



Short-Term Energy Outlook (STEO)

Forecast highlights

Global liquid fuels

- North Sea Brent crude oil spot prices averaged \$52 per barrel (b) in April, \$1/b higher than the March average and the fifth consecutive month that Brent crude oil spot prices averaged between \$50/b and \$55/b. EIA forecasts Brent prices to average \$53/b in 2017 and \$57/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 August 2017 delivery traded during the five-day period ending May 4 suggest that a range of \$37/b to \$63/b encompasses the market expectation for WTI prices in August 2017 at the 95% confidence level.
- Implied global petroleum and liquid fuels inventories are estimated to have increased by 0.4 million barrels per day (b/d) in 2016. EIA forecasts inventory builds to average 0.2 million b/d in 2017 and then increase to an average of 0.5 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 almost 10.0 million b/d in 2018. EIA estimates that crude oil production for April 2017 averaged 9.1 million b/d, which is 0.2 million b/d above the April 2016 level and 0.6 million b/d above the recent monthly average low reached in September 2016.
- For the 2017 summer driving season (April through September), U.S. regular gasoline retail prices are forecast to average \$2.39/gallon (gal), compared with \$2.23/gal last summer. The higher forecast gasoline price is primarily the result of higher forecast crude oil prices. The annual average price for regular gasoline in 2017 is forecast to be \$2.34/gal, which, if realized, would result in the average U.S. household spending about \$160 more on motor fuel in 2017 compared with 2016.

Natural gas

- U.S. dry natural gas production is forecast to average 74.1 billion cubic feet per day (Bcf/d) in 2017, a 1.8 Bcf/d increase from the 2016 level. This increase reverses a 2016 production decline, which was the first annual decline since 2005. Natural gas production in 2018 is forecast to be 3.2 Bcf/d more than the 2017 level.

- In April, the average Henry Hub natural gas spot price was \$3.10 per million British thermal units (MMBtu), 22 cents/MMBtu above the March level. 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 \$3.17/MMBtu in 2017 to \$3.43/MMBtu in 2018. NYMEX contract values for August 2017 delivery traded during the five-day period ending May 4 suggest that a range of \$2.47/MMBtu to \$4.49/MMBtu encompasses the market expectation for Henry Hub natural gas prices in August 2017 at the 95% confidence level.

Electricity, coal, renewables, and emissions

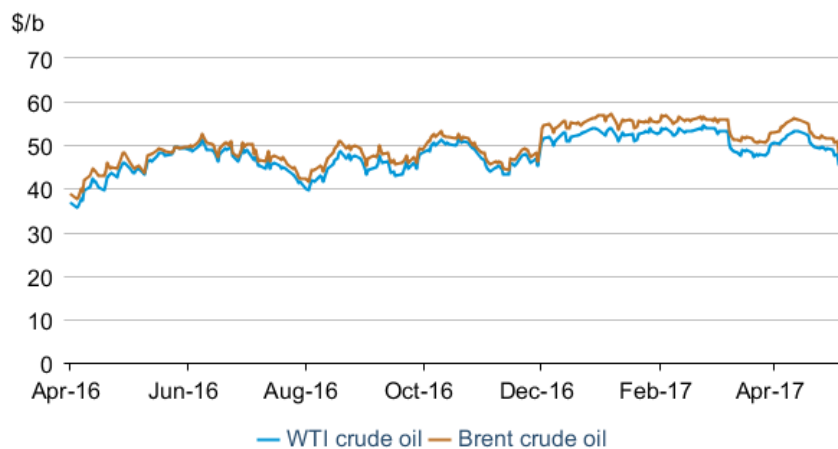
- Total U.S. electricity generation from utility-scale power plants averaged 11,150 gigawatthours per day in 2016. Forecast generation declines by 1.2% in 2017 and then grows by 1.9% in 2018. EIA expects the annual average U.S. residential electricity price to increase by 2.4% in 2017 and by 2.3% in 2018.
- EIA expects growth in demand for U.S. coal exports to contribute to a 5% increase in coal production in 2017. Forecast growth in coal-fired electricity generation leads to an additional 1% increase in coal production in 2018. EIA estimates the delivered coal price averaged \$2.11/MMBtu in 2016, a 5% decline from the 2015 price. Coal prices are forecast to increase in 2017 and 2018 to \$2.16/MMBtu and \$2.22/MMBtu, respectively.
- [Wind energy capacity](#) at the end of 2016 was 81 gigawatts (GW). EIA expects wind capacity additions in the forecast will bring total wind capacity to 102 GW by the end of 2018.
- Total utility-scale solar generation capacity is forecast to increase by 48% from 21 GW at the end of 2016 to 32 GW at the end of 2018. Utility-scale solar electricity generation is forecast to account for more than 1% of total utility-scale electricity generation in 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 2.3% 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: During the first half of April, crude oil prices rose, returning to the mid-\$50 per barrel (b) level where they had been from December through February. However, crude oil prices fell during the second half of April and on May 4 reached the lowest point since the end of November. Between April 3 and May 4, Brent crude oil front-month futures prices declined by \$4.74/b to settle at \$48.38/b, and West Texas Intermediate (WTI) front-month futures prices declined by \$4.72/b to settle at \$45.52/b (**Figure 1**). On average, however, Brent and WTI spot prices in April were \$0.72/b and \$1.73/b higher, respectively, than the March averages.

Figure 1. Crude oil front-month futures prices



eia Bloomberg L.P.

Reports from the Joint Organization of the Petroleum Exporting Countries (OPEC) and non-OPEC Ministerial Monitoring Committee suggested compliance with the [crude oil production cut agreement](#) remained high among its members in March. However, because global oil inventories remain high, oil ministers of several OPEC countries, including those of Saudi Arabia, Kuwait, and Iraq, have suggested their respective countries would support an extension to the crude oil production cut agreement for six months beyond the current end date in June. In addition to the voluntarily production cuts in several countries, Canada experienced an unplanned outage at an oil sands upgrader plant, which resulted in lower production of several Canadian crude oil streams.

Upside support for crude oil prices resulting from voluntary production cuts or unplanned outages over the past months has been countered by rising crude oil production in Libya and in the United States. Libya announced at the beginning of May that its crude oil production had increased to the highest level since late 2014. Further, U.S. crude oil production is estimated to have reached 9.1 million barrels per day (b/d) in April, the highest level since March 2016. The number of U.S. oil drilling rigs reached a two-year high at the beginning of May. Because of a lag between the deployment of drilling rigs and realized oil production, recent rig increases indicate

that U.S. oil production will likely rise further in the coming months. Expectations of supply growth in 2017, particularly in the United States, as well as concerns that a potential extension of the agreement will not reduce global inventories as quickly as expected contributed to a sharp drop in crude oil prices in the first week in May.

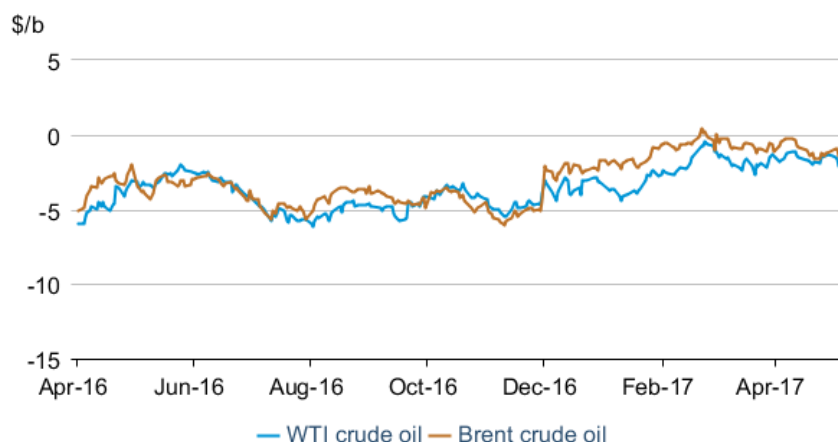
EIA projects that the global crude oil market in 2017 and 2018 will have more supply growth compared with the April STEO, resulting in a lower forecast of crude oil prices in the coming months. The Brent crude oil spot price is forecast to average \$53/b in 2017, down from \$54/b in the April STEO, and \$57/b in 2018, unchanged from the April STEO. WTI prices are expected to average \$2/b lower than Brent prices in both years.

Growth in global liquid fuels supply is expected to limit upward price pressure over the next year. World liquid fuels supply is projected to grow by 1.4 million b/d in 2017 and by 1.9 million b/d in 2018. Compared with the April STEO forecast, those growth estimates are higher by about 0.2 million b/d in 2017 and 0.1 million b/d in 2018. The upward revision to expected supply growth is based on higher expected crude oil production growth from the United States, Brazil, and Canada and more OPEC non-crude liquid production growth. Expected world liquid fuels consumption growth is largely unchanged from the previous STEO, with growth forecast at 1.6 million b/d in both 2017 and 2018.

EIA estimates U.S. commercial crude oil inventories declined by 7.4 million barrels during April, compared with an average increase of 7.4 million barrels over the past five years. The decline in U.S. crude oil inventories is likely because of the increase in gross inputs to refineries in April. In this STEO, EIA estimates that refinery inputs reached 17.2 million b/d in April, the highest on record for any month.

For most of April, the WTI 1st–13th month futures price spread narrowed relative to that of Brent, reflecting stronger near-term WTI prices as a result of the decline in U.S. crude oil inventories. The stronger near-term WTI prices movements relative to Brent suggests the global crude oil market likely did not experience crude oil inventory draws similar to those in the United States. However, with the decline of crude oil prices in early May, both WTI and Brent front-month prices weakened significantly compared with later-dated contracts. The WTI 1st–13th month futures price spread declined 29 cents/b to -\$2.06/b from April 3 to May 4 (**Figure 2**). The Brent 1st–13th month futures price spread declined 67 cents/b to -\$1.39/b over the same period.

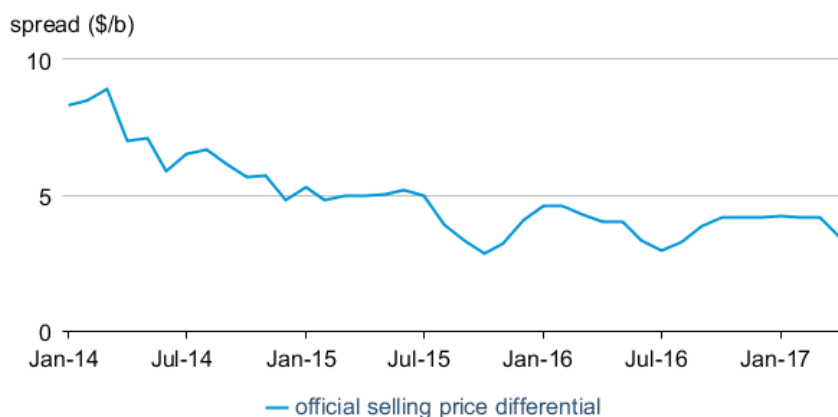
Figure 2. Crude oil front-month - 13th month futures price spread



eia Bloomberg L.P.

Price spreads between [Brent and medium-sour Middle Eastern crude oils](#) continue to narrow, making [light, sweet crude oil](#) from the Atlantic Basin more price competitive for consumers in Asia. Reports from trade press indicate that crude oil exports from West Africa and Europe to Asia have increased over the past few months. In February, for the first time, the [United States exported more crude oil to China](#) than to any other country. Increased flows of light, sweet crude oil into Asia are lowering prices of local Asian crude oils of similar quality. In April, the price differential between the official selling price of a basket of mostly light, sweet crude oils set by Malaysia's state-owned oil company, Petronas, and Dated Brent fell to \$3.50/b from more than \$4/b between October 2016 and March 2017 (**Figure 3**).

Figure 3. Malaysia crude oil official selling price differential to Dated Brent



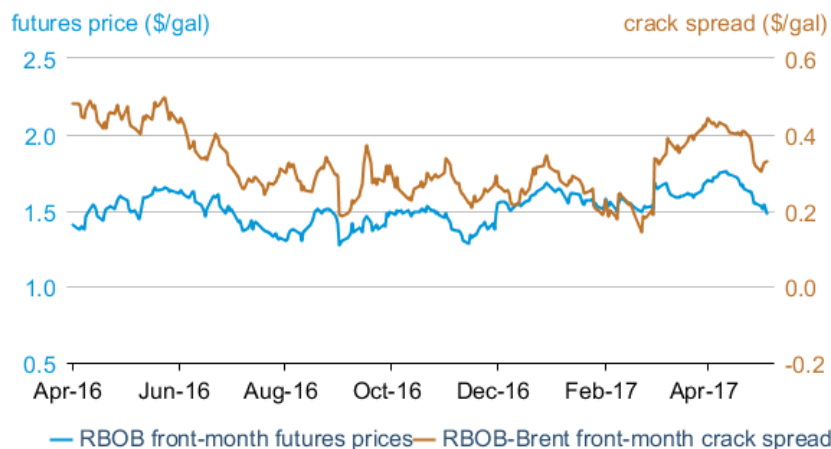
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Petroleum products

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) declined 21 cents per gallon (gal) since April 3, settling at \$1.48/gal on May 4 (**Figure 4**). The RBOB-Brent crack spread (the difference between the price of RBOB and the price of Brent crude oil) declined 10 cents/gal, settling at 33 cents/gal over the same period.

Despite weekly data showing April 2017 gasoline consumption plus exports set a new five-year high for the month, [gasoline crack spreads](#) averaged the lowest for the month of April since 2013. High gross refinery inputs contributed to a counter-seasonal rise in gasoline inventories, pressuring gasoline crack spreads to lower levels than in previous years. In this STEO, EIA estimates that U.S. total motor gasoline inventories rose 0.9 million barrels in April, compared with an average decline of 4.4 million barrels over the past five years.

Figure 4. Historical RBOB futures prices and crack spread



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

Gasoline spot market: The spot price premium of New York Harbor conventional gasoline over Gulf Coast conventional gasoline was 1 cent/gal on average in April (**Figure 5**), 7 cents/gal lower than the average premium over the past five years. High gasoline inventory levels in [Petroleum Administration for Defense District \(PADD\) 1](#) (the East Coast), along with an increase in U.S. gasoline exports, may have contributed to the narrow premium of New York Harbor gasoline over Gulf Coast gasoline. On the East Coast, total gasoline inventories have remained high since the start of 2017, either reaching or setting new five-year highs. However, gasoline inventories in PADD 3 (the Gulf Coast) have generally stayed within the five-year range so far in 2017. Because most U.S. gasoline exports [originate from PADD 3](#), initial data from the [Weekly Petroleum Status Report](#) showing U.S. finished gasoline exports rose by almost 0.1 million barrels per day (b/d) from March to April likely helped to limit gasoline stock builds on the U.S. Gulf Coast given the high level of refinery runs.

Figure 5. New York Harbor - Gulf Coast conventional gasoline spot price differentials



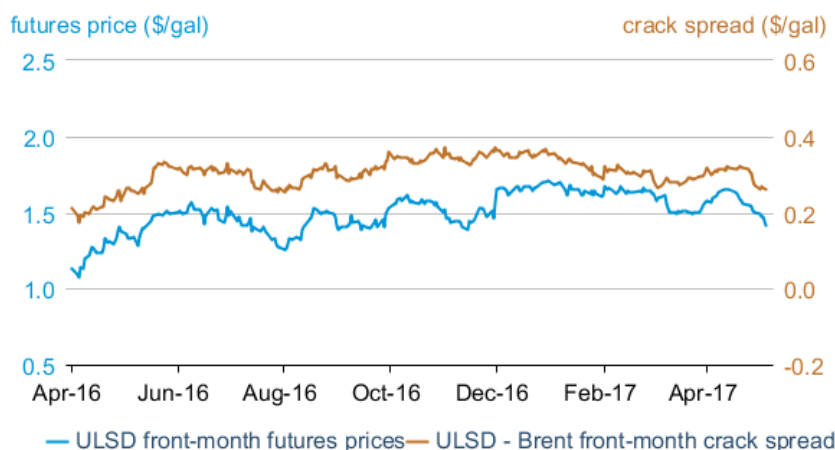
eia Bloomberg L.P.

Ultra-low sulfur diesel prices: The ultra-low sulfur diesel (ULSD) futures price decreased 15 cents/gal since April 3, settling at \$1.41/gal on May 4. The ULSD-Brent crack spread declined by 4 cents/gal, settling at 26 cents/gal over the same period (**Figure 6**). Compared with last April, however, the ULSD crack spread was 9 cents/gal higher on average this year.

In contrast to U.S. gasoline stocks, [U.S. distillate stocks](#) declined from March to April, despite high refinery runs. U.S. distillate consumption set a new five-year high in April, as increasing activity in the U.S. industrial and transportation sectors may be supporting domestic distillate consumption. [U.S. industrial production growth](#) in the first quarter of 2017 accelerated from the third and fourth quarters of 2016. In addition, [weekly rail traffic data](#) from the Association of American Railroads indicate that rail traffic, which uses diesel fuel, has been higher so far in 2017 than during the same period in 2016. Also, oil and natural gas drilling rigs use diesel fuel in their operations and transport, and the increase in drilling activity in 2017 is likely also contributing to higher diesel consumption.

In addition to U.S. domestic consumption, U.S. distillate exports have remained stable at about 1.1 million b/d, on average, since January. However, during the week ending April 14, [U.S. distillate exports](#) set a weekly record of 1.4 million b/d. Declining distillate stocks and strong distillate consumption domestically and internationally have kept ULSD crack spreads in 2017 above 2016 levels.

Figure 6. Historical ULSD futures price and crack spread

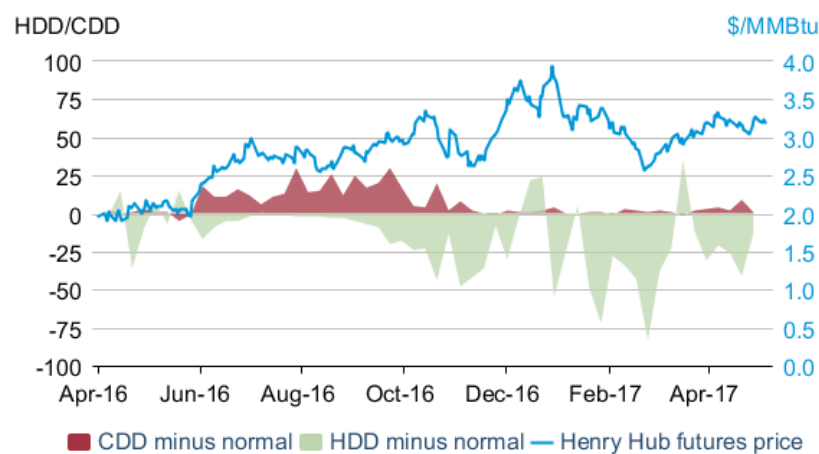


eia Bloomberg L.P., ULSD=ultra-low sulfur diesel

Natural Gas

Prices: The front-month natural gas futures contract for delivery at Henry Hub settled at \$3.19 per million British thermal units (MMBtu) on May 4, an increase of 6 cents/MMBtu from April 3 (**Figure 7**). On April 27, the front-month futures contract moved from the May delivery contract to the June delivery contract, which was priced higher to account for increased summer demand for natural gas power generation. The natural gas spot price averaged \$3.10/MMBtu in April, up 22 cents/MMBtu from March.

Figure 7. Actual minus historical average HDD and CDD

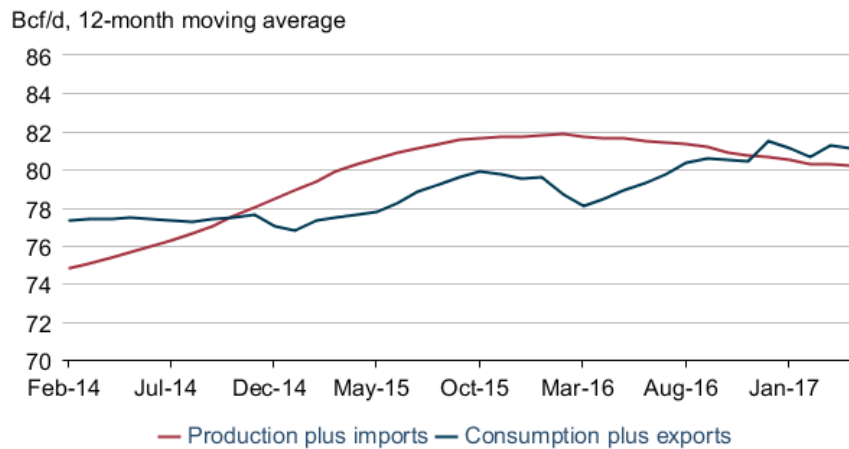


eia Bloomberg L.P., U.S. Energy Information Administration

For the four weeks ending April 28, natural gas storage injections averaged 51 billion cubic feet (Bcf) per week, almost 10 Bcf per week more than the five-year average build for those weeks. With these storage injections, stocks increased well above the five-year average level for April, although they remain below last year's level. With natural gas production returning to growth in

recent months after declining in 2016, higher natural gas exports have helped moderate inventory builds this year. At the end of 2016, the 12-month moving average of consumption plus exports rose above production plus imports and remained higher through April (**Figure 8**). EIA expects this trend to continue through the rest of 2017, putting modest upward pressure on prices.

Figure 8. Natural gas market fundamentals



 U.S. Energy Information Administration

Notable forecast changes

- EIA forecasts dry natural gas production will average 74.1 Bcf/d in 2017, an increase of 1.0 Bcf from the April STEO. EIA forecasts dry gas production will average 77.3 Bcf/d in 2018, an increase of 0.2 Bcf/d from the April STEO. EIA now forecasts gross natural gas exports will average 8.5 Bcf/d in 2017 and 10.0 Bcf/d in 2018, both of which are 0.4 Bcf/d higher than previously forecast.
- This month's STEO forecast for wind power capacity in 2018 is 7% higher than in the April STEO because of new information about planned capacity additions. Wind capacity is now projected to rise from 88 GW in 2017 to 102 GW in 2018, an increase of 16%.
- EIA forecasts coal exports to average 63 million short tons (MMst) in 2017 and 60 MMst in 2018, these are 5% and 14% higher, respectively, than forecast in the April STEO. The export forecast is higher than last month because of slightly lower expected domestic use of coal for electricity generation and because of higher assumed global coal prices.
- For more information, see the [detailed STEO table of forecast changes](#).

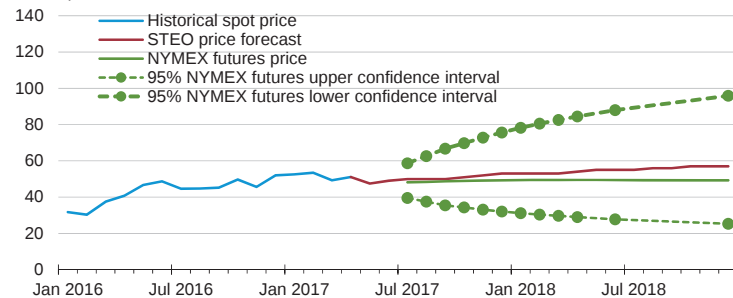
This report was prepared by the U.S. Energy Information Administration (EIA), the statistical and analytical agency within the U.S. Department of Energy. By law, EIA's data, analyses, and forecasts are independent of approval by any other officer or employee of the United States Government. The views in this report therefore should not be construed as representing those of the U.S. Department of Energy or other federal agencies.



Short-Term Energy Outlook

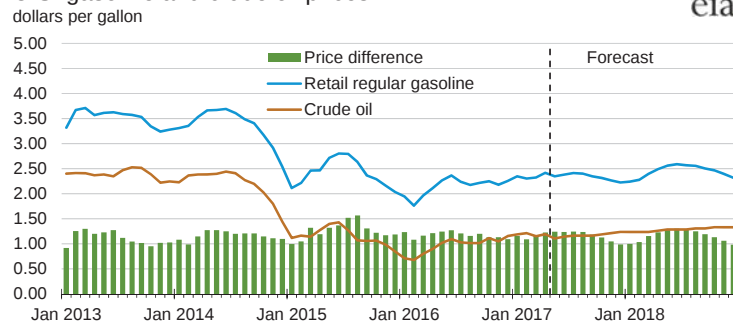
Chart Gallery for May 2017

West Texas Intermediate (WTI) crude oil price
dollars per barrel



Note: Confidence interval derived from options market information for the 5 trading days ending May 4, 2017. Intervals not calculated for months with sparse trading in near-the-money options contracts.
Source: Short-Term Energy Outlook, May 2017.

U.S. gasoline and crude oil prices
dollars per gallon

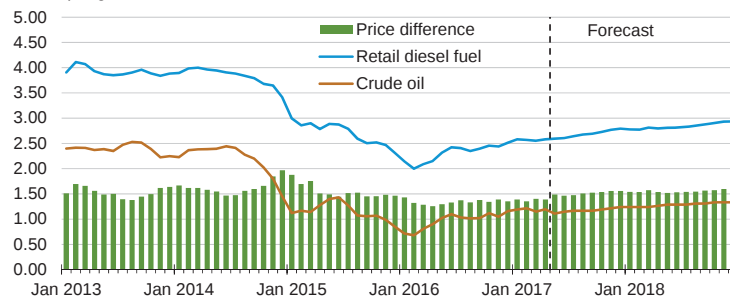


Crude oil price is composite refiner acquisition cost. Retail prices include state and federal taxes.

Source: Short-Term Energy Outlook, May 2017.

U.S. diesel fuel and crude oil prices

dollars per gallon

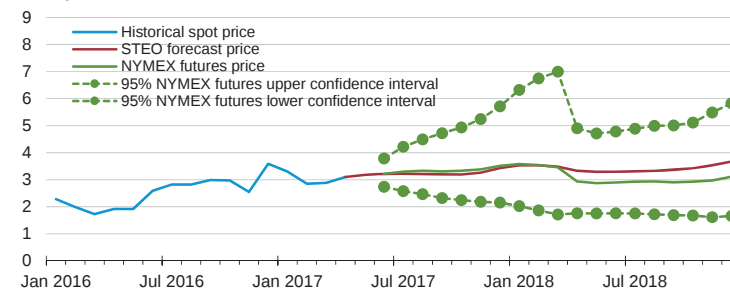


Crude oil price is composite refiner acquisition cost. Retail prices include state and federal taxes.

Source: Short-Term Energy Outlook, May 2017.

Henry Hub natural gas price

dollars per million Btu

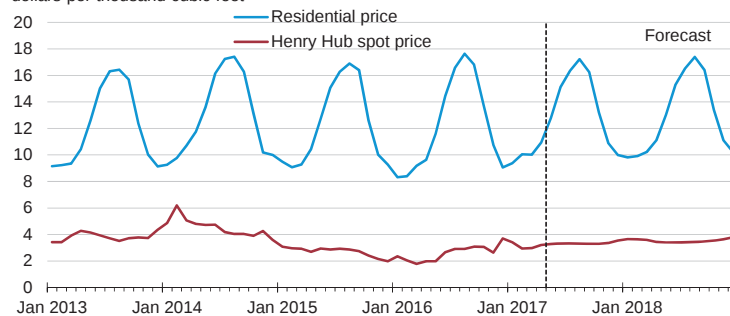


Note: Confidence interval derived from options market information for the 5 trading days ending May 4, 2017. Intervals not calculated for months with sparse trading in near-the-money options contracts.

Source: Short-Term Energy Outlook, May 2017.

U.S. natural gas prices

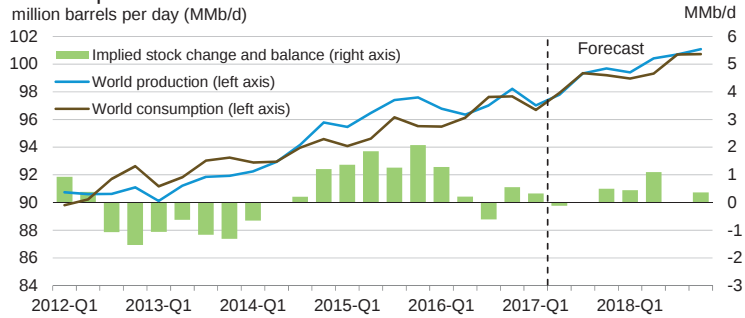
dollars per thousand cubic feet



Source: Short-Term Energy Outlook, May 2017.

World liquid fuels production and consumption balance

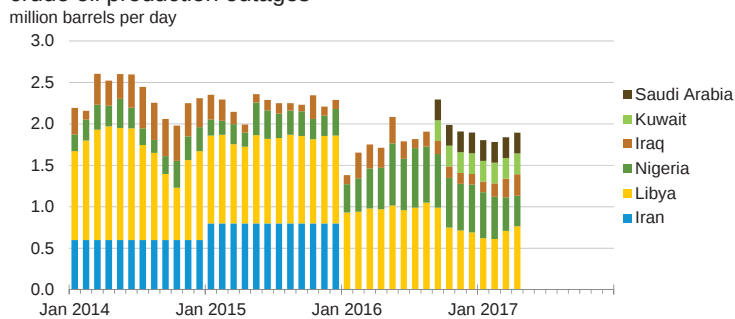
million barrels per day (MMb/d)



Source: Short-Term Energy Outlook, May 2017.

Estimated historical unplanned OPEC crude oil production outages

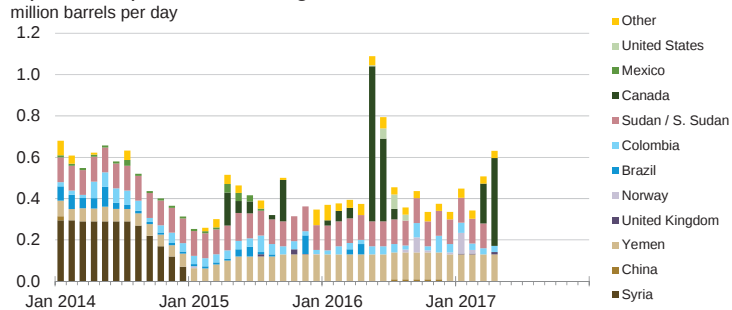
million barrels per day



Source: Short-Term Energy Outlook, May 2017.

Estimated historical unplanned non-OPEC liquid fuels production outages

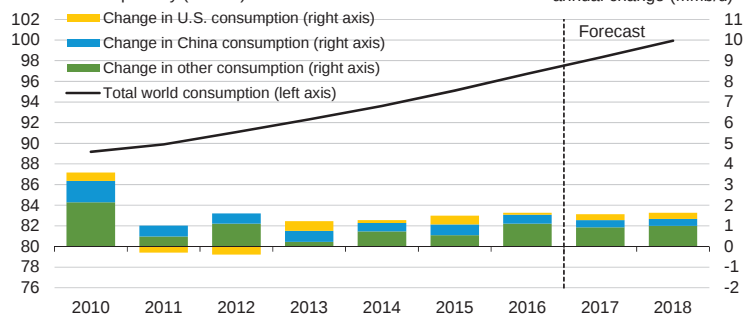
million barrels per day



Source: Short-Term Energy Outlook, May 2017.

World liquid fuels consumption

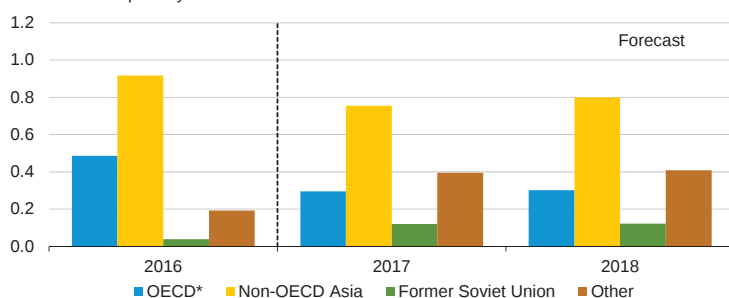
million barrels per day (MMb/d)



Source: Short-Term Energy Outlook, May 2017.

World liquid fuels consumption growth

million barrels per day

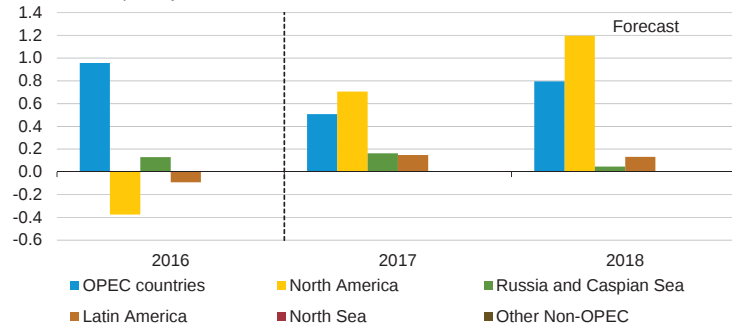


* Countries belonging to the Organization for Economic Cooperation and Development

Source: Short-Term Energy Outlook, May 2017.

World crude oil and liquid fuels production growth

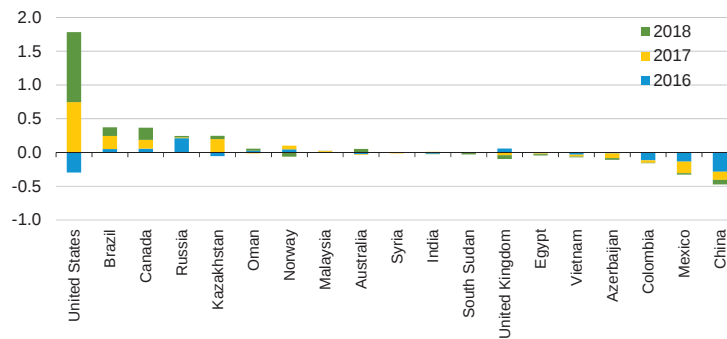
million barrels per day



Source: Short-Term Energy Outlook, May 2017.

Non-OPEC crude oil and liquid fuels production growth

million barrels per day

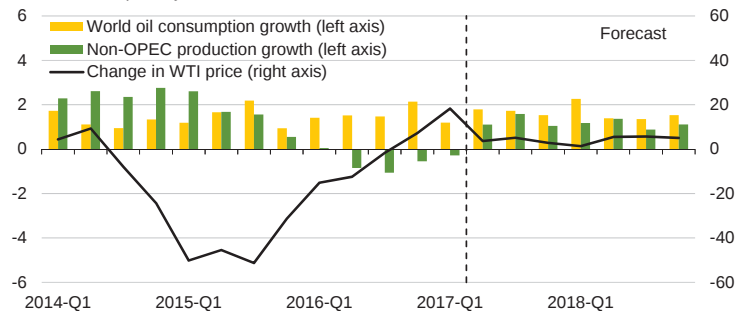


Source: Short-Term Energy Outlook, May 2017.

World consumption and non-OPEC production growth

million barrels per day

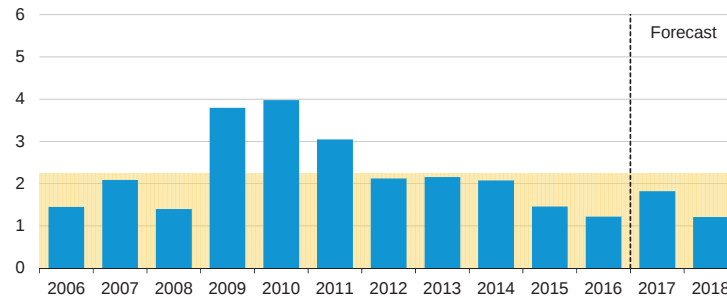
dollars per barrel



Source: Short-Term Energy Outlook, May 2017.

OPEC surplus crude oil production capacity

million barrels per day

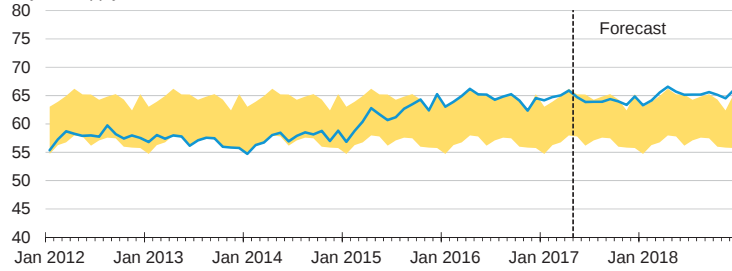


Note: Shaded area represents 2006-2016 average (2.3 million barrels per day).

Source: Short-Term Energy Outlook, May 2017.

OECD commercial stocks of crude oil and other liquids

days of supply

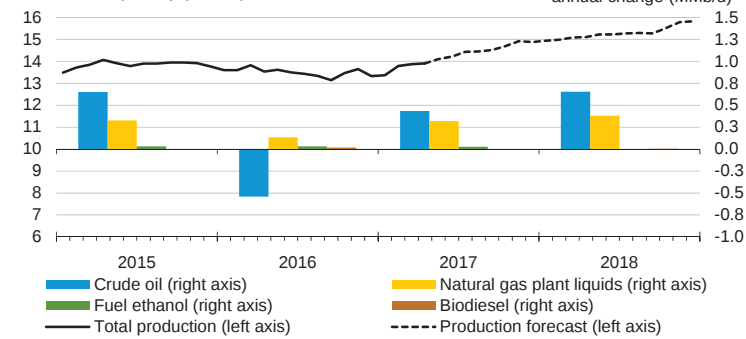


Note: Colored band around days of supply of crude oil and other liquids stocks represents the range between the minimum and maximum from Jan. 2012 - Dec. 2016.

Source: Short-Term Energy Outlook, May 2017.

U.S. crude oil and liquid fuels production

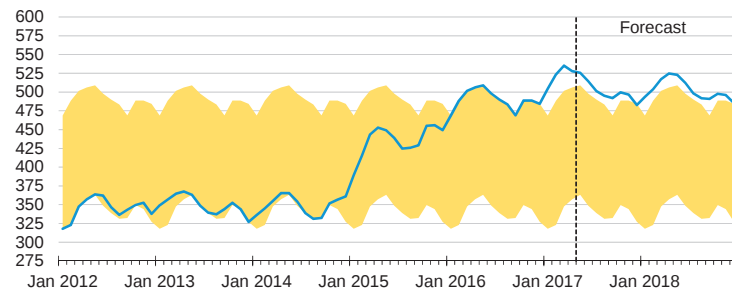
million barrels per day (MMb/d)



Source: Short-Term Energy Outlook, May 2017.

U.S. commercial crude oil stocks

million barrels



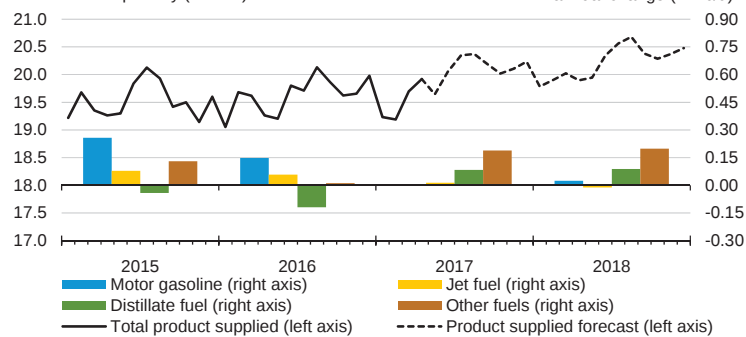
Note: Colored band around storage levels represents the range between the minimum and maximum from Jan. 2012 - Dec. 2016.

Source: Short-Term Energy Outlook, May 2017.

U.S. liquid fuels product supplied

million barrels per day (MMb/d)

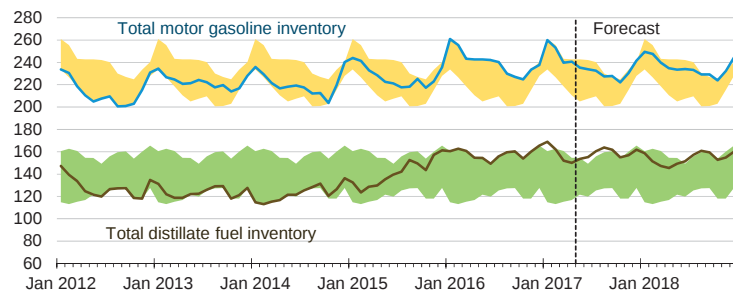
annual change (MMb/d)



Source: Short-Term Energy Outlook, May 2017.

U.S. gasoline and distillate inventories

million barrels



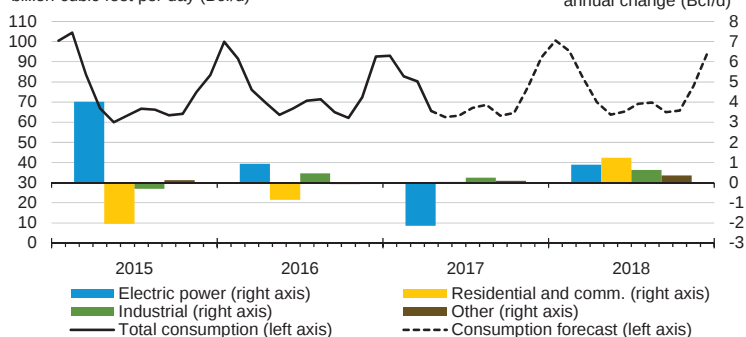
Note: Colored bands around storage levels represent the range between the minimum and maximum from Jan. 2012 - Dec. 2016.

Source: Short-Term Energy Outlook, May 2017.

U.S. natural gas consumption

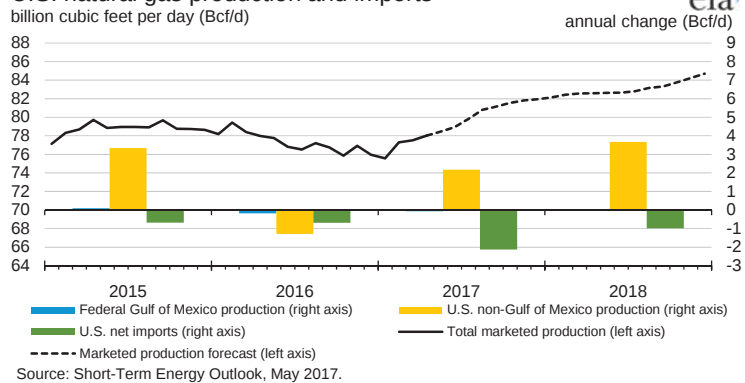
billion cubic feet per day (Bcf/d)

annual change (Bcf/d)

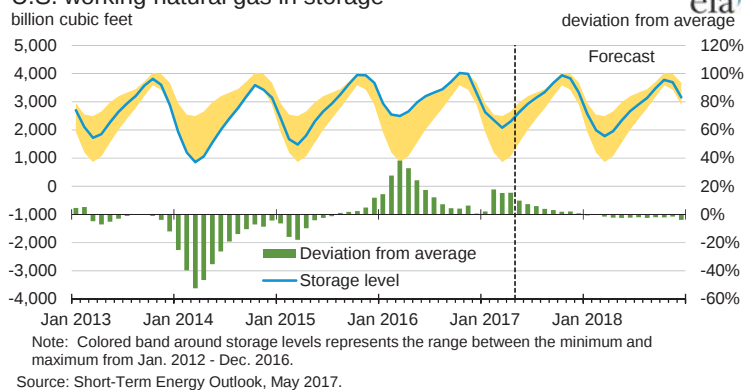


Source: Short-Term Energy Outlook, May 2017.

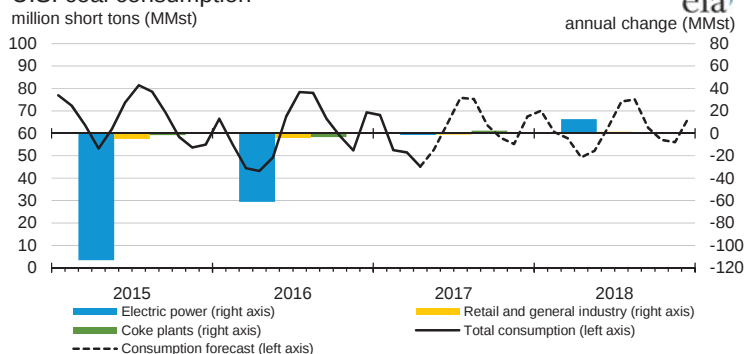
U.S. natural gas production and imports



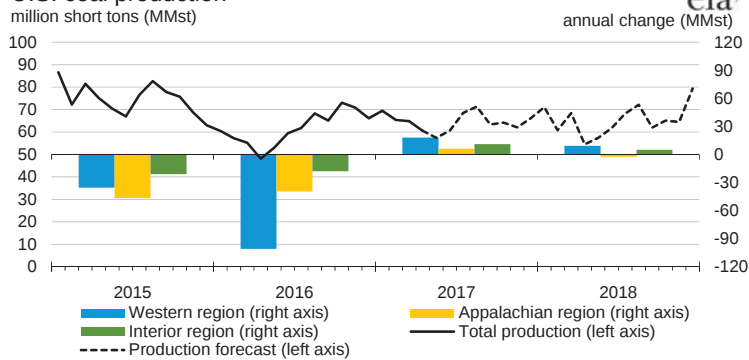
U.S. working natural gas in storage



U.S. coal consumption

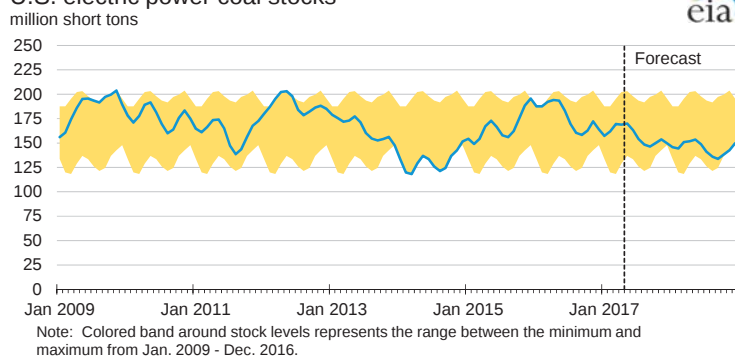


U.S. coal production



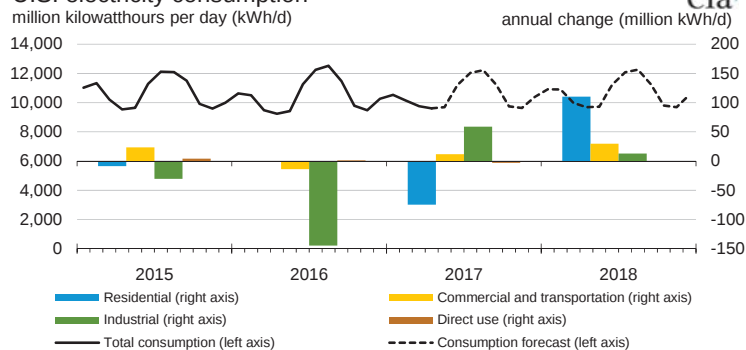
Source: Short-Term Energy Outlook, May 2017.

U.S. electric power coal stocks



Source: Short-Term Energy Outlook, May 2017.

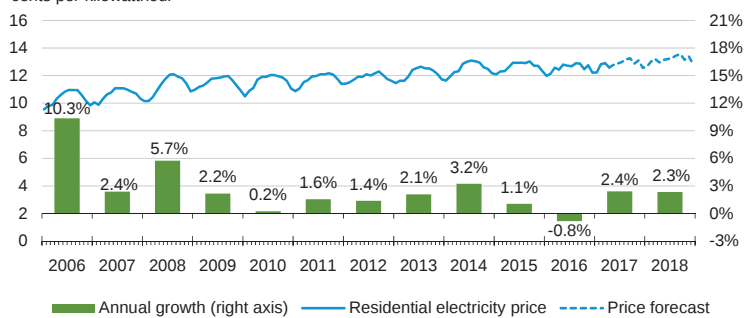
U.S. electricity consumption



Source: Short-Term Energy Outlook, May 2017.

U.S. residential electricity price

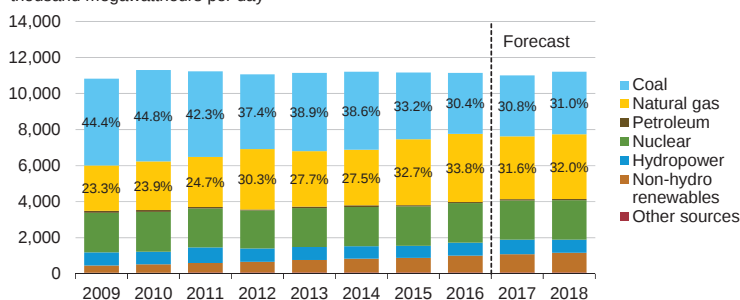
cents per kilowatthour



Source: Short-Term Energy Outlook, May 2017.

U.S. electricity generation by fuel, all sectors

thousand megawatthours per day

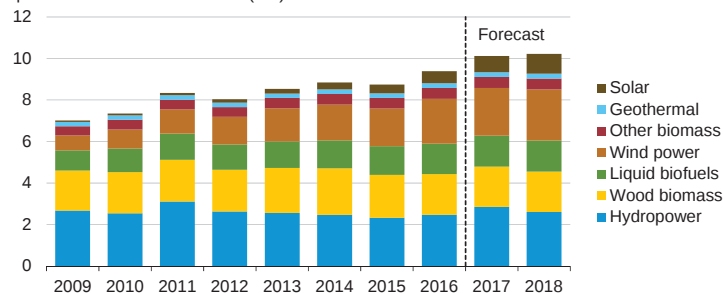


Note: Labels show percentage share of total generation provided by coal and natural gas.

Source: Short-Term Energy Outlook, May 2017.

U.S. renewable energy supply

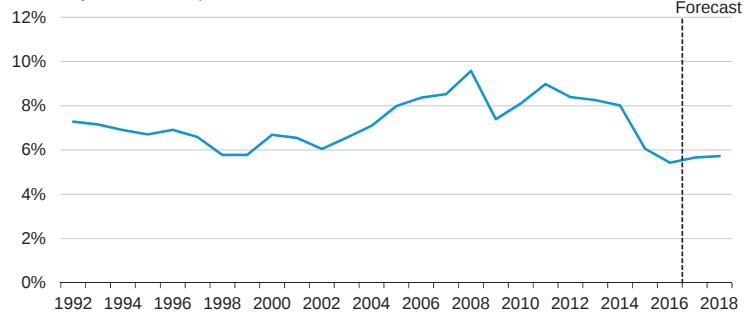
quadrillion British thermal units (Btu)



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.

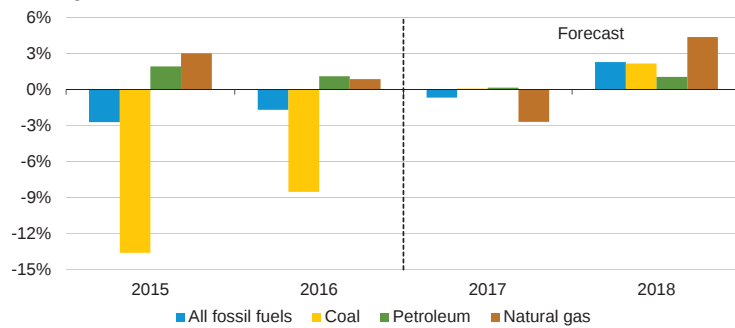
Source: Short-Term Energy Outlook, May 2017.

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



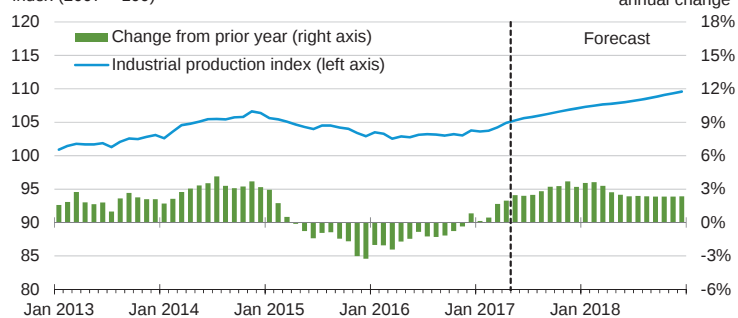
Source: Short-Term Energy Outlook, May 2017.

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



Source: Short-Term Energy Outlook, May 2017.

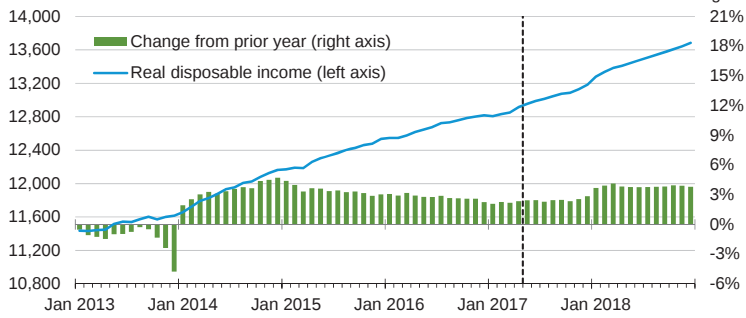
U.S. total industrial production index index (2007 = 100)



Source: Short-Term Energy Outlook, May 2017.

U.S. disposable income

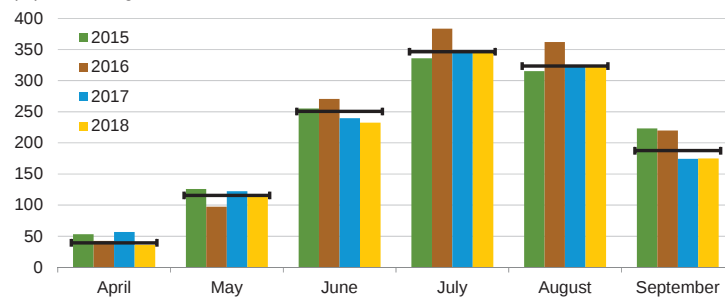
billion 2009 dollars, seasonally adjusted



Source: Short-Term Energy Outlook, May 2017.

U.S. summer cooling degree days

population-weighted

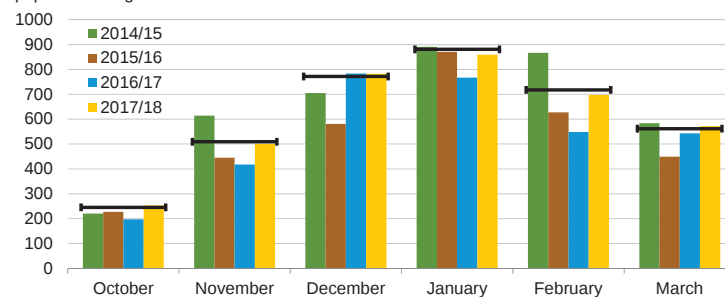


Note: EIA calculations based on from the National Oceanic and Atmospheric Administration data. Horizontal lines indicate each month's prior 10-year average (2007-2016). Projections reflect NOAA's 14-16 month outlook.

Source: Short-Term Energy Outlook, May 2017.

U.S. winter heating degree days

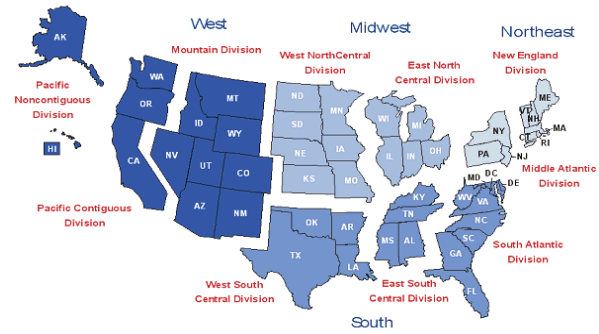
population-weighted



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, May 2017.

U.S. census regions and divisions



Source: Short-Term Energy Outlook, May 2017.

Table SF01. U.S. Motor Gasoline Summer Outlook

U.S. Energy Information Administration | Short-Term Energy Outlook - May 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	<i>1.17</i>	<i>1.19</i>	<i>1.18</i>	<i>8.1</i>	<i>11.5</i>	<i>9.8</i>
Brent Crude Oil Price (Spot)	1.08	1.09	1.09	<i>1.21</i>	<i>1.24</i>	<i>1.22</i>	<i>11.7</i>	<i>13.5</i>	<i>12.6</i>
U.S. Refiner Average Crude Oil Cost	1.01	1.02	1.01	<i>1.15</i>	<i>1.17</i>	<i>1.16</i>	<i>14.1</i>	<i>14.2</i>	<i>14.1</i>
Wholesale Gasoline Price ^b	1.58	1.50	1.54	<i>1.65</i>	<i>1.64</i>	<i>1.65</i>	<i>4.8</i>	<i>9.4</i>	<i>7.0</i>
Wholesale Diesel Fuel Price ^b	1.41	1.45	1.43	<i>1.63</i>	<i>1.67</i>	<i>1.65</i>	<i>15.7</i>	<i>15.7</i>	<i>15.7</i>
Regular Gasoline Retail Price ^c	2.25	2.21	2.23	<i>2.38</i>	<i>2.39</i>	<i>2.39</i>	<i>5.8</i>	<i>8.0</i>	<i>6.9</i>
Diesel Fuel Retail Price ^c	2.30	2.38	2.34	<i>2.59</i>	<i>2.67</i>	<i>2.63</i>	<i>12.8</i>	<i>12.0</i>	<i>12.4</i>
Gasoline Consumption/Supply (million barrels per day)									
Total Consumption	9.437	9.562	9.500	<i>9.522</i>	<i>9.609</i>	<i>9.566</i>	<i>0.9</i>	<i>0.5</i>	<i>0.7</i>
Total Refinery and Blender Net Supply ^d	8.313	8.343	8.328	<i>8.364</i>	<i>8.470</i>	<i>8.417</i>	<i>0.6</i>	<i>1.5</i>	<i>1.1</i>
Fuel Ethanol Blending	0.936	0.958	0.947	<i>0.952</i>	<i>0.973</i>	<i>0.963</i>	<i>1.7</i>	<i>1.6</i>	<i>1.7</i>
Total Stock Withdrawal ^e	0.014	0.164	0.089	<i>0.063</i>	<i>0.067</i>	<i>0.065</i>			
Net Imports ^e	0.175	0.098	0.136	<i>0.143</i>	<i>0.099</i>	<i>0.121</i>	<i>-18.4</i>	<i>1.3</i>	<i>-11.3</i>
Refinery Utilization (percent)	89.9	91.6	90.7	<i>91.5</i>	<i>91.2</i>	<i>91.3</i>			
Gasoline Stocks, Including Blending Components (million barrels)									
Beginning	243.3	242.1	243.3	<i>239.7</i>	<i>233.9</i>	<i>239.7</i>			
Ending	242.1	227.0	227.0	<i>233.9</i>	<i>227.7</i>	<i>227.7</i>			
Economic Indicators (annualized billion 2000 dollars)									
Real GDP	16,583	16,727	16,655	<i>17,009</i>	<i>17,114</i>	<i>17,062</i>	<i>2.6</i>	<i>2.3</i>	<i>2.4</i>
Real Income	12,647	12,738	12,693	<i>12,953</i>	<i>13,045</i>	<i>12,999</i>	<i>2.4</i>	<i>2.4</i>	<i>2.4</i>

^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 - May 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	3,140	-5.3%
Price (cents/kWh)	12.09	12.58	13.04	12.92	12.77	13.02	1.9%
Expenditures	\$405	\$394	\$396	\$409	\$423	\$409	-3.5%
New England							
Usage (kWh)	2,189	2,173	1,930	1,982	2,080	2,043	-1.8%
Price (cents/kWh)	15.50	16.04	17.63	18.65	18.44	17.46	-5.3%
Expenditures	\$339	\$348	\$340	\$370	\$384	\$357	-7.0%
Middle Atlantic							
Usage (kWh)	2,548	2,447	2,234	2,376	2,551	2,405	-5.7%
Price (cents/kWh)	15.63	16.39	16.90	16.37	15.99	16.61	3.9%
Expenditures	\$398	\$401	\$378	\$389	\$408	\$399	-2.0%
East North Central							
Usage (kWh)	3,048	2,618	2,505	2,565	2,903	2,702	-6.9%
Price (cents/kWh)	12.08	12.57	13.24	13.27	12.92	13.47	4.2%
Expenditures	\$368	\$329	\$332	\$340	\$375	\$364	-3.0%
West North Central							
Usage (kWh)	3,547	3,099	3,041	3,075	3,282	3,226	-1.7%
Price (cents/kWh)	11.50	12.25	12.42	12.65	12.78	13.07	2.3%
Expenditures	\$408	\$380	\$378	\$389	\$419	\$422	0.6%
South Atlantic							
Usage (kWh)	4,002	3,773	3,778	3,999	4,110	3,798	-7.6%
Price (cents/kWh)	11.65	11.76	12.09	12.04	11.88	12.19	2.6%
Expenditures	\$466	\$444	\$457	\$482	\$488	\$463	-5.2%
East South Central							
Usage (kWh)	4,468	4,079	4,034	4,279	4,435	4,161	-6.2%
Price (cents/kWh)	10.36	10.71	11.09	10.91	10.89	11.16	2.5%
Expenditures	\$463	\$437	\$447	\$467	\$483	\$464	-3.8%
West South Central							
Usage (kWh)	4,785	4,509	4,256	4,538	4,609	4,455	-3.3%
Price (cents/kWh)	10.27	10.94	11.46	11.03	10.55	10.70	1.3%
Expenditures	\$491	\$493	\$488	\$501	\$486	\$476	-2.1%
Mountain							
Usage (kWh)	3,441	3,382	3,230	3,298	3,427	3,273	-4.5%
Price (cents/kWh)	11.55	11.97	12.32	12.33	12.08	12.26	1.5%
Expenditures	\$397	\$405	\$398	\$407	\$414	\$401	-3.0%
Pacific							
Usage (kWh)	2,079	2,038	2,090	2,051	2,092	2,001	-4.3%
Price (cents/kWh)	13.78	14.47	15.17	15.33	15.98	15.78	-1.3%
Expenditures	\$286	\$295	\$317	\$314	\$334	\$316	-5.6%

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 - May 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	8.99	<i>9.22</i>	<i>9.36</i>	<i>9.65</i>	<i>9.83</i>	<i>9.90</i>	<i>9.90</i>	<i>10.22</i>	8.87	<i>9.31</i>	<i>9.96</i>
Dry Natural Gas Production (billion cubic feet per day)	73.77	72.38	71.84	71.20	71.72	<i>73.19</i>	<i>75.12</i>	<i>76.18</i>	<i>76.69</i>	<i>76.88</i>	<i>77.26</i>	<i>78.26</i>	72.29	<i>74.07</i>	<i>77.28</i>
Coal Production (million short tons)	173	161	195	210	200	<i>179</i>	<i>203</i>	<i>192</i>	<i>200</i>	<i>174</i>	<i>202</i>	<i>209</i>	739	<i>774</i>	<i>785</i>
Energy Consumption															
Liquid Fuels (million barrels per day)	19.45	19.42	19.90	19.75	19.38	<i>19.87</i>	<i>20.30</i>	<i>20.12</i>	<i>19.90</i>	<i>20.06</i>	<i>20.54</i>	<i>20.38</i>	19.63	<i>19.92</i>	<i>20.22</i>
Natural Gas (billion cubic feet per day)	89.15	66.66	69.07	75.70	85.43	<i>63.80</i>	<i>66.37</i>	<i>78.08</i>	<i>92.48</i>	<i>66.32</i>	<i>68.01</i>		75.13	<i>73.38</i>	<i>76.49</i>
Coal (b) (million short tons)	166	160	223	181	172	<i>162</i>	<i>215</i>	<i>181</i>	<i>188</i>	<i>164</i>	<i>212</i>	<i>180</i>	730	<i>729</i>	<i>744</i>
Electricity (billion kilowatt hours per day)	10.19	9.96	12.09	9.84	10.14	<i>10.16</i>	<i>11.83</i>	<i>9.92</i>	<i>10.59</i>	<i>10.20</i>	<i>11.87</i>	<i>10.01</i>	10.52	<i>10.52</i>	<i>10.67</i>
Renewables (c) (quadrillion Btu)	2.61	2.60	2.44	2.54	2.70	<i>2.94</i>	<i>2.64</i>	<i>2.59</i>	<i>2.71</i>	<i>2.95</i>	<i>2.68</i>	<i>2.68</i>	10.19	<i>10.88</i>	<i>11.02</i>
Total Energy Consumption (d) (quadrillion Btu)	25.24	22.95	24.76	24.45	24.55	<i>22.74</i>	<i>24.32</i>	<i>24.44</i>	<i>25.61</i>	<i>23.17</i>	<i>24.55</i>	<i>24.73</i>	97.40	<i>96.04</i>	<i>98.06</i>
Energy Prices															
Crude Oil West Texas Intermediate Spot (dollars per barrel)	33.35	45.46	44.85	49.18	51.64	<i>49.13</i>	<i>50.00</i>	<i>51.97</i>	<i>53.00</i>	<i>54.67</i>	<i>55.67</i>	<i>57.00</i>	43.33	<i>50.68</i>	<i>55.10</i>
Natural Gas Henry Hub Spot (dollars per million Btu)	2.00	2.14	2.88	3.04	3.01	<i>3.16</i>	<i>3.21</i>	<i>3.30</i>	<i>3.52</i>	<i>3.31</i>	<i>3.34</i>	<i>3.54</i>	2.51	<i>3.17</i>	<i>3.43</i>
Coal (dollars per million Btu)	2.13	2.13	2.11	2.08	2.11	<i>2.15</i>	<i>2.20</i>	<i>2.17</i>	<i>2.21</i>	<i>2.20</i>	<i>2.23</i>	<i>2.23</i>	2.11	<i>2.16</i>	<i>2.22</i>
Macroeconomic															
Real Gross Domestic Product (billion chained 2009 dollars - SAAR)	16,525	16,583	16,727	16,813	16,880	<i>17,009</i>	<i>17,114</i>	<i>17,221</i>	<i>17,332</i>	<i>17,434</i>	<i>17,537</i>	<i>17,639</i>	16,662	<i>17,056</i>	<i>17,485</i>
Percent change from prior year	1.6	1.3	1.7	2.0	2.1	<i>2.6</i>	<i>2.3</i>	<i>2.4</i>	<i>2.7</i>	<i>2.5</i>	<i>2.5</i>	<i>2.4</i>	1.6	<i>2.4</i>	<i>2.5</i>
GDP Implicit Price Deflator (Index, 2009=100)	110.6	111.3	111.7	112.2	113.1	<i>113.6</i>	<i>114.2</i>	<i>114.9</i>	<i>115.7</i>	<i>116.3</i>	<i>116.9</i>	<i>117.5</i>	111.5	<i>113.9</i>	<i>116.6</i>
Percent change from prior year	1.2	1.2	1.3	1.6	2.2	<i>2.1</i>	<i>2.3</i>	<i>2.4</i>	<i>2.3</i>	<i>2.4</i>	<i>2.3</i>	<i>2.2</i>	1.3	<i>2.2</i>	<i>2.3</i>
Real Disposable Personal Income (billion chained 2009 dollars - SAAR)	12,556	12,647	12,738	12,801	12,830	<i>12,953</i>	<i>13,045</i>	<i>13,133</i>	<i>13,333</i>	<i>13,443</i>	<i>13,542</i>	<i>13,644</i>	12,686	<i>12,990</i>	<i>13,490</i>
Percent change from prior year	3.1	2.8	2.7	2.5	2.2	<i>2.4</i>	<i>2.4</i>	<i>2.6</i>	<i>3.9</i>	<i>3.8</i>	<i>3.8</i>	<i>3.9</i>	2.8	<i>2.4</i>	<i>3.9</i>
Manufacturing Production Index (Index, 2012=100)	102.9	102.6	102.7	103.1	104.3	<i>105.0</i>	<i>106.0</i>	<i>106.7</i>	<i>107.3</i>	<i>107.7</i>	<i>108.2</i>	<i>109.0</i>	102.8	<i>105.5</i>	<i>108.1</i>
Percent change from prior year	0.3	0.1	-0.1	0.5	1.4	<i>2.4</i>	<i>3.2</i>	<i>3.6</i>	<i>2.9</i>	<i>2.5</i>	<i>2.1</i>	<i>2.1</i>	0.2	<i>2.6</i>	<i>2.4</i>
Weather															
U.S. Heating Degree-Days	1,947	481	51	1,398	1,858	<i>408</i>	<i>75</i>	<i>1,536</i>	<i>2,129</i>	<i>498</i>	<i>75</i>	<i>1,534</i>	3,877	<i>3,877</i>	<i>4,236</i>
U.S. Cooling Degree-Days	54	411	966	129	70	<i>419</i>	<i>844</i>	<i>90</i>	<i>39</i>	<i>382</i>	<i>846</i>	<i>91</i>	1,559	<i>1,424</i>	<i>1,357</i>

- = no data available

Prices are not adjusted for inflation.

(a) Includes lease condensate.

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

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

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

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

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

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: *Petroleum Supply Monthly*, DOE/EIA-0109;

Petroleum Supply Annual, DOE/EIA-0340/2; *Weekly Petroleum Status Report*, DOE/EIA-0208; *Petroleum Marketing Monthly*, DOE/EIA-0380; *Natural Gas Monthly*, DOE/EIA-0130;

Electric Power Monthly, DOE/EIA-0226; *Quarterly Coal Report*, DOE/EIA-0121; and *International Petroleum Monthly*, DOE/EIA-0520.

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

Projections: EIA Regional Short-Term Energy Model. 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 - May 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	<i>49.13</i>	<i>50.00</i>	<i>51.97</i>	<i>53.00</i>	<i>54.67</i>	<i>55.67</i>	<i>57.00</i>	43.33	<i>50.68</i>	<i>55.10</i>
Brent Spot Average	33.89	45.57	45.80	49.25	53.57	<i>50.89</i>	<i>52.00</i>	<i>53.97</i>	<i>55.00</i>	<i>56.67</i>	<i>57.67</i>	<i>59.00</i>	43.74	<i>52.60</i>	<i>57.10</i>
U.S. Imported Average	28.83	40.35	41.19	44.45	47.50	<i>45.70</i>	<i>46.50</i>	<i>48.49</i>	<i>49.50</i>	<i>51.17</i>	<i>52.16</i>	<i>53.50</i>	38.69	<i>47.00</i>	<i>51.56</i>
U.S. Refiner Average Acquisition Cost	30.84	42.23	42.90	46.56	49.73	<i>48.17</i>	<i>49.00</i>	<i>51.02</i>	<i>52.00</i>	<i>53.68</i>	<i>54.66</i>	<i>56.00</i>	40.69	<i>49.46</i>	<i>54.11</i>
U.S. Liquid Fuels (cents per gallon)															
Refiner Prices for Resale															
Gasoline	119	158	150	153	162	<i>165</i>	<i>164</i>	<i>152</i>	<i>159</i>	<i>180</i>	<i>178</i>	<i>163</i>	145	<i>161</i>	<i>170</i>
Diesel Fuel	109	141	145	156	162	<i>163</i>	<i>167</i>	<i>175</i>	<i>175</i>	<i>178</i>	<i>182</i>	<i>187</i>	138	<i>167</i>	<i>181</i>
Heating Oil	99	125	132	146	155	<i>152</i>	<i>158</i>	<i>169</i>	<i>173</i>	<i>168</i>	<i>173</i>	<i>181</i>	124	<i>158</i>	<i>175</i>
Refiner Prices to End Users															
Jet Fuel	107	134	137	149	158	<i>156</i>	<i>162</i>	<i>171</i>	<i>172</i>	<i>172</i>	<i>177</i>	<i>183</i>	132	<i>162</i>	<i>176</i>
No. 6 Residual Fuel Oil (a)	69	89	103	115	128	<i>119</i>	<i>121</i>	<i>125</i>	<i>129</i>	<i>130</i>	<i>134</i>	<i>138</i>	94	<i>123</i>	<i>133</i>
Retail Prices Including Taxes															
Gasoline Regular Grade (b)	190	225	221	223	233	<i>238</i>	<i>239</i>	<i>227</i>	<i>231</i>	<i>255</i>	<i>254</i>	<i>239</i>	215	<i>234</i>	<i>245</i>
Gasoline All Grades (b)	200	235	232	234	244	<i>249</i>	<i>250</i>	<i>238</i>	<i>242</i>	<i>266</i>	<i>266</i>	<i>251</i>	226	<i>245</i>	<i>256</i>
On-highway Diesel Fuel	208	230	238	247	257	<i>259</i>	<i>267</i>	<i>276</i>	<i>279</i>	<i>281</i>	<i>285</i>	<i>292</i>	231	<i>265</i>	<i>284</i>
Heating Oil	195	205	211	233	247	<i>244</i>	<i>253</i>	<i>268</i>	<i>276</i>	<i>266</i>	<i>268</i>	<i>280</i>	210	<i>254</i>	<i>275</i>
Natural Gas															
Henry Hub Spot (dollars per thousand cubic feet)	2.06	2.21	2.97	3.14	3.11	<i>3.26</i>	<i>3.31</i>	<i>3.40</i>	<i>3.63</i>	<i>3.41</i>	<i>3.45</i>	<i>3.66</i>	2.60	<i>3.27</i>	<i>3.54</i>
Henry Hub Spot (dollars per million Btu)	2.00	2.14	2.88	3.04	3.01	<i>3.16</i>	<i>3.21</i>	<i>3.30</i>	<i>3.52</i>	<i>3.31</i>	<i>3.34</i>	<i>3.54</i>	2.51	<i>3.17</i>	<i>3.43</i>
U.S. Retail Prices (dollars per thousand cubic feet)															
Industrial Sector	3.44	2.92	3.63	4.03	4.57	<i>4.07</i>	<i>4.22</i>	<i>4.51</i>	<i>4.95</i>	<i>4.33</i>	<i>4.38</i>	<i>4.75</i>	3.51	<i>4.35</i>	<i>4.62</i>
Commercial Sector	6.84	7.22	8.21	7.48	7.76	<i>8.24</i>	<i>8.76</i>	<i>8.10</i>	<i>8.08</i>	<i>8.53</i>	<i>8.94</i>	<i>8.26</i>	7.25	<i>8.06</i>	<i>8.30</i>
Residential Sector	8.54	11.15	16.99	10.18	9.76	<i>12.38</i>	<i>16.59</i>	<i>10.78</i>	<i>9.95</i>	<i>12.46</i>	<i>16.75</i>	<i>10.99</i>	10.06	<i>10.98</i>	<i>11.11</i>
U.S. Electricity															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	2.13	2.13	2.11	2.08	2.11	<i>2.15</i>	<i>2.20</i>	<i>2.17</i>	<i>2.21</i>	<i>2.20</i>	<i>2.23</i>	<i>2.23</i>	2.11	<i>2.16</i>	<i>2.22</i>
Natural Gas	2.65	2.51	3.00	3.36	3.74	<i>3.65</i>	<i>3.52</i>	<i>3.88</i>	<i>4.39</i>	<i>3.79</i>	<i>3.65</i>	<i>4.17</i>	2.88	<i>3.68</i>	<i>3.96</i>
Residual Fuel Oil (c)	6.15	8.51	9.70	9.08	11.00	<i>10.70</i>	<i>10.13</i>	<i>10.11</i>	<i>10.26</i>	<i>11.10</i>	<i>10.94</i>	<i>10.99</i>	8.41	<i>10.47</i>	<i>10.82</i>
Distillate Fuel Oil	9.00	11.01	11.64	12.14	13.04	<i>13.18</i>	<i>13.57</i>	<i>14.51</i>	<i>14.88</i>	<i>14.81</i>	<i>15.07</i>	<i>15.86</i>	10.86	<i>13.57</i>	<i>15.14</i>
Retail Prices (cents per kilowatthour)															
Industrial Sector	6.42	6.67	7.20	6.67	6.65	<i>6.92</i>	<i>7.47</i>	<i>6.91</i>	<i>6.83</i>	<i>7.07</i>	<i>7.62</i>	<i>7.08</i>	6.75	<i>7.00</i>	<i>7.16</i>
Commercial Sector	10.12	10.34	10.68	10.27	10.32	<i>10.34</i>	<i>10.84</i>	<i>10.54</i>	<i>10.57</i>	<i>10.50</i>	<i>10.96</i>	<i>10.67</i>	10.37	<i>10.52</i>	<i>10.69</i>
Residential Sector	12.20	12.66	12.81	12.45	12.62	<i>12.76</i>	<i>13.13</i>	<i>12.81</i>	<i>12.94</i>	<i>13.11</i>	<i>13.42</i>	<i>13.09</i>	12.55	<i>12.85</i>	<i>13.15</i>

- = no data available

Prices are not adjusted for inflation.

(a) Average for all sulfur contents.

(b) Average self-service cash price.

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

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

Prices exclude taxes unless otherwise noted.

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: *Petroleum Marketing Monthly* , DOE/EIA-0380; *Weekly Petroleum Status Report* , DOE/EIA-0208; *Natural Gas Monthly* , DOE/EIA-0130; *Electric Power Monthly* , DOE/EIA-0226; and *Monthly Energy Review* , DOE/EIA-0035. WTI and Brent crude oils, and Henry Hub natural gas spot prices from Reuter's News Service (<http://www.reuters.com>).

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

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - May 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	26.76	26.73	26.93	27.37	27.84	27.98	28.16	28.29	28.97	26.49	27.22	28.35
U.S. (50 States)	14.96	14.88	14.67	14.80	14.95	15.39	15.81	16.13	16.27	16.51	16.62	17.03	14.83	15.57	16.61
Canada	4.73	3.99	4.70	4.85	4.70	4.53	4.78	4.78	4.80	4.83	4.90	4.98	4.57	4.70	4.88
Mexico	2.57	2.52	2.48	2.40	2.36	2.33	2.30	2.28	2.27	2.26	2.32	2.35	2.49	2.32	2.30
Other OECD	4.74	4.52	4.45	4.71	4.71	4.69	4.48	4.64	4.64	4.57	4.45	4.61	4.61	4.63	4.56
Non-OECD	69.79	70.44	70.71	71.47	70.30	70.86	71.96	71.86	71.42	72.25	72.40	72.12	70.60	71.25	72.05
OPEC	38.30	38.72	39.10	39.56	38.83	39.06	39.83	39.98	40.03	40.31	40.31	40.25	38.92	39.43	40.23
Crude Oil Portion	31.86	32.27	32.58	33.08	31.92	32.11	32.86	32.95	32.99	33.24	33.20	33.10	32.45	32.46	33.13
Other Liquids (b)	6.44	6.45	6.52	6.48	6.90	6.95	6.98	7.03	7.03	7.07	7.11	7.15	6.47	6.97	7.09
Eurasia	14.33	14.09	13.91	14.52	14.46	14.31	14.37	14.43	14.46	14.42	14.37	14.47	14.21	14.39	14.43
China	5.02	4.91	4.79	4.77	4.81	4.72	4.72	4.75	4.66	4.68	4.68	4.71	4.87	4.75	4.68
Other Non-OECD	12.13	12.72	12.90	12.62	12.20	12.77	13.04	12.69	12.28	12.84	13.04	12.68	12.59	12.68	12.71
Total World Supply	96.78	96.34	97.02	98.22	97.02	97.80	99.33	99.70	99.40	100.41	100.69	101.09	97.09	98.47	100.40
Non-OPEC Supply	58.48	57.62	57.91	58.66	58.19	58.73	59.50	59.71	59.38	60.10	60.38	60.83	58.17	59.04	60.18
Consumption (million barrels per day) (c)															
OECD	46.70	46.03	47.30	47.39	46.79	46.53	47.66	47.62	47.41	46.67	47.82	47.90	46.86	47.15	47.45
U.S. (50 States)	19.45	19.42	19.90	19.75	19.38	19.87	20.30	20.12	19.90	20.06	20.54	20.38	19.63	19.92	20.22
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	2.44	2.34	2.46	2.44	2.40	2.34	2.46	2.44	2.43	2.42	2.41
Europe	13.71	14.02	14.54	14.28	13.96	14.18	14.61	14.25	14.10	14.15	14.56	14.30	14.14	14.25	14.28
Japan	4.43	3.66	3.75	4.13	4.27	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	6.45	6.35	6.39	6.54	6.51	6.39	6.43	6.58	6.39	6.43	6.48
Non-OECD	48.80	50.10	50.32	50.28	49.91	51.38	51.69	51.58	51.55	52.64	52.88	52.82	49.88	51.15	52.48
Eurasia	4.78	4.71	4.98	4.97	4.89	4.82	5.10	5.08	5.00	4.92	5.21	5.20	4.86	4.97	5.09
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	12.74	12.95	12.46	12.84	12.89	13.46	12.95	13.33	13.61	13.85	13.32	13.71	12.75	13.16	13.62
Other Non-OECD	18.32	19.27	19.78	19.10	18.74	19.58	20.17	19.56	19.20	19.99	20.58	19.91	19.12	19.52	19.92
Total World Consumption	95.50	96.13	97.63	97.67	96.70	97.92	99.35	99.20	98.96	99.31	100.71	100.72	96.74	98.30	99.93
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	-0.03	0.00	0.53	0.03	-0.38	-0.01	0.46	-0.13	0.12	0.02
Other OECD	0.04	-0.13	-0.10	0.59	-0.70	0.05	0.01	-0.36	-0.16	-0.24	0.01	-0.28	0.10	-0.25	-0.17
Other Stock Draws and Balance	-0.92	0.19	0.72	-1.33	0.39	0.10	0.01	-0.67	-0.31	-0.48	0.02	-0.54	-0.33	-0.04	-0.33
Total Stock Draw	-1.28	-0.21	0.61	-0.55	-0.32	0.12	0.02	-0.50	-0.44	-1.10	0.01	-0.36	-0.36	-0.17	-0.47
End-of-period Commercial Crude Oil and Other Liquids Inventories															
U.S. Commercial Inventory	1,326	1,352	1,353	1,336	1,340	1,356	1,356	1,313	1,316	1,356	1,363	1,327	1,336	1,313	1,327
OECD Commercial Inventory	2,997	3,036	3,043	2,967	3,033	3,044	3,043	3,033	3,051	3,113	3,119	3,109	2,967	3,033	3,109

- = 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 - May 2017

	2016				2017				2018				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2016	2017	2018
North America	22.26	21.38	21.85	22.04	22.01	<i>22.25</i>	<i>22.90</i>	<i>23.19</i>	<i>23.34</i>	<i>23.59</i>	<i>23.84</i>	<i>24.36</i>	21.88	<i>22.59</i>	<i>23.79</i>
Canada	4.73	3.99	4.70	4.85	4.70	<i>4.53</i>	<i>4.78</i>	<i>4.78</i>	<i>4.80</i>	<i>4.83</i>	<i>4.90</i>	<i>4.98</i>	4.57	<i>4.70</i>	<i>4.88</i>
Mexico	2.57	2.52	2.48	2.40	2.36	<i>2.33</i>	<i>2.30</i>	<i>2.28</i>	<i>2.27</i>	<i>2.26</i>	<i>2.32</i>	<i>2.35</i>	2.49	<i>2.32</i>	<i>2.30</i>
United States	14.96	14.88	14.67	14.80	14.95	<i>15.39</i>	<i>15.81</i>	<i>16.13</i>	<i>16.27</i>	<i>16.51</i>	<i>16.62</i>	<i>17.03</i>	14.83	<i>15.57</i>	<i>16.61</i>
Central and South America	4.73	5.40	5.63	5.29	4.96	<i>5.53</i>	<i>5.75</i>	<i>5.40</i>	<i>5.06</i>	<i>5.66</i>	<i>5.89</i>	<i>5.55</i>	5.26	<i>5.41</i>	<i>5.54</i>
Argentina	0.70	0.69	0.70	0.69	0.68	<i>0.69</i>	<i>0.70</i>	<i>0.69</i>	<i>0.68</i>	<i>0.69</i>	<i>0.70</i>	<i>0.69</i>	0.69	<i>0.69</i>	<i>0.69</i>
Brazil	2.63	3.36	3.63	3.32	2.98	<i>3.53</i>	<i>3.76</i>	<i>3.44</i>	<i>3.09</i>	<i>3.66</i>	<i>3.90</i>	<i>3.57</i>	3.23	<i>3.43</i>	<i>3.56</i>
Colombia	0.98	0.93	0.87	0.87	0.89	<i>0.89</i>	<i>0.86</i>	<i>0.86</i>	<i>0.88</i>	<i>0.89</i>	<i>0.85</i>	<i>0.86</i>	0.91	<i>0.88</i>	<i>0.87</i>
Other Central and S. America	0.42	0.43	0.42	0.41	0.41	<i>0.42</i>	<i>0.42</i>	<i>0.41</i>	<i>0.41</i>	<i>0.42</i>	<i>0.43</i>	<i>0.43</i>	0.42	<i>0.41</i>	<i>0.42</i>
Europe	4.22	4.02	3.92	4.20	4.21	<i>4.15</i>	<i>3.93</i>	<i>4.10</i>	<i>4.07</i>	<i>3.98</i>	<i>3.84</i>	<i>3.98</i>	4.09	<i>4.09</i>	<i>3.97</i>
Norway	2.04	1.95	1.91	2.12	2.10	<i>2.07</i>	<i>2.00</i>	<i>2.08</i>	<i>2.05</i>	<i>1.97</i>	<i>1.94</i>	<i>2.03</i>	2.00	<i>2.06</i>	<i>2.00</i>
United Kingdom	1.13	1.09	1.01	1.03	1.10	<i>1.07</i>	<i>0.93</i>	<i>1.00</i>	<i>1.01</i>	<i>1.01</i>	<i>0.90</i>	<i>0.95</i>	1.06	<i>1.02</i>	<i>0.97</i>
Eurasia	14.33	14.09	13.91	14.52	14.46	<i>14.31</i>	<i>14.36</i>	<i>14.43</i>	<i>14.46</i>	<i>14.42</i>	<i>14.37</i>	<i>14.47</i>	14.21	<i>14.39</i>	<i>14.43</i>
Azerbaijan	0.87	0.87	0.84	0.80	0.79	<i>0.78</i>	<i>0.76</i>	<i>0.76</i>	<i>0.77</i>	<i>0.76</i>	<i>0.74</i>	<i>0.73</i>	0.84	<i>0.77</i>	<i>0.75</i>
Kazakhstan	1.76	1.63	1.57	1.83	1.88	<i>1.89</i>	<i>1.90</i>	<i>1.92</i>	<i>1.94</i>	<i>1.91</i>	<i>1.94</i>	<i>1.99</i>	1.70	<i>1.90</i>	<i>1.95</i>
Russia	11.27	11.17	11.08	11.45	11.32	<i>11.17</i>	<i>11.24</i>	<i>11.29</i>	<i>11.29</i>	<i>11.29</i>	<i>11.23</i>	<i>11.30</i>	11.24	<i>11.25</i>	<i>11.28</i>
Turkmenistan	0.27	0.26	0.26	0.28	0.29	<i>0.29</i>	<i>0.29</i>	<i>0.29</i>	<i>0.29</i>	<i>0.29</i>	<i>0.29</i>	<i>0.29</i>	0.27	<i>0.29</i>	<i>0.29</i>
Other Eurasia	0.17	0.17	0.16	0.16	0.18	<i>0.18</i>	<i>0.18</i>	<i>0.18</i>	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	0.16	<i>0.18</i>	<i>0.17</i>
Middle East	1.14	1.14	1.15	1.14	1.08	<i>1.08</i>	<i>1.13</i>	<i>1.13</i>	<i>1.14</i>	<i>1.15</i>	<i>1.15</i>	<i>1.15</i>	1.14	<i>1.11</i>	<i>1.15</i>
Oman	1.02	1.01	1.02	1.02	0.98	<i>0.97</i>	<i>1.03</i>	<i>1.02</i>	<i>1.03</i>	<i>1.03</i>	<i>1.04</i>	<i>1.04</i>	1.02	<i>1.00</i>	<i>1.03</i>
Asia and Oceania	9.73	9.52	9.40	9.38	9.41	<i>9.33</i>	<i>9.31</i>	<i>9.33</i>	<i>9.27</i>	<i>9.27</i>	<i>9.26</i>	<i>9.29</i>	9.51	<i>9.34</i>	<i>9.27</i>
Australia	0.39	0.37	0.40	0.37	0.35	<i>0.38</i>	<i>0.38</i>	<i>0.38</i>	<i>0.40</i>	<i>0.42</i>	<i>0.43</i>	<i>0.45</i>	0.38	<i>0.37</i>	<i>0.42</i>
China	5.02	4.91	4.79	4.77	4.81	<i>4.72</i>	<i>4.72</i>	<i>4.75</i>	<i>4.66</i>	<i>4.68</i>	<i>4.68</i>	<i>4.71</i>	4.87	<i>4.75</i>	<i>4.68</i>
India	0.99	0.99	0.99	0.99	1.00	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>0.99</i>	<i>0.99</i>	<i>0.99</i>	0.99	<i>1.00</i>	<i>0.99</i>
Indonesia	0.94	0.93	0.94	0.94	0.93	<i>0.92</i>	<i>0.91</i>	<i>0.89</i>	<i>0.88</i>	<i>0.87</i>	<i>0.85</i>	<i>0.83</i>	0.94	<i>0.91</i>	<i>0.86</i>
Malaysia	0.76	0.75	0.73	0.74	0.75	<i>0.75</i>	<i>0.76</i>	<i>0.76</i>	<i>0.77</i>	<i>0.76</i>	<i>0.76</i>	<i>0.75</i>	0.75	<i>0.76</i>	<i>0.76</i>
Vietnam	0.33	0.33	0.31	0.31	0.30	<i>0.30</i>	<i>0.29</i>	<i>0.29</i>	<i>0.28</i>	<i>0.28</i>	<i>0.28</i>	<i>0.28</i>	0.32	<i>0.29</i>	<i>0.28</i>
Africa	2.07	2.07	2.06	2.09	2.07	<i>2.10</i>	<i>2.12</i>	<i>2.13</i>	<i>2.03</i>	<i>2.03</i>	<i>2.03</i>	<i>2.03</i>	2.07	<i>2.10</i>	<i>2.03</i>
Egypt	0.70	0.69	0.69	0.69	0.68	<i>0.68</i>	<i>0.68</i>	<i>0.67</i>	<i>0.67</i>	<i>0.66</i>	<i>0.66</i>	<i>0.65</i>	0.69	<i>0.68</i>	<i>0.66</i>
Equatorial Guinea	0.24	0.24	0.24	0.24	0.22	<i>0.22</i>	<i>0.22</i>	<i>0.22</i>	<i>0.20</i>	<i>0.20</i>	<i>0.20</i>	<i>0.20</i>	0.24	<i>0.22</i>	<i>0.20</i>
South Sudan	0.15	0.16	0.15	0.15	0.15	<i>0.15</i>	<i>0.15</i>	<i>0.15</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	0.15	<i>0.15</i>	<i>0.12</i>
Total non-OPEC liquids	58.48	57.62	57.91	58.66	58.19	<i>58.73</i>	<i>59.50</i>	<i>59.71</i>	<i>59.38</i>	<i>60.10</i>	<i>60.38</i>	<i>60.83</i>	58.17	<i>59.04</i>	<i>60.18</i>
OPEC non-crude liquids	6.44	6.45	6.52	6.48	6.90	<i>6.95</i>	<i>6.98</i>	<i>7.03</i>	<i>7.03</i>	<i>7.07</i>	<i>7.11</i>	<i>7.15</i>	6.47	<i>6.97</i>	<i>7.09</i>
Non-OPEC + OPEC non-crude	64.92	64.07	64.43	65.14	65.10	<i>65.68</i>	<i>66.48</i>	<i>66.74</i>	<i>66.41</i>	<i>67.17</i>	<i>67.49</i>	<i>67.98</i>	64.64	<i>66.01</i>	<i>67.27</i>
Unplanned non-OPEC Production Outages	0.38	0.76	0.42	0.34	0.43	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	0.47	<i>n/a</i>	<i>n/a</i>

- = 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 - May 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	-	-
Ecuador	0.54	0.55	0.55	0.55	0.52	-	-	-	-	-	-	-	0.55	-	-
Gabon	0.21	0.21	0.21	0.21	0.19	-	-	-	-	-	-	-	0.21	-	-
Iran	3.03	3.57	3.65	3.70	3.80	-	-	-	-	-	-	-	3.49	-	-
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	31.86	32.27	32.58	33.08	31.92	<i>32.11</i>	<i>32.86</i>	<i>32.95</i>	<i>32.99</i>	<i>33.24</i>	<i>33.20</i>	<i>33.10</i>	32.45	<i>32.46</i>	<i>33.13</i>
Other Liquids (a)	6.44	6.45	6.52	6.48	6.90	<i>6.95</i>	<i>6.98</i>	<i>7.03</i>	<i>7.03</i>	<i>7.07</i>	<i>7.11</i>	<i>7.15</i>	6.47	<i>6.97</i>	<i>7.09</i>
Total OPEC Supply	38.30	38.72	39.10	39.56	38.83	<i>39.06</i>	<i>39.83</i>	<i>39.98</i>	<i>40.03</i>	<i>40.31</i>	<i>40.31</i>	<i>40.25</i>	38.92	<i>39.43</i>	<i>40.23</i>
Crude Oil Production Capacity															
Africa	5.11	4.80	4.62	4.93	4.91	<i>5.09</i>	<i>5.29</i>	<i>5.37</i>	<i>5.43</i>	<i>5.43</i>	<i>5.43</i>	<i>5.44</i>	4.87	<i>5.17</i>	<i>5.44</i>
Middle East	25.52	25.95	26.27	26.56	26.70	<i>26.69</i>	<i>26.56</i>	<i>26.51</i>	<i>26.55</i>	<i>26.52</i>	<i>26.54</i>	<i>26.56</i>	26.08	<i>26.61</i>	<i>26.54</i>
South America	2.84	2.78	2.66	2.62	2.51	<i>2.51</i>	<i>2.50</i>	<i>2.50</i>	<i>2.43</i>	<i>2.40</i>	<i>2.32</i>	<i>2.30</i>	2.73	<i>2.51</i>	<i>2.36</i>
OPEC Total	33.48	33.53	33.56	34.11	34.13	<i>34.29</i>	<i>34.35</i>	<i>34.38</i>	<i>34.41</i>	<i>34.35</i>	<i>34.30</i>	<i>34.30</i>	33.67	<i>34.29</i>	<i>34.34</i>
Surplus Crude Oil Production Capacity															
Africa	0.00	0.00	0.00	0.00	0.01	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	0.00	<i>0.00</i>	<i>0.00</i>
Middle East	1.62	1.26	0.97	1.03	2.19	<i>2.18</i>	<i>1.49</i>	<i>1.42</i>	<i>1.42</i>	<i>1.12</i>	<i>1.10</i>	<i>1.20</i>	1.22	<i>1.82</i>	<i>1.21</i>
South America	0.00	0.00	0.00	0.00	0.00	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	0.00	<i>0.00</i>	<i>0.00</i>
OPEC Total	1.62	1.26	0.97	1.03	2.21	<i>2.18</i>	<i>1.49</i>	<i>1.42</i>	<i>1.42</i>	<i>1.12</i>	<i>1.10</i>	<i>1.20</i>	1.22	<i>1.82</i>	<i>1.21</i>
Unplanned OPEC Production Outages	2.09	2.44	2.34	1.93	1.81	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	2.20	<i>n/a</i>	<i>n/a</i>

- = 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 United Arab Emirates (Middle East).

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

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

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

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

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - May 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	23.70	<i>24.14</i>	<i>24.66</i>	<i>24.47</i>	<i>24.22</i>	<i>24.33</i>	<i>24.90</i>	<i>24.73</i>	24.03	<i>24.25</i>	<i>24.55</i>
Canada	2.39	2.37	2.52	2.46	2.44	<i>2.34</i>	<i>2.46</i>	<i>2.44</i>	<i>2.40</i>	<i>2.34</i>	<i>2.46</i>	<i>2.44</i>	2.43	<i>2.42</i>	<i>2.41</i>
Mexico	1.98	1.94	1.93	1.95	1.88	<i>1.92</i>	<i>1.89</i>	<i>1.90</i>	<i>1.90</i>	<i>1.92</i>	<i>1.89</i>	<i>1.90</i>	1.95	<i>1.90</i>	<i>1.90</i>
United States	19.45	19.42	19.90	19.75	19.38	<i>19.87</i>	<i>20.30</i>	<i>20.12</i>	<i>19.90</i>	<i>20.06</i>	<i>20.54</i>	<i>20.38</i>	19.63	<i>19.92</i>	<i>20.22</i>
Central and South America	6.96	7.12	7.23	7.22	6.91	<i>7.09</i>	<i>7.24</i>	<i>7.23</i>	<i>6.90</i>	<i>7.09</i>	<i>7.22</i>	<i>7.22</i>	7.13	<i>7.12</i>	<i>7.11</i>
Brazil	2.97	3.02	3.09	3.10	2.88	<i>2.96</i>	<i>3.05</i>	<i>3.08</i>	<i>2.84</i>	<i>2.91</i>	<i>3.00</i>	<i>3.02</i>	3.04	<i>2.99</i>	<i>2.94</i>
Europe	14.40	14.72	15.25	14.99	14.66	<i>14.89</i>	<i>15.33</i>	<i>14.97</i>	<i>14.81</i>	<i>14.87</i>	<i>15.30</i>	<i>15.03</i>	14.84	<i>14.97</i>	<i>15.00</i>
Eurasia	4.78	4.71	4.98	4.97	4.89	<i>4.82</i>	<i>5.10</i>	<i>5.08</i>	<i>5.00</i>	<i>4.92</i>	<i>5.21</i>	<i>5.20</i>	4.86	<i>4.97</i>	<i>5.09</i>
Russia	3.53	3.48	3.69	3.67	3.63	<i>3.58</i>	<i>3.79</i>	<i>3.78</i>	<i>3.73</i>	<i>3.68</i>	<i>3.89</i>	<i>3.88</i>	3.59	<i>3.69</i>	<i>3.79</i>
Middle East	7.95	8.70	9.19	8.38	8.31	<i>9.00</i>	<i>9.51</i>	<i>8.77</i>	<i>8.68</i>	<i>9.29</i>	<i>9.83</i>	<i>9.01</i>	8.56	<i>8.90</i>	<i>9.20</i>
Asia and Oceania	33.33	32.85	32.40	33.61	33.81	<i>33.58</i>	<i>33.17</i>	<i>34.23</i>	<i>34.81</i>	<i>34.28</i>	<i>33.77</i>	<i>34.95</i>	33.05	<i>33.70</i>	<i>34.45</i>
China	12.26	12.47	12.38	12.65	12.69	<i>12.82</i>	<i>12.75</i>	<i>12.88</i>	<i>13.02</i>	<i>13.16</i>	<i>13.03</i>	<i>13.27</i>	12.44	<i>12.78</i>	<i>13.12</i>
Japan	4.43	3.66	3.75	4.13	4.27	<i>3.50</i>	<i>3.61</i>	<i>3.99</i>	<i>4.19</i>	<i>3.42</i>	<i>3.53</i>	<i>3.91</i>	3.99	<i>3.84</i>	<i>3.76</i>
India	4.48	4.44	4.07	4.42	4.43	<i>4.75</i>	<i>4.36</i>	<i>4.71</i>	<i>4.95</i>	<i>4.93</i>	<i>4.52</i>	<i>4.88</i>	4.35	<i>4.56</i>	<i>4.82</i>
Africa	4.25	4.28	4.21	4.32	4.40	<i>4.39</i>	<i>4.34</i>	<i>4.45</i>	<i>4.54</i>	<i>4.53</i>	<i>4.48</i>	<i>4.59</i>	4.27	<i>4.40</i>	<i>4.54</i>
Total OECD Liquid Fuels Consumption	46.70	46.03	47.30	47.39	46.79	<i>46.53</i>	<i>47.66</i>	<i>47.62</i>	<i>47.41</i>	<i>46.67</i>	<i>47.82</i>	<i>47.90</i>	46.86	<i>47.15</i>	<i>47.45</i>
Total non-OECD Liquid Fuels Consumption	48.80	50.10	50.32	50.28	49.91	<i>51.38</i>	<i>51.69</i>	<i>51.58</i>	<i>51.55</i>	<i>52.64</i>	<i>52.88</i>	<i>52.82</i>	49.88	<i>51.15</i>	<i>52.48</i>
Total World Liquid Fuels Consumption	95.50	96.13	97.63	97.67	96.70	<i>97.92</i>	<i>99.35</i>	<i>99.20</i>	<i>98.96</i>	<i>99.31</i>	<i>100.71</i>	<i>100.72</i>	96.74	<i>98.30</i>	<i>99.93</i>
Oil-weighted Real Gross Domestic Product (a)															
World Index, 2010 Q1 = 100	119.7	120.4	121.2	122.0	122.8	<i>123.7</i>	<i>124.6</i>	<i>125.6</i>	<i>126.5</i>	<i>127.5</i>	<i>128.4</i>	<i>129.4</i>	120.8	<i>124.2</i>	<i>128.0</i>
Percent change from prior year	2.2	2.3	2.3	2.5	2.6	<i>2.7</i>	<i>2.8</i>	<i>2.9</i>	<i>3.0</i>	<i>3.1</i>	<i>3.1</i>	<i>3.1</i>	2.3	<i>2.8</i>	<i>3.0</i>
OECD Index, 2010 Q1 = 100	111.9	112.3	113.0	113.6	114.1	<i>114.7</i>	<i>115.3</i>	<i>115.9</i>	<i>116.5</i>	<i>117.1</i>	<i>117.7</i>	<i>118.4</i>	112.7	<i>115.0</i>	<i>117.4</i>
Percent change from prior year	1.7	1.6	1.7	1.9	2.0	<i>2.1</i>	<i>2.1</i>	<i>2.0</i>	<i>2.1</i>	<i>2.1</i>	<i>2.1</i>	<i>2.1</i>	1.7	<i>2.1</i>	<i>2.1</i>
Non-OECD Index, 2010 Q1 = 100	129.4	130.5	131.3	132.5	133.6	<i>135.0</i>	<i>136.2</i>	<i>137.7</i>	<i>139.0</i>	<i>140.6</i>	<i>141.9</i>	<i>143.4</i>	130.9	<i>135.6</i>	<i>141.2</i>
Percent change from prior year	2.9	3.1	3.1	3.2	3.3	<i>3.4</i>	<i>3.7</i>	<i>3.9</i>	<i>4.0</i>	<i>4.1</i>	<i>4.2</i>	<i>4.2</i>	3.1	<i>3.6</i>	<i>4.1</i>
Real U.S. Dollar Exchange Rate (a)															
Index, January 2010 = 100	128.50	127.76	128.25	131.39	132.08	<i>131.62</i>	<i>132.93</i>	<i>134.34</i>	<i>135.44</i>	<i>136.01</i>	<i>136.04</i>	<i>135.94</i>	128.98	<i>132.74</i>	<i>135.86</i>
Percent change from prior year	8.0	7.1	4.6	5.6	2.8	<i>3.0</i>	<i>3.7</i>	<i>2.2</i>	<i>2.5</i>	<i>3.3</i>	<i>2.3</i>	<i>1.2</i>	6.3	<i>2.9</i>	<i>2.3</i>

- = no data available

OECD = Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland,

France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Latvia, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal,

Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, the United States.

(a) Weighted geometric mean of real indices for various countries with weights equal to each country's share of world oil consumption in the base period. Exchange rate is measured in foreign currency per U.S. dollar.

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 - May 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	8.99	9.22	9.36	9.65	9.83	9.90	9.90	10.22	8.87	9.31	9.96
Alaska	0.51	0.49	0.45	0.51	0.51	0.46	0.43	0.49	0.50	0.48	0.44	0.49	0.49	0.47	0.48
Federal Gulf of Mexico (b)	1.61	1.58	1.57	1.67	1.73	1.73	1.65	1.78	1.91	1.93	1.81	1.91	1.61	1.72	1.89
Lower 48 States (excl GOM)	7.05	6.78	6.65	6.63	6.75	7.03	7.28	7.37	7.42	7.50	7.65	7.81	6.78	7.11	7.59
Crude Oil Net Imports (c)	7.46	7.19	7.45	7.33	7.25	7.07	6.88	6.04	6.04	6.37	6.26	5.66	7.36	6.81	6.08
SPR Net Withdrawals	0.00	0.00	0.00	0.00	0.03	0.14	0.00	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	-0.57	0.23	0.24	0.10	-0.38	0.05	0.23	0.06	-0.10	0.00	-0.01
Crude Oil Adjustment (d)	-0.06	0.14	0.09	0.09	0.19	0.10	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	15.89	16.77	16.70	16.01	15.75	16.57	16.67	16.15	16.20	16.34	16.29
Other Supply															
Refinery Processing Gain	1.07	1.10	1.15	1.11	1.07	1.08	1.11	1.07	1.03	1.08	1.10	1.08	1.11	1.08	1.07
Natural Gas Plant Liquids Production	3.38	3.57	3.46	3.49	3.53	3.71	3.93	4.01	4.03	4.13	4.22	4.33	3.48	3.80	4.18
Renewables and Oxygenate Production (e)	1.12	1.13	1.17	1.18	1.15	1.14	1.17	1.17	1.15	1.15	1.16	1.16	1.15	1.16	1.15
Fuel Ethanol Production	0.99	0.97	1.01	1.02	1.03	1.02	1.03	1.03	1.02	1.02	1.03	1.02	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	0.24	0.24	0.24	0.22	0.23	0.24
Product Net Imports (c)	-2.48	-2.51	-2.31	-2.65	-2.99	-2.67	-2.60	-2.73	-2.64	-2.63	-2.54	-2.92	-2.49	-2.75	-2.68
Hydrocarbon Gas Liquids	-1.00	-1.10	-0.93	-1.12	-1.20	-1.26	-1.30	-1.37	-1.34	-1.37	-1.38	-1.51	-1.04	-1.28	-1.40
Unfinished Oils	0.30	0.41	0.37	0.33	0.34	0.41	0.44	0.37	0.37	0.42	0.43	0.34	0.36	0.39	0.39
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	0.42	0.49	0.46	0.44	0.46	0.64	0.48	0.46	0.52	0.45	0.51
Finished Motor Gasoline	-0.56	-0.47	-0.49	-0.76	-0.68	-0.35	-0.36	-0.56	-0.67	-0.51	-0.34	-0.63	-0.57	-0.49	-0.54
Jet Fuel	-0.03	-0.04	-0.02	-0.03	-0.04	-0.03	-0.02	0.00	0.03	0.04	0.00	-0.01	-0.03	-0.02	0.02
Distillate Fuel Oil	-0.85	-1.21	-1.13	-0.99	-1.02	-1.17	-1.19	-0.95	-0.83	-1.09	-1.09	-0.90	-1.04	-1.08	-0.98
Residual Fuel Oil	-0.06	-0.06	-0.07	-0.06	-0.11	-0.09	-0.06	-0.08	-0.06	-0.12	-0.08	-0.09	-0.06	-0.09	-0.09
Other Oils (g)	-0.52	-0.62	-0.58	-0.48	-0.57	-0.60	-0.52	-0.52	-0.49	-0.57	-0.52	-0.53	-0.55	-0.55	-0.53
Product Inventory Net Withdrawals	0.17	-0.32	-0.32	0.35	0.52	-0.40	-0.24	0.37	0.35	-0.50	-0.31	0.34	-0.03	0.06	-0.03
Total Supply	19.47	19.42	19.90	19.75	19.38	19.87	20.30	20.12	19.90	20.06	20.54	20.38	19.64	19.92	20.22
Consumption (million barrels per day)															
Hydrocarbon Gas Liquids	2.73	2.25	2.40	2.59	2.76	2.41	2.58	2.87	3.00	2.61	2.75	3.02	2.49	2.65	2.84
Unfinished Oils	0.01	-0.06	-0.05	-0.03	-0.01	-0.01	-0.02	0.03	0.00	-0.01	-0.02	0.03	-0.03	0.00	0.00
Motor Gasoline	9.09	9.44	9.56	9.22	8.89	9.52	9.61	9.29	8.98	9.51	9.63	9.30	9.33	9.33	9.36
Fuel Ethanol blended into Motor Gasoline	0.91	0.94	0.96	0.94	0.90	0.95	0.97	0.94	0.90	0.96	0.97	0.94	0.94	0.94	0.94
Jet Fuel	1.50	1.61	1.68	1.63	1.59	1.64	1.65	1.61	1.55	1.63	1.64	1.61	1.61	1.62	1.61
Distillate Fuel Oil	3.90	3.80	3.79	4.02	3.93	3.95	3.91	4.05	4.13	3.96	3.97	4.14	3.88	3.96	4.05
Residual Fuel Oil	0.31	0.40	0.36	0.35	0.36	0.32	0.35	0.31	0.35	0.32	0.33	0.30	0.36	0.34	0.33
Other Oils (g)	1.89	1.98	2.16	1.99	1.86	2.04	2.22	1.97	1.89	2.04	2.24	1.98	2.00	2.02	2.04
Total Consumption	19.45	19.42	19.90	19.75	19.38	19.87	20.30	20.12	19.90	20.06	20.54	20.38	19.63	19.92	20.22
Total Petroleum and Other Liquids Net Imports	4.97	4.68	5.15	4.68	4.26	4.41	4.29	3.31	3.41	3.74	3.72	2.74	4.87	4.06	3.40
End-of-period Inventories (million barrels)															
Commercial Inventory															
Crude Oil (excluding SPR)	501.5	498.0	469.1	484.3	535.2	514.4	492.0	482.8	517.1	512.3	490.9	485.5	484.3	482.8	485.5
Hydrocarbon Gas Liquids	154.4	211.8	251.6	203.5	154.2	194.8	226.0	183.1	149.4	199.3	233.4	192.2	203.5	183.1	192.2
Unfinished Oils	91.4	86.7	83.3	80.6	88.4	87.8	85.0	79.5	89.7	88.2	85.6	79.3	80.6	79.5	79.3
Other HC/Oxygenates	28.2	27.7	27.1	28.4	32.2	31.6	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	239.7	233.9	227.7	241.6	239.8	234.1	229.3	244.2	237.7	241.6	244.2
Finished Motor Gasoline	26.5	24.9	25.1	28.6	22.0	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	217.7	208.6	201.5	213.7	214.5	210.3	204.9	218.2	209.1	213.7	218.2
Jet Fuel	43.8	40.4	44.7	42.8	42.1	43.6	44.8	42.1	41.6	42.8	44.2	41.9	42.8	42.1	41.9
Distillate Fuel Oil	160.6	149.2	160.4	165.5	152.1	155.2	161.7	161.9	147.2	151.4	159.3	159.9	165.5	161.9	159.9
Residual Fuel Oil	44.5	40.3	38.8	41.5	39.7	39.9	39.1	39.4	41.2	41.3	40.2	40.4	41.5	39.4	40.4
Other Oils (g)	58.4	55.6	50.5	51.3	56.4	54.6	48.7	51.2	56.8	54.9	49.1	51.6	51.3	51.2	51.6
Total Commercial Inventory	1,326	1,352	1,353	1,336	1,340	1,356	1,356	1,313	1,316	1,356	1,363	1,327	1,336	1,313	1,327
Crude Oil in SPR	695	695	695	695	692	679	679	673	668	662	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" includes aviation gasoline blend components, finished aviation gasoline, kerosene, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt and road oil, still gas, and miscellaneous products.

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

SPR: Strategic Petroleum Reserve

HC: Hydrocarbons

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

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

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - May 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	1.41	1.54	1.63	1.68	1.71	1.74	1.81	1.25	1.48	1.74
Propane	1.15	1.17	1.17	1.15	1.16	1.20	1.24	1.25	1.24	1.26	1.28	1.32	1.16	1.21	1.28
Butanes	0.63	0.63	0.64	0.63	0.63	0.65	0.68	0.68	0.67	0.69	0.70	0.72	0.63	0.66	0.69
Natural Gasoline (Pentanes Plus)	0.41	0.43	0.46	0.43	0.41	0.45	0.48	0.46	0.44	0.47	0.49	0.48	0.43	0.45	0.47
Refinery and Blender Net Production															
Ethane/Ethylene	0.00	0.00	0.00	0.00	0.01	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	0.56	0.60	0.59	0.58	0.57	0.61	0.60	0.59	0.58	0.58	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	-0.16	-0.24	-0.26	-0.28	-0.30	-0.30	-0.30	-0.32	-0.09	-0.24	-0.31
Propane/Propylene	-0.65	-0.68	-0.56	-0.77	-0.77	-0.70	-0.66	-0.75	-0.69	-0.72	-0.67	-0.81	-0.67	-0.72	-0.72
Butanes/Butylenes	-0.07	-0.12	-0.08	-0.10	-0.08	-0.11	-0.14	-0.11	-0.12	-0.14	-0.16	-0.14	-0.09	-0.11	-0.14
Natural Gasoline (Pentanes Plus)	-0.20	-0.21	-0.19	-0.15	-0.19	-0.21	-0.24	-0.23	-0.23	-0.22	-0.24	-0.24	-0.19	-0.22	-0.23
HGL Refinery and Blender Net Inputs															
Butanes/Butylenes	0.43	0.28	0.32	0.52	0.43	0.29	0.32	0.48	0.41	0.29	0.32	0.49	0.39	0.38	0.38
Natural Gasoline (Pentanes Plus)	0.14	0.15	0.14	0.14	0.15	0.15	0.16	0.16	0.15	0.16	0.16	0.16	0.15	0.15	0.16
HGL Consumption															
Ethane/Ethylene	1.10	1.08	1.11	1.13	1.18	1.17	1.32	1.37	1.38	1.40	1.46	1.52	1.11	1.26	1.44
Propane/Propylene	1.41	0.88	0.98	1.18	1.38	0.93	0.98	1.21	1.39	0.92	1.01	1.22	1.11	1.12	1.13
Butanes/Butylenes	0.18	0.25	0.24	0.17	0.11	0.24	0.22	0.22	0.18	0.23	0.22	0.21	0.21	0.20	0.21
Natural Gasoline (Pentanes Plus)	0.04	0.04	0.07	0.11	0.09	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	52.63	53.53	50.62	49.69	48.08	50.59	48.66	48.04	45.86	51.61	48.84
Propane/Propylene	66.38	85.18	103.83	84.10	46.20	61.55	78.95	67.22	43.08	64.72	82.82	71.35	84.10	67.22	71.35
Butanes/Butylenes	32.39	54.10	73.35	40.33	32.97	57.05	73.87	46.21	36.96	61.72	79.01	51.55	40.33	46.21	51.55
Natural Gasoline (Pentanes Plus)	20.40	20.94	24.86	25.03	21.82	22.89	23.00	21.66	20.31	22.00	23.00	22.68	25.03	21.66	22.68
Refinery and Blender Net Inputs															
Crude Oil	16.00	16.22	16.53	16.06	15.89	16.77	16.70	16.01	15.75	16.57	16.67	16.15	16.20	16.34	16.29
Hydrocarbon Gas Liquids	0.57	0.43	0.46	0.66	0.57	0.44	0.48	0.63	0.56	0.45	0.48	0.65	0.53	0.53	0.53
Other Hydrocarbons/Oxygenates	1.15	1.22	1.23	1.20	1.15	1.24	1.28	1.26	1.18	1.26	1.29	1.27	1.20	1.23	1.25
Unfinished Oils	0.19	0.53	0.46	0.39	0.26	0.43	0.49	0.40	0.25	0.45	0.48	0.38	0.39	0.39	0.39
Motor Gasoline Blend Components	0.31	0.82	0.91	0.47	0.36	0.76	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	18.24	19.63	19.68	18.81	18.41	19.65	19.65	18.96	18.96	19.09	19.17
Refinery Processing Gain															
.....	1.07	1.10	1.15	1.11	1.07	1.08	1.11	1.07	1.03	1.08	1.10	1.08	1.11	1.08	1.07
Refinery and Blender Net Production															
Hydrocarbon Gas Liquids	0.47	0.86	0.78	0.38	0.47	0.86	0.78	0.41	0.52	0.87	0.78	0.41	0.62	0.63	0.64
Finished Motor Gasoline	9.68	10.06	10.19	10.02	9.52	10.06	10.16	10.05	9.82	10.21	10.15	10.13	9.99	9.95	10.08
Jet Fuel	1.57	1.61	1.75	1.64	1.62	1.69	1.68	1.58	1.51	1.61	1.66	1.60	1.64	1.64	1.59
Distillate Fuel	4.70	4.80	4.93	4.95	4.75	5.08	5.09	4.93	4.72	5.02	5.08	4.97	4.84	4.96	4.95
Residual Fuel	0.40	0.42	0.42	0.44	0.46	0.41	0.40	0.40	0.43	0.44	0.40	0.40	0.42	0.42	0.42
Other Oils (a)	2.47	2.57	2.68	2.47	2.49	2.62	2.68	2.52	2.44	2.59	2.69	2.53	2.55	2.57	2.57
Total Refinery and Blender Net Production	19.29	20.32	20.75	19.89	19.31	20.71	20.79	19.88	19.44	20.73	20.76	20.04	20.07	20.18	20.25
Refinery Distillation Inputs															
.....	16.27	16.50	16.89	16.41	16.21	17.03	16.98	16.31	16.04	16.78	16.95	16.43	16.52	16.63	16.55
Refinery Operable Distillation Capacity															
.....	18.31	18.36	18.44	18.49	18.62	18.62	18.62	18.62	18.62	18.65	18.65	18.65	18.40	18.62	18.64
Refinery Distillation Utilization Factor															
.....	0.89	0.90	0.92	0.89	0.87	0.91	0.91	0.88	0.86	0.90	0.91	0.88	0.90	0.89	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 - May 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	162	<i>165</i>	<i>164</i>	<i>152</i>	<i>159</i>	<i>180</i>	<i>178</i>	<i>163</i>	145	<i>161</i>	<i>170</i>
Gasoline Regular Grade Retail Prices Including Taxes															
PADD 1	187	220	215	223	231	<i>235</i>	<i>237</i>	<i>230</i>	<i>235</i>	<i>252</i>	<i>253</i>	<i>242</i>	212	<i>233</i>	<i>246</i>
PADD 2	176	221	215	212	223	<i>230</i>	<i>233</i>	<i>220</i>	<i>223</i>	<i>250</i>	<i>248</i>	<i>232</i>	207	<i>227</i>	<i>239</i>
PADD 3	167	201	199	201	210	<i>215</i>	<i>213</i>	<i>202</i>	<i>208</i>	<i>229</i>	<i>227</i>	<i>213</i>	192	<i>210</i>	<i>219</i>
PADD 4	184	221	226	220	227	<i>234</i>	<i>240</i>	<i>225</i>	<i>215</i>	<i>244</i>	<i>255</i>	<i>238</i>	213	<i>232</i>	<i>238</i>
PADD 5	241	265	264	263	276	<i>281</i>	<i>277</i>	<i>258</i>	<i>261</i>	<i>295</i>	<i>294</i>	<i>272</i>	259	<i>273</i>	<i>281</i>
U.S. Average	190	225	221	223	233	<i>238</i>	<i>239</i>	<i>227</i>	<i>231</i>	<i>255</i>	<i>254</i>	<i>239</i>	215	<i>234</i>	<i>245</i>
Gasoline All Grades Including Taxes	200	235	232	234	244	<i>249</i>	<i>250</i>	<i>238</i>	<i>242</i>	<i>266</i>	<i>266</i>	<i>251</i>	226	<i>245</i>	<i>256</i>
End-of-period Inventories (million barrels)															
Total Gasoline Inventories															
PADD 1	65.9	73.0	58.6	65.0	65.9	<i>65.9</i>	<i>61.9</i>	<i>65.0</i>	<i>66.3</i>	<i>65.8</i>	<i>62.7</i>	<i>66.0</i>	65.0	<i>65.0</i>	<i>66.0</i>
PADD 2	56.7	53.3	50.6	52.8	57.3	<i>51.6</i>	<i>49.3</i>	<i>52.6</i>	<i>53.6</i>	<i>50.9</i>	<i>49.6</i>	<i>52.5</i>	52.8	<i>52.6</i>	<i>52.5</i>
PADD 3	83.0	80.4	83.3	82.7	79.3	<i>80.3</i>	<i>80.8</i>	<i>84.5</i>	<i>82.3</i>	<i>81.7</i>	<i>81.4</i>	<i>86.1</i>	82.7	<i>84.5</i>	<i>86.1</i>
PADD 4	8.4	7.5	6.9	7.9	7.8	<i>7.4</i>	<i>7.3</i>	<i>7.9</i>	<i>7.5</i>	<i>7.4</i>	<i>7.4</i>	<i>8.0</i>	7.9	<i>7.9</i>	<i>8.0</i>
PADD 5	29.4	27.9	27.6	29.3	29.4	<i>28.7</i>	<i>28.4</i>	<i>31.7</i>	<i>30.1</i>	<i>28.2</i>	<i>28.1</i>	<i>31.5</i>	29.3	<i>31.7</i>	<i>31.5</i>
U.S. Total	243.3	242.1	227.0	237.7	239.7	<i>233.9</i>	<i>227.7</i>	<i>241.6</i>	<i>239.8</i>	<i>234.1</i>	<i>229.3</i>	<i>244.2</i>	237.7	<i>241.6</i>	<i>244.2</i>
Finished Gasoline Inventories															
U.S. Total	26.5	24.9	25.1	28.6	22.0	<i>25.3</i>	<i>26.3</i>	<i>28.0</i>	<i>25.2</i>	<i>23.8</i>	<i>24.4</i>	<i>26.0</i>	28.6	<i>28.0</i>	<i>26.0</i>
Gasoline Blending Components Inventories															
U.S. Total	216.9	217.2	201.9	209.1	217.7	<i>208.6</i>	<i>201.5</i>	<i>213.7</i>	<i>214.5</i>	<i>210.3</i>	<i>204.9</i>	<i>218.2</i>	209.1	<i>213.7</i>	<i>218.2</i>

- = no data available

Prices are not adjusted for inflation.

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

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

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

Historical data : Latest data available from Energy Information Administration databases supporting the following reports: *Petroleum Marketing Monthly* , DOE/EIA-0380; *Petroleum Supply Monthly* , DOE/EIA-0109; *Petroleum Supply Annual* , DOE/EIA-0340/2; and *Weekly Petroleum Status Report* , DOE/EIA-0208.

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

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - May 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	76.78	<i>78.47</i>	<i>80.59</i>	<i>81.77</i>	<i>82.37</i>	<i>82.63</i>	<i>83.09</i>	<i>84.22</i>	77.31	<i>79.42</i>	<i>83.09</i>
Alaska	0.98	0.86	0.87	1.04	1.00	<i>0.83</i>	<i>0.77</i>	<i>0.93</i>	<i>1.00</i>	<i>0.84</i>	<i>0.78</i>	<i>0.93</i>	0.94	<i>0.88</i>	<i>0.89</i>
Federal GOM (a)	3.48	3.34	3.24	3.35	3.36	<i>3.33</i>	<i>3.21</i>	<i>3.22</i>	<i>3.35</i>	<i>3.33</i>	<i>3.21</i>	<i>3.22</i>	3.35	<i>3.28</i>	<i>3.28</i>
Lower 48 States (excl GOM)	74.20	73.32	72.72	71.85	72.41	<i>74.31</i>	<i>76.61</i>	<i>77.62</i>	<i>78.02</i>	<i>78.46</i>	<i>79.11</i>	<i>80.07</i>	73.02	<i>75.26</i>	<i>78.92</i>
Total Dry Gas Production	73.77	72.38	71.84	71.20	71.72	<i>73.19</i>	<i>75.12</i>	<i>76.18</i>	<i>76.69</i>	<i>76.88</i>	<i>77.26</i>	<i>78.26</i>	72.29	<i>74.07</i>	<i>77.28</i>
LNG Gross Imports	0.33	0.19	0.18	0.26	0.31	<i>0.17</i>	<i>0.18</i>	<i>0.22</i>	<i>0.26</i>	<i>0.16</i>	<i>0.18</i>	<i>0.22</i>	0.24	<i>0.22</i>	<i>0.21</i>
LNG Gross Exports	0.15	0.40	0.64	0.85	1.69	<i>1.71</i>	<i>1.84</i>	<i>2.37</i>	<i>2.51</i>	<i>2.28</i>	<i>2.89</i>	<i>3.46</i>	0.51	<i>1.90</i>	<i>2.79</i>
Pipeline Gross Imports	8.08	7.84	8.11	7.78	8.57	<i>7.72</i>	<i>8.01</i>	<i>7.94</i>	<i>8.98</i>	<i>8.16</i>	<i>8.55</i>	<i>8.52</i>	7.96	<i>8.06</i>	<i>8.55</i>
Pipeline Gross Exports	5.63	5.56	5.86	6.21	7.05	<i>6.30</i>	<i>6.42</i>	<i>6.74</i>	<i>7.87</i>	<i>7.13</i>	<i>6.79</i>	<i>7.06</i>	5.82	<i>6.63</i>	<i>7.21</i>
Supplemental Gaseous Fuels	0.17	0.13	0.17	0.17	0.16	<i>0.16</i>	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	0.16	<i>0.17</i>	<i>0.17</i>
Net Inventory Withdrawals	13.09	-7.78	-5.64	4.33	13.63	<i>-9.24</i>	<i>-8.09</i>	<i>3.88</i>	<i>17.02</i>	<i>-9.72</i>	<i>-8.92</i>	<i>3.54</i>	0.99	<i>0.00</i>	<i>0.41</i>
Total Supply	89.67	66.81	68.16	76.68	85.65	<i>63.99</i>	<i>67.13</i>	<i>79.26</i>	<i>92.73</i>	<i>66.24</i>	<i>67.56</i>	<i>80.19</i>	75.31	<i>73.97</i>	<i>76.62</i>
Balancing Item (b)	-0.52	-0.15	0.91	-0.98	-0.22	<i>-0.19</i>	<i>-0.76</i>	<i>-1.18</i>	<i>-0.25</i>	<i>0.08</i>	<i>0.45</i>	<i>-0.80</i>	-0.19	<i>-0.59</i>	<i>-0.13</i>
Total Primary Supply	89.15	66.66	69.07	75.70	85.43	<i>63.80</i>	<i>66.37</i>	<i>78.08</i>	<i>92.48</i>	<i>66.32</i>	<i>68.01</i>	<i>79.39</i>	75.13	<i>73.38</i>	<i>76.49</i>
Consumption (billion cubic feet per day)															
Residential	22.47	7.16	3.48	14.94	22.08	<i>6.52</i>	<i>3.67</i>	<i>16.02</i>	<i>24.82</i>	<i>7.10</i>	<i>3.68</i>	<i>15.94</i>	12.00	<i>12.03</i>	<i>12.83</i>
Commercial	13.42	5.99	4.56	10.21	13.35	<i>5.75</i>	<i>4.58</i>	<i>10.59</i>	<i>14.72</i>	<i>6.13</i>	<i>4.60</i>	<i>10.59</i>	8.54	<i>8.55</i>	<i>8.99</i>
Industrial	22.46	20.04	20.07	21.84	22.78	<i>20.47</i>	<i>20.29</i>	<i>21.89</i>	<i>23.60</i>	<i>21.07</i>	<i>20.74</i>	<i>22.54</i>	21.10	<i>21.35</i>	<i>21.98</i>
Electric Power (c)	24.17	27.45	34.91	22.54	20.78	<i>25.05</i>	<i>31.64</i>	<i>22.99</i>	<i>22.38</i>	<i>25.67</i>	<i>32.52</i>	<i>23.46</i>	27.28	<i>25.14</i>	<i>26.03</i>
Lease and Plant Fuel	4.34	4.28	4.24	4.21	4.24	<i>4.33</i>	<i>4.45</i>	<i>4.51</i>	<i>4.55</i>	<i>4.56</i>	<i>4.58</i>	<i>4.65</i>	4.27	<i>4.38</i>	<i>4.58</i>
Pipeline and Distribution Use	2.17	1.63	1.69	1.85	2.08	<i>1.56</i>	<i>1.63</i>	<i>1.95</i>	<i>2.30</i>	<i>1.67</i>	<i>1.77</i>	<i>2.09</i>	1.83	<i>1.80</i>	<i>1.96</i>
Vehicle Use	0.11	0.11	0.12	0.12	0.12	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	0.11	<i>0.12</i>	<i>0.12</i>
Total Consumption	89.15	66.66	69.07	75.70	85.43	<i>63.80</i>	<i>66.37</i>	<i>78.08</i>	<i>92.48</i>	<i>66.32</i>	<i>68.01</i>	<i>79.39</i>	75.13	<i>73.38</i>	<i>76.49</i>
End-of-period Inventories (billion cubic feet)															
Working Gas Inventory	2,495	3,195	3,715	3,306	2,080	<i>2,922</i>	<i>3,666</i>	<i>3,309</i>	<i>1,778</i>	<i>2,662</i>	<i>3,483</i>	<i>3,158</i>	3,306	<i>3,309</i>	<i>3,158</i>
East Region (d)	436	655	899	721	268	<i>559</i>	<i>818</i>	<i>695</i>	<i>241</i>	<i>525</i>	<i>785</i>	<i>665</i>	721	<i>695</i>	<i>665</i>
Midwest Region (d)	543	763	1,042	906	479	<i>694</i>	<i>1,019</i>	<i>879</i>	<i>350</i>	<i>602</i>	<i>961</i>	<i>831</i>	906	<i>879</i>	<i>831</i>
South Central Region (d)	1,080	1,236	1,185	1,170	946	<i>1,147</i>	<i>1,226</i>	<i>1,190</i>	<i>801</i>	<i>1,025</i>	<i>1,159</i>	<i>1,149</i>	1,170	<i>1,190</i>	<i>1,149</i>
Mountain Region (d)	144	196	232	204	142	<i>195</i>	<i>246</i>	<i>222</i>	<i>147</i>	<i>178</i>	<i>227</i>	<i>207</i>	204	<i>222</i>	<i>207</i>
Pacific Region (d)	266	316	321	271	216	<i>296</i>	<i>325</i>	<i>292</i>	<i>208</i>	<i>302</i>	<i>319</i>	<i>274</i>	271	<i>292</i>	<i>274</i>
Alaska	25	30	36	33	29	<i>31</i>	<i>31</i>	<i>31</i>	<i>31</i>	<i>31</i>	<i>31</i>	<i>31</i>	33	<i>31</i>	<i>31</i>

- = no data available

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

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

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

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

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

LNG: liquefied natural gas.

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

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

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - May 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	<i>3.26</i>	<i>3.31</i>	<i>3.40</i>	<i>3.63</i>	<i>3.41</i>	<i>3.45</i>	<i>3.66</i>	2.60	<i>3.27</i>	<i>3.54</i>
Residential Retail															
New England	11.79	13.13	17.81	13.42	13.01	<i>13.99</i>	<i>16.96</i>	<i>13.54</i>	<i>13.21</i>	<i>14.22</i>	<i>17.02</i>	<i>13.70</i>	12.90	<i>13.58</i>	<i>13.77</i>
Middle Atlantic	8.84	10.70	16.17	10.15	9.90	<i>12.43</i>	<i>16.65</i>	<i>11.18</i>	<i>10.23</i>	<i>12.19</i>	<i>16.68</i>	<i>11.34</i>	10.03	<i>11.11</i>	<i>11.28</i>
E. N. Central	6.81	9.31	17.80	8.26	7.85	<i>10.92</i>	<i>16.72</i>	<i>9.19</i>	<i>8.32</i>	<i>11.15</i>	<i>16.70</i>	<i>9.31</i>	8.27	<i>9.27</i>	<i>9.52</i>
W. N. Central	7.38	10.52	17.88	9.14	8.48	<i>11.23</i>	<i>17.33</i>	<i>9.71</i>	<i>9.01</i>	<i>11.85</i>	<i>17.98</i>	<i>10.19</i>	8.98	<i>9.82</i>	<i>10.30</i>
S. Atlantic	10.23	15.35	23.48	13.14	12.44	<i>16.95</i>	<i>22.20</i>	<i>12.86</i>	<i>11.45</i>	<i>16.38</i>	<i>22.25</i>	<i>12.98</i>	12.66	<i>13.91</i>	<i>13.22</i>
E. S. Central	8.52	13.11	19.55	11.33	10.49	<i>15.35</i>	<i>20.58</i>	<i>12.90</i>	<i>10.45</i>	<i>14.66</i>	<i>20.39</i>	<i>13.03</i>	10.50	<i>12.54</i>	<i>12.27</i>
W. S. Central	8.27	14.10	20.93	13.26	10.04	<i>14.89</i>	<i>20.19</i>	<i>12.23</i>	<i>9.67</i>	<i>14.44</i>	<i>20.09</i>	<i>12.39</i>	11.60	<i>12.39</i>	<i>11.99</i>
Mountain	8.22	9.65	13.76	8.52	8.22	<i>10.11</i>	<i>13.90</i>	<i>9.49</i>	<i>9.36</i>	<i>10.66</i>	<i>14.10</i>	<i>9.57</i>	8.96	<i>9.36</i>	<i>10.02</i>
Pacific	10.97	11.26	13.02	12.17	12.03	<i>12.08</i>	<i>12.65</i>	<i>11.40</i>	<i>12.13</i>	<i>12.50</i>	<i>13.06</i>	<i>11.86</i>	11.67	<i>11.92</i>	<i>12.23</i>
U.S. Average	8.54	11.15	16.99	10.18	9.76	<i>12.38</i>	<i>16.59</i>	<i>10.78</i>	<i>9.95</i>	<i>12.46</i>	<i>16.75</i>	<i>10.99</i>	10.06	<i>10.98</i>	<i>11.11</i>
Commercial Retail															
New England	8.76	9.58	10.49	9.52	9.78	<i>10.13</i>	<i>10.33</i>	<i>10.58</i>	<i>11.00</i>	<i>10.90</i>	<i>10.81</i>	<i>10.59</i>	9.30	<i>10.13</i>	<i>10.86</i>
Middle Atlantic	6.84	6.41	6.02	6.68	7.80	<i>7.84</i>	<i>7.30</i>	<i>7.90</i>	<i>8.12</i>	<i>8.04</i>	<i>7.40</i>	<i>7.95</i>	6.61	<i>7.77</i>	<i>7.97</i>
E. N. Central	5.89	6.58	8.77	6.52	6.69	<i>7.58</i>	<i>9.18</i>	<i>7.28</i>	<i>7.03</i>	<i>8.07</i>	<i>9.42</i>	<i>7.46</i>	6.42	<i>7.22</i>	<i>7.49</i>
W. N. Central	6.22	6.70	8.68	6.80	7.03	<i>7.59</i>	<i>8.98</i>	<i>7.49</i>	<i>7.80</i>	<i>8.28</i>	<i>9.34</i>	<i>7.79</i>	6.68	<i>7.43</i>	<i>7.99</i>
S. Atlantic	7.54	8.32	9.27	8.55	9.05	<i>9.59</i>	<i>9.90</i>	<i>9.02</i>	<i>8.87</i>	<i>9.57</i>	<i>10.11</i>	<i>9.20</i>	8.17	<i>9.25</i>	<i>9.23</i>
E. S. Central	7.49	8.56	9.75	9.03	9.02	<i>9.76</i>	<i>10.19</i>	<i>9.14</i>	<i>8.74</i>	<i>9.80</i>	<i>10.39</i>	<i>9.40</i>	8.36	<i>9.32</i>	<i>9.27</i>
W. S. Central	6.29	6.89	8.27	8.13	7.56	<i>7.53</i>	<i>8.29</i>	<i>7.84</i>	<i>7.47</i>	<i>7.84</i>	<i>8.46</i>	<i>8.07</i>	7.19	<i>7.75</i>	<i>7.84</i>
Mountain	6.94	7.09	7.96	6.89	6.91	<i>7.81</i>	<i>8.61</i>	<i>7.52</i>	<i>7.73</i>	<i>8.01</i>	<i>8.77</i>	<i>7.70</i>	7.06	<i>7.44</i>	<i>7.88</i>
Pacific	8.38	8.13	9.14	9.12	8.97	<i>8.69</i>	<i>9.06</i>	<i>8.81</i>	<i>8.93</i>	<i>8.74</i>	<i>9.13</i>	<i>8.94</i>	8.69	<i>8.89</i>	<i>8.93</i>
U.S. Average	6.84	7.22	8.21	7.48	7.76	<i>8.24</i>	<i>8.76</i>	<i>8.10</i>	<i>8.08</i>	<i>8.53</i>	<i>8.94</i>	<i>8.26</i>	7.25	<i>8.06</i>	<i>8.30</i>
Industrial Retail															
New England	7.07	6.88	6.27	7.10	8.35	<i>7.74</i>	<i>7.44</i>	<i>8.55</i>	<i>8.76</i>	<i>8.01</i>	<i>7.44</i>	<i>8.62</i>	6.90	<i>8.12</i>	<i>8.33</i>
Middle Atlantic	6.72	6.17	5.91	6.99	8.16	<i>7.47</i>	<i>7.75</i>	<i>8.16</i>	<i>8.39</i>	<i>7.69</i>	<i>7.85</i>	<i>8.30</i>	6.59	<i>7.98</i>	<i>8.18</i>
E. N. Central	5.05	4.73	5.33	5.40	5.98	<i>6.11</i>	<i>6.30</i>	<i>6.21</i>	<i>6.84</i>	<i>6.53</i>	<i>6.54</i>	<i>6.48</i>	5.13	<i>6.11</i>	<i>6.65</i>
W. N. Central	4.31	3.49	3.98	4.39	5.17	<i>4.67</i>	<i>4.79</i>	<i>5.30</i>	<i>5.94</i>	<i>5.22</i>	<i>5.10</i>	<i>5.62</i>	4.09	<i>5.01</i>	<i>5.51</i>
S. Atlantic	4.40	3.80	4.44	4.83	5.41	<i>5.05</i>	<i>5.30</i>	<i>5.48</i>	<i>5.77</i>	<i>5.31</i>	<i>5.38</i>	<i>5.69</i>	4.38	<i>5.32</i>	<i>5.55</i>
E. S. Central	3.96	3.38	4.09	4.60	5.09	<i>4.75</i>	<i>4.87</i>	<i>5.14</i>	<i>5.38</i>	<i>4.88</i>	<i>4.95</i>	<i>5.32</i>	4.01	<i>4.97</i>	<i>5.15</i>
W. S. Central	2.28	2.15	3.07	3.21	3.50	<i>3.35</i>	<i>3.59</i>	<i>3.60</i>	<i>3.83</i>	<i>3.60</i>	<i>3.77</i>	<i>3.88</i>	2.68	<i>3.51</i>	<i>3.77</i>
Mountain	5.26	4.96	5.38	5.21	5.37	<i>5.45</i>	<i>6.00</i>	<i>5.97</i>	<i>6.12</i>	<i>5.94</i>	<i>6.32</i>	<i>6.37</i>	5.20	<i>5.68</i>	<i>6.19</i>
Pacific	6.65	6.04	6.68	7.10	7.46	<i>6.53</i>	<i>6.72</i>	<i>6.76</i>	<i>7.26</i>	<i>6.65</i>	<i>6.82</i>	<i>6.91</i>	6.65	<i>6.89</i>	<i>6.93</i>
U.S. Average	3.44	2.92	3.63	4.03	4.57	<i>4.07</i>	<i>4.22</i>	<i>4.51</i>	<i>4.95</i>	<i>4.33</i>	<i>4.38</i>	<i>4.75</i>	3.51	<i>4.35</i>	<i>4.62</i>

- = no data available

Prices are not adjusted for inflation.

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

Regions refer to U.S. Census divisions.

See "Census division" in EIA's Energy Glossary (<http://www.eia.doe.gov/glossary/index.html>) for a list of States in each region.**Historical data:** Latest data available from Energy Information Administration databases supporting the *Natural Gas Monthly*, DOE/EIA-0130.Natural gas Henry Hub spot price from Reuter's News Service (<http://www.reuters.com>).

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

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - May 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	210.0	199.7	<i>178.5</i>	<i>203.1</i>	<i>192.3</i>	<i>200.2</i>	<i>173.6</i>	<i>202.4</i>	<i>209.0</i>	738.7	<i>773.7</i>	<i>785.2</i>
Appalachia	44.3	43.2	44.8	50.2	50.9	<i>44.9</i>	<i>47.1</i>	<i>45.7</i>	<i>47.6</i>	<i>43.7</i>	<i>46.6</i>	<i>48.1</i>	182.6	<i>188.7</i>	<i>186.0</i>
Interior	36.9	34.4	35.7	42.6	43.3	<i>36.6</i>	<i>40.8</i>	<i>39.9</i>	<i>41.8</i>	<i>36.9</i>	<i>42.0</i>	<i>45.0</i>	149.6	<i>160.6</i>	<i>165.7</i>
Western	91.8	82.8	114.6	117.2	105.5	<i>97.0</i>	<i>115.2</i>	<i>106.6</i>	<i>110.8</i>	<i>93.0</i>	<i>113.8</i>	<i>115.9</i>	406.5	<i>424.4</i>	<i>433.5</i>
Primary Inventory Withdrawals	-1.4	0.2	3.6	-0.1	-1.0	<i>0.5</i>	<i>2.9</i>	<i>-0.8</i>	<i>-1.1</i>	<i>-0.3</i>	<i>3.2</i>	<i>-3.0</i>	2.2	<i>1.6</i>	<i>-1.2</i>
Imports	2.7	2.3	2.7	2.1	2.3	<i>2.3</i>	<i>3.2</i>	<i>2.8</i>	<i>1.5</i>	<i>2.2</i>	<i>3.2</i>	<i>2.8</i>	9.8	<i>10.7</i>	<i>9.7</i>
Exports	14.2	14.2	12.6	19.3	20.9	<i>16.3</i>	<i>13.5</i>	<i>12.6</i>	<i>14.6</i>	<i>15.6</i>	<i>14.1</i>	<i>15.2</i>	60.3	<i>63.3</i>	<i>59.5</i>
Metallurgical Coal	10.2	10.1	9.1	11.6	12.3	<i>10.4</i>	<i>8.3</i>	<i>8.7</i>	<i>9.3</i>	<i>10.5</i>	<i>9.2</i>	<i>10.4</i>	40.9	<i>39.8</i>	<i>39.4</i>
Steam Coal	4.0	4.2	3.5	7.7	8.6	<i>5.8</i>	<i>5.2</i>	<i>3.9</i>	<i>5.3</i>	<i>5.1</i>	<i>4.9</i>	<i>4.8</i>	19.3	<i>23.5</i>	<i>20.1</i>
Total Primary Supply	160.1	148.8	188.9	192.6	180.2	<i>165.1</i>	<i>195.7</i>	<i>181.7</i>	<i>186.0</i>	<i>159.9</i>	<i>194.7</i>	<i>193.6</i>	690.4	<i>722.7</i>	<i>734.2</i>
Secondary Inventory Withdrawals	4.1	9.2	25.2	-5.6	-7.3	<i>5.6</i>	<i>16.4</i>	<i>-3.5</i>	<i>-0.3</i>	<i>1.6</i>	<i>14.5</i>	<i>-16.2</i>	32.9	<i>11.2</i>	<i>-0.3</i>
Waste Coal (a)	2.5	2.5	2.5	2.5	2.6	<i>2.6</i>	<i>2.6</i>	<i>2.6</i>	<i>2.6</i>	<i>2.6</i>	<i>2.6</i>	<i>2.6</i>	9.8	<i>10.2</i>	<i>10.3</i>
Total Supply	166.7	160.4	216.6	189.4	175.4	<i>173.3</i>	<i>214.7</i>	<i>180.7</i>	<i>188.4</i>	<i>164.0</i>	<i>211.8</i>	<i>180.0</i>	733.2	<i>744.2</i>	<i>744.2</i>
Consumption (million short tons)															
Coke Plants	4.1	4.1	4.2	4.1	4.4	<i>4.2</i>	<i>5.3</i>	<i>5.0</i>	<i>4.5</i>	<i>4.5</i>	<i>5.5</i>	<i>5.1</i>	16.5	<i>18.9</i>	<i>19.6</i>
Electric Power Sector (b)	152.2	147.2	210.3	167.6	158.7	<i>149.2</i>	<i>200.9</i>	<i>166.8</i>	<i>174.5</i>	<i>150.8</i>	<i>197.5</i>	<i>165.6</i>	677.3	<i>675.7</i>	<i>688.4</i>
Retail and Other Industry	9.5	8.6	8.6	9.0	9.0	<i>8.3</i>	<i>8.5</i>	<i>8.9</i>	<i>9.3</i>	<i>8.7</i>	<i>8.9</i>	<i>9.2</i>	35.7	<i>34.7</i>	<i>36.1</i>
Residential and Commercial	0.4	0.2	0.2	0.3	0.3	<i>0.1</i>	<i>0.1</i>	<i>0.2</i>	<i>0.3</i>	<i>0.1</i>	<i>0.1</i>	<i>0.2</i>	1.2	<i>0.8</i>	<i>0.7</i>
Other Industrial	9.1	8.4	8.4	8.6	8.7	<i>8.2</i>	<i>8.4</i>	<i>8.6</i>	<i>9.0</i>	<i>8.6</i>	<i>8.7</i>	<i>9.0</i>	34.6	<i>33.9</i>	<i>35.4</i>
Total Consumption	165.9	159.9	223.0	180.6	172.1	<i>161.8</i>	<i>214.7</i>	<i>180.7</i>	<i>188.4</i>	<i>164.0</i>	<i>211.8</i>	<i>180.0</i>	729.5	<i>729.3</i>	<i>744.2</i>
Discrepancy (c)	0.8	0.5	-6.5	8.8	3.3	<i>11.5</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	3.7	<i>14.8</i>	<i>0.0</i>
End-of-period Inventories (million short tons)															
Primary Inventories (d)	37.3	37.1	33.6	33.7	34.7	<i>34.2</i>	<i>31.3</i>	<i>32.1</i>	<i>33.2</i>	<i>33.5</i>	<i>30.3</i>	<i>33.3</i>	33.7	<i>32.1</i>	<i>33.3</i>
Secondary Inventories	198.4	189.2	164.0	169.6	176.9	<i>171.3</i>	<i>154.8</i>	<i>158.4</i>	<i>158.6</i>	<i>157.1</i>	<i>142.5</i>	<i>158.7</i>	169.6	<i>158.4</i>	<i>158.7</i>
Electric Power Sector	192.3	183.2	158.2	163.9	169.6	<i>163.3</i>	<i>146.4</i>	<i>149.6</i>	<i>151.0</i>	<i>148.8</i>	<i>133.8</i>	<i>149.7</i>	163.9	<i>149.6</i>	<i>149.7</i>
Retail and General Industry	3.9	3.8	3.7	3.6	5.3	<i>5.5</i>	<i>6.1</i>	<i>6.4</i>	<i>5.6</i>	<i>5.8</i>	<i>6.3</i>	<i>6.6</i>	3.6	<i>6.4</i>	<i>6.6</i>
Coke Plants	1.9	1.8	1.7	1.7	1.5	<i>1.9</i>	<i>1.8</i>	<i>1.8</i>	<i>1.5</i>	<i>1.9</i>	<i>1.9</i>	<i>1.9</i>	1.7	<i>1.8</i>	<i>1.9</i>
Coal Market Indicators															
Coal Miner Productivity															
(Tons per hour)	6.11	6.11	6.11	6.11	5.96	<i>5.96</i>	<i>5.96</i>	<i>5.96</i>	<i>5.86</i>	<i>5.86</i>	<i>5.86</i>	<i>5.86</i>	6.11	<i>5.96</i>	<i>5.86</i>
Total Raw Steel Production															
(Million short tons per day)	0.238	0.247	0.238	0.230	0.248	<i>0.244</i>	<i>0.213</i>	<i>0.180</i>	<i>0.232</i>	<i>0.236</i>	<i>0.218</i>	<i>0.180</i>	0.239	<i>0.221</i>	<i>0.216</i>
Cost of Coal to Electric Utilities															
(Dollars per million Btu)	2.13	2.13	2.11	2.08	2.11	<i>2.15</i>	<i>2.20</i>	<i>2.17</i>	<i>2.21</i>	<i>2.20</i>	<i>2.23</i>	<i>2.23</i>	2.11	<i>2.16</i>	<i>2.22</i>

- = no data available

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

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

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

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

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

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: *Quarterly Coal Report*, DOE/EIA-0121; and *Electric Power Monthly*, DOE/EIA-0226.

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

Projections: EIA Regional Short-Term Energy Model.

Table 7a. U.S. Electricity Industry Overview

U.S. Energy Information Administration | Short-Term Energy Outlook - May 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	10.47	<i>10.75</i>	<i>12.36</i>	<i>10.44</i>	<i>11.00</i>	<i>10.87</i>	<i>12.42</i>	<i>10.56</i>	11.15	<i>11.01</i>	<i>11.22</i>
Electric Power Sector (a)	10.23	10.32	12.32	9.96	10.04	<i>10.32</i>	<i>11.92</i>	<i>10.02</i>	<i>10.57</i>	<i>10.45</i>	<i>11.98</i>	<i>10.14</i>	10.71	<i>10.58</i>	<i>10.79</i>
Comm. and Indus. Sectors (b)	0.44	0.43	0.45	0.42	0.43	<i>0.43</i>	<i>0.45</i>	<i>0.42</i>	<i>0.43</i>	<i>0.42</i>	<i>0.45</i>	<i>0.42</i>	0.44	<i>0.43</i>	<i>0.43</i>
Net Imports	0.18	0.18	0.22	0.19	0.19	<i>0.16</i>	<i>0.18</i>	<i>0.15</i>	<i>0.15</i>	<i>0.15</i>	<i>0.17</i>	<i>0.13</i>	0.19	<i>0.17</i>	<i>0.15</i>
Total Supply	10.85	10.93	12.98	10.58	10.66	<i>10.91</i>	<i>12.54</i>	<i>10.59</i>	<i>11.15</i>	<i>11.02</i>	<i>12.59</i>	<i>10.69</i>	11.34	<i>11.18</i>	<i>11.37</i>
Losses and Unaccounted for (c)	0.66	0.97	0.90	0.73	0.52	<i>0.75</i>	<i>0.71</i>	<i>0.67</i>	<i>0.57</i>	<i>0.82</i>	<i>0.73</i>	<i>0.68</i>	0.82	<i>0.66</i>	<i>0.70</i>
Electricity Consumption (billion kilowatthours per day unless noted)															
Retail Sales	9.81	9.58	11.69	9.47	9.76	<i>9.78</i>	<i>11.43</i>	<i>9.55</i>	<i>10.20</i>	<i>9.83</i>	<i>11.47</i>	<i>9.64</i>	10.14	<i>10.13</i>	<i>10.29</i>
Residential Sector	3.81	3.37	4.77	3.42	3.70	<i>3.39</i>	<i>4.53</i>	<i>3.46</i>	<i>4.07</i>	<i>3.41</i>	<i>4.53</i>	<i>3.51</i>	3.85	<i>3.77</i>	<i>3.88</i>
Commercial Sector	3.49	3.62	4.20	3.55	3.52	<i>3.69</i>	<i>4.13</i>	<i>3.56</i>	<i>3.58</i>	<i>3.70</i>	<i>4.16</i>	<i>3.58</i>	3.71	<i>3.73</i>	<i>3.75</i>
Industrial Sector	2.48	2.57	2.70	2.48	2.52	<i>2.68</i>	<i>2.76</i>	<i>2.51</i>	<i>2.53</i>	<i>2.70</i>	<i>2.77</i>	<i>2.52</i>	2.56	<i>2.62</i>	<i>2.63</i>
Transportation Sector	0.02	0.02	0.02	0.02	0.02	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	0.02	<i>0.02</i>	<i>0.02</i>
Direct Use (d)	0.39	0.38	0.40	0.38	0.38	<i>0.38</i>	<i>0.39</i>	<i>0.37</i>	<i>0.38</i>	<i>0.38</i>	<i>0.39</i>	<i>0.37</i>	0.38	<i>0.38</i>	<i>0.38</i>
Total Consumption	10.19	9.96	12.09	9.84	10.14	<i>10.16</i>	<i>11.83</i>	<i>9.92</i>	<i>10.59</i>	<i>10.20</i>	<i>11.87</i>	<i>10.01</i>	10.52	<i>10.52</i>	<i>10.67</i>
Average residential electricity usage per customer (kWh)	2,645	2,342	3,348	2,401	2,501	<i>2,328</i>	<i>3,149</i>	<i>2,406</i>	<i>2,735</i>	<i>2,319</i>	<i>3,113</i>	<i>2,414</i>	10,736	<i>10,383</i>	<i>10,581</i>
Prices															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	2.13	2.13	2.11	2.08	2.11	<i>2.15</i>	<i>2.20</i>	<i>2.17</i>	<i>2.21</i>	<i>2.20</i>	<i>2.23</i>	<i>2.23</i>	2.11	<i>2.16</i>	<i>2.22</i>
Natural Gas	2.65	2.51	3.00	3.36	3.74	<i>3.65</i>	<i>3.52</i>	<i>3.88</i>	<i>4.39</i>	<i>3.79</i>	<i>3.65</i>	<i>4.17</i>	2.88	<i>3.68</i>	<i>3.96</i>
Residual Fuel Oil	6.15	8.51	9.70	9.08	11.00	<i>10.70</i>	<i>10.13</i>	<i>10.11</i>	<i>10.26</i>	<i>11.10</i>	<i>10.94</i>	<i>10.99</i>	8.41	<i>10.47</i>	<i>10.82</i>
Distillate Fuel Oil	9.00	11.01	11.64	12.14	13.04	<i>13.18</i>	<i>13.57</i>	<i>14.51</i>	<i>14.88</i>	<i>14.81</i>	<i>15.07</i>	<i>15.86</i>	10.86	<i>13.57</i>	<i>15.14</i>
Retail Prices (cents per kilowatthour)															
Residential Sector	12.20	12.66	12.81	12.45	12.62	<i>12.76</i>	<i>13.13</i>	<i>12.81</i>	<i>12.94</i>	<i>13.11</i>	<i>13.42</i>	<i>13.09</i>	12.55	<i>12.85</i>	<i>13.15</i>
Commercial Sector	10.12	10.34	10.68	10.27	10.32	<i>10.34</i>	<i>10.84</i>	<i>10.54</i>	<i>10.57</i>	<i>10.50</i>	<i>10.96</i>	<i>10.67</i>	10.37	<i>10.52</i>	<i>10.69</i>
Industrial Sector	6.42	6.67	7.20	6.67	6.65	<i>6.92</i>	<i>7.47</i>	<i>6.91</i>	<i>6.83</i>	<i>7.07</i>	<i>7.62</i>	<i>7.08</i>	6.75	<i>7.00</i>	<i>7.16</i>

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

Prices are not adjusted for inflation.

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

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

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

 (d) Direct Use represents commercial and industrial facility use of onsite net electricity generation; and electrical sales or transfers to adjacent or 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 - May 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	110	144	117	139	112	144	119	127	127	129
Middle Atlantic	367	309	461	320	367	308	420	321	388	311	418	323	364	354	360
E. N. Central	522	447	619	459	505	433	570	461	548	434	563	463	512	492	502
W. N. Central	298	243	322	255	298	245	323	262	324	249	322	268	279	282	291
S. Atlantic	968	874	1,223	852	896	876	1,137	865	1,031	878	1,140	883	980	944	983
E. S. Central	337	274	412	279	304	273	381	285	363	275	377	291	326	311	326
W. S. Central	526	518	810	517	509	545	780	517	581	546	783	530	593	588	610
Mountain	240	251	337	232	244	247	344	233	252	252	350	237	265	267	273
Pacific contiguous	406	336	422	381	431	340	417	383	428	344	420	385	386	393	394
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	3,703	3,388	4,527	3,458	4,067	3,411	4,530	3,513	3,845	3,771	3,881
Commercial Sector															
New England	141	137	160	135	139	134	154	135	138	133	152	132	143	140	139
Middle Atlantic	422	408	488	408	428	414	467	408	431	412	466	408	432	429	429
E. N. Central	488	493	567	483	491	494	549	485	499	495	550	486	508	505	508
W. N. Central	271	271	308	271	272	274	310	274	277	276	312	276	280	282	285
S. Atlantic	792	844	977	802	792	865	944	803	804	858	946	805	854	851	854
E. S. Central	231	242	295	234	229	254	291	235	237	255	295	239	251	252	257
W. S. Central	473	519	623	511	478	555	631	516	503	566	649	527	532	545	562
Mountain	240	258	290	250	247	259	294	251	250	261	297	253	260	263	265
Pacific contiguous	418	428	475	436	424	429	472	436	425	427	474	439	440	440	441
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	3,518	3,692	4,127	3,559	3,581	3,698	4,155	3,580	3,715	3,725	3,755
Industrial Sector															
New England	45	47	49	45	45	47	48	43	44	46	47	42	47	46	45
Middle Atlantic	192	191	202	189	192	194	205	191	193	195	206	192	193	195	197
E. N. Central	502	504	528	485	498	515	534	490	500	516	535	492	505	509	511
W. N. Central	223	228	246	227	233	256	264	239	240	263	270	244	231	248	254
S. Atlantic	362	384	393	362	359	372	386	355	350	363	376	347	375	368	359
E. S. Central	258	269	274	261	270	284	284	265	271	283	282	264	265	276	275
W. S. Central	456	471	481	458	480	508	499	469	488	517	507	477	467	489	497
Mountain	214	232	247	215	211	239	254	221	216	244	259	226	227	231	236
Pacific contiguous	215	236	262	224	215	253	268	226	216	254	269	227	234	240	242
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	2,516	2,681	2,756	2,513	2,531	2,696	2,767	2,525	2,558	2,617	2,630
Total All Sectors (a)															
New England	320	294	362	295	321	293	347	297	323	292	344	295	318	314	313
Middle Atlantic	993	918	1,162	927	999	927	1,104	932	1,024	930	1,102	935	1,000	991	998
E. N. Central	1,514	1,446	1,716	1,429	1,496	1,444	1,654	1,437	1,549	1,447	1,650	1,442	1,526	1,508	1,522
W. N. Central	792	742	877	753	803	775	896	775	842	788	904	788	791	813	830
S. Atlantic	2,126	2,106	2,596	2,020	2,051	2,117	2,470	2,027	2,189	2,103	2,466	2,038	2,213	2,167	2,199
E. S. Central	827	785	981	774	804	810	955	785	870	814	955	793	842	839	858
W. S. Central	1,455	1,509	1,914	1,487	1,467	1,609	1,910	1,503	1,573	1,629	1,939	1,535	1,592	1,623	1,669
Mountain	694	741	875	697	702	744	892	705	718	757	906	717	752	762	775
Pacific contiguous	1,042	1,002	1,162	1,043	1,073	1,024	1,159	1,047	1,072	1,027	1,165	1,054	1,062	1,076	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	9,760	9,783	11,432	9,553	10,203	9,827	11,474	9,640	10,139	10,135	10,288

- = 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 - May 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	18.90	17.74	17.86	18.54	19.77	17.89	17.73	18.38	18.85	18.27	18.46
Middle Atlantic	15.29	15.88	16.08	15.74	15.65	16.32	16.82	16.43	16.09	16.72	17.33	17.06	15.76	16.32	16.81
E. N. Central	12.51	13.25	12.91	13.04	12.85	13.70	13.50	13.72	13.45	14.32	14.06	14.29	12.91	13.43	14.00
W. N. Central	10.61	12.31	12.67	11.27	10.95	12.59	12.95	11.58	11.13	12.88	13.26	11.88	11.73	12.03	12.27
S. Atlantic	11.40	11.75	11.88	11.47	11.78	11.99	12.22	11.75	12.21	12.41	12.52	11.98	11.65	11.96	12.29
E. S. Central	10.35	10.94	10.90	11.14	11.02	10.98	11.28	11.61	11.14	11.22	11.43	11.71	10.82	11.23	11.37
W. S. Central	10.34	10.69	10.65	10.52	10.57	10.55	10.92	10.95	10.69	10.57	10.95	11.08	10.56	10.77	10.83
Mountain	11.05	11.91	12.12	11.45	11.27	12.01	12.34	11.72	11.50	12.25	12.61	12.01	11.68	11.89	12.14
Pacific	14.13	13.95	16.09	13.85	14.47	13.78	15.96	13.84	15.32	14.39	16.45	14.10	14.56	14.56	15.12
U.S. Average	12.20	12.66	12.81	12.45	12.62	12.76	13.13	12.81	12.94	13.11	13.42	13.09	12.55	12.85	13.15
Commercial Sector															
New England	15.33	15.01	15.19	14.89	14.87	13.11	14.14	14.34	14.84	12.72	13.74	14.17	15.11	14.12	13.87
Middle Atlantic	12.02	12.48	13.29	12.22	12.02	12.41	13.47	12.54	12.12	12.44	13.56	12.76	12.54	12.63	12.74
E. N. Central	9.65	9.87	9.91	9.98	9.88	10.03	10.12	10.27	10.15	10.27	10.30	10.42	9.86	10.08	10.28
W. N. Central	8.86	9.70	10.15	9.07	9.15	9.90	10.43	9.36	9.28	10.10	10.67	9.62	9.47	9.73	9.94
S. Atlantic	9.37	9.27	9.26	9.21	9.43	9.37	9.45	9.55	10.01	9.75	9.70	9.74	9.28	9.45	9.79
E. S. Central	9.93	9.99	10.12	10.35	10.41	10.03	10.48	10.90	10.70	10.28	10.60	10.98	10.10	10.45	10.63
W. S. Central	7.80	7.79	7.86	7.78	8.14	7.51	7.90	8.01	7.95	7.23	7.68	7.98	7.81	7.88	7.70
Mountain	9.02	9.75	10.03	9.34	9.08	9.66	10.10	9.50	9.18	9.74	10.19	9.61	9.56	9.61	9.71
Pacific	12.21	13.08	14.69	12.96	12.61	13.76	15.25	13.34	13.39	14.44	15.74	13.58	13.28	13.78	14.33
U.S. Average	10.12	10.34	10.68	10.27	10.32	10.34	10.84	10.54	10.57	10.50	10.96	10.67	10.37	10.52	10.69
Industrial Sector															
New England	12.22	11.86	12.25	12.03	12.46	12.15	12.46	12.17	12.95	12.49	12.72	12.36	12.09	12.31	12.63
Middle Atlantic	7.05	7.01	7.12	6.92	6.90	7.00	7.21	7.06	6.94	6.99	7.27	7.15	7.03	7.05	7.09
E. N. Central	6.74	6.88	7.04	6.96	6.99	7.02	7.21	7.13	7.14	7.13	7.30	7.24	6.91	7.09	7.21
W. N. Central	6.65	7.10	7.82	6.64	6.89	7.18	7.94	6.75	7.03	7.30	8.07	6.86	7.07	7.21	7.34
S. Atlantic	6.15	6.33	6.78	6.30	6.28	6.56	7.05	6.55	6.47	6.71	7.21	6.73	6.40	6.62	6.79
E. S. Central	5.45	5.72	6.14	5.99	5.95	6.17	6.50	6.28	6.22	6.37	6.68	6.49	5.83	6.23	6.44
W. S. Central	5.06	5.03	5.44	5.32	5.35	5.52	5.94	5.80	5.56	5.69	6.13	6.07	5.22	5.65	5.86
Mountain	5.83	6.29	7.01	6.08	6.07	6.62	7.33	6.32	6.30	6.85	7.57	6.52	6.33	6.62	6.85
Pacific	7.99	9.08	10.54	8.65	8.17	9.06	10.57	8.68	8.26	9.14	10.63	8.70	9.14	9.20	9.26
U.S. Average	6.42	6.67	7.20	6.67	6.65	6.92	7.47	6.91	6.83	7.07	7.62	7.08	6.75	7.00	7.16
All Sectors (a)															
New England	16.41	16.07	16.13	15.88	16.21	14.70	15.43	15.66	16.68	14.64	15.26	15.58	16.13	15.51	15.55
Middle Atlantic	12.25	12.47	13.31	12.34	12.36	12.56	13.56	12.74	12.63	12.71	13.79	13.07	12.63	12.84	13.08
E. N. Central	9.67	9.87	10.11	9.93	9.92	10.07	10.34	10.30	10.34	10.36	10.61	10.57	9.90	10.16	10.47
W. N. Central	8.90	9.75	10.42	9.08	9.18	9.85	10.60	9.31	9.35	10.04	10.81	9.53	9.57	9.77	9.96
S. Atlantic	9.74	9.76	10.12	9.64	9.90	9.96	10.35	9.96	10.48	10.33	10.62	10.20	9.84	10.06	10.42
E. S. Central	8.70	8.86	9.33	9.17	9.18	8.99	9.62	9.59	9.49	9.24	9.77	9.76	9.03	9.36	9.57
W. S. Central	7.86	7.92	8.43	7.97	8.05	7.92	8.62	8.33	8.22	7.86	8.60	8.46	8.07	8.25	8.30
Mountain	8.74	9.40	9.98	9.03	8.93	9.47	10.18	9.24	9.13	9.64	10.38	9.43	9.33	9.50	9.69
Pacific	12.08	12.42	14.25	12.35	12.45	12.61	14.41	12.50	13.12	13.09	14.80	12.71	12.82	13.03	13.47
U.S. Average	9.99	10.17	10.75	10.11	10.24	10.24	10.93	10.41	10.59	10.46	11.12	10.61	10.28	10.48	10.71

- = 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 - May 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	3,213	3,013	4,008	3,313	3,608	3,063	3,943	3,285	3,388	3,389	3,475
Natural Gas	3,426	3,762	4,702	3,191	2,954	3,450	4,275	3,232	3,153	3,514	4,375	3,286	3,771	3,481	3,584
Petroleum (a)	68	63	72	59	62	64	73	63	76	67	76	64	65	66	71
Other Gases	40	35	35	32	40	36	35	32	41	37	36	33	36	36	37
Nuclear	2,245	2,155	2,254	2,148	2,242	2,072	2,272	2,131	2,223	2,097	2,280	2,138	2,200	2,179	2,185
Renewable Energy Sources:	1,804	1,747	1,487	1,625	1,941	2,088	1,677	1,651	1,876	2,067	1,690	1,735	1,665	1,838	1,841
Conventional Hydropower	842	810	618	637	897	987	786	625	784	878	723	617	726	823	750
Wind	667	614	517	682	726	720	502	705	753	768	540	778	620	663	709
Wood Biomass	114	104	116	108	112	105	114	109	112	104	115	110	111	110	110
Waste Biomass	60	61	61	59	61	60	61	59	60	61	61	60	60	60	60
Geothermal	47	46	47	50	49	46	46	47	48	46	47	47	48	47	47
Solar	73	112	127	89	97	171	168	105	120	210	203	122	100	135	164
Pumped Storage Hydropower	-12	-14	-26	-21	-15	-12	-17	-15	-14	-12	-16	-14	-18	-15	-14
Other Nonrenewable Fuels (b)	36	38	39	36	36	38	40	36	35	38	40	36	37	38	37
Total Generation	10,667	10,754	12,764	10,386	10,474	10,749	12,363	10,443	10,999	10,871	12,422	10,564	11,145	11,011	11,216
Northeast Census Region															
Coal	162	141	203	150	142	103	166	177	200	115	159	178	164	147	163
Natural Gas	512	599	795	521	470	541	708	527	465	547	725	540	607	562	570
Petroleum (a)	7	3	6	6	5	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	538	481	536	502	522	493	536	503	511	514	514
Hydropower (c)	111	94	78	82	103	111	93	89	88	103	87	87	91	99	91
Other Renewables (d)	77	63	61	73	72	69	63	75	80	71	64	79	69	70	74
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	1,343	1,323	1,586	1,388	1,377	1,349	1,593	1,407	1,462	1,410	1,432
South Census Region															
Coal	1,270	1,347	1,950	1,462	1,318	1,431	1,839	1,429	1,565	1,485	1,854	1,424	1,508	1,505	1,582
Natural Gas	2,013	2,235	2,645	1,825	1,755	2,168	2,472	1,823	1,849	2,093	2,461	1,856	2,180	2,056	2,066
Petroleum (a)	29	30	35	23	27	28	31	24	32	27	30	24	29	27	28
Other Gases	15	13	14	13	16	14	14	13	16	14	14	14	14	14	15
Nuclear	951	998	994	936	977	913	1,013	950	996	939	1,021	958	970	963	978
Hydropower (c)	191	84	71	63	134	98	88	71	116	91	82	70	102	98	90
Other Renewables (d)	330	307	305	335	388	392	313	373	399	432	348	406	320	366	396
Other Nonrenewable Fuels (b)	16	18	18	16	16	18	18	15	16	17	18	15	17	17	17
Total Generation	4,815	5,033	6,032	4,673	4,631	5,061	5,789	4,698	4,989	5,099	5,829	4,766	5,140	5,047	5,172
Midwest Census Region															
Coal	1,202	1,109	1,498	1,197	1,274	1,137	1,451	1,180	1,325	1,120	1,427	1,166	1,252	1,261	1,260
Natural Gas	357	368	454	295	281	330	434	326	349	381	453	330	368	343	378
Petroleum (a)	10	9	8	7	8	11	12	10	11	11	12	10	9	10	11
Other Gases	16	13	14	11	16	14	14	12	17	14	14	12	14	14	14
Nuclear	573	543	572	523	551	526	555	521	542	511	556	521	553	538	532
Hydropower (c)	48	43	39	37	49	46	44	40	41	43	41	39	42	45	41
Other Renewables (d)	282	245	185	300	297	277	189	306	324	294	200	340	253	267	289
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	2,479	2,345	2,704	2,398	2,612	2,379	2,708	2,421	2,494	2,482	2,530
West Census Region															
Coal	426	370	551	508	479	341	552	528	518	343	503	516	464	475	470
Natural Gas	543	560	809	549	448	411	661	556	490	493	736	560	616	519	570
Petroleum (a)	21	20	23	23	23	22	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	176	152	167	157	163	154	167	157	166	163	161
Hydropower (c)	480	575	404	434	596	719	543	410	524	628	497	407	473	567	514
Other Renewables (d)	273	322	317	280	287	363	326	272	290	391	354	293	298	312	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	2,021	2,019	2,284	1,958	2,021	2,044	2,292	1,970	2,050	2,071	2,082

(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 - May 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	1,766	<i>1,642</i>	<i>2,186</i>	<i>1,814</i>	<i>1,938</i>	<i>1,657</i>	<i>2,147</i>	<i>1,799</i>	1,852	<i>1,853</i>	<i>1,885</i>
Natural Gas (million cf/d)	25,226	28,572	36,107	23,726	22,000	<i>26,276</i>	<i>32,865</i>	<i>24,147</i>	<i>23,514</i>	<i>26,844</i>	<i>33,721</i>	<i>24,613</i>	28,416	<i>26,346</i>	<i>27,194</i>
Petroleum (thousand b/d)	121	112	130	103	112	<i>113</i>	<i>128</i>	<i>111</i>	<i>134</i>	<i>118</i>	<i>133</i>	<i>114</i>	116	<i>116</i>	<i>125</i>
Residual Fuel Oil	29	22	35	25	26	<i>28</i>	<i>31</i>	<i>26</i>	<i>32</i>	<i>28</i>	<i>33</i>	<i>28</i>	28	<i>28</i>	<i>30</i>
Distillate Fuel Oil	30	23	24	25	28	<i>24</i>	<i>27</i>	<i>25</i>	<i>32</i>	<i>25</i>	<i>27</i>	<i>25</i>	26	<i>26</i>	<i>27</i>
Petroleum Coke (a)	57	63	66	48	53	<i>58</i>	<i>66</i>	<i>55</i>	<i>64</i>	<i>60</i>	<i>67</i>	<i>56</i>	58	<i>58</i>	<i>62</i>
Other Petroleum Liquids (b)	5	3	5	4	4	<i>3</i>	<i>5</i>	<i>5</i>	<i>7</i>	<i>4</i>	<i>5</i>	<i>5</i>	4	<i>4</i>	<i>5</i>
Northeast Census Region															
Coal (thousand st/d)	80	66	94	70	69	<i>49</i>	<i>81</i>	<i>85</i>	<i>94</i>	<i>55</i>	<i>77</i>	<i>86</i>	77	<i>71</i>	<i>78</i>
Natural Gas (million cf/d)	3,829	4,578	6,203	3,899	3,583	<i>4,146</i>	<i>5,518</i>	<i>3,989</i>	<i>3,532</i>	<i>4,203</i>	<i>5,668</i>	<i>4,099</i>	4,630	<i>4,314</i>	<i>4,381</i>
Petroleum (thousand b/d)	12	5	12	8	10	<i>7</i>	<i>11</i>	<i>9</i>	<i>16</i>	<i>11</i>	<i>17</i>	<i>11</i>	9	<i>9</i>	<i>14</i>
South Census Region															
Coal (thousand st/d)	671	718	1,035	789	707	<i>760</i>	<i>976</i>	<i>762</i>	<i>809</i>	<i>778</i>	<i>981</i>	<i>760</i>	804	<i>802</i>	<i>833</i>
Natural Gas (million cf/d)	14,754	16,920	20,179	13,502	12,912	<i>16,431</i>	<i>18,840</i>	<i>13,494</i>	<i>13,641</i>	<i>15,882</i>	<i>18,785</i>	<i>13,758</i>	16,342	<i>15,430</i>	<i>15,526</i>
Petroleum (thousand b/d)	55	56	66	43	50	<i>52</i>	<i>57</i>	<i>44</i>	<i>59</i>	<i>50</i>	<i>56</i>	<i>44</i>	55	<i>51</i>	<i>52</i>
Midwest Census Region															
Coal (thousand st/d)	680	626	848	675	717	<i>641</i>	<i>819</i>	<i>668</i>	<i>742</i>	<i>631</i>	<i>806</i>	<i>660</i>	708	<i>711</i>	<i>710</i>
Natural Gas (million cf/d)	2,692	2,910	3,743	2,283	2,179	<i>2,586</i>	<i>3,524</i>	<i>2,528</i>	<i>2,698</i>	<i>3,007</i>	<i>3,711</i>	<i>2,580</i>	2,908	<i>2,707</i>	<i>3,001</i>
Petroleum (thousand b/d)	19	19	18	16	16	<i>20</i>	<i>22</i>	<i>20</i>	<i>21</i>	<i>20</i>	<i>22</i>	<i>19</i>	18	<i>19</i>	<i>20</i>
West Census Region															
Coal (thousand st/d)	244	208	312	288	274	<i>192</i>	<i>309</i>	<i>299</i>	<i>293</i>	<i>192</i>	<i>282</i>	<i>293</i>	263	<i>269</i>	<i>265</i>
Natural Gas (million cf/d)	3,951	4,164	5,982	4,041	3,326	<i>3,113</i>	<i>4,983</i>	<i>4,137</i>	<i>3,643</i>	<i>3,752</i>	<i>5,557</i>	<i>4,177</i>	4,537	<i>3,895</i>	<i>4,287</i>
Petroleum (thousand b/d)	34	32	35	35	36	<i>34</i>	<i>38</i>	<i>39</i>	<i>39</i>	<i>36</i>	<i>40</i>	<i>39</i>	34	<i>36</i>	<i>38</i>
End-of-period U.S. Fuel Inventories Held by Electric Power Sector															
Coal (million short tons)	192.3	183.2	158.2	163.9	169.6	<i>163.3</i>	<i>146.4</i>	<i>149.6</i>	<i>151.0</i>	<i>148.8</i>	<i>133.8</i>	<i>149.7</i>	163.9	<i>149.6</i>	<i>149.7</i>
Residual Fuel Oil (mmb)	11.9	12.2	11.7	11.7	12.1	<i>12.3</i>	<i>12.0</i>	<i>12.4</i>	<i>12.3</i>	<i>12.1</i>	<i>12.0</i>	<i>12.5</i>	11.7	<i>12.4</i>	<i>12.5</i>
Distillate Fuel Oil (mmb)	17.3	17.4	21.0	17.1	16.7	<i>16.7</i>	<i>16.8</i>	<i>17.2</i>	<i>17.4</i>	<i>17.3</i>	<i>17.2</i>	<i>17.6</i>	17.1	<i>17.2</i>	<i>17.6</i>
Petroleum Coke (mmb)	6.2	4.5	3.8	4.4	4.3	<i>4.3</i>	<i>4.2</i>	<i>4.2</i>	<i>4.1</i>	<i>4.1</i>	<i>4.1</i>	<i>4.1</i>	4.4	<i>4.2</i>	<i>4.1</i>

(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 - May 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	0.759	0.851	0.685	0.544	0.667	0.756	0.630	0.538	2.465	2.838	2.591
Wood Biomass (b)	0.061	0.049	0.060	0.052	0.056	0.049	0.060	0.054	0.055	0.049	0.061	0.055	0.222	0.219	0.219
Waste Biomass (c)	0.070	0.072	0.072	0.072	0.071	0.071	0.073	0.072	0.069	0.072	0.075	0.073	0.287	0.287	0.289
Wind	0.577	0.531	0.452	0.596	0.621	0.622	0.439	0.616	0.644	0.664	0.472	0.680	2.155	2.298	2.459
Geothermal	0.040	0.039	0.040	0.043	0.041	0.039	0.040	0.040	0.040	0.039	0.040	0.041	0.162	0.160	0.160
Solar	0.062	0.095	0.110	0.077	0.082	0.146	0.145	0.090	0.101	0.179	0.175	0.105	0.344	0.462	0.560
Subtotal	1.521	1.470	1.261	1.384	1.629	1.778	1.441	1.416	1.575	1.760	1.453	1.491	5.636	6.265	6.278
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	0.314	0.305	0.314	0.316	0.307	0.302	0.313	0.316	1.283	1.250	1.239
Waste Biomass (c)	0.046	0.047	0.047	0.046	0.050	0.049	0.048	0.048	0.050	0.049	0.048	0.048	0.186	0.196	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	0.201	0.203	0.207	0.206	0.200	0.203	0.206	0.206	0.796	0.817	0.814
Subtotal	0.573	0.564	0.578	0.585	0.574	0.566	0.578	0.579	0.566	0.563	0.576	0.578	2.300	2.297	2.284
Commercial Sector															
Wood Biomass (b)	0.020	0.020	0.021	0.021	0.019	0.018	0.019	0.018	0.019	0.018	0.019	0.018	0.082	0.074	0.074
Waste Biomass (c)	0.013	0.012	0.012	0.013	0.013	0.012	0.012	0.012	0.013	0.012	0.012	0.012	0.049	0.049	0.049
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	0.060	0.068	0.070	0.061	0.066	0.075	0.077	0.066	0.251	0.259	0.283
Residential Sector															
Wood Biomass (b)	0.093	0.093	0.094	0.094	0.097	0.098	0.099	0.099	0.103	0.103	0.104	0.104	0.373	0.394	0.413
Geothermal	0.010	0.010	0.010	0.010	0.011	0.012	0.012	0.012	0.013	0.013	0.013	0.013	0.040	0.047	0.052
Solar (d)	0.030	0.047	0.049	0.034	0.037	0.058	0.061	0.044	0.047	0.073	0.076	0.055	0.161	0.201	0.251
Subtotal	0.133	0.150	0.153	0.138	0.145	0.168	0.172	0.155	0.162	0.188	0.193	0.172	0.573	0.641	0.716
Transportation Sector															
Ethanol (e)	0.277	0.283	0.293	0.288	0.268	0.292	0.298	0.289	0.270	0.290	0.296	0.288	1.141	1.147	1.145
Biomass-based Diesel (e)	0.051	0.066	0.088	0.084	0.051	0.071	0.083	0.087	0.066	0.074	0.086	0.087	0.289	0.292	0.312
Subtotal	0.328	0.349	0.381	0.372	0.321	0.363	0.382	0.376	0.337	0.364	0.382	0.375	1.430	1.441	1.457
All Sectors Total															
Hydroelectric Power (a)	0.714	0.687	0.530	0.546	0.762	0.854	0.687	0.547	0.671	0.760	0.633	0.540	2.477	2.851	2.604
Wood Biomass (b)	0.496	0.477	0.495	0.492	0.485	0.470	0.492	0.487	0.484	0.472	0.497	0.492	1.959	1.935	1.945
Waste Biomass (c)	0.129	0.131	0.130	0.131	0.134	0.132	0.134	0.132	0.132	0.134	0.135	0.133	0.522	0.532	0.534
Wind	0.577	0.531	0.452	0.596	0.621	0.622	0.439	0.616	0.644	0.664	0.472	0.680	2.155	2.298	2.459
Geothermal	0.056	0.055	0.056	0.059	0.058	0.057	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	0.142	0.236	0.239	0.158	0.175	0.292	0.293	0.190	0.587	0.776	0.949
Ethanol (e)	0.287	0.295	0.305	0.299	0.278	0.300	0.310	0.300	0.281	0.302	0.308	0.299	1.186	1.188	1.190
Biomass-based Diesel (e)	0.051	0.066	0.088	0.084	0.051	0.071	0.083	0.087	0.066	0.074	0.086	0.087	0.289	0.292	0.312
Biofuel Losses and Co-products (f)	0.196	0.193	0.203	0.205	0.201	0.203	0.207	0.206	0.200	0.203	0.206	0.206	0.796	0.817	0.814
Total Consumption	2.614	2.598	2.439	2.538	2.704	2.943	2.643	2.587	2.706	2.950	2.681	2.681	10.190	10.877	11.017

- = 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 CO₂ Emissions

U.S. Energy Information Administration | Short-Term Energy Outlook - May 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	16,880	<i>17,009</i>	<i>17,114</i>	<i>17,221</i>	<i>17,332</i>	<i>17,434</i>	<i>17,537</i>	<i>17,639</i>	16,662	<i>17,056</i>	<i>17,485</i>
Real Personal Consumption Expend.															
(billion chained 2009 dollars - SAAR)	11,365	11,485	11,569	11,670	11,697	<i>11,797</i>	<i>11,877</i>	<i>11,953</i>	<i>12,062</i>	<i>12,159</i>	<i>12,251</i>	<i>12,346</i>	11,522	<i>11,831</i>	<i>12,204</i>
Real Fixed Investment															
(billion chained 2009 dollars - SAAR)	2,787	2,779	2,779	2,799	2,846	<i>2,897</i>	<i>2,934</i>	<i>2,976</i>	<i>3,001</i>	<i>3,028</i>	<i>3,054</i>	<i>3,078</i>	2,786	<i>2,913</i>	<i>3,040</i>
Business Inventory Change															
(billion chained 2009 dollars - SAAR)	42	-15	4	52	49	<i>35</i>	<i>29</i>	<i>35</i>	<i>35</i>	<i>39</i>	<i>43</i>	<i>45</i>	21	<i>37</i>	<i>41</i>
Real Government Expenditures															
(billion chained 2009 dollars - SAAR)	2,913	2,901	2,906	2,908	2,901	<i>2,908</i>	<i>2,914</i>	<i>2,928</i>	<i>2,936</i>	<i>2,945</i>	<i>2,952</i>	<i>2,954</i>	2,907	<i>2,913</i>	<i>2,947</i>
Real Exports of Goods & Services															
(billion chained 2009 dollars - SAAR)	2,102	2,111	2,162	2,137	2,167	<i>2,185</i>	<i>2,201</i>	<i>2,212</i>	<i>2,222</i>	<i>2,229</i>	<i>2,239</i>	<i>2,252</i>	2,128	<i>2,191</i>	<i>2,236</i>
Real Imports of Goods & Services															
(billion chained 2009 dollars - SAAR)	2,668	2,670	2,684	2,742	2,777	<i>2,801</i>	<i>2,828</i>	<i>2,873</i>	<i>2,916</i>	<i>2,962</i>	<i>3,001</i>	<i>3,036</i>	2,691	<i>2,820</i>	<i>2,979</i>
Real Disposable Personal Income															
(billion chained 2009 dollars - SAAR)	12,556	12,647	12,738	12,801	12,830	<i>12,953</i>	<i>13,045</i>	<i>13,133</i>	<i>13,333</i>	<i>13,443</i>	<i>13,542</i>	<i>13,644</i>	12,686	<i>12,990</i>	<i>13,490</i>
Non-Farm Employment															
(millions)	143.4	144.0	144.7	145.2	145.7	<i>146.3</i>	<i>146.8</i>	<i>147.3</i>	<i>147.8</i>	<i>148.2</i>	<i>148.7</i>	<i>149.1</i>	144.3	<i>146.5</i>	<i>148.4</i>
Civilian Unemployment Rate															
(percent)	4.9	4.9	4.9	4.7	4.7	<i>4.5</i>	<i>4.5</i>	<i>4.4</i>	<i>4.3</i>	<i>4.2</i>	<i>4.1</i>	<i>4.1</i>	4.9	<i>4.5</i>	<i>4.2</i>
Housing Starts															
(millions - SAAR)	1.15	1.16	1.14	1.25	1.26	<i>1.25</i>	<i>1.26</i>	<i>1.27</i>	<i>1.29</i>	<i>1.30</i>	<i>1.31</i>	<i>1.33</i>	1.18	<i>1.26</i>	<i>1.31</i>
Industrial Production Indices (Index, 2012=100)															
Total Industrial Production	103.1	102.9	103.1	103.3	103.9	<i>105.3</i>	<i>106.0</i>	<i>106.8</i>	<i>107.5</i>	<i>107.9</i>	<i>108.5</i>	<i>109.3</i>	103.1	<i>105.5</i>	<i>108.3</i>
Manufacturing	102.9	102.6	102.7	103.1	104.3	<i>105.0</i>	<i>106.0</i>	<i>106.7</i>	<i>107.3</i>	<i>107.7</i>	<i>108.2</i>	<i>109.0</i>	102.8	<i>105.5</i>	<i>108.1</i>
Food	107.0	107.7	108.3	107.5	110.1	<i>109.6</i>	<i>110.1</i>	<i>110.6</i>	<i>111.2</i>	<i>111.8</i>	<i>112.4</i>	<i>113.1</i>	107.6	<i>110.1</i>	<i>112.1</i>
Paper	96.1	95.3	95.0	96.7	96.2	<i>96.4</i>	<i>96.6</i>	<i>96.6</i>	<i>96.5</i>	<i>96.3</i>	<i>96.2</i>	<i>96.3</i>	95.8	<i>96.5</i>	<i>96.3</i>
Petroleum and Coal Products	100.0	100.9	101.4	101.4	103.3	<i>103.6</i>	<i>104.1</i>	<i>104.8</i>	<i>105.4</i>	<i>105.9</i>	<i>106.7</i>	<i>107.5</i>	100.9	<i>104.0</i>	<i>106.4</i>
Chemicals	98.8	98.0	97.1	97.9	99.0	<i>99.2</i>	<i>99.9</i>	<i>100.7</i>	<i>101.5</i>	<i>102.3</i>	<i>103.2</i>	<i>104.3</i>	97.9	<i>99.7</i>	<i>102.8</i>
Nonmetallic Mineral Products	113.6	112.2	111.0	112.2	114.9	<i>115.3</i>	<i>116.2</i>	<i>117.4</i>	<i>118.7</i>	<i>120.0</i>	<i>121.2</i>	<i>122.2</i>	112.3	<i>115.9</i>	<i>120.5</i>
Primary Metals	94.8	95.0	92.1	92.7	95.7	<i>94.5</i>	<i>94.8</i>	<i>95.3</i>	<i>95.6</i>	<i>95.6</i>	<i>96.2</i>	<i>97.0</i>	93.7	<i>95.1</i>	<i>96.1</i>
Coal-weighted Manufacturing (a)	100.8	100.3	99.4	100.2	102.3	<i>102.1</i>	<i>102.7</i>	<i>103.4</i>	<i>103.9</i>	<i>104.4</i>	<i>105.1</i>	<i>106.0</i>	100.2	<i>102.6</i>	<i>104.9</i>
Distillate-weighted Manufacturing (a)	105.6	105.5	105.1	106.2	108.1	<i>108.3</i>	<i>109.1</i>	<i>109.9</i>	<i>110.6</i>	<i>111.2</i>	<i>111.9</i>	<i>112.7</i>	105.6	<i>108.9</i>	<i>111.6</i>
Electricity-weighted Manufacturing (a)	101.5	101.2	100.9	101.5	103.2	<i>103.3</i>	<i>104.1</i>	<i>104.9</i>	<i>105.6</i>	<i>106.2</i>	<i>107.0</i>	<i>108.0</i>	101.3	<i>103.9</i>	<i>106.7</i>
Natural Gas-weighted Manufacturing (a)	100.8	100.5	100.5	101.1	103.2	<i>103.3</i>	<i>104.2</i>	<i>105.2</i>	<i>106.0</i>	<i>106.7</i>	<i>107.7</i>	<i>109.0</i>	100.7	<i>104.0</i>	<i>107.3</i>
Price Indexes															
Consumer Price Index (all urban consumers)															
(index, 1982-1984=1.00)	2.38	2.39	2.40	2.42	2.44	<i>2.45</i>	<i>2.46</i>	<i>2.48</i>	<i>2.49</i>	<i>2.50</i>	<i>2.51</i>	<i>2.53</i>	2.40	<i>2.46</i>	<i>2.51</i>
Producer Price Index: All Commodities															
(index, 1982=1.00)	1.84	1.85	1.85	1.88	1.91	<i>1.92</i>	<i>1.93</i>	<i>1.94</i>	<i>1.95</i>	<i>1.96</i>	<i>1.97</i>	<i>1.99</i>	1.85	<i>1.92</i>	<i>1.97</i>
Producer Price Index: Petroleum															
(index, 1982=1.00)	1.21	1.46	1.53	1.55	1.66	<i>1.70</i>	<i>1.71</i>	<i>1.69</i>	<i>1.73</i>	<i>1.83</i>	<i>1.85</i>	<i>1.81</i>	1.44	<i>1.69</i>	<i>1.81</i>
GDP Implicit Price Deflator															
(index, 2009=100)	110.6	111.3	111.7	112.2	113.1	<i>113.6</i>	<i>114.2</i>	<i>114.9</i>	<i>115.7</i>	<i>116.3</i>	<i>116.9</i>	<i>117.5</i>	111.5	<i>113.9</i>	<i>116.6</i>
Miscellaneous															
Vehicle Miles Traveled (b)															
(million miles/day)	8,086	9,024	8,942	8,590	8,258	<i>9,133</i>	<i>9,043</i>	<i>8,668</i>	<i>8,259</i>	<i>9,260</i>	<i>9,147</i>	<i>8,777</i>	8,661	<i>8,777</i>	<i>8,863</i>
Air Travel Capacity															
(Available ton-miles/day, thousands)	548	603	609	590	568	<i>599</i>	<i>596</i>	<i>575</i>	<i>567</i>	<i>600</i>	<i>598</i>	<i>580</i>	588	<i>584</i>	<i>586</i>
Aircraft Utilization															
(Revenue ton-miles/day, thousands)	326	366	375	357	340	<i>371</i>	<i>367</i>	<i>350</i>	<i>344</i>	<i>375</i>	<i>370</i>	<i>353</i>	356	<i>357</i>	<i>360</i>
Airline Ticket Price Index															
(index, 1982-1984=100)	281.8	305.0	273.0	270.4	274.0	<i>305.8</i>	<i>289.1</i>	<i>295.7</i>	<i>294.7</i>	<i>323.7</i>	<i>302.6</i>	<i>306.9</i>	282.6	<i>291.2</i>	<i>307.0</i>
Raw Steel Production															
(million short tons per day)	0.238	0.247	0.238	0.230	0.248	<i>0.244</i>	<i>0.213</i>	<i>0.180</i>	<i>0.232</i>	<i>0.236</i>	<i>0.218</i>	<i>0.180</i>	0.239	<i>0.221</i>	<i>0.216</i>
Carbon Dioxide (CO₂) Emissions (million metric tons)															
Petroleum	571	571	589	589	561	<i>578</i>	<i>595</i>	<i>589</i>	<i>573</i>	<i>582</i>	<i>598</i>	<i>594</i>	2,320	<i>2,324</i>	<i>2,348</i>
Natural Gas	439	327	343	376	415	<i>313</i>	<i>330</i>	<i>388</i>	<i>451</i>	<i>325</i>	<i>338</i>	<i>394</i>	1,485	<i>1,445</i>	<i>1,508</i>
Coal	309	298	413	335	319	<i>301</i>	<i>399</i>	<i>336</i>	<i>350</i>	<i>306</i>	<i>394</i>	<i>334</i>	1,354	<i>1,355</i>	<i>1,384</i>
Total Energy (c)	1,322	1,199	1,347	1,302	1,298	<i>1,196</i>	<i>1,326</i>	<i>1,316</i>	<i>1,377</i>	<i>1,216</i>	<i>1,333</i>	<i>1,326</i>	5,171	<i>5,135</i>	<i>5,252</i>

- = no data available

SAAR = Seasonally-adjusted annual rate

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

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

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

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.**Historical data:** Latest data available from U.S. Department of Commerce, Bureau of Economic Analysis; Federal Reserve System, Statistical release G17; Federal Highway Administration; and Federal Aviation Administration. Minor discrepancies with published historical data are due to independent rounding.**Projections:** EIA Regional Short-Term Energy Model. 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 - May 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	887	888	894	898	903	908	913	917	922	880	896	915
Middle Atlantic	2,456	2,461	2,482	2,492	2,496	2,513	2,526	2,538	2,551	2,564	2,575	2,586	2,473	2,518	2,569
E. N. Central	2,273	2,284	2,304	2,313	2,320	2,332	2,343	2,354	2,367	2,380	2,391	2,402	2,293	2,337	2,385
W. N. Central	1,042	1,046	1,056	1,062	1,066	1,073	1,079	1,085	1,090	1,096	1,101	1,107	1,052	1,076	1,099
S. Atlantic	2,932	2,943	2,968	2,985	3,000	3,024	3,044	3,064	3,086	3,106	3,126	3,145	2,957	3,033	3,116
E. S. Central	742	745	751	755	757	762	766	771	775	779	783	787	748	764	781
W. S. Central	2,021	2,019	2,037	2,050	2,062	2,083	2,101	2,120	2,133	2,147	2,165	2,183	2,032	2,092	2,157
Mountain	1,044	1,049	1,059	1,065	1,071	1,081	1,090	1,099	1,108	1,116	1,124	1,132	1,055	1,085	1,120
Pacific	3,039	3,057	3,082	3,101	3,117	3,141	3,161	3,182	3,206	3,226	3,246	3,267	3,070	3,150	3,236
Industrial Output, Manufacturing (Index, Year 2012=100)															
New England	98.8	99.0	98.9	99.4	100.3	100.9	101.6	102.2	102.6	102.7	103.0	103.5	99.0	101.3	102.9
Middle Atlantic	99.0	98.9	99.1	98.6	99.5	100.1	101.0	101.7	102.1	102.4	102.8	103.5	98.9	100.6	102.7
E. N. Central	105.3	105.1	104.9	105.2	106.6	107.4	108.3	109.2	110.0	110.6	111.1	112.0	105.1	107.9	110.9
W. N. Central	101.9	101.4	101.6	101.8	103.1	103.8	104.7	105.5	106.1	106.4	106.9	107.6	101.7	104.3	106.8
S. Atlantic	105.4	105.4	106.0	106.9	108.2	109.0	109.8	110.4	110.8	111.0	111.4	112.1	105.9	109.3	111.3
E. S. Central	107.2	107.5	107.7	108.5	109.9	110.7	111.6	112.4	112.9	113.3	113.8	114.6	107.7	111.2	113.6
W. S. Central	98.0	96.6	96.2	96.6	97.9	98.6	99.6	100.6	101.4	102.0	102.9	103.9	96.9	99.2	102.6
Mountain	106.4	106.3	106.3	107.0	108.3	109.3	110.4	111.3	111.9	112.2	112.7	113.4	106.5	109.9	112.5
Pacific	103.0	102.7	102.5	102.8	103.9	104.6	105.6	106.5	107.1	107.5	108.0	108.8	102.8	105.1	107.9
Real Personal Income (Billion \$2009)															
New England	774	782	789	792	795	802	808	814	820	827	832	838	784	805	829
Middle Atlantic	1,956	1,968	1,987	1,990	1,996	2,011	2,025	2,038	2,053	2,068	2,081	2,094	1,975	2,018	2,074
E. N. Central	2,082	2,097	2,113	2,121	2,126	2,144	2,158	2,172	2,190	2,205	2,220	2,234	2,103	2,150	2,212
W. N. Central	991	997	1,005	1,006	1,008	1,017	1,024	1,030	1,039	1,046	1,053	1,060	1,000	1,020	1,049
S. Atlantic	2,704	2,723	2,744	2,762	2,773	2,801	2,824	2,848	2,876	2,901	2,926	2,951	2,733	2,812	2,914
E. S. Central	771	773	778	782	784	791	797	802	810	816	821	827	776	794	818
W. S. Central	1,731	1,738	1,751	1,760	1,770	1,790	1,807	1,825	1,845	1,863	1,880	1,898	1,745	1,798	1,871
Mountain	951	959	966	972	977	988	998	1,007	1,018	1,028	1,038	1,048	962	992	1,033
Pacific	2,337	2,359	2,376	2,389	2,397	2,421	2,440	2,461	2,485	2,507	2,526	2,548	2,366	2,430	2,517
Households (Thousands)															
New England	5,827	5,832	5,834	5,837	5,840	5,846	5,853	5,864	5,876	5,887	5,897	5,908	5,837	5,864	5,908
Middle Atlantic	15,961	15,971	15,977	15,980	15,980	15,989	16,006	16,027	16,051	16,074	16,097	16,120	15,980	16,027	16,120
E. N. Central	18,744	18,760	18,769	18,776	18,783	18,797	18,819	18,847	18,879	18,913	18,946	18,979	18,776	18,847	18,979
W. N. Central	8,523	8,540	8,554	8,568	8,582	8,599	8,619	8,643	8,669	8,696	8,720	8,744	8,568	8,643	8,744
S. Atlantic	25,028	25,127	25,216	25,301	25,381	25,472	25,571	25,679	25,789	25,899	26,006	26,114	25,301	25,679	26,114
E. S. Central	7,585	7,599	7,611	7,622	7,632	7,646	7,662	7,681	7,701	7,723	7,743	7,763	7,622	7,681	7,763
W. S. Central	14,512	14,564	14,613	14,657	14,701	14,751	14,806	14,867	14,929	14,992	15,053	15,115	14,657	14,867	15,115
Mountain	8,934	8,973	9,010	9,048	9,083	9,123	9,166	9,213	9,262	9,311	9,361	9,409	9,048	9,213	9,409
Pacific	18,622	18,677	18,725	18,775	18,822	18,880	18,943	19,010	19,078	19,146	19,210	19,272	18,775	19,010	19,272
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	7.5	7.3	7.4	7.4
Middle Atlantic	19.2	19.2	19.3	19.3	19.4	19.4	19.4	19.5	19.5	19.6	19.6	19.6	19.3	19.4	19.6
E. N. Central	21.7	21.7	21.8	21.8	21.9	21.9	22.0	22.0	22.1	22.2	22.2	22.2	21.8	22.0	22.2
W. N. Central	10.5	10.5	10.6	10.6	10.6	10.7	10.7	10.7	10.7	10.8	10.8	10.8	10.5	10.7	10.8
S. Atlantic	27.4	27.6	27.7	27.9	28.0	28.1	28.3	28.4	28.5	28.6	28.7	28.8	27.6	28.2	28.6
E. S. Central	7.9	7.9	8.0	8.0	8.0	8.0	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	16.9	16.9	17.0	17.1	17.2	17.3	17.3	17.4	17.5	17.6	16.8	17.2	17.5
Mountain	10.2	10.2	10.3	10.3	10.4	10.5	10.5	10.6	10.6	10.7	10.7	10.8	10.3	10.5	10.7
Pacific	22.2	22.4	22.5	22.7	22.8	22.8	22.9	23.0	23.1	23.2	23.3	23.3	22.5	22.9	23.2

- = 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 - May 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	2,842	905	77	2,117	2,992	741	136	2,178	3,184	879	136	2,178	5,941	6,047	6,377
Middle Atlantic	2,665	751	39	1,903	2,665	525	87	1,997	2,946	718	87	1,997	5,358	5,273	5,747
E. N. Central	2,867	753	48	2,031	2,691	584	124	2,231	3,140	748	124	2,231	5,699	5,630	6,243
W. N. Central	2,893	660	103	2,131	2,811	647	157	2,404	3,214	712	157	2,405	5,787	6,019	6,488
South Atlantic	1,380	210	2	859	1,149	135	14	984	1,457	209	14	983	2,451	2,282	2,662
E. S. Central	1,754	232	5	1,101	1,374	161	20	1,313	1,851	267	20	1,314	3,092	2,869	3,451
W. S. Central	1,050	79	1	620	772	67	4	807	1,182	90	4	806	1,750	1,650	2,083
Mountain	2,080	677	160	1,703	2,053	647	151	1,856	2,193	694	151	1,855	4,620	4,706	4,893
Pacific	1,301	466	96	1,155	1,555	539	89	1,200	1,487	570	89	1,201	3,019	3,383	3,347
U.S. Average	1,947	481	51	1,398	1,858	408	75	1,536	2,129	498	75	1,534	3,877	3,877	4,236
Heating Degree Days, Prior 10-year Average															
New England	3,212	824	133	2,105	3,201	831	122	2,125	3,173	812	124	2,122	6,273	6,279	6,230
Middle Atlantic	2,983	651	90	1,926	2,982	661	81	1,941	2,947	638	82	1,948	5,650	5,664	5,616
E. N. Central	3,246	689	125	2,205	3,254	701	114	2,197	3,208	688	118	2,207	6,266	6,266	6,221
W. N. Central	3,298	693	150	2,393	3,302	707	142	2,379	3,263	704	146	2,381	6,534	6,530	6,494
South Atlantic	1,498	184	14	972	1,502	188	12	965	1,476	177	12	977	2,668	2,666	2,643
E. S. Central	1,898	225	19	1,308	1,905	231	16	1,287	1,868	218	17	1,304	3,450	3,438	3,406
W. S. Central	1,221	83	5	815	1,227	88	4	799	1,181	80	4	807	2,123	2,118	2,073
Mountain	2,231	725	147	1,880	2,216	734	142	1,861	2,194	732	144	1,860	4,982	4,953	4,929
Pacific	1,496	610	88	1,212	1,462	597	88	1,205	1,464	593	86	1,197	3,406	3,352	3,340
U.S. Average	2,199	483	76	1,534	2,192	487	71	1,526	2,160	476	72	1,530	4,292	4,276	4,237
Cooling Degree Days															
New England	0	79	541	0	0	91	403	1	0	81	403	1	620	496	486
Middle Atlantic	0	146	734	5	0	167	530	4	0	146	530	4	885	701	679
E. N. Central	3	230	705	19	1	231	536	6	0	206	535	6	958	774	749
W. N. Central	10	319	713	30	9	272	670	10	3	256	670	10	1,071	960	939
South Atlantic	137	651	1,346	279	159	703	1,152	223	111	621	1,154	224	2,412	2,237	2,109
E. S. Central	42	534	1,256	129	66	563	1,052	63	25	487	1,052	63	1,961	1,744	1,627
W. S. Central	122	835	1,600	329	215	927	1,516	198	82	831	1,516	198	2,885	2,855	2,627
Mountain	33	464	891	113	37	417	916	73	18	418	917	74	1,501	1,443	1,426
Pacific	36	231	593	73	31	155	567	62	25	166	567	62	933	815	818
U.S. Average	54	411	966	129	70	419	844	90	39	382	846	91	1,559	1,424	1,357
Cooling Degree Days, Prior 10-year Average															
New England	0	81	419	1	0	81	433	1	0	82	437	0	501	515	520
Middle Atlantic	0	168	549	5	0	169	567	6	0	169	570	3	722	741	742
E. N. Central	3	229	528	6	3	234	543	8	3	230	538	6	766	788	777
W. N. Central	7	279	674	9	7	281	673	12	7	277	664	11	969	973	959
South Atlantic	114	661	1,147	222	117	666	1,167	230	119	678	1,161	223	2,144	2,180	2,181
E. S. Central	32	541	1,038	56	33	544	1,056	65	34	547	1,041	62	1,668	1,699	1,684
W. S. Central	90	890	1,517	191	89	876	1,528	204	100	897	1,538	202	2,688	2,698	2,736
Mountain	21	429	930	76	23	424	931	81	24	421	923	80	1,456	1,459	1,447
Pacific	29	180	611	72	30	181	608	74	30	179	608	74	892	893	891
U.S. Average	42	404	845	89	43	406	857	94	45	410	856	92	1,380	1,400	1,403

- = 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>).