**	*7.3*	*7.3*	*7.9*	*7.5*	*7.4*	*7.4*	*8.0*	**7.9**	*7.9*	*8.0*
PADD 5	**29.4**	**27.9**	**27.6**	**29.3**	**29.7**	*28.1*	*28.2*	*31.6*	*30.1*	*28.2*	*28.0*	*31.4*	**29.3**	*31.6*	*31.4*
U.S. Total	**243.3**	**242.1**	**227.0**	**237.7**	**239.0**	*234.2*	*227.7*	*241.6*	*239.7*	*234.1*	*229.3*	*244.2*	**237.7**	*241.6*	*244.2*
Finished Gasoline Inventories															
U.S. Total	**26.5**	**24.9**	**25.1**	**28.6**	**21.7**	*25.3*	*26.3*	*28.0*	*25.2*	*23.8*	*24.4*	*26.0*	**28.6**	*28.0*	*26.0*
Gasoline Blending Components Inventories															
U.S. Total	**216.9**	**217.2**	**201.9**	**209.1**	**217.2**	*208.9*	*201.4*	*213.6*	*214.5*	*210.3*	*205.0*	*218.2*	**209.1**	*213.6*	*218.2*

- = 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 2017

	2016				2017				2018				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2016	2017	2018
Supply (billion cubic feet per day)															
Total Marketed Production	**78.66**	**77.52**	**76.83**	**76.24**	**76.51**	*77.52*	*79.74*	*80.91*	*81.88*	*82.27*	*82.30*	*83.25*	**77.31**	*78.68*	*82.43*
Alaska	**0.98**	**0.86**	**0.87**	**1.04**	**1.01**	*0.83*	*0.77*	*0.93*	*1.00*	*0.84*	*0.78*	*0.93*	**0.94**	*0.88*	*0.89*
Federal GOM (a)	**3.48**	**3.34**	**3.24**	**3.35**	**3.35**	*3.33*	*3.21*	*3.22*	*3.35*	*3.33*	*3.21*	*3.22*	**3.35**	*3.28*	*3.28*
Lower 48 States (excl GOM)	**74.20**	**73.32**	**72.72**	**71.85**	**72.16**	*73.35*	*75.76*	*76.75*	*77.52*	*78.09*	*78.31*	*79.10*	**73.02**	*74.52*	*78.26*
Total Dry Gas Production	**73.77**	**72.38**	**71.84**	**71.20**	**71.40**	*72.22*	*74.24*	*75.28*	*76.13*	*76.45*	*76.43*	*77.26*	**72.29**	*73.30*	*76.57*
LNG Gross Imports	**0.33**	**0.19**	**0.18**	**0.26**	**0.29**	*0.17*	*0.18*	*0.22*	*0.29*	*0.16*	*0.18*	*0.22*	**0.24**	*0.21*	*0.21*
LNG Gross Exports	**0.15**	**0.40**	**0.64**	**0.85**	**1.63**	*1.71*	*1.84*	*2.37*	*2.51*	*2.28*	*2.89*	*3.46*	**0.51**	*1.89*	*2.79*
Pipeline Gross Imports	**8.08**	**7.84**	**8.11**	**7.79**	**8.83**	*8.09*	*8.07*	*7.94*	*9.00*	*8.18*	*8.55*	*8.52*	**7.96**	*8.23*	*8.56*
Pipeline Gross Exports	**5.63**	**5.56**	**5.86**	**6.21**	**7.21**	*6.58*	*6.56*	*6.81*	*7.91*	*7.15*	*6.80*	*7.07*	**5.82**	*6.79*	*7.23*
Supplemental Gaseous Fuels	**0.17**	**0.13**	**0.17**	**0.17**	**0.16**	*0.16*	*0.16*	*0.17*	*0.17*	*0.17*	*0.17*	*0.17*	**0.16**	*0.16*	*0.17*
Net Inventory Withdrawals	**13.09**	**-7.77**	**-5.64**	**4.33**	**13.70**	*-9.23*	*-8.05*	*3.91*	*16.92*	*-9.83*	*-8.90*	*3.62*	**0.99**	*0.03*	*0.39*
Total Supply	**89.67**	**66.82**	**68.16**	**76.69**	**85.55**	*63.12*	*66.19*	*78.32*	*92.08*	*65.69*	*66.74*	*79.26*	**75.32**	*73.26*	*75.88*
Balancing Item (b)	**-0.54**	**-0.18**	**0.91**	**-0.98**	**0.03**	*0.97*	*0.32*	*-0.71*	*0.13*	*0.99*	*0.71*	*-0.39*	**-0.20**	*0.15*	*0.36*
Total Primary Supply	**89.13**	**66.64**	**69.07**	**75.70**	**85.58**	*64.09*	*66.51*	*77.61*	*92.21*	*66.68*	*67.45*	*78.87*	**75.12**	*73.41*	*76.24*
Consumption (billion cubic feet per day)															
Residential	**22.47**	**7.16**	**3.48**	**14.94**	**22.23**	*7.05*	*4.11*	*15.54*	*24.13*	*7.45*	*4.03*	*15.49*	**12.00**	*12.19*	*12.73*
Commercial	**13.42**	**5.99**	**4.56**	**10.21**	**13.44**	*5.80*	*4.52*	*10.57*	*14.69*	*6.06*	*4.56*	*10.64*	**8.54**	*8.56*	*8.96*
Industrial	**22.45**	**20.03**	**20.07**	**21.84**	**22.85**	*20.42*	*20.29*	*21.92*	*23.54*	*21.07*	*20.74*	*22.57*	**21.10**	*21.37*	*21.97*
Electric Power (c)	**24.17**	**27.45**	**34.91**	**22.54**	**20.63**	*24.82*	*31.40*	*23.01*	*22.86*	*25.72*	*31.67*	*23.35*	**27.28**	*24.99*	*25.92*
Lease and Plant Fuel	**4.34**	**4.28**	**4.24**	**4.21**	**4.22**	*4.28*	*4.40*	*4.46*	*4.52*	*4.54*	*4.54*	*4.59*	**4.27**	*4.34*	*4.55*
Pipeline and Distribution Use	**2.17**	**1.63**	**1.69**	**1.85**	**2.09**	*1.60*	*1.67*	*1.98*	*2.35*	*1.71*	*1.79*	*2.12*	**1.83**	*1.83*	*1.99*
Vehicle Use	**0.11**	**0.11**	**0.12**	**0.12**	**0.12**	*0.12*	*0.12*	*0.12*	*0.12*	*0.12*	*0.12*	*0.12*	**0.11**	*0.12*	*0.12*
Total Consumption	**89.13**	**66.64**	**69.07**	**75.70**	**85.58**	*64.09*	*66.51*	*77.61*	*92.21*	*66.68*	*67.45*	*78.87*	**75.12**	*73.41*	*76.24*
End-of-period Inventories (billion cubic feet)															
Working Gas Inventory	**2,495**	**3,194**	**3,714**	**3,305**	**2,072**	*2,912*	*3,653*	*3,294*	*1,771*	*2,666*	*3,484*	*3,151*	**3,305**	*3,294*	*3,151*
East Region (d)	**436**	**654**	**898**	**720**	**259**	*551*	*815*	*692*	*240*	*530*	*788*	*665*	**720**	*692*	*665*
Midwest Region (d)	**543**	**763**	**1,042**	**906**	**478**	*697*	*1,021*	*881*	*355*	*606*	*964*	*834*	**906**	*881*	*834*
South Central Region (d)	**1,080**	**1,236**	**1,185**	**1,170**	**948**	*1,157*	*1,234*	*1,190*	*799*	*1,026*	*1,160*	*1,144*	**1,170**	*1,190*	*1,144*
Mountain Region (d)	**144**	**196**	**232**	**204**	**142**	*187*	*235*	*213*	*141*	*174*	*223*	*205*	**204**	*213*	*205*
Pacific Region (d)	**266**	**316**	**321**	**271**	**219**	*288*	*317*	*286*	*205*	*300*	*318*	*272*	**271**	*286*	*272*
Alaska	**25**	**30**	**36**	**33**	**27**	*31*	*31*	*31*	*31*	*31*	*31*	*31*	**33**	*31*	*31*

- = 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 2017

	2016				2017				2018				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2016	2017	2018
Wholesale/Spot															
Henry Hub Spot Price	**2.06**	**2.21**	**2.97**	**3.14**	**3.11**	*3.24*	*3.30*	*3.39*	*3.62*	*3.40*	*3.42*	*3.64*	**2.60**	*3.26*	*3.52*
Residential Retail															
New England	**11.79**	**13.13**	**17.81**	**13.42**	**12.91**	*13.85*	*16.91*	*13.52*	*13.20*	*14.21*	*17.01*	*13.69*	**12.90**	*13.49*	*13.75*
Middle Atlantic	**8.84**	**10.70**	**16.17**	**10.15**	**9.86**	*12.31*	*16.59*	*11.16*	*10.22*	*12.19*	*16.69*	*11.36*	**10.03**	*11.05*	*11.27*
E. N. Central	**6.81**	**9.31**	**17.80**	**8.26**	**7.77**	*10.75*	*16.68*	*9.18*	*8.31*	*11.14*	*16.69*	*9.29*	**8.27**	*9.20*	*9.51*
W. N. Central	**7.38**	**10.52**	**17.88**	**9.14**	**8.31**	*10.96*	*17.31*	*9.63*	*8.99*	*11.87*	*17.84*	*10.10*	**8.98**	*9.68*	*10.27*
S. Atlantic	**10.23**	**15.35**	**23.48**	**13.14**	**12.31**	*16.85*	*22.13*	*12.93*	*11.44*	*16.37*	*22.26*	*13.08*	**12.66**	*13.85*	*13.24*
E. S. Central	**8.52**	**13.11**	**19.55**	**11.33**	**10.47**	*15.29*	*20.56*	*12.91*	*10.44*	*14.67*	*20.38*	*13.02*	**10.50**	*12.50*	*12.28*
W. S. Central	**8.27**	**14.10**	**20.93**	**13.26**	**10.34**	*15.46*	*20.28*	*12.24*	*9.61*	*14.41*	*20.07*	*12.36*	**11.60**	*12.60*	*11.94*
Mountain	**8.22**	**9.65**	**13.76**	**8.52**	**8.21**	*9.92*	*13.80*	*9.49*	*9.38*	*10.65*	*14.09*	*9.62*	**8.96**	*9.32*	*10.05*
Pacific	**10.97**	**11.26**	**13.02**	**12.17**	**12.04**	*12.10*	*12.64*	*11.37*	*12.10*	*12.46*	*13.04*	*11.84*	**11.67**	*11.92*	*12.20*
U.S. Average	**8.54**	**11.15**	**16.99**	**10.18**	**9.73**	*12.37*	*16.57*	*10.77*	*9.94*	*12.54*	*16.75*	*11.00*	**10.06**	*11.02*	*11.19*
Commercial Retail															
New England	**8.76**	**9.58**	**10.49**	**9.52**	**9.51**	*9.68*	*10.17*	*10.54*	*10.97*	*10.88*	*10.77*	*10.55*	**9.30**	*9.90*	*10.83*
Middle Atlantic	**6.84**	**6.41**	**6.02**	**6.68**	**7.67**	*7.57*	*7.14*	*7.81*	*8.06*	*8.00*	*7.38*	*7.94*	**6.61**	*7.62*	*7.93*
E. N. Central	**5.89**	**6.58**	**8.77**	**6.52**	**6.63**	*7.47*	*9.15*	*7.27*	*7.01*	*8.03*	*9.39*	*7.45*	**6.42**	*7.17*	*7.47*
W. N. Central	**6.22**	**6.70**	**8.68**	**6.80**	**6.93**	*7.38*	*8.91*	*7.46*	*7.79*	*8.27*	*9.32*	*7.78*	**6.68**	*7.34*	*7.98*
S. Atlantic	**7.54**	**8.32**	**9.27**	**8.55**	**8.92**	*9.43*	*9.82*	*8.99*	*8.84*	*9.55*	*10.12*	*9.21*	**8.17**	*9.15*	*9.22*
E. S. Central	**7.49**	**8.56**	**9.75**	**9.03**	**9.04**	*9.81*	*10.19*	*9.13*	*8.73*	*9.80*	*10.38*	*9.39*	**8.36**	*9.34*	*9.27*
W. S. Central	**6.29**	**6.89**	**8.27**	**8.13**	**7.69**	*7.70*	*8.29*	*7.82*	*7.45*	*7.82*	*8.45*	*8.04*	**7.19**	*7.82*	*7.81*
Mountain	**6.94**	**7.09**	**7.96**	**6.89**	**6.87**	*7.62*	*8.49*	*7.48*	*7.73*	*8.02*	*8.77*	*7.73*	**7.06**	*7.37*	*7.90*
Pacific	**8.38**	**8.13**	**9.14**	**9.12**	**9.01**	*8.78*	*9.08*	*8.80*	*8.90*	*8.70*	*9.11*	*8.92*	**8.69**	*8.91*	*8.90*
U.S. Average	**6.84**	**7.22**	**8.21**	**7.48**	**7.70**	*8.11*	*8.70*	*8.07*	*8.06*	*8.51*	*8.93*	*8.25*	**7.25**	*7.99*	*8.28*
Industrial Retail															
New England	**7.07**	**6.88**	**6.27**	**7.10**	**8.12**	*7.47*	*7.35*	*8.51*	*8.74*	*7.99*	*7.44*	*8.61*	**6.90**	*7.96*	*8.32*
Middle Atlantic	**6.72**	**6.17**	**5.91**	**6.99**	**7.99**	*7.16*	*7.63*	*8.11*	*8.36*	*7.66*	*7.82*	*8.28*	**6.59**	*7.81*	*8.15*
E. N. Central	**5.05**	**4.73**	**5.33**	**5.40**	**5.82**	*5.87*	*6.24*	*6.20*	*6.83*	*6.52*	*6.52*	*6.45*	**5.13**	*5.99*	*6.64*
W. N. Central	**4.31**	**3.49**	**3.98**	**4.39**	**4.95**	*4.41*	*4.72*	*5.28*	*5.94*	*5.21*	*5.08*	*5.60*	**4.09**	*4.87*	*5.50*
S. Atlantic	**4.40**	**3.80**	**4.44**	**4.83**	**5.30**	*5.03*	*5.27*	*5.47*	*5.75*	*5.29*	*5.37*	*5.68*	**4.38**	*5.27*	*5.54*
E. S. Central	**3.96**	**3.38**	**4.09**	**4.60**	**4.97**	*4.72*	*4.85*	*5.14*	*5.36*	*4.86*	*4.93*	*5.30*	**4.01**	*4.93*	*5.13*
W. S. Central	**2.28**	**2.15**	**3.07**	**3.21**	**3.48**	*3.35*	*3.57*	*3.58*	*3.81*	*3.58*	*3.75*	*3.86*	**2.68**	*3.50*	*3.75*
Mountain	**5.28**	**4.96**	**5.42**	**5.12**	**5.38**	*5.48*	*6.02*	*6.01*	*6.16*	*5.96*	*6.33*	*6.37*	**5.19**	*5.71*	*6.21*
Pacific	**6.65**	**6.04**	**6.68**	**7.10**	**7.48**	*6.56*	*6.71*	*6.73*	*7.23*	*6.62*	*6.80*	*6.89*	**6.65**	*6.90*	*6.91*
U.S. Average	**3.44**	**2.92**	**3.63**	**4.03**	**4.52**	*4.03*	*4.19*	*4.48*	*4.93*	*4.31*	*4.36*	*4.73*	**3.51**	*4.31*	*4.60*

- = 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 2017

	2016				2017				2018				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2016	2017	2018
Supply (million short tons)															
Production	**173.0**	**160.5**	**195.1**	**199.5**	**199.7**	*184.0*	*207.7*	*192.8*	*195.1*	*175.7*	*206.5*	*209.4*	**728.2**	*784.2*	*786.6*
Appalachia	**44.3**	**43.2**	**44.8**	**47.6**	**50.9**	*46.9*	*50.0*	*47.1*	*47.2*	*45.1*	*48.9*	*49.2*	**180.0**	*194.9*	*190.4*
Interior	**36.9**	**34.4**	**35.7**	**37.2**	**43.3**	*37.8*	*41.8*	*40.2*	*41.2*	*37.6*	*42.6*	*44.9*	**144.2**	*163.1*	*166.3*
Western	**91.8**	**82.8**	**114.6**	**114.8**	**105.5**	*99.3*	*115.9*	*105.5*	*106.6*	*92.9*	*115.0*	*115.3*	**404.0**	*426.1*	*429.8*
Primary Inventory Withdrawals	**-1.4**	**0.2**	**3.6**	**-0.1**	**-1.0**	*0.5*	*2.9*	*-0.8*	*-1.1*	*-0.3*	*3.2*	*-3.0*	**2.2**	*1.6*	*-1.2*
Imports	**2.7**	**2.3**	**2.7**	**2.1**	**1.9**	*1.8*	*3.1*	*2.8*	*1.5*	*2.2*	*3.2*	*2.8*	**9.8**	*9.6*	*9.7*
Exports	**14.2**	**14.2**	**12.6**	**19.3**	**22.3**	*19.8*	*15.6*	*14.0*	*15.2*	*16.1*	*14.5*	*15.5*	**60.3**	*71.6*	*61.3*
Metallurgical Coal	**10.2**	**10.1**	**9.1**	**11.6**	**12.2**	*11.1*	*9.0*	*9.4*	*9.6*	*10.8*	*9.5*	*10.8*	**40.9**	*41.7*	*40.7*
Steam Coal	**4.0**	**4.2**	**3.5**	**7.7**	**10.1**	*8.7*	*6.6*	*4.6*	*5.6*	*5.3*	*4.9*	*4.7*	**19.3**	*30.0*	*20.6*
Total Primary Supply	**160.1**	**148.8**	**188.9**	**182.2**	**178.3**	*166.5*	*198.1*	*180.8*	*180.2*	*161.5*	*198.4*	*193.6*	**680.0**	*723.7*	*733.8*
Secondary Inventory Withdrawals	**4.1**	**9.2**	**25.2**	**-5.6**	**-1.8**	*4.9*	*16.1*	*-3.7*	*-0.4*	*1.7*	*14.1*	*-16.2*	**32.9**	*15.6*	*-0.9*
Waste Coal (a)	**2.5**	**2.5**	**2.5**	**2.5**	**2.6**	*2.6*	*2.6*	*2.6*	*2.6*	*2.6*	*2.6*	*2.6*	**9.8**	*10.2*	*10.3*
Total Supply	**166.7**	**160.4**	**216.6**	**179.0**	**179.1**	*174.0*	*216.8*	*179.7*	*182.4*	*165.7*	*215.0*	*180.0*	**722.7**	*749.6*	*743.2*
Consumption (million short tons)															
Coke Plants	**4.1**	**4.1**	**4.2**	**4.1**	**4.4**	*4.3*	*5.4*	*5.1*	*4.6*	*4.6*	*5.5*	*5.2*	**16.5**	*19.1*	*19.8*
Electric Power Sector (b)	**152.2**	**147.2**	**210.3**	**167.6**	**160.6**	*147.7*	*202.9*	*165.7*	*168.5*	*152.4*	*200.6*	*165.6*	**677.3**	*676.9*	*687.0*
Retail and Other Industry	**9.5**	**8.6**	**8.6**	**9.0**	**9.0**	*8.4*	*8.6*	*8.9*	*9.4*	*8.8*	*8.9*	*9.3*	**35.7**	*34.9*	*36.3*
Residential and Commercial	**0.4**	**0.2**	**0.2**	**0.3**	**0.3**	*0.2*	*0.2*	*0.2*	*0.3*	*0.1*	*0.1*	*0.2*	**1.2**	*0.8*	*0.7*
Other Industrial	**9.1**	**8.4**	**8.4**	**8.6**	**8.7**	*8.3*	*8.4*	*8.7*	*9.1*	*8.7*	*8.8*	*9.0*	**34.6**	*34.0*	*35.6*
Total Consumption	**165.9**	**159.9**	**223.0**	**180.6**	**174.0**	*160.4*	*216.8*	*179.7*	*182.4*	*165.7*	*215.0*	*180.0*	**729.5**	*730.9*	*743.2*
Discrepancy (c)	**0.8**	**0.5**	**-6.5**	**-1.6**	**5.1**	*13.6*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	**-6.8**	*18.7*	*0.0*
End-of-period Inventories (million short tons)															
Primary Inventories (d)	**37.3**	**37.1**	**33.6**	**33.7**	**34.7**	*34.2*	*31.3*	*32.1*	*33.2*	*33.5*	*30.3*	*33.3*	**33.7**	*32.1*	*33.3*
Secondary Inventories	**198.4**	**189.2**	**164.0**	**169.6**	**171.4**	*166.5*	*150.3*	*154.0*	*154.4*	*152.7*	*138.7*	*154.9*	**169.6**	*154.0*	*154.9*
Electric Power Sector	**192.3**	**183.2**	**158.2**	**163.9**	**164.1**	*158.5*	*141.9*	*145.2*	*146.7*	*144.4*	*129.9*	*145.9*	**163.9**	*145.2*	*145.9*
Retail and General Industry	**3.9**	**3.8**	**3.7**	**3.6**	**5.3**	*5.5*	*6.1*	*6.4*	*5.6*	*5.8*	*6.3*	*6.6*	**3.6**	*6.4*	*6.6*
Coke Plants	**1.9**	**1.8**	**1.7**	**1.7**	**1.5**	*1.9*	*1.8*	*1.8*	*1.6*	*1.9*	*1.9*	*1.9*	**1.7**	*1.8*	*1.9*
Coal Market Indicators															
Coal Miner Productivity (Tons per hour)	**6.11**	**6.11**	**6.11**	**6.11**	**5.96**	*5.96*	*5.96*	*5.96*	*5.86*	*5.86*	*5.86*	*5.86*	**6.11**	*5.96*	*5.86*
Total Raw Steel Production (Million short tons per day)	**0.238**	**0.247**	**0.238**	**0.230**	**0.248**	*0.245*	*0.215*	*0.184*	*0.235*	*0.239*	*0.220*	*0.181*	**0.239**	*0.223*	*0.219*
Cost of Coal to Electric Utilities (Dollars per million Btu)	**2.13**	**2.13**	**2.11**	**2.08**	**2.08**	*2.17*	*2.21*	*2.18*	*2.20*	*2.20*	*2.24*	*2.23*	**2.11**	*2.16*	*2.22*

- = no data available

(a) Waste coal includes waste coal and cloal 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 2017

	2016				2017				2018				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2016	2017	2018
Electricity Supply (billion kilowatthours per day)															
Electricity Generation	**10.67**	**10.75**	**12.76**	**10.39**	**10.53**	*10.70*	*12.34*	*10.44*	*10.94*	*10.87*	*12.38*	*10.54*	**11.15**	*11.01*	*11.19*
Electric Power Sector (a)	**10.23**	**10.32**	**12.32**	**9.96**	**10.10**	*10.27*	*11.89*	*10.02*	*10.51*	*10.44*	*11.94*	*10.12*	**10.71**	*10.57*	*10.76*
Comm. and Indus. Sectors (b)	**0.44**	**0.43**	**0.45**	**0.42**	**0.43**	*0.43*	*0.45*	*0.42*	*0.43*	*0.42*	*0.45*	*0.42*	**0.44**	*0.43*	*0.43*
Net Imports	**0.18**	**0.18**	**0.22**	**0.19**	**0.19**	*0.17*	*0.18*	*0.15*	*0.15*	*0.15*	*0.17*	*0.13*	**0.19**	*0.17*	*0.15*
Total Supply	**10.85**	**10.93**	**12.98**	**10.58**	**10.73**	*10.87*	*12.52*	*10.59*	*11.10*	*11.02*	*12.56*	*10.67*	**11.34**	*11.18*	*11.34*
Losses and Unaccounted for (c)	**0.66**	**0.97**	**0.90**	**0.73**	**0.62**	*0.71*	*0.71*	*0.67*	*0.56*	*0.82*	*0.72*	*0.68*	**0.82**	*0.68*	*0.70*
Electricity Consumption (billion kilowatthours per day unless noted)															
Retail Sales	**9.81**	**9.58**	**11.69**	**9.47**	**9.73**	*9.78*	*11.42*	*9.55*	*10.15*	*9.83*	*11.44*	*9.62*	**10.14**	*10.12*	*10.26*
Residential Sector	**3.81**	**3.37**	**4.77**	**3.42**	**3.70**	*3.38*	*4.51*	*3.45*	*4.05*	*3.40*	*4.50*	*3.50*	**3.85**	*3.76*	*3.86*
Commercial Sector	**3.49**	**3.62**	**4.20**	**3.55**	**3.51**	*3.70*	*4.13*	*3.56*	*3.57*	*3.70*	*4.15*	*3.58*	**3.71**	*3.73*	*3.75*
Industrial Sector	**2.48**	**2.57**	**2.70**	**2.48**	**2.49**	*2.68*	*2.76*	*2.51*	*2.51*	*2.70*	*2.77*	*2.53*	**2.56**	*2.61*	*2.63*
Transportation Sector	**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*
Direct Use (d)	**0.39**	**0.38**	**0.40**	**0.38**	**0.38**	*0.38*	*0.40*	*0.37*	*0.38*	*0.38*	*0.39*	*0.37*	**0.38**	*0.38*	*0.38*
Total Consumption	**10.19**	**9.96**	**12.09**	**9.84**	**10.11**	*10.16*	*11.81*	*9.92*	*10.54*	*10.20*	*11.84*	*9.99*	**10.52**	*10.50*	*10.64*
Average residential electricity usage per customer (kWh)	**2,645**	**2,342**	**3,348**	**2,401**	**2,520**	*2,318*	*3,133*	*2,402*	*2,725*	*2,312*	*3,095*	*2,405*	**10,736**	*10,372*	*10,538*
Prices															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	**2.13**	**2.13**	**2.11**	**2.08**	**2.08**	*2.17*	*2.21*	*2.18*	*2.20*	*2.20*	*2.24*	*2.23*	**2.11**	*2.16*	*2.22*
Natural Gas	**2.65**	**2.51**	**3.00**	**3.36**	**3.69**	*3.64*	*3.50*	*3.87*	*4.37*	*3.78*	*3.63*	*4.15*	**2.88**	*3.66*	*3.95*
Residual Fuel Oil	**6.15**	**8.51**	**9.70**	**9.08**	**11.01**	*10.76*	*10.30*	*10.10*	*9.91*	*10.78*	*10.78*	*10.85*	**8.41**	*10.52*	*10.58*
Distillate Fuel Oil	**9.00**	**11.01**	**11.64**	**12.14**	**12.88**	*13.17*	*13.97*	*14.25*	*14.37*	*14.50*	*14.95*	*15.62*	**10.86**	*13.56*	*14.84*
Retail Prices (cents per kilowatthour)															
Residential Sector	**12.20**	**12.66**	**12.81**	**12.45**	**12.61**	*13.05*	*13.43*	*12.96*	*12.94*	*13.61*	*13.95*	*13.35*	**12.55**	*13.04*	*13.48*
Commercial Sector	**10.12**	**10.34**	**10.68**	**10.27**	**10.38**	*10.40*	*10.80*	*10.52*	*10.64*	*10.55*	*10.91*	*10.65*	**10.37**	*10.53*	*10.70*
Industrial Sector	**6.42**	**6.67**	**7.20**	**6.67**	**6.65**	*6.95*	*7.49*	*6.92*	*6.85*	*7.09*	*7.63*	*7.08*	**6.75**	*7.01*	*7.18*

- = 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 colocated 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 2017

	2016				2017				2018				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2016	2017	2018
Residential Sector															
New England	**133**	**109**	**152**	**114**	**135**	*109*	*142*	*115*	*138*	*107*	*140*	*115*	**127**	*125*	*125*
Middle Atlantic	**367**	**309**	**461**	**320**	**368**	*310*	*421*	*322*	*389*	*313*	*418*	*323*	**364**	*356*	*361*
E. N. Central	**522**	**447**	**619**	**459**	**507**	*429*	*568*	*462*	*547*	*436*	*563*	*464*	**512**	*492*	*503*
W. N. Central	**298**	**243**	**322**	**255**	**298**	*240*	*312*	*263*	*322*	*244*	*312*	*268*	**279**	*278*	*287*
S. Atlantic	**968**	**874**	**1,223**	**852**	**891**	*888*	*1,140*	*864*	*1,024*	*881*	*1,140*	*878*	**980**	*946*	*981*
E. S. Central	**337**	**274**	**412**	**279**	**305**	*272*	*375*	*283*	*360*	*273*	*373*	*289*	**326**	*309*	*324*
W. S. Central	**526**	**518**	**810**	**517**	**501**	*532*	*773*	*516*	*578*	*536*	*775*	*528*	**593**	*581*	*605*
Mountain	**240**	**251**	**337**	**232**	**245**	*245*	*345*	*232*	*249*	*251*	*351*	*235*	**265**	*267*	*272*
Pacific contiguous	**406**	**336**	**422**	**381**	**439**	*344*	*418*	*383*	*432*	*349*	*419*	*385*	**386**	*396*	*396*
AK and HI	**13**	**12**	**12**	**14**	**14**	*12*	*12*	*13*	*14*	*12*	*12*	*13*	**13**	*13*	*13*
Total	**3,810**	**3,373**	**4,771**	**3,421**	**3,704**	*3,381*	*4,506*	*3,454*	*4,053*	*3,401*	*4,503*	*3,498*	**3,845**	*3,762*	*3,864*
Commercial Sector															
New England	**141**	**137**	**160**	**135**	**140**	*137*	*157*	*136*	*139*	*134*	*152*	*131*	**143**	*143*	*139*
Middle Atlantic	**422**	**408**	**488**	**408**	**423**	*415*	*468*	*408*	*425*	*412*	*465*	*408*	**432**	*429*	*428*
E. N. Central	**488**	**493**	**567**	**483**	**490**	*491*	*549*	*484*	*497*	*494*	*549*	*484*	**508**	*504*	*506*
W. N. Central	**271**	**271**	**308**	**271**	**272**	*273*	*309*	*274*	*277*	*276*	*311*	*275*	**280**	*282*	*285*
S. Atlantic	**792**	**844**	**977**	**802**	**784**	*876*	*945*	*804*	*796*	*864*	*946*	*805*	**854**	*853*	*853*
E. S. Central	**231**	**242**	**295**	**234**	**227**	*255*	*291*	*235*	*234*	*257*	*295*	*238*	**251**	*252*	*256*
W. S. Central	**473**	**519**	**623**	**511**	**477**	*549*	*632*	*518*	*503*	*568*	*649*	*529*	**532**	*544*	*563*
Mountain	**240**	**258**	**290**	**250**	**246**	*257*	*294*	*250*	*248*	*260*	*296*	*252*	**260**	*262*	*264*
Pacific contiguous	**418**	**428**	**475**	**436**	**431**	*429*	*472*	*436*	*432*	*424*	*472*	*438*	**440**	*442*	*442*
AK and HI	**16**	**16**	**16**	**16**	**16**	*16*	*16*	*16*	*16*	*15*	*16*	*16*	**16**	*16*	*16*
Total	**3,494**	**3,616**	**4,199**	**3,547**	**3,508**	*3,697*	*4,133*	*3,561*	*3,568*	*3,705*	*4,151*	*3,577*	**3,715**	*3,726*	*3,751*
Industrial Sector															
New England	**45**	**47**	**49**	**45**	**44**	*48*	*48*	*43*	*43*	*46*	*47*	*42*	**47**	*46*	*45*
Middle Atlantic	**192**	**191**	**202**	**189**	**192**	*194*	*205*	*191*	*192*	*195*	*206*	*192*	**193**	*195*	*197*
E. N. Central	**502**	**504**	**528**	**485**	**493**	*514*	*534*	*490*	*496*	*516*	*535*	*491*	**505**	*508*	*510*
W. N. Central	**223**	**228**	**246**	**227**	**228**	*256*	*264*	*239*	*236*	*264*	*270*	*244*	**231**	*247*	*254*
S. Atlantic	**362**	**384**	**393**	**362**	**363**	*374*	*385*	*355*	*353*	*365*	*376*	*347*	**375**	*369*	*360*
E. S. Central	**258**	**269**	**274**	**261**	**264**	*286*	*285*	*266*	*264*	*285*	*283*	*264*	**265**	*275*	*274*
W. S. Central	**456**	**471**	**481**	**458**	**476**	*511*	*500*	*469*	*484*	*520*	*507*	*477*	**467**	*489*	*497*
Mountain	**214**	**232**	**247**	**215**	**210**	*237*	*254*	*221*	*215*	*242*	*259*	*226*	**227**	*230*	*236*
Pacific contiguous	**215**	**236**	**262**	**224**	**211**	*250*	*267*	*225*	*212*	*251*	*268*	*227*	**234**	*238*	*240*
AK and HI	**13**	**14**	**15**	**14**	**13**	*14*	*15*	*14*	*13*	*14*	*15*	*14*	**14**	*14*	*14*
Total	**2,480**	**2,575**	**2,697**	**2,480**	**2,493**	*2,683*	*2,755*	*2,514*	*2,508*	*2,698*	*2,767*	*2,525*	**2,558**	*2,612*	*2,625*
Total All Sectors (a)															
New England	**320**	**294**	**362**	**295**	**320**	*295*	*349*	*296*	*321*	*289*	*340*	*289*	**318**	*315*	*310*
Middle Atlantic	**993**	**918**	**1,162**	**927**	**994**	*930*	*1,106*	*933*	*1,019*	*932*	*1,101*	*935*	**1,000**	*991*	*997*
E. N. Central	**1,514**	**1,446**	**1,716**	**1,429**	**1,492**	*1,435*	*1,652*	*1,438*	*1,542*	*1,448*	*1,649*	*1,442*	**1,526**	*1,504*	*1,520*
W. N. Central	**792**	**742**	**877**	**753**	**798**	*769*	*885*	*775*	*835*	*784*	*894*	*788*	**791**	*807*	*825*
S. Atlantic	**2,126**	**2,106**	**2,596**	**2,020**	**2,042**	*2,142*	*2,474*	*2,026*	*2,177*	*2,114*	*2,466*	*2,034*	**2,213**	*2,172*	*2,198*
E. S. Central	**827**	**785**	**981**	**774**	**796**	*813*	*951*	*784*	*859*	*816*	*951*	*791*	**842**	*836*	*854*
W. S. Central	**1,455**	**1,509**	**1,914**	**1,487**	**1,455**	*1,592*	*1,905*	*1,504*	*1,566*	*1,624*	*1,932*	*1,535*	**1,592**	*1,615*	*1,665*
Mountain	**694**	**741**	**875**	**697**	**701**	*739*	*892*	*704*	*713*	*753*	*906*	*714*	**752**	*759*	*772*
Pacific contiguous	**1,042**	**1,002**	**1,162**	**1,043**	**1,083**	*1,025*	*1,159*	*1,047*	*1,077*	*1,026*	*1,162*	*1,052*	**1,062**	*1,079*	*1,080*
AK and HI	**42**	**41**	**43**	**44**	**43**	*41*	*43*	*43*	*43*	*41*	*43*	*43*	**43**	*43*	*42*
Total	**9,805**	**9,584**	**11,688**	**9,469**	**9,726**	*9,783*	*11,416*	*9,550*	*10,153*	*9,826*	*11,444*	*9,622*	**10,139**	*10,122*	*10,263*

- = 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 Kilowatthour

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2017

	2016				2017				2018				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2016	2017	2018
Residential Sector															
New England	**19.08**	**19.30**	**18.47**	**18.68**	**19.07**	*19.69*	*19.84*	*20.22*	*20.63*	*21.30*	*21.29*	*21.50*	**18.85**	*19.69*	*21.16*
Middle Atlantic	**15.29**	**15.88**	**16.08**	**15.74**	**15.55**	*16.22*	*16.74*	*16.21*	*15.93*	*16.69*	*17.26*	*16.64*	**15.76**	*16.20*	*16.64*
E. N. Central	**12.51**	**13.25**	**12.91**	**13.04**	**12.90**	*13.79*	*13.54*	*13.66*	*13.46*	*14.45*	*14.16*	*14.19*	**12.91**	*13.46*	*14.04*
W. N. Central	**10.61**	**12.31**	**12.67**	**11.27**	**10.94**	*12.64*	*13.07*	*11.53*	*11.13*	*12.98*	*13.43*	*11.78*	**11.73**	*12.05*	*12.31*
S. Atlantic	**11.40**	**11.75**	**11.88**	**11.47**	**11.73**	*11.97*	*12.37*	*11.88*	*11.97*	*12.49*	*12.82*	*12.21*	**11.65**	*12.01*	*12.39*
E. S. Central	**10.35**	**10.94**	**10.90**	**11.14**	**11.10**	*11.59*	*11.81*	*11.92*	*11.58*	*12.19*	*12.25*	*12.19*	**10.82**	*11.61*	*12.04*
W. S. Central	**10.34**	**10.69**	**10.65**	**10.52**	**10.55**	*11.17*	*11.47*	*11.20*	*10.91*	*11.69*	*11.95*	*11.53*	**10.56**	*11.15*	*11.55*
Mountain	**11.05**	**11.91**	**12.12**	**11.45**	**11.28**	*12.15*	*12.42*	*11.72*	*11.56*	*12.49*	*12.76*	*12.02*	**11.68**	*11.95*	*12.27*
Pacific	**14.13**	**13.95**	**16.09**	**13.85**	**14.51**	*14.33*	*16.41*	*14.07*	*14.99*	*15.14*	*17.18*	*14.54*	**14.56**	*14.87*	*15.50*
U.S. Average	**12.20**	**12.66**	**12.81**	**12.45**	**12.61**	*13.05*	*13.43*	*12.96*	*12.94*	*13.61*	*13.95*	*13.35*	**12.55**	*13.04*	*13.48*
Commercial Sector															
New England	**15.33**	**15.01**	**15.19**	**14.89**	**15.12**	*13.29*	*13.77*	*14.12*	*15.01*	*12.91*	*13.46*	*14.02*	**15.11**	*14.06*	*13.84*
Middle Atlantic	**12.02**	**12.48**	**13.29**	**12.22**	**12.07**	*12.45*	*13.41*	*12.52*	*12.17*	*12.48*	*13.51*	*12.74*	**12.54**	*12.64*	*12.75*
E. N. Central	**9.65**	**9.87**	**9.91**	**9.98**	**10.02**	*10.18*	*10.15*	*10.29*	*10.33*	*10.43*	*10.33*	*10.43*	**9.86**	*10.16*	*10.38*
W. N. Central	**8.86**	**9.70**	**10.15**	**9.07**	**9.12**	*9.84*	*10.40*	*9.36*	*9.27*	*10.04*	*10.64*	*9.62*	**9.47**	*9.70*	*9.92*
S. Atlantic	**9.37**	**9.27**	**9.26**	**9.21**	**9.48**	*9.39*	*9.45*	*9.55*	*10.07*	*9.79*	*9.70*	*9.75*	**9.28**	*9.46*	*9.82*
E. S. Central	**9.93**	**9.99**	**10.12**	**10.35**	**10.53**	*10.15*	*10.46*	*10.94*	*10.91*	*10.40*	*10.55*	*11.00*	**10.10**	*10.51*	*10.70*
W. S. Central	**7.80**	**7.79**	**7.86**	**7.78**	**8.26**	*7.60*	*7.75*	*7.92*	*8.03*	*7.28*	*7.54*	*7.90*	**7.81**	*7.87*	*7.66*
Mountain	**9.02**	**9.75**	**10.03**	**9.34**	**9.13**	*9.66*	*10.04*	*9.48*	*9.23*	*9.74*	*10.13*	*9.60*	**9.56**	*9.60*	*9.70*
Pacific	**12.21**	**13.08**	**14.69**	**12.96**	**12.53**	*13.75*	*15.26*	*13.35*	*13.31*	*14.47*	*15.77*	*13.60*	**13.28**	*13.76*	*14.32*
U.S. Average	**10.12**	**10.34**	**10.68**	**10.27**	**10.38**	*10.40*	*10.80*	*10.52*	*10.64*	*10.55*	*10.91*	*10.65*	**10.37**	*10.53*	*10.70*
Industrial Sector															
New England	**12.22**	**11.86**	**12.25**	**12.03**	**12.42**	*12.04*	*12.39*	*12.13*	*12.87*	*12.36*	*12.64*	*12.30*	**12.09**	*12.24*	*12.54*
Middle Atlantic	**7.05**	**7.01**	**7.12**	**6.92**	**6.93**	*7.03*	*7.20*	*7.06*	*6.98*	*7.02*	*7.26*	*7.15*	**7.03**	*7.06*	*7.10*
E. N. Central	**6.74**	**6.88**	**7.04**	**6.96**	**7.02**	*7.12*	*7.25*	*7.14*	*7.20*	*7.22*	*7.33*	*7.26*	**6.91**	*7.14*	*7.25*
W. N. Central	**6.65**	**7.10**	**7.82**	**6.64**	**6.89**	*7.18*	*7.94*	*6.75*	*7.03*	*7.30*	*8.05*	*6.85*	**7.07**	*7.21*	*7.33*
S. Atlantic	**6.15**	**6.33**	**6.78**	**6.30**	**6.35**	*6.61*	*7.07*	*6.56*	*6.57*	*6.75*	*7.22*	*6.74*	**6.40**	*6.65*	*6.83*
E. S. Central	**5.45**	**5.72**	**6.14**	**5.99**	**5.91**	*6.23*	*6.56*	*6.30*	*6.22*	*6.42*	*6.72*	*6.50*	**5.83**	*6.26*	*6.47*
W. S. Central	**5.06**	**5.03**	**5.44**	**5.32**	**5.27**	*5.51*	*5.98*	*5.81*	*5.53*	*5.66*	*6.16*	*6.08*	**5.22**	*5.64*	*5.86*
Mountain	**5.83**	**6.29**	**7.01**	**6.08**	**6.08**	*6.68*	*7.39*	*6.35*	*6.33*	*6.92*	*7.64*	*6.55*	**6.33**	*6.66*	*6.90*
Pacific	**7.99**	**9.08**	**10.54**	**8.65**	**8.24**	*9.10*	*10.54*	*8.67*	*8.32*	*9.19*	*10.61*	*8.69*	**9.14**	*9.22*	*9.28*
U.S. Average	**6.42**	**6.67**	**7.20**	**6.67**	**6.65**	*6.95*	*7.49*	*6.92*	*6.85*	*7.09*	*7.63*	*7.08*	**6.75**	*7.01*	*7.18*
All Sectors (a)															
New England	**16.41**	**16.07**	**16.13**	**15.88**	**16.38**	*15.45*	*16.03*	*16.17*	*17.11*	*15.92*	*16.54*	*16.70*	**16.13**	*16.02*	*16.58*
Middle Atlantic	**12.25**	**12.47**	**13.31**	**12.34**	**12.35**	*12.56*	*13.51*	*12.66*	*12.60*	*12.73*	*13.74*	*12.92*	**12.63**	*12.80*	*13.02*
E. N. Central	**9.67**	**9.87**	**10.11**	**9.93**	**10.01**	*10.17*	*10.38*	*10.30*	*10.43*	*10.49*	*10.66*	*10.55*	**9.90**	*10.22*	*10.54*
W. N. Central	**8.90**	**9.75**	**10.42**	**9.08**	**9.16**	*9.85*	*10.60*	*9.29*	*9.36*	*10.03*	*10.83*	*9.50*	**9.57**	*9.75*	*9.95*
S. Atlantic	**9.74**	**9.76**	**10.12**	**9.64**	**9.90**	*9.97*	*10.42*	*10.01*	*10.39*	*10.39*	*10.76*	*10.29*	**9.84**	*10.09*	*10.47*
E. S. Central	**8.70**	**8.86**	**9.33**	**9.17**	**9.22**	*9.27*	*9.82*	*9.72*	*9.75*	*9.60*	*10.08*	*9.93*	**9.03**	*9.52*	*9.85*
W. S. Central	**7.86**	**7.92**	**8.43**	**7.97**	**8.07**	*8.13*	*8.80*	*8.39*	*8.32*	*8.21*	*8.94*	*8.58*	**8.07**	*8.38*	*8.54*
Mountain	**8.74**	**9.40**	**9.98**	**9.03**	**8.97**	*9.54*	*10.21*	*9.24*	*9.17*	*9.75*	*10.44*	*9.43*	**9.33**	*9.54*	*9.75*
Pacific	**12.08**	**12.42**	**14.25**	**12.35**	**12.49**	*12.82*	*14.58*	*12.59*	*12.99*	*13.39*	*15.07*	*12.87*	**12.82**	*13.16*	*13.62*
U.S. Average	**9.99**	**10.17**	**10.75**	**10.11**	**10.27**	*10.37*	*11.04*	*10.45*	*10.62*	*10.66*	*11.31*	*10.69*	**10.28**	*10.56*	*10.84*

- = 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 2017

	2016				2017				2018				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2016	2017	2018
United States															
Coal	**3,059**	**2,967**	**4,202**	**3,317**	**3,250**	*2,985*	*4,060*	*3,293*	*3,483*	*3,093*	*4,013*	*3,285*	**3,388**	*3,399*	*3,469*
Natural Gas	**3,426**	**3,762**	**4,702**	**3,191**	**2,917**	*3,414*	*4,242*	*3,232*	*3,211*	*3,515*	*4,256*	*3,264*	**3,771**	*3,454*	*3,564*
Petroleum (a)	**68**	**63**	**72**	**59**	**61**	*63*	*73*	*63*	*76*	*67*	*75*	*64*	**65**	*65*	*70*
Other Gases	**40**	**35**	**35**	**32**	**39**	*35*	*35*	*32*	*40*	*36*	*35*	*33*	**36**	*35*	*36*
Nuclear	**2,245**	**2,155**	**2,254**	**2,148**	**2,247**	*2,031*	*2,258*	*2,134*	*2,223*	*2,097*	*2,280*	*2,138*	**2,200**	*2,167*	*2,185*
Renewable Energy Sources:	**1,804**	**1,747**	**1,487**	**1,625**	**1,994**	*2,151*	*1,649*	*1,661*	*1,890*	*2,034*	*1,702*	*1,737*	**1,665**	*1,862*	*1,840*
Conventional Hydropower	**842**	**810**	**618**	**637**	**917**	*1,035*	*751*	*632*	*798*	*842*	*734*	*617*	**726**	*833*	*747*
Wind	**667**	**614**	**517**	**682**	**752**	*722*	*503*	*706*	*752*	*769*	*541*	*779*	**620**	*670*	*710*
Wood Biomass	**114**	**104**	**116**	**108**	**114**	*107*	*116*	*110*	*114*	*105*	*116*	*111*	**111**	*112*	*111*
Waste Biomass	**60**	**61**	**61**	**59**	**59**	*59*	*60*	*59*	*59*	*60*	*61*	*60*	**60**	*59*	*60*
Geothermal	**47**	**46**	**47**	**50**	**49**	*47*	*47*	*47*	*48*	*46*	*47*	*47*	**48**	*47*	*47*
Solar	**73**	**112**	**127**	**89**	**103**	*181*	*172*	*107*	*120*	*210*	*204*	*123*	**100**	*141*	*164*
Pumped Storage Hydropower	**-12**	**-14**	**-26**	**-21**	**-16**	*-13*	*-17*	*-15*	*-14*	*-12*	*-16*	*-14*	**-18**	*-15*	*-14*
Other Nonrenewable Fuels (b)	**36**	**38**	**39**	**36**	**36**	*37*	*40*	*36*	*35*	*38*	*40*	*36*	**37**	*37*	*37*
Total Generation	**10,667**	**10,754**	**12,764**	**10,386**	**10,527**	*10,702*	*12,340*	*10,436*	*10,944*	*10,867*	*12,385*	*10,543*	**11,145**	*11,004*	*11,187*
Northeast Census Region															
Coal	**162**	**141**	**203**	**150**	**154**	*125*	*176*	*177*	*221*	*120*	*177*	*180*	**164**	*158*	*174*
Natural Gas	**512**	**599**	**795**	**521**	**474**	*523*	*707*	*524*	*464*	*544*	*702*	*534*	**607**	*558*	*562*
Petroleum (a)	**7**	**3**	**6**	**6**	**4**	*4*	*6*	*5*	*9*	*6*	*9*	*6*	**5**	*5*	*7*
Other Gases	**2**	**2**	**2**	**2**	**2**	*2*	*2*	*2*	*2*	*2*	*2*	*2*	**2**	*2*	*2*
Nuclear	**543**	**461**	**516**	**525**	**539**	*470*	*536*	*503*	*522*	*493*	*536*	*503*	**511**	*512*	*514*
Hydropower (c)	**111**	**94**	**78**	**82**	**103**	*120*	*89*	*89*	*82*	*103*	*87*	*87*	**91**	*100*	*90*
Other Renewables (d)	**77**	**63**	**61**	**73**	**71**	*69*	*63*	*75*	*80*	*71*	*64*	*78*	**69**	*70*	*73*
Other Nonrenewable Fuels (b)	**11**	**12**	**12**	**11**	**11**	*11*	*12*	*11*	*11*	*11*	*12*	*12*	**12**	*11*	*11*
Total Generation	**1,426**	**1,375**	**1,674**	**1,371**	**1,359**	*1,325*	*1,591*	*1,385*	*1,391*	*1,350*	*1,588*	*1,401*	**1,462**	*1,416*	*1,433*
South Census Region															
Coal	**1,270**	**1,347**	**1,950**	**1,462**	**1,334**	*1,456*	*1,914*	*1,433*	*1,501*	*1,486*	*1,887*	*1,424*	**1,508**	*1,536*	*1,575*
Natural Gas	**2,013**	**2,235**	**2,645**	**1,825**	**1,721**	*2,137*	*2,409*	*1,814*	*1,844*	*2,100*	*2,410*	*1,844*	**2,180**	*2,021*	*2,051*
Petroleum (a)	**29**	**30**	**35**	**23**	**26**	*27*	*31*	*24*	*31*	*27*	*30*	*24*	**29**	*27*	*28*
Other Gases	**15**	**13**	**14**	**13**	**14**	*13*	*14*	*13*	*15*	*13*	*14*	*13*	**14**	*13*	*14*
Nuclear	**951**	**998**	**994**	**936**	**979**	*890*	*997*	*952*	*996*	*939*	*1,021*	*958*	**970**	*955*	*978*
Hydropower (c)	**191**	**84**	**71**	**63**	**135**	*106*	*84*	*71*	*110*	*91*	*82*	*70*	**102**	*99*	*88*
Other Renewables (d)	**330**	**307**	**305**	**335**	**399**	*392*	*315*	*374*	*400*	*436*	*352*	*410*	**320**	*370*	*400*
Other Nonrenewable Fuels (b)	**16**	**18**	**18**	**16**	**15**	*17*	*18*	*15*	*15*	*17*	*18*	*15*	**17**	*16*	*16*
Total Generation	**4,815**	**5,033**	**6,032**	**4,673**	**4,623**	*5,037*	*5,781*	*4,696*	*4,912*	*5,110*	*5,814*	*4,759*	**5,140**	*5,037*	*5,150*
Midwest Census Region															
Coal	**1,202**	**1,109**	**1,498**	**1,197**	**1,292**	*1,104*	*1,440*	*1,179*	*1,294*	*1,110*	*1,431*	*1,158*	**1,252**	*1,254*	*1,248*
Natural Gas	**357**	**368**	**454**	**295**	**283**	*329*	*432*	*326*	*392*	*388*	*437*	*336*	**368**	*343*	*389*
Petroleum (a)	**10**	**9**	**8**	**7**	**7**	*10*	*12*	*10*	*11*	*11*	*12*	*10*	**9**	*10*	*11*
Other Gases	**16**	**13**	**14**	**11**	**17**	*13*	*14*	*12*	*18*	*14*	*14*	*12*	**14**	*14*	*14*
Nuclear	**573**	**543**	**572**	**523**	**555**	*532*	*556*	*522*	*542*	*511*	*556*	*521*	**553**	*541*	*532*
Hydropower (c)	**48**	**43**	**39**	**37**	**55**	*49*	*42*	*40*	*44*	*43*	*41*	*39*	**42**	*46*	*42*
Other Renewables (d)	**282**	**245**	**185**	**300**	**307**	*281*	*189*	*306*	*322*	*293*	*199*	*339*	**253**	*271*	*288*
Other Nonrenewable Fuels (b)	**4**	**4**	**4**	**3**	**4**	*4*	*5*	*4*	*4*	*4*	*5*	*4*	**4**	*4*	*4*
Total Generation	**2,492**	**2,334**	**2,773**	**2,374**	**2,520**	*2,323*	*2,690*	*2,398*	*2,626*	*2,375*	*2,695*	*2,419*	**2,494**	*2,483*	*2,529*
West Census Region															
Coal	**426**	**370**	**551**	**508**	**470**	*301*	*529*	*503*	*467*	*377*	*518*	*523*	**464**	*451*	*471*
Natural Gas	**543**	**560**	**809**	**549**	**440**	*425*	*694*	*569*	*510*	*483*	*707*	*549*	**616**	*533*	*563*
Petroleum (a)	**21**	**20**	**23**	**23**	**23**	*21*	*24*	*24*	*24*	*23*	*25*	*25*	**22**	*23*	*24*
Other Gases	**7**	**6**	**5**	**6**	**6**	*6*	*5*	*6*	*6*	*6*	*5*	*6*	**6**	*6*	*6*
Nuclear	**178**	**152**	**172**	**164**	**175**	*139*	*168*	*157*	*163*	*154*	*167*	*157*	**166**	*160*	*161*
Hydropower (c)	**480**	**575**	**404**	**434**	**607**	*746*	*520*	*417*	*548*	*593*	*507*	*407*	**473**	*572*	*513*
Other Renewables (d)	**273**	**322**	**317**	**280**	**299**	*374*	*330*	*274*	*290*	*391*	*354*	*293*	**298**	*319*	*332*
Other Nonrenewable Fuels (b)	**4**	**5**	**5**	**5**	**5**	*5*	*6*	*5*	*5*	*5*	*6*	*5*	**5**	*5*	*5*
Total Generation	**1,933**	**2,011**	**2,285**	**1,968**	**2,025**	*2,017*	*2,277*	*1,956*	*2,014*	*2,032*	*2,289*	*1,965*	**2,050**	*2,069*	*2,075*

(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 2017

	2016				2017				2018				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2016	2017	2018
Fuel Consumption for Electricity Generation, All Sectors															
United States															
Coal (thousand st/d)	**1,676**	**1,619**	**2,288**	**1,822**	**1,785**	*1,624*	*2,207*	*1,801*	*1,870*	*1,674*	*2,181*	*1,798*	**1,852**	*1,855*	*1,881*
Natural Gas (million cf/d)	**25,226**	**28,572**	**36,107**	**23,726**	**21,813**	*26,023*	*32,622*	*24,160*	*23,993*	*26,890*	*32,862*	*24,492*	**28,416**	*26,179*	*27,076*
Petroleum (thousand b/d)	**121**	**112**	**130**	**103**	**108**	*109*	*128*	*111*	*134*	*119*	*133*	*114*	**116**	*114*	*125*
Residual Fuel Oil	**29**	**22**	**35**	**25**	**24**	*28*	*31*	*26*	*32*	*29*	*34*	*28*	**28**	*27*	*31*
Distillate Fuel Oil	**30**	**23**	**24**	**25**	**29**	*24*	*27*	*25*	*32*	*25*	*27*	*25*	**26**	*26*	*27*
Petroleum Coke (a)	**57**	**63**	**66**	**48**	**50**	*55*	*65*	*55*	*63*	*60*	*67*	*56*	**58**	*56*	*62*
Other Petroleum Liquids (b)	**5**	**3**	**5**	**4**	**4**	*3*	*5*	*5*	*7*	*4*	*5*	*5*	**4**	*4*	*5*
Northeast Census Region															
Coal (thousand st/d)	**80**	**66**	**94**	**70**	**74**	*59*	*86*	*85*	*104*	*57*	*86*	*87*	**77**	*76*	*83*
Natural Gas (million cf/d)	**3,829**	**4,578**	**6,203**	**3,899**	**3,638**	*4,019*	*5,535*	*3,978*	*3,542*	*4,195*	*5,513*	*4,071*	**4,630**	*4,297*	*4,335*
Petroleum (thousand b/d)	**12**	**5**	**12**	**8**	**8**	*7*	*12*	*9*	*16*	*11*	*17*	*11*	**9**	*9*	*14*
South Census Region															
Coal (thousand st/d)	**671**	**718**	**1,035**	**789**	**717**	*774*	*1,011*	*763*	*777*	*780*	*997*	*759*	**804**	*817*	*829*
Natural Gas (million cf/d)	**14,754**	**16,920**	**20,179**	**13,502**	**12,676**	*16,212*	*18,346*	*13,419*	*13,607*	*15,940*	*18,404*	*13,680*	**16,342**	*15,174*	*15,416*
Petroleum (thousand b/d)	**55**	**56**	**66**	**43**	**48**	*50*	*57*	*44*	*58*	*51*	*55*	*44*	**55**	*50*	*52*
Midwest Census Region															
Coal (thousand st/d)	**680**	**626**	**848**	**675**	**725**	*621*	*813*	*667*	*725*	*625*	*807*	*655*	**708**	*707*	*703*
Natural Gas (million cf/d)	**2,692**	**2,910**	**3,743**	**2,283**	**2,189**	*2,573*	*3,506*	*2,527*	*3,035*	*3,064*	*3,582*	*2,627*	**2,908**	*2,702*	*3,077*
Petroleum (thousand b/d)	**19**	**19**	**18**	**16**	**15**	*19*	*21*	*20*	*21*	*20*	*21*	*19*	**18**	*19*	*20*
West Census Region															
Coal (thousand st/d)	**244**	**208**	**312**	**288**	**269**	*169*	*297*	*285*	*265*	*211*	*291*	*296*	**263**	*255*	*266*
Natural Gas (million cf/d)	**3,951**	**4,164**	**5,982**	**4,041**	**3,310**	*3,219*	*5,235*	*4,236*	*3,809*	*3,691*	*5,363*	*4,113*	**4,537**	*4,006*	*4,248*
Petroleum (thousand b/d)	**34**	**32**	**35**	**35**	**37**	*33*	*38*	*38*	*38*	*37*	*39*	*39*	**34**	*37*	*38*
End-of-period U.S. Fuel Inventories Held by Electric Power Sector															
Coal (million short tons)	**192.3**	**183.2**	**158.2**	**163.9**	**164.1**	*158.5*	*141.9*	*145.2*	*146.7*	*144.4*	*129.9*	*145.9*	**163.9**	*145.2*	*145.9*
Residual Fuel Oil (mmb)	**11.9**	**12.2**	**11.7**	**11.7**	**12.0**	*12.1*	*11.9*	*12.4*	*12.3*	*12.2*	*12.0*	*12.5*	**11.7**	*12.4*	*12.5*
Distillate Fuel Oil (mmb)	**17.3**	**17.4**	**21.0**	**17.1**	**15.6**	*15.7*	*15.8*	*16.4*	*16.6*	*16.5*	*16.6*	*17.0*	**17.1**	*16.4*	*17.0*
Petroleum Coke (mmb)	**6.2**	**4.5**	**3.8**	**4.4**	**4.4**	*4.4*	*4.3*	*4.3*	*4.2*	*4.2*	*4.2*	*4.1*	**4.4**	*4.3*	*4.1*

(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 8. U.S. Renewable Energy Consumption (Quadrillion Btu)

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2017

	2016				2017				2018				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2016	2017	2018
Electric Power Sector															
Hydroelectric Power (a)	**0.710**	**0.684**	**0.528**	**0.543**	**0.771**	*0.892*	*0.655*	*0.550*	*0.679*	*0.725*	*0.639*	*0.538*	**2.465**	*2.868*	*2.581*
Wood Biomass (b)	**0.061**	**0.049**	**0.060**	**0.052**	**0.057**	*0.053*	*0.062*	*0.055*	*0.056*	*0.050*	*0.062*	*0.056*	**0.222**	*0.227*	*0.224*
Waste Biomass (c)	**0.070**	**0.072**	**0.072**	**0.072**	**0.071**	*0.070*	*0.073*	*0.072*	*0.069*	*0.072*	*0.074*	*0.073*	**0.287**	*0.286*	*0.289*
Wind	**0.577**	**0.531**	**0.452**	**0.596**	**0.643**	*0.625*	*0.439*	*0.617*	*0.643*	*0.665*	*0.473*	*0.681*	**2.155**	*2.323*	*2.461*
Geothermal	**0.040**	**0.039**	**0.040**	**0.043**	**0.041**	*0.040*	*0.040*	*0.040*	*0.040*	*0.039*	*0.040*	*0.041*	**0.162**	*0.162*	*0.160*
Solar	**0.062**	**0.095**	**0.110**	**0.077**	**0.087**	*0.154*	*0.148*	*0.092*	*0.101*	*0.180*	*0.176*	*0.105*	**0.344**	*0.482*	*0.562*
Subtotal	**1.521**	**1.470**	**1.261**	**1.384**	**1.671**	*1.833*	*1.418*	*1.426*	*1.588*	*1.731*	*1.465*	*1.493*	**5.636**	*6.348*	*6.276*
Industrial Sector															
Hydroelectric Power (a)	**0.004**	**0.003**	**0.002**	**0.003**	**0.004**	*0.003*	*0.002*	*0.003*	*0.004*	*0.003*	*0.002*	*0.003*	**0.012**	*0.012*	*0.012*
Wood Biomass (b)	**0.321**	**0.315**	**0.320**	**0.326**	**0.316**	*0.311*	*0.316*	*0.317*	*0.308*	*0.303*	*0.313*	*0.316*	**1.283**	*1.260*	*1.239*
Waste Biomass (c)	**0.046**	**0.047**	**0.047**	**0.046**	**0.051**	*0.049*	*0.048*	*0.049*	*0.049*	*0.050*	*0.049*	*0.049*	**0.186**	*0.197*	*0.196*
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*
Biofuel Losses and Co-products (f)	**0.196**	**0.193**	**0.203**	**0.205**	**0.202**	*0.203*	*0.207*	*0.207*	*0.200*	*0.203*	*0.206*	*0.206*	**0.796**	*0.818*	*0.815*
Subtotal	**0.573**	**0.564**	**0.578**	**0.585**	**0.577**	*0.572*	*0.579*	*0.580*	*0.566*	*0.564*	*0.576*	*0.579*	**2.300**	*2.309*	*2.285*
Commercial Sector															
Wood Biomass (b)	**0.020**	**0.020**	**0.021**	**0.021**	**0.020**	*0.018*	*0.019*	*0.018*	*0.020*	*0.018*	*0.019*	*0.018*	**0.082**	*0.075*	*0.075*
Waste Biomass (c)	**0.013**	**0.012**	**0.012**	**0.013**	**0.013**	*0.012*	*0.012*	*0.012*	*0.012*	*0.012*	*0.012*	*0.012*	**0.049**	*0.049*	*0.048*
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*
Subtotal	**0.060**	**0.065**	**0.066**	**0.060**	**0.061**	*0.067*	*0.069*	*0.060*	*0.064*	*0.073*	*0.074*	*0.064*	**0.251**	*0.257*	*0.275*
Residential Sector															
Wood Biomass (b)	**0.093**	**0.093**	**0.094**	**0.094**	**0.095**	*0.098*	*0.099*	*0.099*	*0.103*	*0.103*	*0.104*	*0.104*	**0.373**	*0.392*	*0.413*
Geothermal	**0.010**	**0.010**	**0.010**	**0.010**	**0.010**	*0.012*	*0.012*	*0.012*	*0.013*	*0.013*	*0.013*	*0.013*	**0.040**	*0.046*	*0.052*
Solar (d)	**0.030**	**0.047**	**0.049**	**0.034**	**0.037**	*0.059*	*0.063*	*0.045*	*0.049*	*0.076*	*0.079*	*0.057*	**0.161**	*0.204*	*0.261*
Subtotal	**0.133**	**0.150**	**0.153**	**0.138**	**0.142**	*0.169*	*0.174*	*0.156*	*0.164*	*0.191*	*0.196*	*0.174*	**0.573**	*0.642*	*0.726*
Transportation Sector															
Ethanol (e)	**0.277**	**0.283**	**0.293**	**0.288**	**0.268**	*0.291*	*0.298*	*0.290*	*0.271*	*0.290*	*0.296*	*0.289*	**1.141**	*1.148*	*1.146*
Biomass-based Diesel (e)	**0.051**	**0.066**	**0.088**	**0.084**	**0.051**	*0.072*	*0.086*	*0.090*	*0.069*	*0.076*	*0.088*	*0.089*	**0.289**	*0.299*	*0.323*
Subtotal	**0.328**	**0.349**	**0.381**	**0.372**	**0.319**	*0.364*	*0.384*	*0.380*	*0.339*	*0.366*	*0.384*	*0.379*	**1.430**	*1.447*	*1.469*
All Sectors Total															
Hydroelectric Power (a)	**0.714**	**0.687**	**0.530**	**0.546**	**0.775**	*0.896*	*0.657*	*0.553*	*0.683*	*0.729*	*0.642*	*0.540*	**2.477**	*2.881*	*2.594*
Wood Biomass (b)	**0.496**	**0.477**	**0.495**	**0.492**	**0.487**	*0.480*	*0.496*	*0.489*	*0.486*	*0.474*	*0.499*	*0.493*	**1.959**	*1.952*	*1.952*
Waste Biomass (c)	**0.129**	**0.131**	**0.130**	**0.131**	**0.134**	*0.131*	*0.134*	*0.132*	*0.130*	*0.134*	*0.135*	*0.134*	**0.522**	*0.532*	*0.533*
Wind	**0.577**	**0.531**	**0.452**	**0.596**	**0.643**	*0.625*	*0.439*	*0.617*	*0.643*	*0.665*	*0.473*	*0.681*	**2.155**	*2.323*	*2.461*
Geothermal	**0.056**	**0.055**	**0.056**	**0.059**	**0.057**	*0.058*	*0.058*	*0.058*	*0.059*	*0.058*	*0.059*	*0.060*	**0.226**	*0.230*	*0.236*
Solar	**0.110**	**0.166**	**0.183**	**0.128**	**0.139**	*0.246*	*0.244*	*0.161*	*0.177*	*0.294*	*0.295*	*0.191*	**0.587**	*0.790*	*0.957*
Ethanol (e)	**0.287**	**0.295**	**0.305**	**0.299**	**0.278**	*0.301*	*0.310*	*0.301*	*0.281*	*0.302*	*0.308*	*0.300*	**1.186**	*1.190*	*1.191*
Biomass-based Diesel (e)	**0.051**	**0.066**	**0.088**	**0.084**	**0.051**	*0.072*	*0.086*	*0.090*	*0.069*	*0.076*	*0.088*	*0.089*	**0.289**	*0.299*	*0.323*
Biofuel Losses and Co-products (f)	**0.196**	**0.193**	**0.203**	**0.205**	**0.202**	*0.203*	*0.207*	*0.207*	*0.200*	*0.203*	*0.206*	*0.206*	**0.796**	*0.818*	*0.815*
Total Consumption	**2.614**	**2.598**	**2.439**	**2.538**	**2.741**	*3.005*	*2.624*	*2.603*	*2.721*	*2.926*	*2.696*	*2.688*	**10.190**	*10.973*	*11.031*

- = no data available

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

(b) Wood and wood-derived fuels.

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

(d) Includes small-scale solar thermal and photovoltaic energy used in the commercial, industrial, and electric power sectors.

(e) 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.

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

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 9a. U.S. Macroeconomic Indicators and CO_2 Emissions

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2017

	2016				2017				2018				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2016	2017	2018
Macroeconomic															
Real Gross Domestic Product															
(billion chained 2009 dollars - SAAR)	**16,525**	**16,583**	**16,727**	**16,813**	**16,842**	*16,984*	*17,107*	*17,212*	*17,320*	*17,421*	*17,527*	*17,632*	**16,662**	*17,036*	*17,475*
Real Personal Consumption Expend.															
(billion chained 2009 dollars - SAAR)	**11,365**	**11,485**	**11,569**	**11,670**	**11,680**	*11,776*	*11,853*	*11,924*	*12,023*	*12,117*	*12,207*	*12,300*	**11,522**	*11,808*	*12,162*
Real Fixed Investment															
(billion chained 2009 dollars - SAAR)	**2,787**	**2,779**	**2,779**	**2,799**	**2,869**	*2,898*	*2,932*	*2,974*	*3,000*	*3,028*	*3,054*	*3,080*	**2,786**	*2,918*	*3,041*
Business Inventory Change															
(billion chained 2009 dollars - SAAR)	**42**	**-15**	**4**	**52**	**9**	*7*	*12*	*22*	*22*	*34*	*44*	*50*	**21**	*12*	*37*
Real Government Expenditures															
(billion chained 2009 dollars - SAAR)	**2,913**	**2,901**	**2,906**	**2,908**	**2,895**	*2,904*	*2,915*	*2,926*	*2,933*	*2,941*	*2,947*	*2,947*	**2,907**	*2,910*	*2,942*
Real Exports of Goods & Services															
(billion chained 2009 dollars - SAAR)	**2,102**	**2,111**	**2,162**	**2,137**	**2,168**	*2,177*	*2,193*	*2,204*	*2,213*	*2,221*	*2,236*	*2,254*	**2,128**	*2,185*	*2,231*
Real Imports of Goods & Services															
(billion chained 2009 dollars - SAAR)	**2,668**	**2,670**	**2,684**	**2,742**	**2,770**	*2,765*	*2,785*	*2,825*	*2,859*	*2,910*	*2,953*	*2,992*	**2,691**	*2,786*	*2,928*
Real Disposable Personal Income															
(billion chained 2009 dollars - SAAR)	**12,556**	**12,647**	**12,738**	**12,801**	**12,834**	*12,949*	*13,039*	*13,129*	*13,313*	*13,424*	*13,526*	*13,638*	**12,686**	*12,988*	*13,475*
Non-Farm Employment															
(millions)	**143.4**	**144.0**	**144.7**	**145.2**	**145.7**	*146.2*	*146.7*	*147.1*	*147.4*	*147.8*	*148.1*	*148.4*	**144.3**	*146.4*	*147.9*
Civilian Unemployment Rate															
(percent)	**4.9**	**4.9**	**4.9**	**4.7**	**4.7**	*4.4*	*4.4*	*4.4*	*4.3*	*4.2*	*4.2*	*4.1*	**4.9**	*4.5*	*4.2*
Housing Starts															
(millions - SAAR)	**1.15**	**1.16**	**1.14**	**1.25**	**1.25**	*1.25*	*1.28*	*1.30*	*1.32*	*1.33*	*1.35*	*1.36*	**1.18**	*1.27*	*1.34*
Industrial Production Indices (Index, 2012=100)															
Total Industrial Production	**103.1**	**102.9**	**103.1**	**103.3**	**103.7**	*104.8*	*105.6*	*106.3*	*107.0*	*107.5*	*108.2*	*109.0*	**103.1**	*105.1*	*107.9*
Manufacturing	**102.9**	**102.6**	**102.7**	**103.1**	**103.8**	*104.1*	*104.7*	*105.4*	*106.1*	*106.5*	*107.1*	*108.0*	**102.8**	*104.5*	*106.9*
Food	**107.0**	**107.7**	**108.3**	**107.5**	**110.3**	*109.6*	*110.1*	*110.6*	*111.2*	*111.8*	*112.4*	*113.1*	**107.6**	*110.1*	*112.1*
Paper	**96.1**	**95.3**	**95.0**	**96.7**	**96.4**	*96.4*	*96.6*	*96.7*	*96.5*	*96.3*	*96.2*	*96.3*	**95.8**	*96.5*	*96.3*
Petroleum and Coal Products	**100.0**	**100.9**	**101.4**	**101.4**	**103.8**	*103.6*	*104.1*	*104.8*	*105.4*	*106.0*	*106.7*	*107.5*	**100.9**	*104.1*	*106.4*
Chemicals	**98.8**	**98.0**	**97.1**	**98.1**	**97.9**	*99.5*	*100.2*	*101.1*	*101.8*	*102.5*	*103.5*	*104.6*	**98.0**	*99.7*	*103.1*
Nonmetallic Mineral Products	**113.6**	**112.2**	**111.0**	**112.3**	**115.9**	*115.3*	*116.2*	*117.4*	*118.7*	*120.0*	*121.2*	*122.2*	**112.3**	*116.2*	*120.5*
Primary Metals	**94.8**	**95.0**	**92.1**	**92.8**	**96.6**	*94.8*	*95.0*	*95.8*	*95.9*	*96.0*	*96.4*	*97.3*	**93.7**	*95.5*	*96.4*
Coal-weighted Manufacturing (a)	**100.8**	**100.3**	**99.4**	**100.2**	**102.6**	*102.2*	*102.8*	*103.6*	*104.0*	*104.5*	*105.2*	*106.1*	**100.2**	*102.8*	*105.0*
Distillate-weighted Manufacturing (a)	**105.6**	**105.5**	**105.1**	**106.2**	**108.2**	*108.3*	*108.9*	*109.7*	*110.4*	*111.1*	*111.8*	*112.6*	**105.6**	*108.8*	*111.5*
Electricity-weighted Manufacturing (a)	**101.5**	**101.2**	**100.9**	**101.6**	**103.2**	*103.4*	*104.0*	*104.9*	*105.6*	*106.2*	*106.9*	*108.0*	**101.3**	*103.9*	*106.7*
Natural Gas-weighted Manufacturing (a)	**100.8**	**100.5**	**100.5**	**101.4**	**103.2**	*103.4*	*104.2*	*105.3*	*106.0*	*106.8*	*107.7*	*109.0*	**100.8**	*104.0*	*107.4*
Price Indexes															
Consumer Price Index (all urban consumers)															
(index, 1982-1984=1.00)	**2.38**	**2.39**	**2.40**	**2.42**	**2.44**	*2.45*	*2.46*	*2.47*	*2.49*	*2.50*	*2.51*	*2.53*	**2.40**	*2.46*	*2.51*
Producer Price Index: All Commodities															
(index, 1982=1.00)	**1.84**	**1.85**	**1.85**	**1.88**	**1.93**	*1.93*	*1.94*	*1.95*	*1.97*	*1.98*	*1.98*	*2.00*	**1.85**	*1.94*	*1.98*
Producer Price Index: Petroleum															
(index, 1982=1.00)	**1.21**	**1.46**	**1.53**	**1.55**	**1.66**	*1.74*	*1.78*	*1.66*	*1.66*	*1.79*	*1.83*	*1.78*	**1.44**	*1.71*	*1.77*
GDP Implicit Price Deflator															
(index, 2009=100)	**110.6**	**111.3**	**111.7**	**112.2**	**112.9**	*113.3*	*114.0*	*114.6*	*115.4*	*116.0*	*116.6*	*117.2*	**111.5**	*113.7*	*116.3*
Miscellaneous															
Vehicle Miles Traveled (b)															
(million miles/day)	**8,086**	**9,024**	**8,943**	**8,590**	**8,303**	*9,133*	*9,043*	*8,679*	*8,254*	*9,262*	*9,145*	*8,773*	**8,661**	*8,792*	*8,861*
Air Travel Capacity															
(Available ton-miles/day, thousands)	**548**	**603**	**609**	**590**	**560**	*597*	*594*	*572*	*564*	*599*	*597*	*579*	**588**	*581*	*585*
Aircraft Utilization															
(Revenue ton-miles/day, thousands)	**326**	**366**	**375**	**357**	**339**	*369*	*365*	*348*	*342*	*373*	*367*	*351*	**356**	*355*	*358*
Airline Ticket Price Index															
(index, 1982-1984=100)	**281.8**	**305.0**	**273.0**	**270.4**	**274.0**	*305.5*	*289.3*	*295.5*	*293.2*	*321.8*	*301.1*	*305.4*	**282.6**	*291.0*	*305.4*
Raw Steel Production															
(million short tons per day)	**0.238**	**0.247**	**0.238**	**0.230**	**0.248**	*0.245*	*0.215*	*0.184*	*0.235*	*0.239*	*0.220*	*0.181*	**0.239**	*0.223*	*0.219*
Carbon Dioxide (CO_2) Emissions (million metric tons)															
Petroleum	**571**	**571**	**589**	**589**	**559**	*578*	*595*	*589*	*573*	*582*	*598*	*596*	**2,320**	*2,321*	*2,349*
Natural Gas	**439**	**327**	**343**	**376**	**415**	*315*	*330*	*386*	*449*	*327*	*335*	*392*	**1,485**	*1,446*	*1,503*
Coal	**309**	**298**	**413**	**335**	**320**	*299*	*403*	*334*	*341*	*309*	*400*	*335*	**1,354**	*1,356*	*1,384*
Total Energy (c)	**1,322**	**1,199**	**1,347**	**1,302**	**1,297**	*1,194*	*1,331*	*1,312*	*1,365*	*1,222*	*1,336*	*1,325*	**5,171**	*5,134*	*5,248*

- = 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. Macroeconomic projections are based on Global Insight Model of the U.S. Economy.

Table 9b. U.S. Regional Macroeconomic Data

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2017

	2016				2017				2018				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2016	2017	2018
Real Gross State Product (Billion $2009)															
New England	**872**	**876**	**884**	**886**	**888**	*894*	*900*	*905*	*910*	*914*	*919*	*923*	**880**	*897*	*916*
Middle Atlantic	**2,456**	**2,461**	**2,482**	**2,492**	**2,489**	*2,508*	*2,523*	*2,535*	*2,547*	*2,560*	*2,572*	*2,584*	**2,473**	*2,513*	*2,566*
E. N. Central	**2,273**	**2,284**	**2,304**	**2,313**	**2,313**	*2,328*	*2,340*	*2,351*	*2,363*	*2,375*	*2,388*	*2,399*	**2,293**	*2,333*	*2,381*
W. N. Central	**1,042**	**1,046**	**1,056**	**1,062**	**1,063**	*1,072*	*1,079*	*1,084*	*1,090*	*1,095*	*1,101*	*1,107*	**1,052**	*1,075*	*1,098*
S. Atlantic	**2,932**	**2,943**	**2,968**	**2,985**	**2,995**	*3,021*	*3,044*	*3,064*	*3,085*	*3,104*	*3,125*	*3,145*	**2,957**	*3,031*	*3,115*
E. S. Central	**742**	**745**	**751**	**755**	**756**	*762*	*767*	*771*	*775*	*779*	*784*	*788*	**748**	*764*	*782*
W. S. Central	**2,021**	**2,019**	**2,037**	**2,050**	**2,058**	*2,079*	*2,102*	*2,120*	*2,135*	*2,150*	*2,167*	*2,184*	**2,032**	*2,090*	*2,159*
Mountain	**1,044**	**1,049**	**1,059**	**1,065**	**1,068**	*1,079*	*1,089*	*1,098*	*1,107*	*1,114*	*1,122*	*1,131*	**1,055**	*1,084*	*1,118*
Pacific	**3,039**	**3,057**	**3,082**	**3,101**	**3,109**	*3,136*	*3,159*	*3,179*	*3,201*	*3,222*	*3,242*	*3,263*	**3,070**	*3,146*	*3,232*
Industrial Output, Manufacturing (Index, Year 2012=100)															
New England	**98.2**	**97.8**	**97.8**	**97.9**	**97.7**	*97.7*	*98.0*	*98.5*	*98.9*	*99.1*	*99.5*	*100.0*	**97.9**	*98.0*	*99.4*
Middle Atlantic	**98.8**	**98.4**	**98.2**	**97.9**	**98.0**	*98.3*	*98.7*	*99.3*	*99.8*	*100.1*	*100.6*	*101.4*	**98.3**	*98.6*	*100.5*
E. N. Central	**105.0**	**104.9**	**105.0**	**105.7**	**106.0**	*106.2*	*106.7*	*107.4*	*108.2*	*108.8*	*109.4*	*110.3*	**105.1**	*106.6*	*109.2*
W. N. Central	**102.3**	**102.0**	**102.0**	**102.2**	**102.5**	*102.8*	*103.3*	*104.0*	*104.7*	*105.1*	*105.8*	*106.6*	**102.1**	*103.2*	*105.6*
S. Atlantic	**105.5**	**105.5**	**105.9**	**106.9**	**107.5**	*107.7*	*108.2*	*108.8*	*109.3*	*109.6*	*110.1*	*110.9*	**105.9**	*108.1*	*110.0*
E. S. Central	**107.3**	**107.7**	**108.4**	**108.9**	**110.3**	*110.7*	*111.2*	*111.9*	*112.6*	*113.0*	*113.7*	*114.6*	**108.1**	*111.0*	*113.5*
W. S. Central	**97.7**	**96.7**	**96.1**	**96.4**	**98.3**	*98.8*	*99.5*	*100.4*	*101.3*	*102.0*	*102.9*	*104.1*	**96.7**	*99.2*	*102.6*
Mountain	**106.1**	**106.0**	**106.3**	**107.2**	**108.5**	*109.0*	*109.8*	*110.7*	*111.4*	*111.7*	*112.3*	*113.2*	**106.4**	*109.5*	*112.2*
Pacific	**104.0**	**103.7**	**103.3**	**103.7**	**104.3**	*104.6*	*105.2*	*106.0*	*106.8*	*107.2*	*107.8*	*108.7*	**103.7**	*105.0*	*107.6*
Real Personal Income (Billion $2009)															
New England	**775**	**782**	**790**	**793**	**797**	*804*	*809*	*815*	*821*	*827*	*833*	*839*	**785**	*806*	*830*
Middle Atlantic	**1,955**	**1,967**	**1,980**	**1,988**	**1,996**	*2,012*	*2,024*	*2,036*	*2,051*	*2,064*	*2,078*	*2,092*	**1,973**	*2,017*	*2,071*
E. N. Central	**2,082**	**2,096**	**2,108**	**2,115**	**2,122**	*2,139*	*2,150*	*2,163*	*2,179*	*2,195*	*2,210*	*2,227*	**2,100**	*2,143*	*2,203*
W. N. Central	**993**	**999**	**1,005**	**1,007**	**1,007**	*1,015*	*1,019*	*1,026*	*1,034*	*1,041*	*1,049*	*1,057*	**1,001**	*1,017*	*1,045*
S. Atlantic	**2,703**	**2,723**	**2,749**	**2,763**	**2,777**	*2,805*	*2,824*	*2,847*	*2,874*	*2,899*	*2,924*	*2,951*	**2,735**	*2,813*	*2,912*
E. S. Central	**771**	**774**	**780**	**781**	**785**	*792*	*796*	*802*	*809*	*815*	*821*	*827*	**776**	*794*	*818*
W. S. Central	**1,732**	**1,740**	**1,747**	**1,755**	**1,764**	*1,783*	*1,799*	*1,817*	*1,836*	*1,854*	*1,872*	*1,891*	**1,743**	*1,791*	*1,863*
Mountain	**952**	**960**	**973**	**976**	**981**	*993*	*1,001*	*1,010*	*1,021*	*1,031*	*1,040*	*1,050*	**965**	*996*	*1,035*
Pacific	**2,335**	**2,356**	**2,377**	**2,397**	**2,404**	*2,426*	*2,443*	*2,463*	*2,486*	*2,508*	*2,528*	*2,551*	**2,366**	*2,434*	*2,518*
Households (Thousands)															
New England	**5,827**	**5,832**	**5,835**	**5,838**	**5,840**	*5,849*	*5,856*	*5,866*	*5,877*	*5,887*	*5,898*	*5,909*	**5,838**	*5,866*	*5,909*
Middle Atlantic	**15,961**	**15,971**	**15,977**	**15,981**	**15,983**	*16,000*	*16,015*	*16,034*	*16,056*	*16,080*	*16,105*	*16,130*	**15,981**	*16,034*	*16,130*
E. N. Central	**18,744**	**18,760**	**18,769**	**18,776**	**18,784**	*18,806*	*18,825*	*18,848*	*18,876*	*18,907*	*18,939*	*18,971*	**18,776**	*18,848*	*18,971*
W. N. Central	**8,523**	**8,540**	**8,554**	**8,568**	**8,583**	*8,604*	*8,623*	*8,645*	*8,669*	*8,695*	*8,719*	*8,744*	**8,568**	*8,645*	*8,744*
S. Atlantic	**25,028**	**25,127**	**25,216**	**25,301**	**25,382**	*25,486*	*25,584*	*25,687*	*25,794*	*25,901*	*26,008*	*26,117*	**25,301**	*25,687*	*26,117*
E. S. Central	**7,585**	**7,599**	**7,611**	**7,622**	**7,633**	*7,650*	*7,666*	*7,683*	*7,703*	*7,723*	*7,744*	*7,765*	**7,622**	*7,683*	*7,765*
W. S. Central	**14,512**	**14,564**	**14,613**	**14,658**	**14,701**	*14,759*	*14,814*	*14,872*	*14,933*	*14,996*	*15,058*	*15,121*	**14,658**	*14,872*	*15,121*
Mountain	**8,934**	**8,973**	**9,010**	**9,047**	**9,081**	*9,124*	*9,165*	*9,207*	*9,252*	*9,297*	*9,343*	*9,388*	**9,047**	*9,207*	*9,388*
Pacific	**18,622**	**18,677**	**18,725**	**18,774**	**18,821**	*18,884*	*18,942*	*19,002*	*19,065*	*19,129*	*19,192*	*19,251*	**18,774**	*19,002*	*19,251*
Total Non-farm Employment (Millions)															
New England	**7.3**	**7.3**	**7.3**	**7.3**	**7.4**	*7.4*	*7.4*	*7.4*	*7.4*	*7.4*	*7.4*	*7.4*	**7.3**	*7.4*	*7.4*
Middle Atlantic	**19.2**	**19.2**	**19.3**	**19.4**	**19.5**	*19.5*	*19.5*	*19.5*	*19.6*	*19.6*	*19.6*	*19.6*	**19.3**	*19.5*	*19.6*
E. N. Central	**21.7**	**21.7**	**21.8**	**21.8**	**21.9**	*21.9*	*22.0*	*22.0*	*22.0*	*22.1*	*22.1*	*22.1*	**21.7**	*21.9*	*22.1*
W. N. Central	**10.5**	**10.5**	**10.6**	**10.6**	**10.6**	*10.7*	*10.7*	*10.7*	*10.7*	*10.7*	*10.8*	*10.8*	**10.6**	*10.7*	*10.7*
S. Atlantic	**27.4**	**27.6**	**27.8**	**27.9**	**28.0**	*28.1*	*28.2*	*28.3*	*28.4*	*28.5*	*28.6*	*28.7*	**27.7**	*28.2*	*28.5*
E. S. Central	**7.9**	**7.9**	**8.0**	**8.0**	**8.0**	*8.1*	*8.1*	*8.1*	*8.1*	*8.1*	*8.2*	*8.2*	**8.0**	*8.1*	*8.2*
W. S. Central	**16.8**	**16.8**	**16.8**	**16.9**	**17.0**	*17.1*	*17.2*	*17.2*	*17.3*	*17.4*	*17.4*	*17.5*	**16.8**	*17.1*	*17.4*
Mountain	**10.2**	**10.2**	**10.3**	**10.4**	**10.4**	*10.5*	*10.5*	*10.6*	*10.6*	*10.6*	*10.7*	*10.7*	**10.3**	*10.5*	*10.7*
Pacific	**22.2**	**22.4**	**22.5**	**22.6**	**22.7**	*22.8*	*22.9*	*22.9*	*23.0*	*23.1*	*23.1*	*23.2*	**22.4**	*22.8*	*23.1*

- = 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.

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 Global Insight Model of the U.S. Economy.

Table 9c. U.S. Regional Weather Data

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2017

	2016				2017				2018				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2016	2017	2018
Heating Degree Days															
New England	**2,845**	**905**	**77**	**2,119**	**2,992**	*790*	*131*	*2,178*	*3,185*	*874*	*135*	*2,179*	**5,947**	*6,092*	*6,373*
Middle Atlantic	**2,667**	**751**	**39**	**1,900**	**2,661**	*573*	*84*	*2,000*	*2,944*	*707*	*86*	*2,000*	**5,356**	*5,317*	*5,736*
E. N. Central	**2,869**	**753**	**48**	**2,032**	**2,690**	*630*	*123*	*2,229*	*3,123*	*737*	*126*	*2,229*	**5,701**	*5,672*	*6,216*
W. N. Central	**2,893**	**660**	**103**	**2,130**	**2,810**	*668*	*161*	*2,396*	*3,173*	*703*	*161*	*2,396*	**5,786**	*6,034*	*6,434*
South Atlantic	**1,381**	**210**	**2**	**859**	**1,146**	*131*	*13*	*980*	*1,455*	*206*	*13*	*978*	**2,452**	*2,271*	*2,653*
E. S. Central	**1,752**	**232**	**5**	**1,097**	**1,371**	*159*	*20*	*1,315*	*1,844*	*260*	*20*	*1,315*	**3,086**	*2,865*	*3,439*
W. S. Central	**1,053**	**79**	**1**	**622**	**773**	*78*	*5*	*820*	*1,191*	*89*	*5*	*819*	**1,756**	*1,676*	*2,103*
Mountain	**2,080**	**679**	**161**	**1,704**	**2,058**	*691*	*152*	*1,822*	*2,175*	*689*	*151*	*1,821*	**4,624**	*4,723*	*4,836*
Pacific	**1,303**	**468**	**96**	**1,157**	**1,556**	*528*	*88*	*1,201*	*1,486*	*574*	*87*	*1,203*	**3,023**	*3,373*	*3,349*
U.S. Average	**1,949**	**481**	**51**	**1,398**	**1,857**	*426*	*75*	*1,534*	*2,122*	*493*	*75*	*1,532*	**3,878**	*3,892*	*4,223*
Heating Degree Days, Prior 10-year Average															
New England	**3,212**	**824**	**133**	**2,105**	**3,201**	*831*	*122*	*2,125*	*3,173*	*817*	*123*	*2,122*	**6,273**	*6,279*	*6,235*
Middle Atlantic	**2,983**	**651**	**90**	**1,926**	**2,982**	*661*	*81*	*1,940*	*2,947*	*643*	*82*	*1,948*	**5,650**	*5,664*	*5,620*
E. N. Central	**3,246**	**689**	**125**	**2,205**	**3,254**	*701*	*114*	*2,197*	*3,208*	*692*	*118*	*2,207*	**6,266**	*6,266*	*6,226*
W. N. Central	**3,298**	**693**	**150**	**2,393**	**3,302**	*707*	*142*	*2,379*	*3,263*	*706*	*146*	*2,380*	**6,534**	*6,530*	*6,495*
South Atlantic	**1,498**	**184**	**14**	**972**	**1,502**	*188*	*12*	*965*	*1,476*	*177*	*12*	*977*	**2,668**	*2,666*	*2,641*
E. S. Central	**1,898**	**225**	**19**	**1,308**	**1,905**	*231*	*16*	*1,286*	*1,867*	*217*	*17*	*1,304*	**3,450**	*3,438*	*3,406*
W. S. Central	**1,221**	**83**	**5**	**815**	**1,227**	*88*	*4*	*799*	*1,181*	*82*	*4*	*809*	**2,123**	*2,119*	*2,076*
Mountain	**2,231**	**725**	**147**	**1,880**	**2,216**	*734*	*142*	*1,862*	*2,194*	*736*	*144*	*1,857*	**4,982**	*4,953*	*4,932*
Pacific	**1,496**	**610**	**88**	**1,212**	**1,462**	*597*	*88*	*1,205*	*1,464*	*592*	*86*	*1,198*	**3,406**	*3,352*	*3,339*
U.S. Average	**2,199**	**483**	**76**	**1,534**	**2,192**	*487*	*71*	*1,526*	*2,160*	*477*	*72*	*1,529*	**4,292**	*4,276*	*4,238*
Cooling Degree Days															
New England	**0**	**78**	**537**	**0**	**0**	*109*	*416*	*1*	*0*	*82*	*394*	*1*	**615**	*527*	*477*
Middle Atlantic	**0**	**146**	**734**	**6**	**0**	*168*	*539*	*4*	*0*	*149*	*527*	*4*	**886**	*710*	*680*
E. N. Central	**3**	**230**	**704**	**19**	**1**	*197*	*534*	*6*	*0*	*213*	*532*	*6*	**956**	*737*	*751*
W. N. Central	**10**	**318**	**712**	**30**	**9**	*248*	*657*	*10*	*3*	*260*	*659*	*10*	**1,070**	*923*	*932*
South Atlantic	**136**	**651**	**1,344**	**277**	**158**	*728*	*1,160*	*227*	*111*	*626*	*1,154*	*228*	**2,408**	*2,274*	*2,120*
E. S. Central	**42**	**534**	**1,256**	**130**	**66**	*569*	*1,049*	*63*	*26*	*496*	*1,047*	*63*	**1,963**	*1,747*	*1,631*
W. S. Central	**122**	**832**	**1,594**	**326**	**214**	*854*	*1,493*	*195*	*82*	*835*	*1,480*	*195*	**2,874**	*2,756*	*2,592*
Mountain	**34**	**464**	**886**	**113**	**36**	*411*	*915*	*75*	*17*	*427*	*920*	*75*	**1,498**	*1,437*	*1,440*
Pacific	**34**	**229**	**591**	**72**	**29**	*187*	*573*	*61*	*25*	*165*	*566*	*61*	**927**	*850*	*817*
U.S. Average	**53**	**410**	**964**	**128**	**70**	*415*	*844*	*91*	*39*	*386*	*839*	*91*	**1,555**	*1,420*	*1,356*
Cooling Degree Days, Prior 10-year Average															
New England	**0**	**81**	**419**	**1**	**0**	*81*	*433*	*1*	*0*	*84*	*438*	*0*	**501**	*514*	*522*
Middle Atlantic	**0**	**168**	**549**	**5**	**0**	*169*	*567*	*6*	*0*	*169*	*570*	*3*	**722**	*741*	*743*
E. N. Central	**3**	**229**	**528**	**6**	**3**	*234*	*543*	*8*	*3*	*227*	*538*	*6*	**766**	*788*	*774*
W. N. Central	**7**	**279**	**674**	**9**	**7**	*281*	*673*	*12*	*7*	*275*	*662*	*11*	**969**	*973*	*955*
South Atlantic	**114**	**661**	**1,147**	**222**	**117**	*666*	*1,167*	*230*	*119*	*681*	*1,161*	*224*	**2,144**	*2,179*	*2,184*
E. S. Central	**32**	**541**	**1,038**	**56**	**33**	*544*	*1,056*	*66*	*34*	*548*	*1,041*	*62*	**1,668**	*1,699*	*1,685*
W. S. Central	**90**	**890**	**1,517**	**191**	**90**	*876*	*1,527*	*204*	*100*	*889*	*1,535*	*201*	**2,688**	*2,697*	*2,725*
Mountain	**21**	**429**	**930**	**76**	**23**	*424*	*931*	*81*	*24*	*421*	*922*	*80*	**1,456**	*1,459*	*1,446*
Pacific	**29**	**180**	**611**	**71**	**30**	*181*	*607*	*73*	*30*	*182*	*608*	*74*	**891**	*891*	*893*
U.S. Average	**42**	**404**	**845**	**88**	**43**	*405*	*857*	*94*	*45*	*410*	*856*	*91*	**1,380**	*1,399*	*1,402*

- = no data available

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

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

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

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

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

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

Appendix

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

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

Table a1. Summary of Estimated Petroleum and Other Liquids Quantities

	April 2017	May 2017	April-May 2017 Average	April-May 2016 Average	2014 – 2016 Average
Global Petroleum and Other Liquids (million barrels per day)					
Global Petroleum and Other Liquids Production (a)	97.1	97.9	97.5	96.3	95.9
Global Petroleum and Other Liquids Consumption (b)	97.7	97.7	97.7	95.9	95.3
Biofuels Production (c)	2.0	2.3	2.1	2.1	2.1
Biofuels Consumption (c)	2.1	2.1	2.1	2.1	2.0
Iran Liquid Fuels Production	4.8	4.8	4.8	4.3	3.7
Iran Liquid Fuels Consumption	1.9	1.9	1.9	1.8	1.9
Petroleum and Petroleum Products Produced and Consumed in Countries Other Than Iran (million barrels per day)					
Production (d)	90.3	90.8	90.5	89.9	90.1
Consumption (d)	93.8	93.7	93.7	92.0	91.4
Production minus Consumption	-3.5	-2.9	-3.2	-2.1	-1.3
World Inventory Net Withdrawals Including Iran	0.5	-0.2	0.2	-0.4	-0.6
Estimated OECD Inventory Level (e) (million barrels)	3,019	3,022	3,020	3,022	2,840
OPEC Surplus Crude Oil Production Capacity (f)	2.3	2.2	2.3	1.3	1.6

Note: The term "petroleum and other liquids" encompasses crude oil, lease condensate, natural gas liquids, biofuels, coal-to-liquids, gas-to-liquids, and refinery processing gains, which are important to consider in concert due to the inter-related supply, demand, and price dynamics of petroleum, petroleum products, and related fuels.
(a) Production includes crude oil (including lease condensates), natural gas liquids, other liquids, and refinery processing gains.
(b) Consumption of petroleum by the OECD countries is synonymous with "products supplied," defined in the glossary of the EIA Petroleum Supply Monthly, DOE/EIA-0109. Consumption of petroleum by the non-OECD countries is "apparent consumption," which includes internal consumption, refinery fuel, and loss, and bunkering.
(c) Biofuels production and consumption are based on EIA estimates as published in the International Energy Statistics. Biofuels production in the third quarter tends to be at its highest level in the year as ethanol production in Brazil reaches its seasonal peak and is typically lowest in the first quarter as seasonal production falls in the South/South-Central region of Brazil.
(d) Global production of petroleum and petroleum products outside of Iran is derived by subtracting biofuels production and Iran liquid fuels production from global liquid fuels production. The same method is used to calculate global consumption outside of Iran.
(e) Estimated inventory level is for OECD countries only.

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

Table a2. Crude Oil and Petroleum Product Price Data

Item	April 2017	May 2017	April-May 2017 Average	April-May 2016 Average	2014 – 2016 Average
Brent Front Month Futures Price ($ per barrel)	53.82	51.39	52.52	45.50	66.06
WTI Front Month Futures Price ($ per barrel)	51.12	48.54	49.74	43.96	61.71
Dubai Front Month Futures Price ($ per barrel)	52.66	50.37	51.43	42.03	63.38
Brent 1st - 13th Month Futures Spread ($ per barrel)	-0.93	-0.97	-0.95	-3.33	-3.42
WTI 1st - 13th Month Futures Spread ($ per barrel)	-1.54	-1.38	-1.45	-3.71	-2.04
RBOB Front Month Futures Price ($ per gallon)	1.68	1.58	1.63	1.53	1.89
Heating Oil Front Month Futures Price ($ per gallon)	1.59	1.51	1.55	1.33	1.93
RBOB - Brent Futures Crack Spread ($ per gallon)	0.40	0.36	0.38	0.45	0.31
Heating Oil - Brent Futures Crack Spread ($ per gallon)	0.31	0.29	0.30	0.25	0.36

(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).