



Short-Term Energy Outlook (STEO)

Forecast highlights

Global liquid fuels

- North Sea Brent crude oil spot prices averaged \$48 per barrel (b) in July, \$2/b higher than the June average and almost \$4/b higher than in July 2016. EIA forecasts Brent spot prices to average \$51/b in 2017 and \$52/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 December 2017 delivery that traded during the five-day period ending August 3 suggest that a range of \$37/b to \$68/b encompasses the market expectation for December WTI prices at the 95% confidence level.
- U.S. regular gasoline retail prices averaged \$2.30 per gallon (gal) in July, down 5 cents/gal from the average in June but 6 cents/gal higher than in July 2016. During the April-through-September summer driving season of 2017, U.S. regular gasoline retail prices are forecast to average \$2.37/gal, 14 cents/gal higher than last summer. Annual average U.S. regular gasoline retail prices are forecast to be \$2.33/gal in both 2017 and 2018.
- U.S. crude oil production averaged an estimated 8.9 million barrels per day (b/d) in 2016 and is forecast to average 9.3 million b/d in 2017. EIA forecasts crude oil production to average 9.9 million b/d in 2018, which would mark the highest annual average production in U.S. history, surpassing the previous record of 9.6 million b/d set in 1970.
- EIA forecasts that global petroleum and liquid fuels inventories will be largely unchanged in 2017 and then increase by an average of 0.2 million b/d in 2018.

Natural gas

- U.S. dry natural gas production is forecast to average 73.5 billion cubic feet per day (Bcf/d) in 2017, a 1.2 Bcf/d increase from the 2016 level. Natural gas production in 2018 is forecast to be 3.9 Bcf/d above the 2017 level.
- In July, the average Henry Hub natural gas spot price was \$2.98 per million British thermal units (MMBtu), about the same as in June. Higher natural gas exports and growing domestic natural gas consumption in 2018 contribute to the forecast Henry Hub natural gas spot price rising from an annual average of \$3.06/MMBtu in 2017 to \$3.29/MMBtu in 2018. NYMEX contract values for December 2017 delivery that traded

during the five-day period ending August 3 suggest that a range of \$2.17/MMBtu to \$4.48/MMBtu encompasses the market expectation for December Henry Hub natural gas prices at the 95% confidence level.

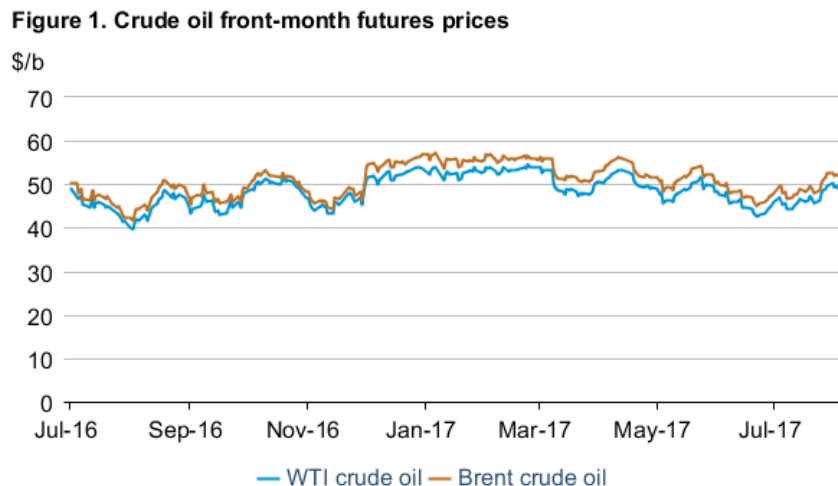
Electricity, coal, renewables, and emissions

- Total U.S. electricity generation from utility-scale power plants averaged 11,145 gigawatthours per day in 2016. Forecast U.S. generation declines by 1.2% in 2017, which mostly reflects expectations of milder temperatures in the third quarter of 2017 compared with the same period last year. Forecast generation grows by 1.8% in 2018 based largely on a forecast of colder temperatures during the first quarter 2018 compared with the same period in 2017 and on the expectation of a growing economy.
- EIA expects the share of U.S. total utility-scale electricity generation from natural gas to fall from an average of 34% in 2016 to about 31% in 2017 as a result of higher natural gas prices, increased generation from renewables and coal, and lower electricity demand. Coal's forecast generation share rises from 30% last year to almost 32% in 2017. The projected generation shares for natural gas and coal are nearly identical in 2018, averaging between 31% and 32%.
- [Coal exports](#) for the first five months of 2017 were 37 million short tons (MMst), which was 60% higher than coal exports over the same period last year. EIA expects growth in coal exports to slow in the coming months, with exports for all of 2017 forecast at 70 MMst, 17% above the 2016 level. The increase in coal exports contributes to an expected 58 MMst (8%) increase in coal production in 2017. In 2018, coal production is forecast to increase by 10 MMst (1%).
- [Wind electricity generating capacity](#) at the end of 2016 was 81 gigawatts (GW). EIA expects wind capacity additions in the forecast will bring total wind capacity to 88 GW by the end of 2017 and to 102 GW by the end of 2018.
- Total utility-scale solar electricity generating capacity at the end of 2016 was 22 GW. EIA expects solar capacity additions in the forecast will bring total utility-scale solar capacity to 29 GW by the end of 2017 and to 32 GW by the end of 2018.
- After declining 1.7% in 2016, energy-related carbon dioxide (CO₂) emissions are projected to decrease 0.3% in 2017 and then to increase 2.0% 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: Crude oil benchmark Brent front-month futures prices increased by \$2.33 per barrel (b) from July 3, settling at \$52.01/b on August 3. The West Texas Intermediate (WTI) crude oil price increased by \$1.96/b during the same period, settling at \$49.03/b (**Figure 1**). Brent and WTI monthly average spot prices in July were \$2.11/b and \$1.45/b higher, respectively, than the June averages.



eia Bloomberg L.P.

Crude oil prices increased in response to supply-side factors as well as strong U.S. refinery demand. Total commercial crude oil and petroleum product inventories in the United States fell by 22.4 million barrels from June 30 to July 28, compared with a five-year average inventory build of 5.9 million barrels over that period. Also, drilling activity in the United States, as measured by the Baker Hughes active oil rig count, increased by 10 rigs in July, the fewest monthly oil rig additions since the rig count began increasing in June 2016. Some U.S. exploration and production companies recently announced less investment spending for the rest of the year, suggesting the current rate of U.S. oil production growth could slow. EIA forecasts that month-over-month crude oil production increases for the Lower 48 states onshore region will slow to an average of 60,000 barrels per day (b/d) in the second half of 2017, compared with estimated average monthly growth of 110,000 b/d in the first half of the year.

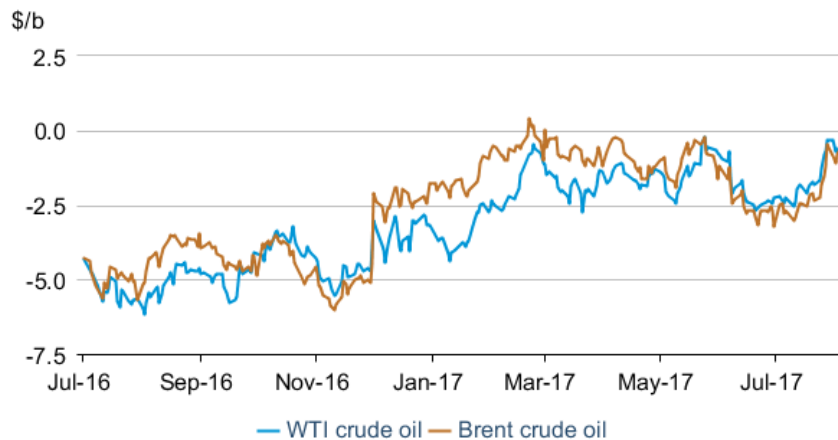
Crude oil prices were further supported as the Organization of the Petroleum Exporting Countries (OPEC) member Saudi Arabia announced a cap on the country's crude oil exports in August. However, it is unclear how much extra crude oil this cap would remove from the market given the country's typical seasonal decline in crude oil exports [because of an increase in crude oil use for power generation](#). However, Libya and Nigeria, two other OPEC members, continue to increase crude oil production, a contributing factor in keeping prices near \$50/b.

Global economic growth expectations remain supportive of liquid fuels demand growth. Second-quarter Gross Domestic Product [grew 2.6% at a seasonally adjusted annual rate in the United States](#) and grew 6.9% and 2.1% year-over-year in China and the Eurozone, respectively. Furthermore, global inflation data remain below targets set by the major central banks, allowing the continuation of generally accommodative monetary conditions. EIA forecasts global liquid fuels consumption to grow by 1.4 million b/d in 2017 and by 1.6 million b/d in 2018.

Strong oil inventory draws have likely caused front-month futures prices to increase more than prices for contracts for delivery further in the future. Contango (when near-term prices are lower than longer-dated ones) narrowed significantly in the past month. The Brent and WTI 1st-13th spread increased \$1.78/b and \$1.47/b, respectively, from July 3 to August 3, settling at -73 cents/b and -72 cents/b, respectively (**Figure 2**).

In July, total commercial petroleum inventories in the Organization for Economic Cooperation and Development (OECD) countries are estimated to have declined by the most year-over-year since April 2014. In the United States, commercial crude oil stocks fell to 481.9 million barrels on the week ending July 28, which was 95.0 million barrels above the five-year average. In recent weeks, U.S. crude oil inventories reached the closest to the five-year average since September 2015. U.S. refineries have been running at [record highs](#) this year, with crude oil inputs [averaging 17.3 million b/d for the four weeks ending July 28](#), contributing to the inventory decline and the flattening crude oil futures price curve.

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

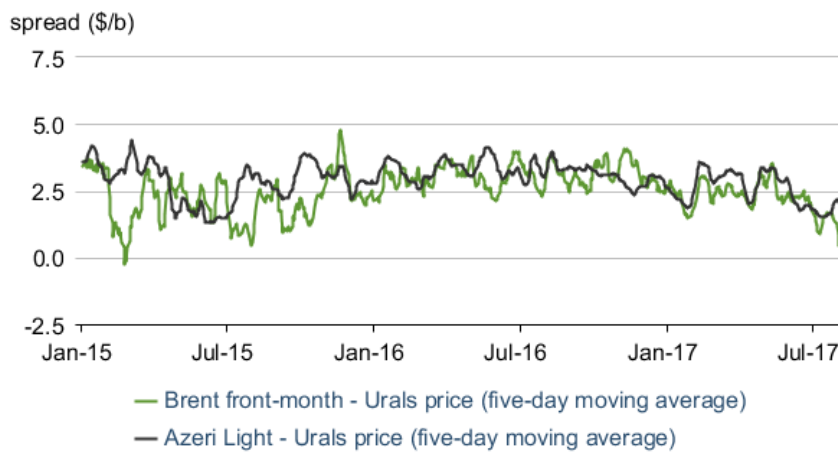


Crude oil quality differentials: The OPEC and non-OPEC crude oil voluntary production cuts resulted primarily in less medium, sour and heavy, sour crude oils on the global market. As a result, over the past several months, the [usual premium](#) that light, sweet crude oils command over medium and heavy crude oils has declined in many regions around the world. Prices for Urals crude oil, a medium, sour crude oil produced in Russia and priced in the Mediterranean region, have increased in July compared with prices for lighter crude oils (**Figure 3**). The average monthly spread between the Brent front-month price and Urals spot price declined from

\$2.63/b in May to \$1.35/b in July. Similarly, the average monthly price spread between Azeri Light, a light crude oil produced in Azerbaijan, and Urals declined from \$3.05/b to \$1.73/b over the same period.

Trade press reports indicate that less crude oil is being exported from Saudi Arabia to Europe, which may be supporting prices of crude oils like Urals, which are similar in quality to Saudi Arabian crude oil. Less Urals crude oil exported into the European region may also be supporting Urals prices, as one of the pipelines that transports Urals crude oil for export from the Baltic Sea is being converted to transport diesel. At the same time, higher crude oil production in Libya, Nigeria, and the United States is adding additional light, sweet crude oil into the market and could be contributing to a narrower price spread between light and medium crude oils.

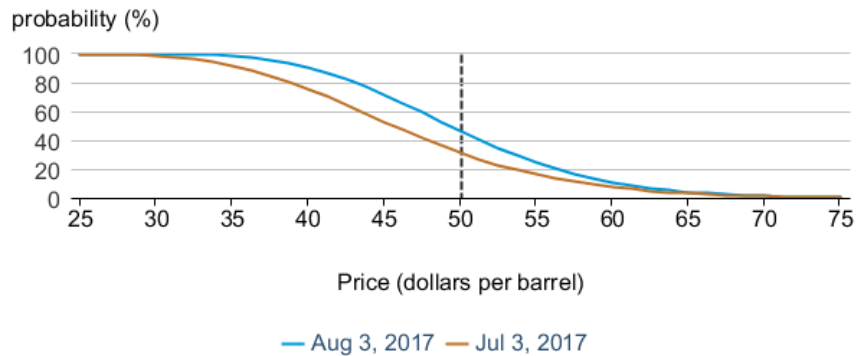
Figure 3. Light crude oil prices minus Urals spot price



eia Bloomberg L.P., Thomson Reuters

Market-derived probabilities: The December 2017 WTI futures contract averaged \$49.90/b for the five trading days ending August 3 and has a market-derived probability of exceeding \$50/b of 46% (**Figure 4**). This contract had a 31% market-derived probability of exceeding \$50/b as of July 3. Larger than expected inventory withdrawals and petroleum demand reported in the [Weekly Petroleum Status Report](#) (WPSR) could have contributed to an increase in market expectations of WTI prices ending the year above \$50/b.

Figure 4. Probability of the December 2017 WTI contract expiring above price levels



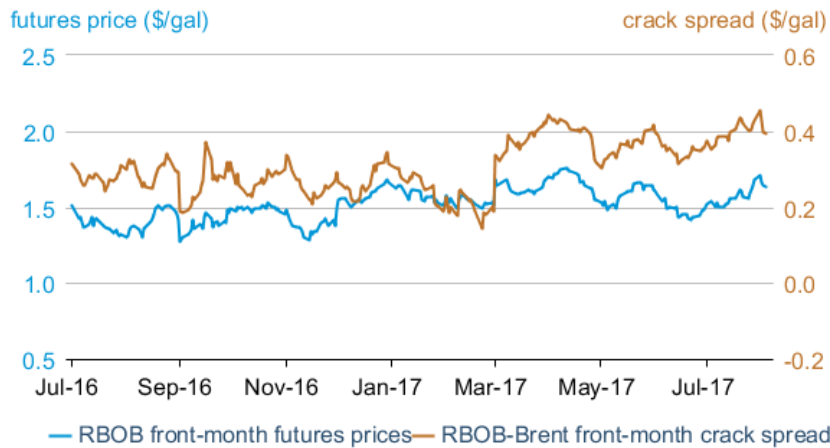
 U.S. Energy Information Administration, CME Group

Petroleum products

Gasoline prices: The front-month futures price of reformulated blendstock for oxygenate blending (RBOB, the petroleum component of gasoline used in many parts of the country) rose by 10 cents per gallon (gal) from July 3, settling at \$1.63/gal on August 3 (**Figure 5**). The RBOB-Brent crack spread (the difference between the price of RBOB and the price of Brent crude oil) rose by 4 cents/gal over the same period, settling at 39 cents/gal.

The RBOB-Brent crack spread averaged 40 cents/gal in July, 12 cents/gal more than in July 2016. In the STEO forecast, EIA estimates that U.S. gasoline consumption reached a record high of 9.7 million barrels per day (b/d) in July. This estimate is supported by WPSR data that show average gasoline consumption for the four weeks ending July 28 was 9.8 million b/d. WPSR data also show finished gasoline exports for the four weeks ending July 28 were 0.6 million b/d, which, if confirmed in monthly data, would be a record high for July because of continued demand from Mexico and South America, among others.

Figure 5. Historical RBOB futures prices and crack spread



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

Regional gasoline prices: The price premium of New York Harbor gasoline over Gulf Coast gasoline reached a seven-month high toward the end of July (**Figure 6**). The relative strength in the New York market was in response to refinery outages that occurred during a period of low gasoline imports and low receipts of gasoline from the U.S. Gulf Coast compared with typical levels, which contributed to declining gasoline stocks in [Petroleum Administration for Defense District \(PADD\) 1](#) (U.S. East Coast). Some gasoline production on the U.S. East Coast may have been curtailed because of operational issues at refineries in Philadelphia and Delaware City in recent weeks. WPSR [estimates of total gasoline imports](#) into the U.S. East Coast for July were close to or below the five-year low. Further, gasoline movements from the U.S. Gulf Coast to the U.S. East Coast were reported to be lower than usual. In June, shipments of gasoline through the Colonial pipeline, which runs from the U.S. Gulf Coast to New York Harbor, were reported to fall below capacity for the first time in almost six years.

With refinery issues as well as lower imports and regional movements, [total gasoline stocks in PADD 1B](#), which includes the New York Harbor region, have been declining since April and are close to the five-year average for July, according to the WPSR. In contrast, [gasoline stocks on the U.S. Gulf Coast](#) reached a record high for the month of July. The higher price premium for New York Harbor gasoline may begin to attract gasoline shipments into the region in the coming weeks.

Figure 6. New York Harbor - Gulf Coast conventional gasoline spot price differentials

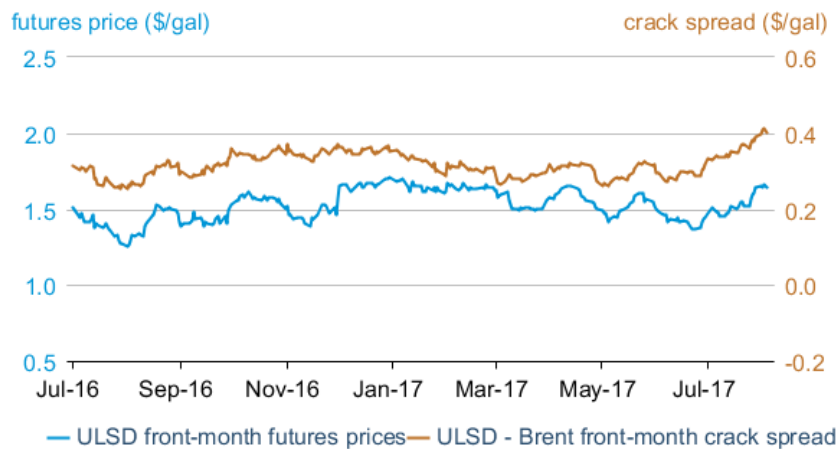


eia Bloomberg L.P.

Ultra-low sulfur diesel prices: The ultra-low sulfur diesel (ULSD) futures price rose by 13 cents/gal from July 3, settling at \$1.64/gal on August 3. The ULSD-Brent crack spread (the difference between the price of ULSD and the price of Brent crude oil) rose by 7 cents/gal, settling at 40 cents/gal (**Figure 7**). On August 2, the ULSD-Brent crack spread reached the highest point since September 2015.

According to the WPSR, [distillate consumption](#) reached 4.2 million b/d in July. That level is closer to the consumption levels seen during the peak U.S. home heating season in the winter months, and if confirmed in the monthly data, it would be a record high for July. Continued increases in U.S. [industrial production](#), [manufacturing activity](#), and freight shipments are likely contributing to increased domestic consumption of distillate. In addition, the [Petroleum Supply Monthly](#) shows that [distillate exports](#) reached a record high of 1.5 million b/d in May.

Figure 7. Historical ULSD futures price and crack spread

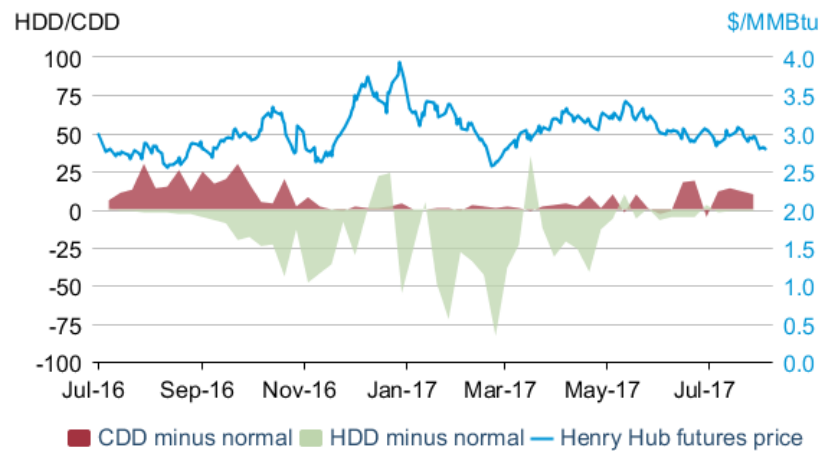



eia Bloomberg L.P., ULSD=ultra-low sulfur diesel

Natural Gas

Prices: The front-month natural gas futures contract for delivery at Henry Hub settled at \$2.80 per million British thermal units (MMBtu) on August 3, a decrease of 15 cents/MMBtu from July 3 (**Figure 8**). Natural gas futures prices fell during the second half of July and the beginning of August as [weather models forecasted below-normal temperatures](#) in much of the eastern half of the country for the first half of August. The Henry Hub natural gas spot price averaged \$2.98/MMBtu in July, almost unchanged compared with the June average.

Figure 8. Actual minus historical average HDD and CDD



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

Regional markets: Natural gas production in the [Marcellus](#) and [Utica](#) shales has risen substantially in recent years, often outpacing the growth of natural gas pipeline capacity. This growth has pushed regional natural gas prices lower relative to the benchmark Henry Hub price. The front-month basis swap (the difference between a regional natural gas price and the price at Henry Hub in Louisiana) for Dominion South in southeast Pennsylvania was $-\$1.20/\text{MMBtu}$ as of August 3 (**Figure 9**), down from the average basis of -50 cents/MMBtu from January through May 2017. This price decrease reflects constrained pipeline takeaway capacity, which drives producers to lower their natural gas prices. Prior increases in takeaway capacity in the region have narrowed the basis. In November 2016, the [Algonquin Incremental Market \(AIM\)](#) expansion began service, and it likely contributed to the basis swap narrowing by more than $\$1.00/\text{MMBtu}$. The Dominion South basis swap could remain near $-\$1.00/\text{MMBtu}$ without new takeaway capacity. However, the Federal Energy Regulatory Commission certified several [new natural gas pipeline projects](#) for the region earlier this year. Once new capacity comes on line, especially from the Atlantic Sunrise and Rover pipeline projects, the basis swap with Henry Hub could narrow.

Figure 9. Dominion South front month basis swap



eia Bloomberg L.P.

Notable forecast changes

- For more information, see the [detailed STEO table of forecast changes](#).

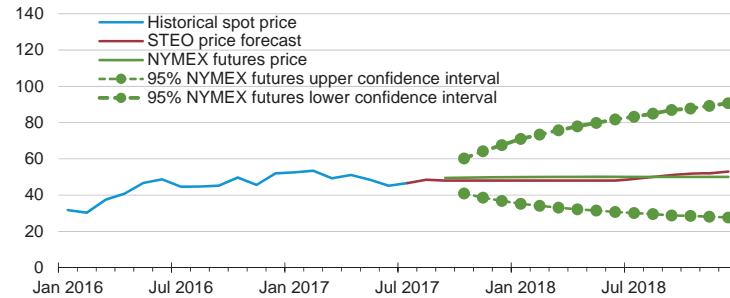
This report was prepared by the U.S. Energy Information Administration (EIA), the statistical and analytical agency within the U.S. Department of Energy. By law, EIA's data, analyses, and forecasts are independent of approval by any other officer or employee of the United States Government. The views 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

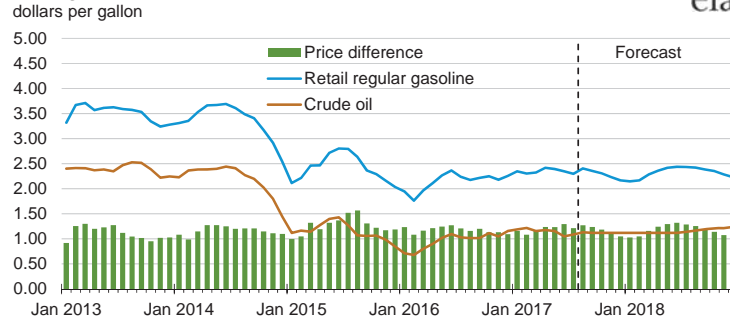
Chart Gallery for August 2017

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



Note: Confidence interval derived from options market information for the 5 trading days ending Aug 3, 2017. Intervals not calculated for months with sparse trading in near-the-money options contracts.
Source: Short-Term Energy Outlook, August 2017.

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

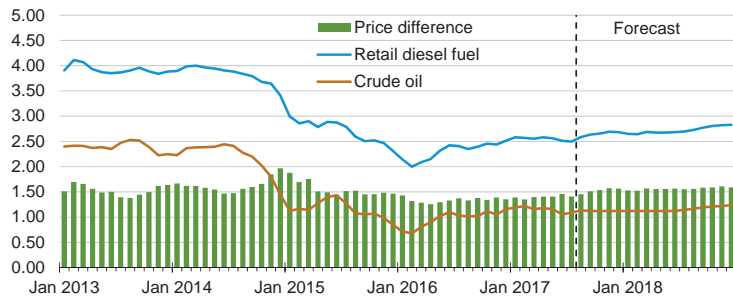


Crude oil price is composite refiner acquisition cost. Retail prices include state and federal taxes.

Source: Short-Term Energy Outlook, August 2017.

U.S. diesel fuel and crude oil prices

dollars per gallon

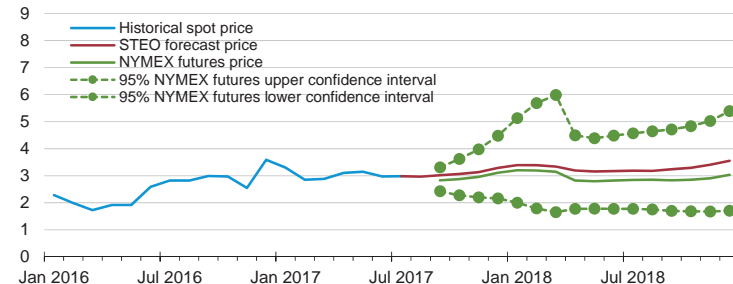


Crude oil price is composite refiner acquisition cost. Retail prices include state and federal taxes.

Source: Short-Term Energy Outlook, August 2017.

Henry Hub natural gas price

dollars per million Btu

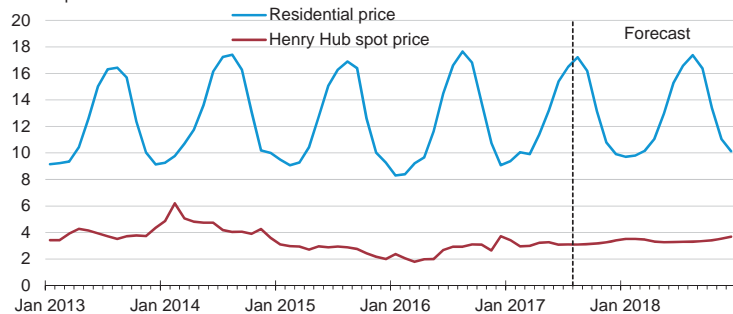


Note: Confidence interval derived from options market information for the 5 trading days ending Aug 3, 2017. Intervals not calculated for months with sparse trading in near-the-money options contracts.

Source: Short-Term Energy Outlook, August 2017.

U.S. natural gas prices

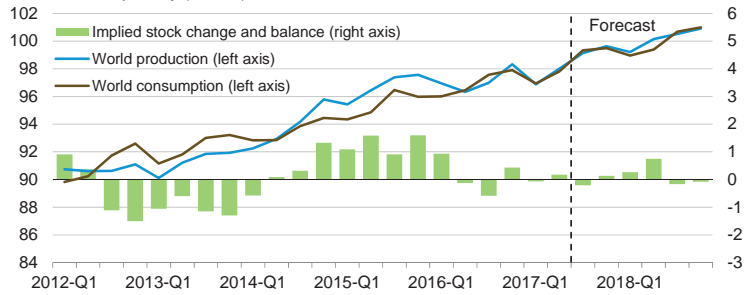
dollars per thousand cubic feet



Source: Short-Term Energy Outlook, August 2017.

World liquid fuels production and consumption balance

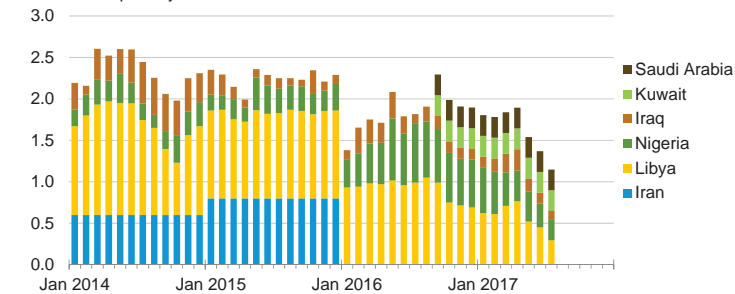
million barrels per day (MMb/d)



Source: Short-Term Energy Outlook, August 2017.

Estimated historical unplanned OPEC crude oil production outages

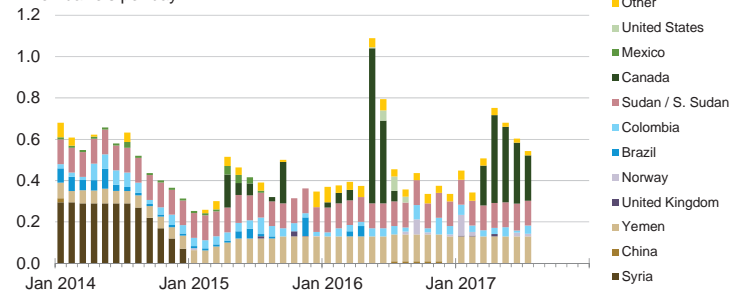
million barrels per day



Source: Short-Term Energy Outlook, August 2017.

Estimated historical unplanned non-OPEC liquid fuels production outages

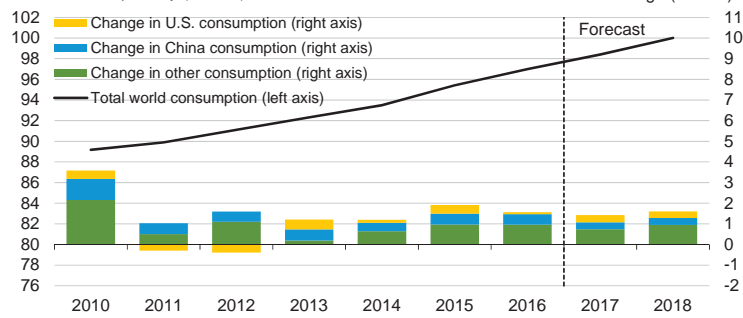
million barrels per day



Source: Short-Term Energy Outlook, August 2017.

World liquid fuels consumption

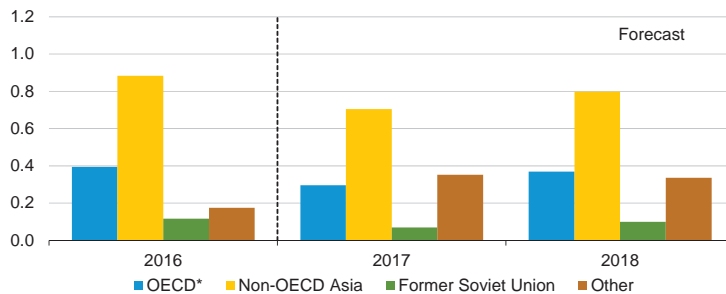
million barrels per day (MMb/d)



Source: Short-Term Energy Outlook, August 2017.

World liquid fuels consumption growth

million barrels per day

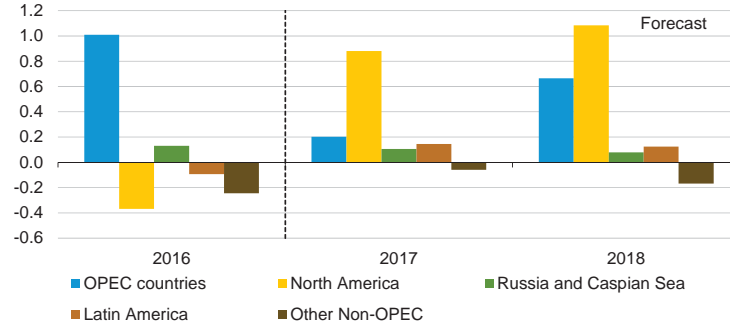


* Countries belonging to the Organization for Economic Cooperation and Development

Source: Short-Term Energy Outlook, August 2017.

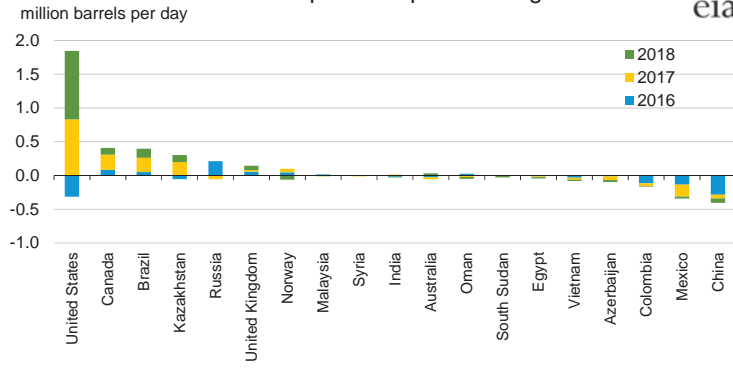
World crude oil and liquid fuels production growth

million barrels per day



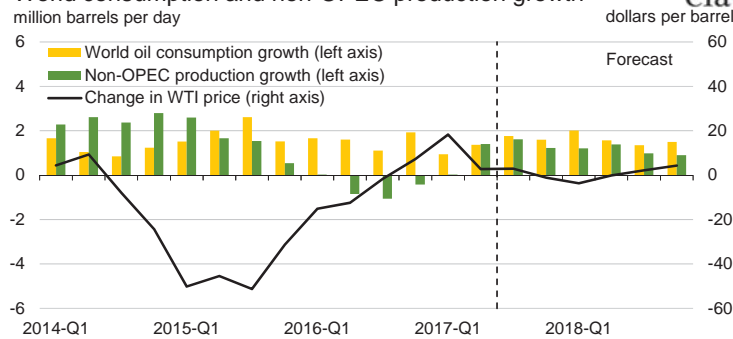
Source: Short-Term Energy Outlook, August 2017.

Non-OPEC crude oil and liquid fuels production growth



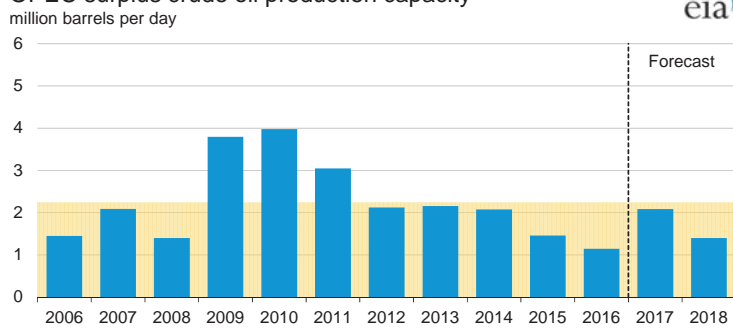
Source: Short-Term Energy Outlook, August 2017.

World consumption and non-OPEC production growth



Source: Short-Term Energy Outlook, August 2017.

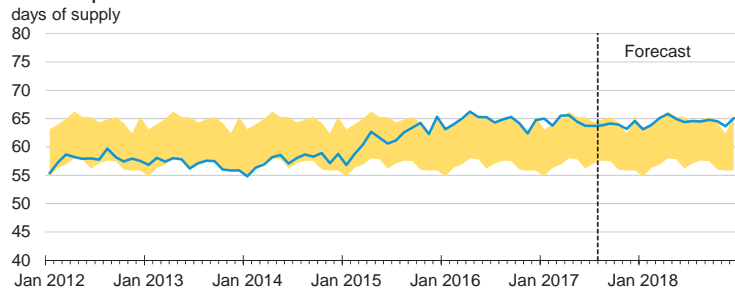
OPEC surplus crude oil production capacity



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

Source: Short-Term Energy Outlook, August 2017.

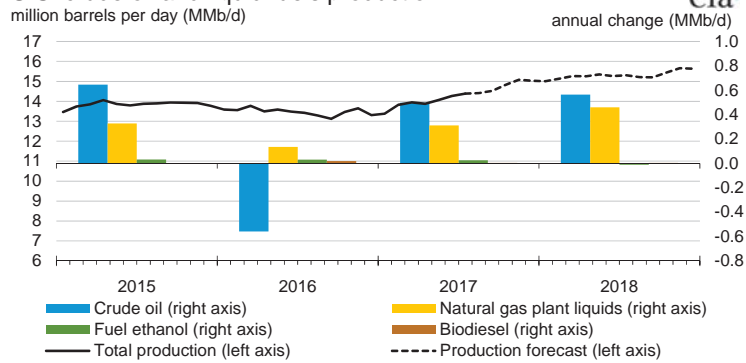
OECD commercial stocks of crude oil and other liquids



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

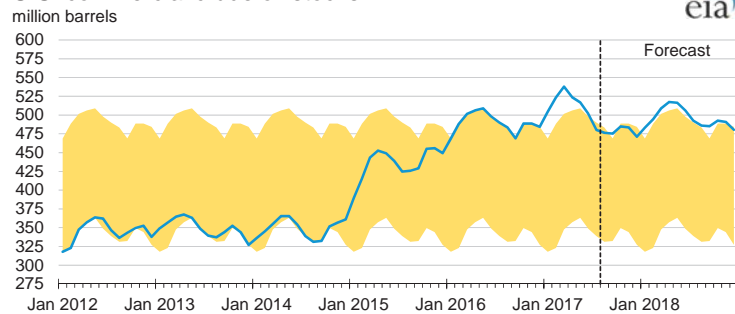
Source: Short-Term Energy Outlook, August 2017.

U.S. crude oil and liquid fuels production



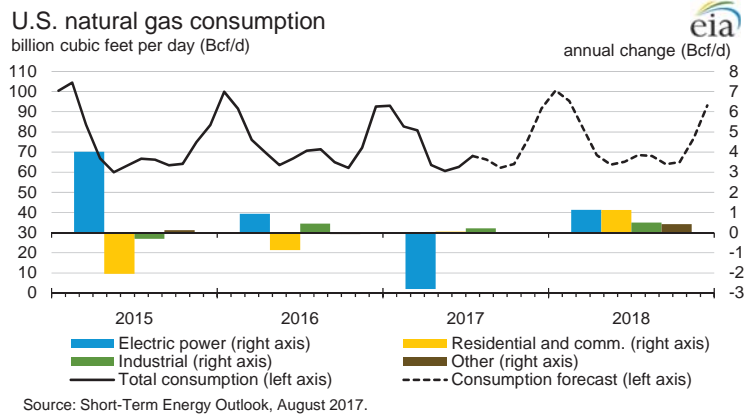
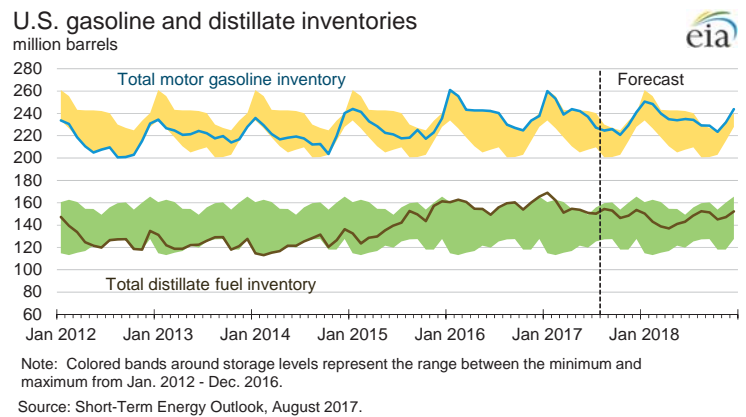
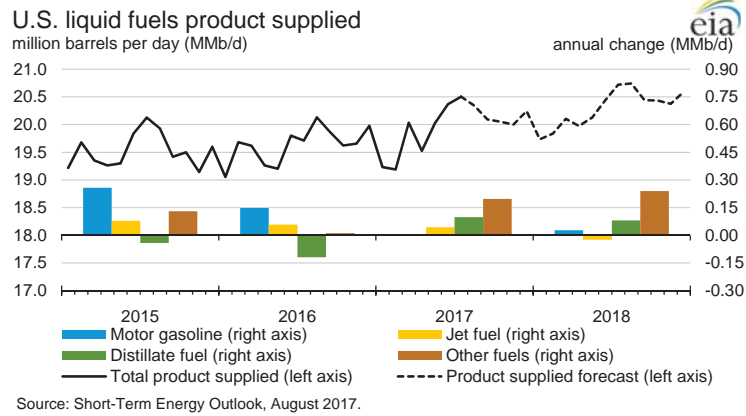
Source: Short-Term Energy Outlook, August 2017.

U.S. commercial crude oil stocks

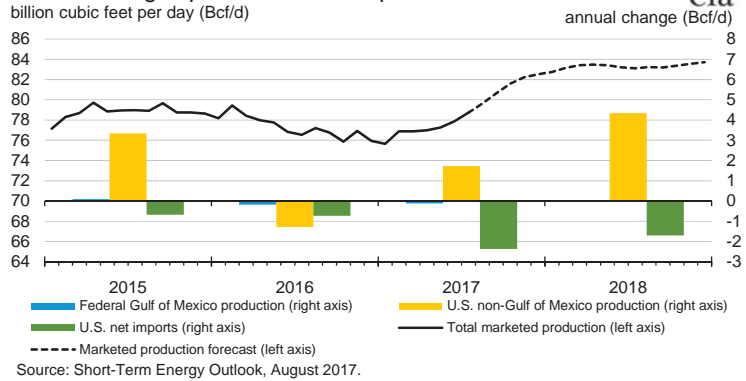


Note: Colored band around storage levels represents the range between the minimum and maximum from Jan. 2012 - Dec. 2016.

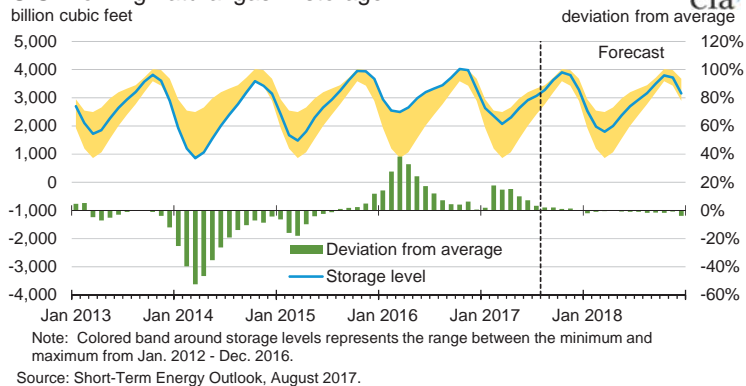
Source: Short-Term Energy Outlook, August 2017.



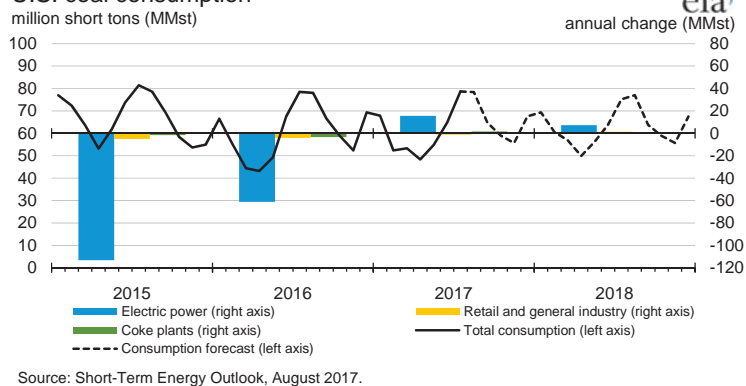
U.S. natural gas production and imports



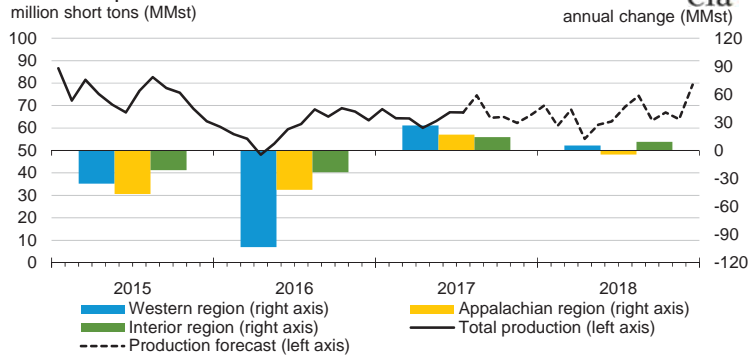
U.S. working natural gas in storage



U.S. coal consumption

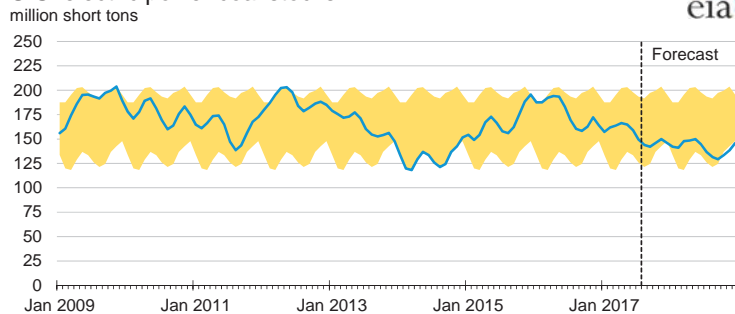


U.S. coal production



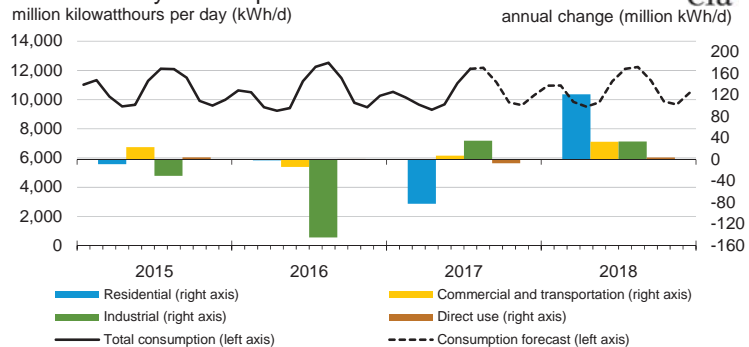
Source: Short-Term Energy Outlook, August 2017.

U.S. electric power coal stocks



Source: Short-Term Energy Outlook, August 2017.

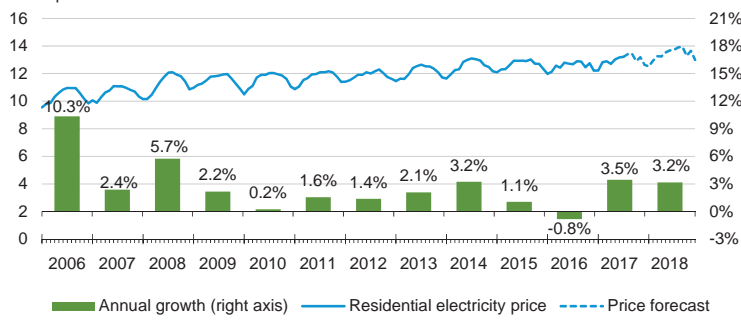
U.S. electricity consumption



Source: Short-Term Energy Outlook, August 2017.

U.S. residential electricity price

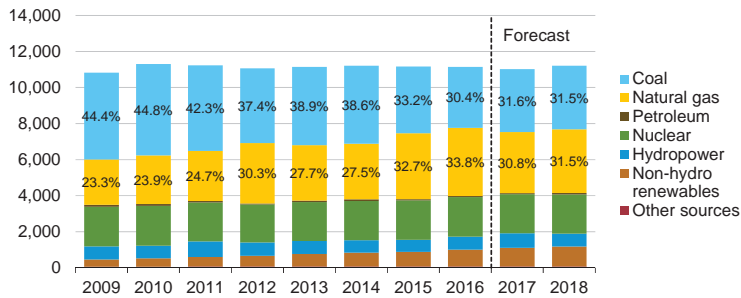
cents per kilowatthour



Source: Short-Term Energy Outlook, August 2017.

U.S. electricity generation by fuel, all sectors

thousand megawatthours per day

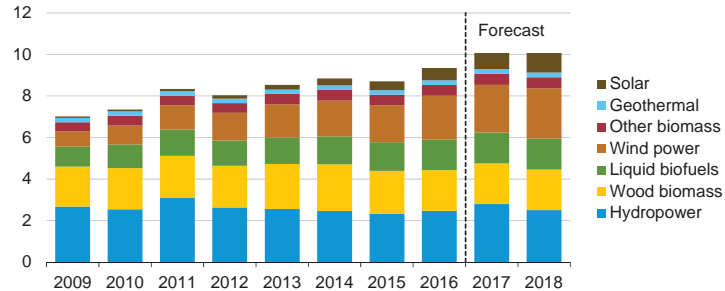


Note: Labels show percentage share of total generation provided by coal and natural gas.

Source: Short-Term Energy Outlook, August 2017.

U.S. renewable energy supply

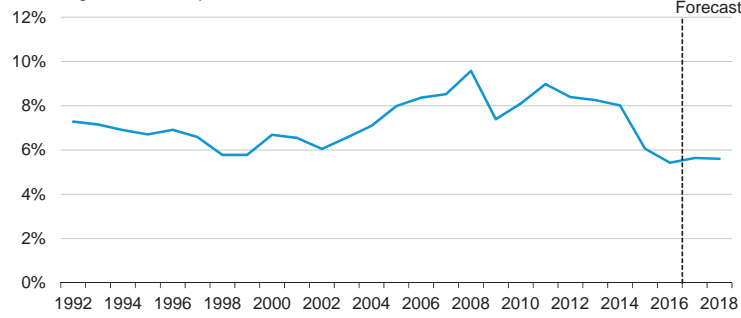
quadrillion British thermal units (Btu)



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.

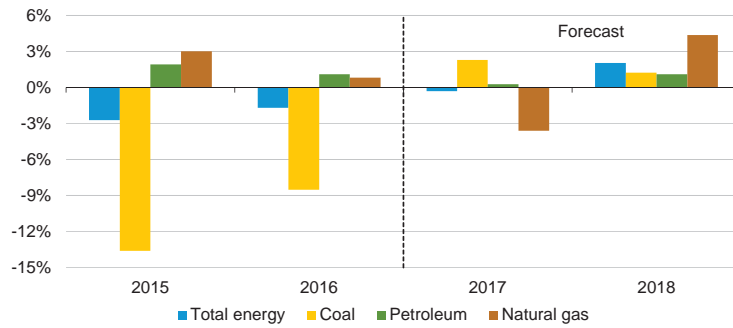
Source: Short-Term Energy Outlook, August 2017.

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



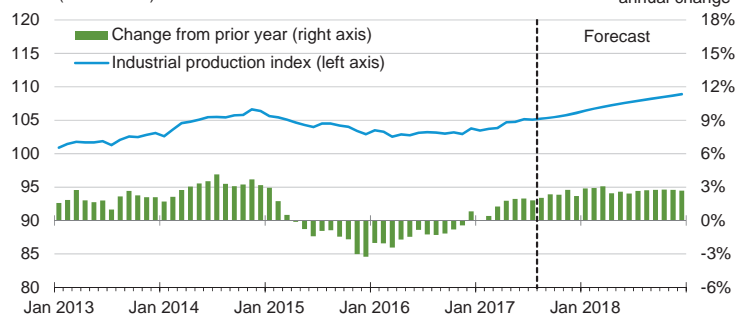
Source: Short-Term Energy Outlook, August 2017.

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



Source: Short-Term Energy Outlook, August 2017.

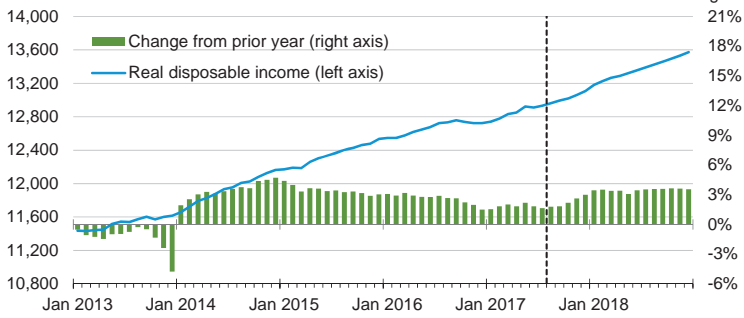
U.S. total industrial production index index (2007 = 100)



Source: Short-Term Energy Outlook, August 2017.

U.S. disposable income

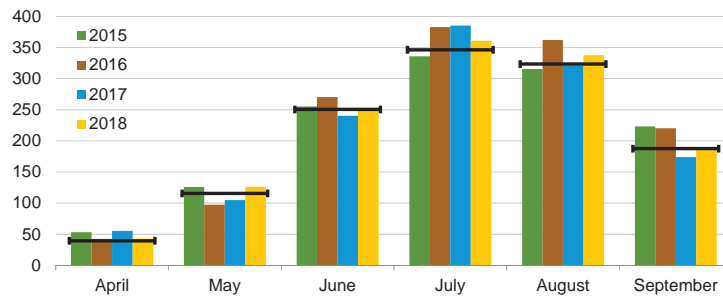
billion 2009 dollars, seasonally adjusted



Source: Short-Term Energy Outlook, August 2017.

U.S. summer cooling degree days

population-weighted

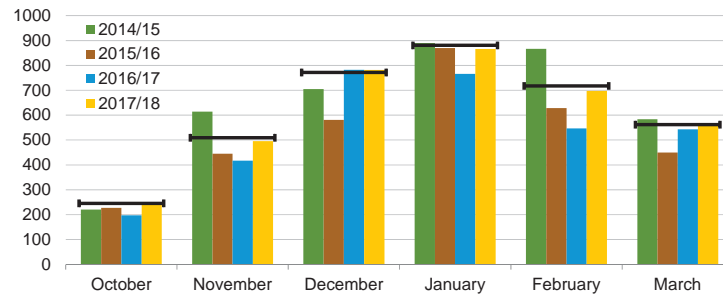


Note: EIA calculations based on from the National Oceanic and Atmospheric Administration data. Horizontal lines indicate each month's prior 10-year average (2007-2016). Projections reflect NOAA's 14-16 month outlook.

Source: Short-Term Energy Outlook, August 2017.

U.S. winter heating degree days

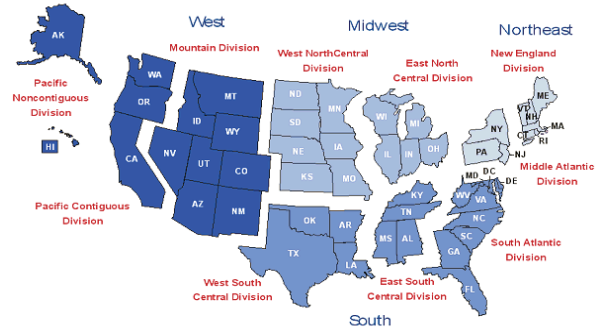
population-weighted



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, August 2017.

U.S. census regions and divisions



Source: Short-Term Energy Outlook, August 2017.

Table SF01. U.S. Motor Gasoline Summer Outlook

U.S. Energy Information Administration | Short-Term Energy Outlook - August 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>1.15</i>	<i>1.14</i>	<i>1.14</i>	5.9	6.5	6.2
Brent Crude Oil Price (Spot)	1.08	1.09	1.09	<i>1.18</i>	<i>1.18</i>	<i>1.18</i>	8.8	8.5	8.7
U.S. Refiner Average Crude Oil Cost	1.01	1.02	1.01	<i>1.13</i>	<i>1.11</i>	<i>1.12</i>	12.2	8.9	10.5
Wholesale Gasoline Price ^b	1.58	1.50	1.54	<i>1.66</i>	<i>1.64</i>	<i>1.65</i>	5.3	9.0	7.1
Wholesale Diesel Fuel Price ^b	1.41	1.45	1.43	<i>1.53</i>	<i>1.60</i>	<i>1.57</i>	9.0	10.5	9.8
Regular Gasoline Retail Price ^c	2.25	2.21	2.23	<i>2.38</i>	<i>2.35</i>	<i>2.37</i>	5.9	6.4	6.2
Diesel Fuel Retail Price ^c	2.30	2.38	2.34	<i>2.55</i>	<i>2.57</i>	<i>2.56</i>	11.0	7.9	9.4
Gasoline Consumption/Supply (million barrels per day)									
Total Consumption	9.437	9.562	9.500	<i>9.474</i>	<i>9.600</i>	<i>9.537</i>	0.4	0.4	0.4
Total Refinery and Blender Net Supply ^d	8.313	8.343	8.328	<i>8.468</i>	<i>8.535</i>	<i>8.502</i>	1.9	2.3	2.1
Fuel Ethanol Blending	0.936	0.958	0.947	<i>0.953</i>	<i>0.971</i>	<i>0.962</i>	1.8	1.4	1.6
Total Stock Withdrawal ^e	0.014	0.164	0.089	<i>0.021</i>	<i>0.121</i>	<i>0.071</i>			
Net Imports ^e	0.175	0.098	0.136	<i>0.032</i>	<i>-0.027</i>	<i>0.002</i>	-82.0	-127.7	-98.5
Refinery Utilization (percent)	89.9	91.6	90.7	<i>93.7</i>	<i>92.7</i>	<i>93.2</i>			
Gasoline Stocks, Including Blending Components (million barrels)									
Beginning	243.3	242.1	243.3	<i>239.0</i>	<i>237.1</i>	<i>239.0</i>			
Ending	242.1	227.0	227.0	<i>237.1</i>	<i>225.9</i>	<i>225.9</i>			
Economic Indicators (annualized billion 2000 dollars)									
Real GDP	16,583	16,727	16,655	<i>16,980</i>	<i>17,103</i>	<i>17,041</i>	2.4	2.2	2.3
Real Income	12,647	12,738	12,693	<i>12,895</i>	<i>12,963</i>	<i>12,929</i>	2.0	1.8	1.9

^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 - August 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	3,172	-4.4%
Price (cents/kWh)	12.09	12.58	13.04	12.92	12.77	13.27	3.9%
Expenditures	\$405	\$394	\$396	\$409	\$423	\$421	-0.6%
New England							
Usage (kWh)	2,189	2,173	1,930	1,982	2,080	2,000	-3.9%
Price (cents/kWh)	15.50	16.04	17.63	18.65	18.44	19.45	5.5%
Expenditures	\$339	\$348	\$340	\$370	\$384	\$389	1.4%
Middle Atlantic							
Usage (kWh)	2,548	2,447	2,234	2,376	2,551	2,363	-7.4%
Price (cents/kWh)	15.63	16.39	16.90	16.37	15.99	16.60	3.8%
Expenditures	\$398	\$401	\$378	\$389	\$408	\$392	-3.8%
East North Central							
Usage (kWh)	3,048	2,618	2,505	2,565	2,903	2,672	-7.9%
Price (cents/kWh)	12.08	12.57	13.24	13.27	12.92	13.39	3.6%
Expenditures	\$368	\$329	\$332	\$340	\$375	\$358	-4.6%
West North Central							
Usage (kWh)	3,547	3,099	3,041	3,075	3,282	3,192	-2.7%
Price (cents/kWh)	11.50	12.25	12.42	12.65	12.78	13.08	2.3%
Expenditures	\$408	\$380	\$378	\$389	\$419	\$417	-0.5%
South Atlantic							
Usage (kWh)	4,002	3,773	3,778	3,999	4,110	3,862	-6.0%
Price (cents/kWh)	11.65	11.76	12.09	12.04	11.88	12.32	3.7%
Expenditures	\$466	\$444	\$457	\$482	\$488	\$476	-2.5%
East South Central							
Usage (kWh)	4,468	4,079	4,034	4,279	4,435	4,048	-8.7%
Price (cents/kWh)	10.36	10.71	11.09	10.91	10.89	11.71	7.5%
Expenditures	\$463	\$437	\$447	\$467	\$483	\$474	-1.9%
West South Central							
Usage (kWh)	4,785	4,509	4,256	4,538	4,609	4,321	-6.3%
Price (cents/kWh)	10.27	10.94	11.46	11.03	10.55	11.03	4.5%
Expenditures	\$491	\$493	\$488	\$501	\$486	\$477	-2.0%
Mountain							
Usage (kWh)	3,441	3,382	3,230	3,298	3,428	3,383	-1.3%
Price (cents/kWh)	11.55	11.97	12.32	12.33	12.08	12.33	2.0%
Expenditures	\$397	\$405	\$398	\$407	\$414	\$417	0.7%
Pacific							
Usage (kWh)	2,079	2,038	2,090	2,051	2,092	2,087	-0.2%
Price (cents/kWh)	13.78	14.47	15.17	15.33	15.98	16.33	2.2%
Expenditures	\$286	\$295	\$317	\$314	\$334	\$341	2.0%

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 - August 2017

	2016				2017				2018				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017	2018
Energy Supply															
Crude Oil Production (a) (million barrels per day)	9.14	8.82	8.64	8.81	9.02	9.20	<i>9.42</i>	<i>9.75</i>	<i>9.89</i>	<i>9.93</i>	<i>9.80</i>	<i>10.03</i>	8.85	<i>9.35</i>	<i>9.91</i>
Dry Natural Gas Production (billion cubic feet per day)	73.77	72.38	71.84	71.20	71.35	72.05	<i>74.11</i>	<i>76.35</i>	<i>77.22</i>	<i>77.43</i>	<i>77.20</i>	<i>77.50</i>	72.29	<i>73.48</i>	<i>77.34</i>
Coal Production (million short tons)	173	161	195	200	197	190	<i>206</i>	<i>193</i>	<i>199</i>	<i>180</i>	<i>207</i>	<i>210</i>	728	<i>786</i>	<i>796</i>
Energy Consumption															
Liquid Fuels (million barrels per day)	19.45	19.42	19.90	19.75	19.49	19.97	<i>20.32</i>	<i>20.10</i>	<i>19.89</i>	<i>20.18</i>	<i>20.64</i>	<i>20.47</i>	19.63	<i>19.97</i>	<i>20.30</i>
Natural Gas (billion cubic feet per day)	89.13	66.62	69.05	75.70	85.57	62.25	<i>65.52</i>	<i>77.30</i>	<i>92.47</i>	<i>65.74</i>	<i>66.89</i>		75.11	<i>72.62</i>	<i>75.79</i>
Coal (b) (million short tons)	166	160	223	181	174	168	<i>222</i>	<i>182</i>	<i>187</i>	<i>170</i>	<i>216</i>	<i>182</i>	730	<i>746</i>	<i>755</i>
Electricity (billion kilowatt hours per day)	10.19	9.96	12.09	9.84	10.11	10.03	<i>11.83</i>	<i>9.92</i>	<i>10.57</i>	<i>10.19</i>	<i>11.89</i>	<i>10.01</i>	10.52	<i>10.48</i>	<i>10.67</i>
Renewables (c) (quadrillion Btu)	2.60	2.59	2.43	2.52	2.75	2.95	<i>2.58</i>	<i>2.58</i>	<i>2.66</i>	<i>2.86</i>	<i>2.67</i>	<i>2.67</i>	10.14	<i>10.87</i>	<i>10.87</i>
Total Energy Consumption (d) (quadrillion Btu)	25.23	22.95	24.76	24.45	25.01	22.83	<i>24.29</i>	<i>24.42</i>	<i>25.55</i>	<i>23.19</i>	<i>24.58</i>	<i>24.72</i>	97.39	<i>96.54</i>	<i>98.05</i>
Energy Prices															
Crude Oil West Texas Intermediate Spot (dollars per barrel)	33.35	45.46	44.85	49.18	51.64	48.15	<i>47.75</i>	<i>48.00</i>	<i>48.00</i>	<i>48.00</i>	<i>49.97</i>	<i>52.31</i>	43.33	<i>48.88</i>	<i>49.58</i>
Natural Gas Henry Hub Spot (dollars per million Btu)	2.00	2.14	2.88	3.04	3.01	3.08	<i>2.99</i>	<i>3.17</i>	<i>3.38</i>	<i>3.17</i>	<i>3.20</i>	<i>3.42</i>	2.51	<i>3.06</i>	<i>3.29</i>
Coal (dollars per million Btu)	2.13	2.13	2.11	2.08	2.08	2.14	<i>2.20</i>	<i>2.17</i>	<i>2.20</i>	<i>2.20</i>	<i>2.23</i>	<i>2.22</i>	2.11	<i>2.15</i>	<i>2.21</i>
Macroeconomic															
Real Gross Domestic Product (billion chained 2009 dollars - SAAR)	16,525	16,583	16,727	16,813	16,873	16,980	<i>17,103</i>	<i>17,208</i>	<i>17,321</i>	<i>17,430</i>	<i>17,534</i>	<i>17,632</i>	16,662	<i>17,041</i>	<i>17,480</i>
Percent change from prior year	1.6	1.3	1.7	2.0	2.1	2.4	<i>2.2</i>	<i>2.3</i>	<i>2.7</i>	<i>2.7</i>	<i>2.5</i>	<i>2.5</i>	1.6	<i>2.3</i>	<i>2.6</i>
GDP Implicit Price Deflator (Index, 2009=100)	110.6	111.3	111.7	112.2	112.8	113.2	<i>113.8</i>	<i>114.4</i>	<i>115.2</i>	<i>115.9</i>	<i>116.5</i>	<i>117.1</i>	111.5	<i>113.6</i>	<i>116.2</i>
Percent change from prior year	1.2	1.2	1.3	1.6	1.9	1.8	<i>1.9</i>	<i>2.0</i>	<i>2.1</i>	<i>2.3</i>	<i>2.4</i>	<i>2.3</i>	1.3	<i>1.9</i>	<i>2.3</i>
Real Disposable Personal Income (billion chained 2009 dollars - SAAR)	12,556	12,647	12,738	12,729	12,783	12,895	<i>12,963</i>	<i>13,061</i>	<i>13,225</i>	<i>13,322</i>	<i>13,426</i>	<i>13,532</i>	12,668	<i>12,925</i>	<i>13,376</i>
Percent change from prior year	3.1	2.8	2.7	1.9	1.8	2.0	<i>1.8</i>	<i>2.6</i>	<i>3.5</i>	<i>3.3</i>	<i>3.6</i>	<i>3.6</i>	2.6	<i>2.0</i>	<i>3.5</i>
Manufacturing Production Index (Index, 2012=100)	102.9	102.6	102.7	103.1	103.7	104.1	<i>104.4</i>	<i>105.0</i>	<i>105.8</i>	<i>106.6</i>	<i>107.2</i>	<i>107.8</i>	102.8	<i>104.3</i>	<i>106.8</i>
Percent change from prior year	0.3	0.1	-0.1	0.5	0.9	1.5	<i>1.7</i>	<i>1.8</i>	<i>2.0</i>	<i>2.3</i>	<i>2.6</i>	<i>2.7</i>	0.2	<i>1.5</i>	<i>2.4</i>
Weather															
U.S. Heating Degree-Days	1,948	480	51	1,397	1,856	427	<i>71</i>	<i>1,526</i>	<i>2,128</i>	<i>481</i>	<i>72</i>	<i>1,518</i>	3,876	<i>3,881</i>	<i>4,199</i>
U.S. Cooling Degree-Days	54	411	965	128	69	401	<i>881</i>	<i>92</i>	<i>45</i>	<i>418</i>	<i>886</i>	<i>102</i>	1,558	<i>1,443</i>	<i>1,452</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 - August 2017

	2016				2017				2018				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017	2018
Crude Oil (dollars per barrel)															
West Texas Intermediate Spot Average	33.35	45.46	44.85	49.18	51.64	48.15	<i>47.75</i>	<i>48.00</i>	<i>48.00</i>	<i>48.00</i>	<i>49.97</i>	<i>52.31</i>	43.33	<i>48.88</i>	<i>49.58</i>
Brent Spot Average	33.89	45.57	45.80	49.25	53.57	49.59	<i>49.70</i>	<i>50.00</i>	<i>50.00</i>	<i>50.00</i>	<i>51.97</i>	<i>54.31</i>	43.74	<i>50.71</i>	<i>51.58</i>
U.S. Imported Average	28.85	40.35	41.19	44.45	47.94	45.28	<i>44.21</i>	<i>44.50</i>	<i>44.50</i>	<i>44.50</i>	<i>46.48</i>	<i>48.84</i>	38.69	<i>45.51</i>	<i>46.03</i>
U.S. Refiner Average Acquisition Cost	30.84	42.23	42.90	46.56	49.91	47.40	<i>46.70</i>	<i>47.00</i>	<i>47.00</i>	<i>47.00</i>	<i>48.97</i>	<i>51.35</i>	40.69	<i>47.72</i>	<i>48.59</i>
U.S. Liquid Fuels (cents per gallon)															
Refiner Prices for Resale															
Gasoline	119	158	150	153	163	166	<i>164</i>	<i>147</i>	<i>147</i>	<i>165</i>	<i>164</i>	<i>152</i>	145	<i>160</i>	<i>157</i>
Diesel Fuel	109	141	145	156	162	153	<i>160</i>	<i>164</i>	<i>161</i>	<i>163</i>	<i>169</i>	<i>175</i>	138	<i>160</i>	<i>167</i>
Heating Oil	99	125	132	146	154	145	<i>150</i>	<i>158</i>	<i>159</i>	<i>153</i>	<i>160</i>	<i>169</i>	124	<i>152</i>	<i>161</i>
Refiner Prices to End Users															
Jet Fuel	107	134	137	149	158	149	<i>154</i>	<i>160</i>	<i>158</i>	<i>157</i>	<i>164</i>	<i>171</i>	132	<i>155</i>	<i>163</i>
No. 6 Residual Fuel Oil (a)	69	89	103	115	128	119	<i>116</i>	<i>117</i>	<i>118</i>	<i>115</i>	<i>120</i>	<i>126</i>	94	<i>120</i>	<i>120</i>
Retail Prices Including Taxes															
Gasoline Regular Grade (b)	190	225	221	223	233	238	<i>235</i>	<i>224</i>	<i>220</i>	<i>241</i>	<i>241</i>	<i>229</i>	215	<i>233</i>	<i>233</i>
Gasoline All Grades (b)	200	235	232	234	244	250	<i>247</i>	<i>235</i>	<i>232</i>	<i>252</i>	<i>253</i>	<i>241</i>	226	<i>244</i>	<i>244</i>
On-highway Diesel Fuel	208	230	238	247	257	255	<i>257</i>	<i>267</i>	<i>266</i>	<i>268</i>	<i>273</i>	<i>282</i>	231	<i>259</i>	<i>272</i>
Heating Oil	195	205	211	233	247	239	<i>242</i>	<i>256</i>	<i>260</i>	<i>249</i>	<i>253</i>	<i>265</i>	210	<i>248</i>	<i>259</i>
Natural Gas															
Henry Hub Spot (dollars per thousand cubic feet)	2.07	2.22	2.99	3.15	3.12	3.19	<i>3.10</i>	<i>3.28</i>	<i>3.50</i>	<i>3.29</i>	<i>3.32</i>	<i>3.54</i>	2.61	<i>3.17</i>	<i>3.41</i>
Henry Hub Spot (dollars per million Btu)	2.00	2.14	2.88	3.04	3.01	3.08	<i>2.99</i>	<i>3.17</i>	<i>3.38</i>	<i>3.17</i>	<i>3.20</i>	<i>3.42</i>	2.51	<i>3.06</i>	<i>3.29</i>
U.S. Retail Prices (dollars per thousand cubic feet)															
Industrial Sector	3.44	2.93	3.63	4.03	4.52	4.06	<i>3.98</i>	<i>4.38</i>	<i>4.81</i>	<i>4.21</i>	<i>4.18</i>	<i>4.63</i>	3.51	<i>4.25</i>	<i>4.47</i>
Commercial Sector	6.84	7.23	8.21	7.49	7.70	8.28	<i>8.66</i>	<i>7.96</i>	<i>7.94</i>	<i>8.41</i>	<i>8.83</i>	<i>8.14</i>	7.26	<i>7.98</i>	<i>8.17</i>
Residential Sector	8.54	11.17	17.01	10.19	9.73	12.84	<i>16.61</i>	<i>10.70</i>	<i>9.86</i>	<i>12.49</i>	<i>16.76</i>	<i>10.93</i>	10.06	<i>11.02</i>	<i>11.07</i>
U.S. Electricity															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	2.13	2.13	2.11	2.08	2.08	2.14	<i>2.20</i>	<i>2.17</i>	<i>2.20</i>	<i>2.20</i>	<i>2.23</i>	<i>2.22</i>	2.11	<i>2.15</i>	<i>2.21</i>
Natural Gas	2.65	2.51	3.00	3.36	3.69	3.35	<i>3.27</i>	<i>3.75</i>	<i>4.24</i>	<i>3.66</i>	<i>3.51</i>	<i>4.04</i>	2.88	<i>3.49</i>	<i>3.82</i>
Residual Fuel Oil (c)	6.15	8.51	9.70	9.08	11.16	10.42	<i>9.75</i>	<i>9.68</i>	<i>9.58</i>	<i>10.20</i>	<i>9.94</i>	<i>10.15</i>	8.41	<i>10.23</i>	<i>9.96</i>
Distillate Fuel Oil	9.00	11.01	11.64	12.14	12.75	14.03	<i>13.45</i>	<i>13.90</i>	<i>14.79</i>	<i>15.63</i>	<i>14.25</i>	<i>14.59</i>	10.86	<i>13.50</i>	<i>14.81</i>
Retail Prices (cents per kilowatthour)															
Industrial Sector	6.42	6.67	7.20	6.67	6.65	6.93	<i>7.53</i>	<i>6.93</i>	<i>6.86</i>	<i>7.12</i>	<i>7.71</i>	<i>7.12</i>	6.75	<i>7.02</i>	<i>7.21</i>
Commercial Sector	10.12	10.34	10.68	10.27	10.38	10.61	<i>10.71</i>	<i>10.42</i>	<i>10.57</i>	<i>10.70</i>	<i>10.84</i>	<i>10.56</i>	10.37	<i>10.54</i>	<i>10.67</i>
Residential Sector	12.20	12.66	12.81	12.45	12.61	12.99	<i>13.35</i>	<i>12.89</i>	<i>12.87</i>	<i>13.50</i>	<i>13.85</i>	<i>13.28</i>	12.55	<i>12.98</i>	<i>13.39</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 - August 2017

	2016				2017				2018				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017	2018
Supply (million barrels per day) (a)															
OECD	26.96	25.87	26.28	26.84	27.00	27.13	<i>27.42</i>	<i>28.18</i>	<i>28.33</i>	<i>28.48</i>	<i>28.40</i>	<i>29.01</i>	26.49	<i>27.44</i>	<i>28.56</i>
U.S. (50 States)	14.92	14.85	14.64	14.79	15.02	15.41	<i>15.80</i>	<i>16.29</i>	<i>16.42</i>	<i>16.64</i>	<i>16.60</i>	<i>16.91</i>	14.80	<i>15.63</i>	<i>16.65</i>
Canada	4.73	3.99	4.70	4.95	4.92	4.74	<i>4.79</i>	<i>4.82</i>	<i>4.85</i>	<i>4.87</i>	<i>4.94</i>	<i>5.02</i>	4.59	<i>4.82</i>	<i>4.92</i>
Mexico	2.56	2.52	2.48	2.39	2.36	2.34	<i>2.29</i>	<i>2.27</i>	<i>2.25</i>	<i>2.24</i>	<i>2.30</i>	<i>2.34</i>	2.49	<i>2.31</i>	<i>2.28</i>
Other OECD	4.74	4.52	4.45	4.70	4.71	4.64	<i>4.55</i>	<i>4.79</i>	<i>4.81</i>	<i>4.73</i>	<i>4.55</i>	<i>4.75</i>	4.60	<i>4.67</i>	<i>4.71</i>
Non-OECD	69.98	70.46	70.71	71.49	69.88	70.88	<i>71.71</i>	<i>71.46</i>	<i>70.89</i>	<i>71.67</i>	<i>72.12</i>	<i>71.90</i>	70.66	<i>70.99</i>	<i>71.65</i>
OPEC	38.76	39.00	39.37	39.83	38.68	39.27	<i>39.89</i>	<i>39.91</i>	<i>39.81</i>	<i>40.03</i>	<i>40.29</i>	<i>40.29</i>	39.24	<i>39.44</i>	<i>40.11</i>
Crude Oil Portion	32.24	32.47	32.76	33.27	32.17	32.27	<i>32.86</i>	<i>32.82</i>	<i>32.73</i>	<i>32.91</i>	<i>33.13</i>	<i>33.08</i>	32.69	<i>32.53</i>	<i>32.96</i>
Other Liquids (b)	6.52	6.53	6.60	6.56	6.51	7.01	<i>7.03</i>	<i>7.09</i>	<i>7.09</i>	<i>7.12</i>	<i>7.16</i>	<i>7.20</i>	6.56	<i>6.91</i>	<i>7.14</i>
Eurasia	14.33	14.09	13.91	14.51	14.42	14.33	<i>14.27</i>	<i>14.29</i>	<i>14.38</i>	<i>14.39</i>	<i>14.37</i>	<i>14.48</i>	14.21	<i>14.33</i>	<i>14.41</i>
China	5.02	4.90	4.79	4.77	4.83	4.82	<i>4.78</i>	<i>4.82</i>	<i>4.71</i>	<i>4.74</i>	<i>4.74</i>	<i>4.78</i>	4.87	<i>4.81</i>	<i>4.74</i>
Other Non-OECD	11.87	12.46	12.65	12.38	11.94	12.46	<i>12.77</i>	<i>12.44</i>	<i>11.98</i>	<i>12.51</i>	<i>12.72</i>	<i>12.35</i>	12.34	<i>12.40</i>	<i>12.39</i>
Total World Supply	96.94	96.33	96.99	98.33	96.88	98.01	<i>99.13</i>	<i>99.64</i>	<i>99.22</i>	<i>100.15</i>	<i>100.52</i>	<i>100.92</i>	97.15	<i>98.42</i>	<i>100.21</i>
Non-OPEC Supply	58.17	57.33	57.62	58.50	58.20	58.73	<i>59.24</i>	<i>59.73</i>	<i>59.41</i>	<i>60.12</i>	<i>60.23</i>	<i>60.63</i>	57.91	<i>58.98</i>	<i>60.10</i>
Consumption (million barrels per day) (c)															
OECD	46.64	46.00	47.28	47.37	46.80	46.51	<i>47.62</i>	<i>47.55</i>	<i>47.35</i>	<i>46.76</i>	<i>47.89</i>	<i>47.96</i>	46.83	<i>47.12</i>	<i>47.49</i>
U.S. (50 States)	19.45	19.42	19.90	19.75	19.49	19.97	<i>20.32</i>	<i>20.10</i>	<i>19.87</i>	<i>20.18</i>	<i>20.64</i>	<i>20.47</i>	19.63	<i>19.98</i>	<i>20.30</i>
U.S. Territories	0.28	0.28	0.28	0.28	0.29	0.29	<i>0.29</i>	<i>0.29</i>	<i>0.31</i>	<i>0.31</i>	<i>0.31</i>	<i>0.31</i>	0.28	<i>0.29</i>	<i>0.31</i>
Canada	2.33	2.32	2.46	2.40	2.35	2.34	<i>2.49</i>	<i>2.47</i>	<i>2.44</i>	<i>2.38</i>	<i>2.49</i>	<i>2.47</i>	2.38	<i>2.41</i>	<i>2.44</i>
Europe	13.63	13.93	14.45	14.20	13.81	14.06	<i>14.60</i>	<i>14.24</i>	<i>14.08</i>	<i>14.14</i>	<i>14.54</i>	<i>14.28</i>	14.05	<i>14.18</i>	<i>14.26</i>
Japan	4.44	3.70	3.79	4.18	4.33	3.54	<i>3.61</i>	<i>3.99</i>	<i>4.19</i>	<i>3.42</i>	<i>3.53</i>	<i>3.91</i>	4.03	<i>3.86</i>	<i>3.76</i>
Other OECD	6.52	6.36	6.40	6.57	6.52	6.30	<i>6.31</i>	<i>6.47</i>	<i>6.46</i>	<i>6.33</i>	<i>6.37</i>	<i>6.53</i>	6.46	<i>6.40</i>	<i>6.42</i>
Non-OECD	49.36	50.46	50.30	50.53	50.15	51.32	<i>51.72</i>	<i>51.95</i>	<i>51.61</i>	<i>52.64</i>	<i>52.80</i>	<i>53.04</i>	50.16	<i>51.29</i>	<i>52.53</i>
Eurasia	4.68	4.61	4.88	4.87	4.74	4.67	<i>4.94</i>	<i>4.93</i>	<i>4.83</i>	<i>4.76</i>	<i>5.04</i>	<i>5.02</i>	4.76	<i>4.82</i>	<i>4.91</i>
Europe	0.69	0.70	0.72	0.72	0.70	0.71	<i>0.73</i>	<i>0.73</i>	<i>0.71</i>	<i>0.72</i>	<i>0.74</i>	<i>0.74</i>	0.71	<i>0.72</i>	<i>0.73</i>
China	12.37	12.73	12.39	12.63	12.74	12.91	<i>12.77</i>	<i>13.07</i>	<i>13.07</i>	<i>13.25</i>	<i>13.10</i>	<i>13.41</i>	12.53	<i>12.87</i>	<i>13.21</i>
Other Asia	12.90	13.11	12.61	13.00	13.02	13.43	<i>13.12</i>	<i>13.51</i>	<i>13.72</i>	<i>13.96</i>	<i>13.42</i>	<i>13.82</i>	12.91	<i>13.27</i>	<i>13.73</i>
Other Non-OECD	18.72	19.31	19.70	19.31	18.95	19.61	<i>20.16</i>	<i>19.72</i>	<i>19.27</i>	<i>19.96</i>	<i>20.51</i>	<i>20.05</i>	19.26	<i>19.61</i>	<i>19.95</i>
Total World Consumption	96.00	96.46	97.57	97.90	96.95	97.83	<i>99.34</i>	<i>99.50</i>	<i>98.96</i>	<i>99.40</i>	<i>100.69</i>	<i>101.00</i>	96.99	<i>98.41</i>	<i>100.02</i>
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	0.14	<i>0.15</i>	<i>0.45</i>	<i>-0.05</i>	<i>-0.43</i>	<i>-0.01</i>	<i>0.48</i>	-0.13	<i>0.18</i>	<i>0.00</i>
Other OECD	0.03	-0.13	-0.10	0.60	-0.47	-0.39	<i>0.02</i>	<i>-0.20</i>	<i>-0.07</i>	<i>-0.11</i>	<i>0.06</i>	<i>-0.13</i>	0.10	<i>-0.26</i>	<i>-0.06</i>
Other Stock Draws and Balance	-0.56	0.54	0.70	-1.21	0.55	0.07	<i>0.04</i>	<i>-0.38</i>	<i>-0.14</i>	<i>-0.21</i>	<i>0.12</i>	<i>-0.26</i>	-0.14	<i>0.07</i>	<i>-0.12</i>
Total Stock Draw	-0.93	0.13	0.59	-0.43	0.06	-0.18	<i>0.21</i>	<i>-0.13</i>	<i>-0.26</i>	<i>-0.75</i>	<i>0.17</i>	<i>0.08</i>	-0.16	<i>-0.01</i>	<i>-0.19</i>
End-of-period Commercial Crude Oil and Other Liquids Inventories															
U.S. Commercial Inventory	1,326	1,352	1,353	1,336	1,341	1,338	<i>1,327</i>	<i>1,292</i>	<i>1,303</i>	<i>1,347</i>	<i>1,354</i>	<i>1,316</i>	1,336	<i>1,292</i>	<i>1,316</i>
OECD Commercial Inventory	2,997	3,037	3,043	2,967	3,011	3,043	<i>3,030</i>	<i>3,013</i>	<i>3,031</i>	<i>3,085</i>	<i>3,086</i>	<i>3,060</i>	2,967	<i>3,013</i>	<i>3,060</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.

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

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

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

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

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

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

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

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

Projections: EIA Regional Short-Term Energy Model.

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

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

	2016				2017				2018				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017	2018
North America	22.22	21.35	21.82	22.14	22.30	22.49	<i>22.88</i>	<i>23.39</i>	<i>23.52</i>	<i>23.75</i>	<i>23.85</i>	<i>24.27</i>	21.88	<i>22.77</i>	<i>23.85</i>
Canada	4.73	3.99	4.70	4.95	4.92	4.74	<i>4.79</i>	<i>4.82</i>	<i>4.85</i>	<i>4.87</i>	<i>4.94</i>	<i>5.02</i>	4.59	<i>4.82</i>	<i>4.92</i>
Mexico	2.56	2.52	2.48	2.39	2.36	2.34	<i>2.29</i>	<i>2.27</i>	<i>2.25</i>	<i>2.24</i>	<i>2.30</i>	<i>2.34</i>	2.49	<i>2.31</i>	<i>2.28</i>
United States	14.92	14.85	14.64	14.79	15.02	15.41	<i>15.80</i>	<i>16.29</i>	<i>16.42</i>	<i>16.64</i>	<i>16.60</i>	<i>16.91</i>	14.80	<i>15.63</i>	<i>16.65</i>
Central and South America	4.72	5.39	5.62	5.29	4.93	5.50	<i>5.75</i>	<i>5.41</i>	<i>5.05</i>	<i>5.62</i>	<i>5.88</i>	<i>5.54</i>	5.26	<i>5.40</i>	<i>5.53</i>
Argentina	0.70	0.68	0.70	0.69	0.67	0.64	<i>0.70</i>	<i>0.68</i>	<i>0.66</i>	<i>0.63</i>	<i>0.69</i>	<i>0.67</i>	0.69	<i>0.67</i>	<i>0.67</i>
Brazil	2.63	3.36	3.63	3.32	2.97	3.56	<i>3.78</i>	<i>3.45</i>	<i>3.10</i>	<i>3.69</i>	<i>3.92</i>	<i>3.59</i>	3.23	<i>3.45</i>	<i>3.58</i>
Colombia	0.98	0.93	0.87	0.87	0.87	0.88	<i>0.86</i>	<i>0.86</i>	<i>0.86</i>	<i>0.88</i>	<i>0.85</i>	<i>0.86</i>	0.91	<i>0.87</i>	<i>0.86</i>
Other Central and S. America	0.42	0.42	0.42	0.42	0.42	0.42	<i>0.41</i>	<i>0.41</i>	<i>0.42</i>	<i>0.42</i>	<i>0.42</i>	<i>0.42</i>	0.42	<i>0.42</i>	<i>0.42</i>
Europe	4.22	4.02	3.92	4.20	4.23	4.13	<i>4.02</i>	<i>4.27</i>	<i>4.27</i>	<i>4.18</i>	<i>3.99</i>	<i>4.16</i>	4.09	<i>4.16</i>	<i>4.15</i>
Norway	2.04	1.95	1.91	2.12	2.10	2.04	<i>2.00</i>	<i>2.09</i>	<i>2.07</i>	<i>1.97</i>	<i>1.93</i>	<i>2.00</i>	2.00	<i>2.06</i>	<i>1.99</i>
United Kingdom	1.13	1.09	1.01	1.03	1.10	1.08	<i>1.02</i>	<i>1.15</i>	<i>1.18</i>	<i>1.21</i>	<i>1.06</i>	<i>1.15</i>	1.06	<i>1.09</i>	<i>1.15</i>
Eurasia	14.33	14.09	13.91	14.51	14.42	14.33	<i>14.27</i>	<i>14.29</i>	<i>14.38</i>	<i>14.39</i>	<i>14.37</i>	<i>14.48</i>	14.21	<i>14.33</i>	<i>14.41</i>
Azerbaijan	0.87	0.87	0.84	0.80	0.79	0.80	<i>0.79</i>	<i>0.78</i>	<i>0.78</i>	<i>0.77</i>	<i>0.76</i>	<i>0.74</i>	0.84	<i>0.79</i>	<i>0.76</i>
Kazakhstan	1.76	1.63	1.57	1.83	1.87	1.88	<i>1.89</i>	<i>1.95</i>	<i>1.99</i>	<i>1.98</i>	<i>1.98</i>	<i>2.05</i>	1.70	<i>1.90</i>	<i>2.00</i>
Russia	11.27	11.17	11.08	11.45	11.32	11.18	<i>11.13</i>	<i>11.10</i>	<i>11.15</i>	<i>11.18</i>	<i>11.17</i>	<i>11.24</i>	11.24	<i>11.18</i>	<i>11.19</i>
Turkmenistan	0.27	0.26	0.26	0.28	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>	0.27	<i>0.28</i>	<i>0.29</i>
Other Eurasia	0.17	0.17	0.16	0.16	0.15	0.18	<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>0.17</i>	<i>0.17</i>
Middle East	1.14	1.14	1.14	1.14	1.07	1.07	<i>1.12</i>	<i>1.11</i>	<i>1.11</i>	<i>1.09</i>	<i>1.07</i>	<i>1.05</i>	1.14	<i>1.09</i>	<i>1.08</i>
Oman	1.02	1.01	1.02	1.02	0.98	0.97	<i>1.01</i>	<i>1.01</i>	<i>0.99</i>	<i>0.97</i>	<i>0.95</i>	<i>0.94</i>	1.02	<i>0.99</i>	<i>0.96</i>
Asia and Oceania	9.71	9.51	9.40	9.37	9.39	9.34	<i>9.30</i>	<i>9.35</i>	<i>9.24</i>	<i>9.25</i>	<i>9.25</i>	<i>9.30</i>	9.49	<i>9.34</i>	<i>9.26</i>
Australia	0.39	0.37	0.40	0.37	0.34	0.35	<i>0.35</i>	<i>0.36</i>	<i>0.37</i>	<i>0.37</i>	<i>0.38</i>	<i>0.40</i>	0.38	<i>0.35</i>	<i>0.38</i>
China	5.02	4.90	4.79	4.77	4.83	4.82	<i>4.78</i>	<i>4.82</i>	<i>4.71</i>	<i>4.74</i>	<i>4.74</i>	<i>4.78</i>	4.87	<i>4.81</i>	<i>4.74</i>
India	0.99	0.99	0.99	0.99	1.01	1.00	<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	0.93	0.93	0.91	<i>0.90</i>	<i>0.89</i>	<i>0.88</i>	<i>0.87</i>	<i>0.85</i>	<i>0.85</i>	0.94	<i>0.91</i>	<i>0.86</i>
Malaysia	0.76	0.75	0.74	0.75	0.75	0.73	<i>0.74</i>	<i>0.74</i>	<i>0.74</i>	<i>0.74</i>	<i>0.74</i>	<i>0.73</i>	0.75	<i>0.74</i>	<i>0.74</i>
Vietnam	0.33	0.33	0.31	0.31	0.30	0.30	<i>0.28</i>	<i>0.28</i>	<i>0.28</i>	<i>0.27</i>	<i>0.27</i>	<i>0.27</i>	0.32	<i>0.29</i>	<i>0.27</i>
Africa	1.83	1.83	1.81	1.85	1.86	1.88	<i>1.89</i>	<i>1.91</i>	<i>1.83</i>	<i>1.83</i>	<i>1.82</i>	<i>1.82</i>	1.83	<i>1.88</i>	<i>1.83</i>
Egypt	0.70	0.69	0.69	0.69	0.68	0.68	<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>
South Sudan	0.15	0.16	0.15	0.15	0.15	0.15	<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	58.17	57.33	57.62	58.50	58.20	58.73	<i>59.24</i>	<i>59.73</i>	<i>59.41</i>	<i>60.12</i>	<i>60.23</i>	<i>60.63</i>	57.91	<i>58.98</i>	<i>60.10</i>
OPEC non-crude liquids	6.52	6.53	6.60	6.56	6.51	7.01	<i>7.03</i>	<i>7.09</i>	<i>7.09</i>	<i>7.12</i>	<i>7.16</i>	<i>7.20</i>	6.56	<i>6.91</i>	<i>7.14</i>
Non-OPEC + OPEC non-crude	64.69	63.86	64.22	65.06	64.71	65.74	<i>66.27</i>	<i>66.82</i>	<i>66.49</i>	<i>67.24</i>	<i>67.39</i>	<i>67.83</i>	64.46	<i>65.89</i>	<i>67.24</i>
Unplanned non-OPEC Production Outages	0.38	0.76	0.42	0.34	0.43	0.68	<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, Equatorial Guinea, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, Venezuela.

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

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

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

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

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

Projections: EIA Regional Short-Term Energy Model.

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

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

	2016				2017				2018				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017	2018
Crude Oil															
Algeria	1.05	1.04	1.05	1.05	1.04	1.03	-	-	-	-	-	-	1.05	-	-
Angola	1.78	1.79	1.79	1.64	1.64	1.66	-	-	-	-	-	-	1.75	-	-
Ecuador	0.54	0.55	0.55	0.55	0.54	0.52	-	-	-	-	-	-	0.55	-	-
Equatorial Guinea	0.16	0.16	0.16	0.16	0.16	0.13	0.14	-	-	-	-	-	0.16	-	-
Gabon	0.21	0.21	0.21	0.21	0.19	0.20	-	-	-	-	-	-	0.21	-	-
Iran	3.25	3.61	3.67	3.73	3.80	3.81	-	-	-	-	-	-	3.57	-	-
Iraq	4.29	4.39	4.43	4.61	4.46	4.44	-	-	-	-	-	-	4.43	-	-
Kuwait	2.88	2.79	2.91	2.92	2.74	2.71	-	-	-	-	-	-	2.87	-	-
Libya	0.35	0.31	0.29	0.58	0.65	0.72	-	-	-	-	-	-	0.38	-	-
Nigeria	1.73	1.44	1.28	1.44	1.38	1.49	-	-	-	-	-	-	1.47	-	-
Qatar	0.66	0.68	0.66	0.66	0.72	0.61	-	-	-	-	-	-	0.67	-	-
Saudi Arabia	10.20	10.33	10.60	10.55	9.98	10.05	-	-	-	-	-	-	10.42	-	-
United Arab Emirates	2.85	2.93	3.06	3.09	2.92	2.90	-	-	-	-	-	-	2.98	-	-
Venezuela	2.30	2.23	2.11	2.07	1.99	1.97	-	-	-	-	-	-	2.18	-	-
OPEC Total	32.24	32.47	32.76	33.27	32.17	32.27	32.86	32.82	32.73	32.91	33.13	33.08	32.69	32.53	32.96
Other Liquids (a)	6.52	6.53	6.60	6.56	6.51	7.01	7.03	7.09	7.09	7.12	7.16	7.20	6.56	6.91	7.14
Total OPEC Supply	38.76	39.00	39.37	39.83	38.68	39.27	39.89	39.91	39.81	40.03	40.29	40.29	39.24	39.44	40.11
Crude Oil Production Capacity															
Africa	5.27	4.96	4.78	5.09	5.05	5.24	5.64	5.66	5.51	5.48	5.47	5.48	5.03	5.40	5.49
Middle East	25.54	25.95	26.27	26.56	26.78	26.69	26.72	26.74	26.73	26.37	26.53	26.55	26.08	26.73	26.55
South America	2.84	2.78	2.66	2.62	2.53	2.50	2.47	2.46	2.40	2.35	2.32	2.25	2.73	2.49	2.33
OPEC Total	33.66	33.69	33.72	34.27	34.36	34.43	34.83	34.86	34.64	34.21	34.33	34.28	33.84	34.62	34.36
Surplus Crude Oil Production Capacity															
Africa	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Middle East	1.42	1.22	0.95	1.00	2.17	2.17	1.96	2.04	1.91	1.30	1.20	1.20	1.15	2.08	1.40
South America	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEC Total	1.42	1.22	0.95	1.00	2.19	2.17	1.96	2.04	1.91	1.30	1.20	1.20	1.15	2.09	1.40
Unplanned OPEC Production Outages	2.09	2.44	2.34	1.93	1.81	1.60	n/a	n/a	n/a	n/a	n/a	n/a	2.20	n/a	n/a

- = no data available

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

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

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

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

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

Projections: EIA Regional Short-Term Energy Model.

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

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

	2016				2017				2018				2016	2017	2018
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
North America	23.84	23.77	24.38	24.19	23.81	24.26	24.71	24.48	24.23	24.49	25.04	24.86	24.05	24.32	24.66
Canada	2.33	2.32	2.46	2.40	2.35	2.34	2.49	2.47	2.44	2.38	2.49	2.47	2.38	2.41	2.44
Mexico	2.05	2.02	2.01	2.03	1.96	1.93	1.89	1.90	1.90	1.92	1.89	1.90	2.03	1.92	1.90
United States	19.45	19.42	19.90	19.75	19.49	19.97	20.32	20.10	19.87	20.18	20.64	20.47	19.63	19.98	20.30
Central and South America	7.04	7.20	7.30	7.29	7.03	7.14	7.29	7.28	6.98	7.12	7.25	7.25	7.21	7.19	7.15
Brazil	2.87	2.93	3.00	3.00	2.86	2.87	2.96	2.98	2.80	2.82	2.91	2.93	2.95	2.92	2.86
Europe	14.32	14.62	15.16	14.91	14.51	14.77	15.33	14.96	14.79	14.85	15.28	15.01	14.76	14.90	14.99
Eurasia	4.68	4.61	4.88	4.87	4.74	4.67	4.94	4.93	4.83	4.76	5.04	5.02	4.76	4.82	4.91
Russia	3.54	3.49	3.69	3.68	3.58	3.54	3.74	3.73	3.66	3.61	3.83	3.81	3.60	3.65	3.73
Middle East	8.33	8.74	9.10	8.59	8.45	9.01	9.50	8.92	8.72	9.28	9.77	9.17	8.69	8.97	9.24
Asia and Oceania	33.64	33.35	32.65	33.84	34.10	33.69	33.34	34.59	34.97	34.47	33.94	35.21	33.37	33.93	34.65
China	12.37	12.73	12.39	12.63	12.74	12.91	12.77	13.07	13.07	13.25	13.10	13.41	12.53	12.87	13.21
Japan	4.44	3.70	3.79	4.18	4.33	3.54	3.61	3.99	4.19	3.42	3.53	3.91	4.03	3.86	3.76
India	4.59	4.56	4.17	4.53	4.51	4.67	4.48	4.84	5.03	5.01	4.59	4.97	4.46	4.63	4.90
Africa	4.15	4.18	4.10	4.21	4.29	4.29	4.23	4.34	4.43	4.42	4.37	4.48	4.16	4.29	4.43
Total OECD Liquid Fuels Consumption	46.64	46.00	47.28	47.37	46.80	46.51	47.62	47.55	47.35	46.76	47.89	47.96	46.83	47.12	47.49
Total non-OECD Liquid Fuels Consumption	49.36	50.46	50.30	50.53	50.15	51.32	51.72	51.95	51.61	52.64	52.80	53.04	50.16	51.29	52.53
Total World Liquid Fuels Consumption	96.00	96.46	97.57	97.90	96.95	97.83	99.34	99.50	98.96	99.40	100.69	101.00	96.99	98.41	100.02
Oil-weighted Real Gross Domestic Product (a)															
World Index, 2010 Q1 = 100	119.7	120.4	121.2	122.1	123.0	123.8	124.6	125.6	126.5	127.6	128.5	129.6	120.9	124.3	128.1
Percent change from prior year	2.2	2.2	2.4	2.5	2.7	2.9	2.8	2.8	2.9	3.1	3.1	3.1	2.4	2.8	3.1
OECD Index, 2010 Q1 = 100	111.9	112.3	113.0	113.7	114.2	114.8	115.5	116.1	116.7	117.4	118.0	118.6	112.7	115.1	117.7
Percent change from prior year	1.7	1.6	1.7	2.0	2.1	2.2	2.2	2.1	2.2	2.2	2.2	2.2	1.7	2.2	2.2
Non-OECD Index, 2010 Q1 = 100	129.4	130.2	131.4	132.7	133.8	135.0	136.0	137.5	138.8	140.5	141.7	143.4	130.9	135.6	141.1
Percent change from prior year	2.9	3.0	3.2	3.2	3.4	3.6	3.5	3.7	3.7	4.1	4.2	4.3	3.1	3.6	4.1
Real U.S. Dollar Exchange Rate (a)															
Index, January 2010 = 100	128.72	127.98	128.46	131.61	132.29	131.11	132.25	133.73	134.77	135.44	135.60	135.85	129.19	132.35	135.41
Percent change from prior year	8.0	7.1	4.6	5.6	2.8	2.4	3.0	1.6	1.9	3.3	2.5	1.6	6.3	2.4	2.3

- = no data available

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

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

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

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

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.**Historical data:** Latest data available from Energy Information Administration international energy statistics.

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

Projections: EIA Regional Short-Term Energy Model.

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

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

	2016				2017				2018				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017	2018
Supply (million barrels per day)															
Crude Oil Supply															
Domestic Production (a)	9.14	8.82	8.64	8.81	9.02	9.20	9.42	9.75	9.89	9.93	9.80	10.03	8.85	9.35	9.91
Alaska	0.51	0.49	0.45	0.51	0.52	0.49	0.43	0.49	0.51	0.48	0.43	0.49	0.49	0.48	0.48
Federal Gulf of Mexico (b)	1.59	1.57	1.56	1.67	1.76	1.68	1.63	1.75	1.87	1.88	1.77	1.87	1.60	1.70	1.85
Lower 48 States (excl GOM)	7.04	6.76	6.63	6.63	6.74	7.03	7.36	7.51	7.51	7.57	7.60	7.67	6.76	7.16	7.59
Crude Oil Net Imports (c)	7.46	7.19	7.45	7.33	7.24	7.26	7.09	6.15	6.21	6.76	6.57	5.92	7.36	6.93	6.36
SPR Net Withdrawals	0.00	0.00	0.00	0.00	0.04	0.11	0.03	0.06	0.06	0.06	0.06	0.06	0.00	0.06	0.06
Commercial Inventory Net Withdrawals	-0.57	0.04	0.31	-0.17	-0.60	0.40	0.29	0.05	-0.42	0.03	0.23	0.05	-0.10	0.04	-0.03
Crude Oil Adjustment (d)	-0.02	0.17	0.12	0.09	0.21	0.14	0.10	0.15	0.19	0.19	0.21	0.15	0.09	0.15	0.19
Total Crude Oil Input to Refineries	16.00	16.22	16.53	16.06	15.91	17.10	16.93	16.16	15.93	16.97	16.87	16.22	16.20	16.53	16.50
Other Supply															
Refinery Processing Gain	1.07	1.10	1.15	1.11	1.09	1.12	1.13	1.09	1.06	1.10	1.11	1.09	1.11	1.11	1.09
Natural Gas Plant Liquids Production	3.38	3.57	3.46	3.49	3.54	3.72	3.85	4.05	4.11	4.21	4.29	4.39	3.48	3.79	4.25
Renewables and Oxygenate Production (e)	1.12	1.13	1.17	1.18	1.16	1.15	1.17	1.18	1.14	1.15	1.16	1.15	1.15	1.16	1.15
Fuel Ethanol Production	0.99	0.97	1.01	1.02	1.03	1.00	1.03	1.03	1.01	1.01	1.02	1.02	1.00	1.02	1.01
Petroleum Products Adjustment (f)	0.21	0.22	0.22	0.21	0.21	0.22	0.23	0.23	0.23	0.25	0.24	0.24	0.22	0.22	0.24
Product Net Imports (c)	-2.48	-2.51	-2.31	-2.65	-2.96	-2.98	-2.82	-2.94	-2.87	-2.98	-2.74	-2.99	-2.49	-2.92	-2.90
Hydrocarbon Gas Liquids	-1.00	-1.10	-0.93	-1.12	-1.20	-1.20	-1.31	-1.45	-1.38	-1.43	-1.45	-1.55	-1.04	-1.29	-1.45
Unfinished Oils	0.30	0.41	0.37	0.33	0.37	0.30	0.38	0.33	0.37	0.41	0.43	0.32	0.36	0.34	0.38
Other HC/Oxygenates	-0.10	-0.08	-0.05	-0.05	-0.12	-0.09	-0.05	-0.05	-0.09	-0.06	-0.04	-0.04	-0.07	-0.08	-0.06
Motor Gasoline Blend Comp.	0.34	0.65	0.59	0.51	0.43	0.62	0.44	0.46	0.46	0.65	0.48	0.46	0.52	0.49	0.51
Finished Motor Gasoline	-0.56	-0.47	-0.49	-0.76	-0.66	-0.59	-0.47	-0.64	-0.75	-0.63	-0.42	-0.64	-0.57	-0.59	-0.61
Jet Fuel	-0.03	-0.04	-0.02	-0.03	-0.04	-0.06	-0.02	-0.01	-0.01	0.03	0.04	-0.01	-0.03	-0.03	0.01
Distillate Fuel Oil	-0.85	-1.21	-1.13	-0.99	-1.01	-1.29	-1.14	-0.99	-0.91	-1.22	-1.16	-0.94	-1.04	-1.11	-1.06
Residual Fuel Oil	-0.06	-0.06	-0.07	-0.06	-0.10	-0.10	-0.09	-0.07	-0.06	-0.13	-0.09	-0.09	-0.06	-0.09	-0.09
Other Oils (g)	-0.52	-0.62	-0.58	-0.48	-0.61	-0.57	-0.56	-0.50	-0.49	-0.59	-0.52	-0.50	-0.55	-0.56	-0.52
Product Inventory Net Withdrawals	0.17	-0.32	-0.32	0.35	0.53	-0.37	-0.17	0.34	0.30	-0.52	-0.30	0.36	-0.03	0.08	-0.04
Total Supply	19.47	19.42	19.90	19.75	19.50	19.97	20.32	20.10	19.89	20.18	20.64	20.47	19.64	19.97	20.30
Consumption (million barrels per day)															
Hydrocarbon Gas Liquids	2.73	2.25	2.40	2.59	2.79	2.42	2.45	2.83	3.02	2.62	2.75	3.06	2.49	2.62	2.86
Unfinished Oils	0.01	-0.06	-0.05	-0.03	0.02	0.02	-0.02	0.01	0.00	-0.03	-0.03	0.01	-0.03	0.01	-0.01
Motor Gasoline	9.09	9.44	9.56	9.22	8.95	9.47	9.60	9.29	8.96	9.52	9.62	9.31	9.33	9.33	9.36
Fuel Ethanol blended into Motor Gasoline	0.91	0.94	0.96	0.94	0.89	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	1.60	1.70	1.69	1.61	1.52	1.66	1.70	1.62	1.61	1.65	1.63
Distillate Fuel Oil	3.90	3.80	3.79	4.02	3.95	3.92	3.99	4.04	4.10	3.99	4.00	4.13	3.88	3.98	4.06
Residual Fuel Oil	0.31	0.40	0.36	0.35	0.37	0.36	0.33	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	1.83	2.08	2.26	2.02	1.93	2.10	2.27	2.03	2.00	2.05	2.08
Total Consumption	19.45	19.42	19.90	19.75	19.49	19.97	20.32	20.10	19.89	20.18	20.64	20.47	19.63	19.97	20.30
Total Petroleum and Other Liquids Net Imports	4.97	4.68	5.15	4.68	4.29	4.29	4.27	3.21	3.33	3.78	3.83	2.93	4.87	4.01	3.47
End-of-period Inventories (million barrels)															
Commercial Inventory															
Crude Oil (excluding SPR)	501.5	498.0	469.1	484.3	537.9	501.8	475.4	471.1	508.9	506.3	485.3	480.5	484.3	471.1	480.5
Hydrocarbon Gas Liquids	154.4	211.8	251.6	203.5	151.5	196.2	230.7	187.6	156.5	206.5	240.9	197.2	203.5	187.6	197.2
Unfinished Oils	91.4	86.7	83.3	80.6	89.3	89.0	86.3	79.8	89.7	88.7	86.2	79.6	80.6	79.8	79.6
Other HC/Oxygenates	28.2	27.7	27.1	28.4	32.6	28.9	27.7	28.4	30.1	29.1	28.4	29.0	28.4	28.4	29.0
Total Motor Gasoline	243.3	242.1	227.0	237.7	239.0	237.1	225.9	241.1	240.0	234.9	229.1	243.9	237.7	241.1	243.9
Finished Motor Gasoline	26.5	24.9	25.1	28.6	21.7	22.5	26.1	27.9	25.2	23.9	24.3	25.9	28.6	27.9	25.9
Motor Gasoline Blend Comp.	216.9	217.2	201.9	209.1	217.2	214.6	199.8	213.2	214.8	211.1	204.7	218.0	209.1	213.2	218.0
Jet Fuel	43.8	40.4	44.7	42.8	42.3	40.9	42.1	40.0	40.0	41.5	43.1	40.9	42.8	40.0	40.9
Distillate Fuel Oil	160.6	149.2	160.4	165.5	151.1	150.9	153.0	153.6	138.9	143.1	151.3	152.2	165.5	153.6	152.2
Residual Fuel Oil	44.5	40.3	38.8	41.5	40.8	36.4	35.3	37.2	40.0	40.7	39.4	39.8	41.5	37.2	39.8
Other Oils (g)	58.4	55.6	50.5	51.3	56.6	57.1	51.0	53.3	58.7	56.6	50.7	53.1	51.3	53.3	53.1
Total Commercial Inventory	1,326	1,352	1,353	1,336	1,341	1,338	1,327	1,292	1,303	1,347	1,354	1,316	1,336	1,292	1,316
Crude Oil in SPR	695	695	695	695	692	682	679	673	667	661	655	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 - August 2017

	2016				2017				2018				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017	2018
HGL Production															
Natural Gas Processing Plants															
Ethane	1.20	1.34	1.19	1.29	1.33	1.40	1.45	1.61	1.69	1.72	1.76	1.84	1.25	1.45	1.76
Propane	1.15	1.17	1.17	1.15	1.16	1.22	1.24	1.27	1.28	1.30	1.31	1.34	1.16	1.22	1.31
Butanes	0.63	0.63	0.64	0.63	0.63	0.66	0.68	0.69	0.69	0.71	0.72	0.72	0.63	0.66	0.71
Natural Gasoline (Pentanes Plus)	0.41	0.43	0.46	0.43	0.41	0.45	0.48	0.47	0.45	0.48	0.50	0.49	0.43	0.45	0.48
Refinery and Blender Net Production															
Ethane/Ethylene	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00
Propane/Propylene	0.58	0.60	0.58	0.58	0.57	0.60	0.60	0.59	0.58	0.61	0.60	0.59	0.58	0.59	0.60
Butanes/Butylenes	-0.11	0.26	0.20	-0.20	-0.09	0.27	0.19	-0.17	-0.06	0.25	0.18	-0.18	0.04	0.05	0.05
Renewable Fuels and Oxygenate Plant Net Production															
Natural Gasoline (Pentanes Plus)	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02
HGL Net Imports															
Ethane	-0.08	-0.09	-0.10	-0.11	-0.15	-0.18	-0.24	-0.28	-0.31	-0.31	-0.32	-0.34	-0.09	-0.21	-0.32
Propane/Propylene	-0.65	-0.68	-0.56	-0.77	-0.79	-0.71	-0.68	-0.80	-0.74	-0.74	-0.72	-0.84	-0.67	-0.74	-0.76
Butanes/Butylenes	-0.07	-0.12	-0.08	-0.10	-0.09	-0.13	-0.17	-0.15	-0.10	-0.16	-0.16	-0.12	-0.09	-0.13	-0.14
Natural Gasoline (Pentanes Plus)	-0.20	-0.21	-0.19	-0.15	-0.18	-0.18	-0.23	-0.22	-0.23	-0.22	-0.25	-0.24	-0.19	-0.20	-0.24
HGL Refinery and Blender Net Inputs															
Butanes/Butylenes	0.43	0.28	0.32	0.52	0.43	0.30	0.32	0.48	0.41	0.30	0.32	0.49	0.39	0.38	0.38
Natural Gasoline (Pentanes Plus)	0.14	0.15	0.14	0.14	0.16	0.17	0.16	0.16	0.15	0.16	0.16	0.16	0.15	0.16	0.16
HGL Consumption															
Ethane/Ethylene	1.10	1.08	1.11	1.13	1.18	1.18	1.23	1.35	1.37	1.39	1.48	1.53	1.11	1.24	1.44
Propane/Propylene	1.41	0.88	0.98	1.18	1.39	0.93	0.95	1.19	1.39	0.91	0.97	1.22	1.11	1.11	1.12
Butanes/Butylenes	0.18	0.25	0.24	0.17	0.12	0.21	0.21	0.21	0.20	0.26	0.24	0.25	0.21	0.19	0.24
Natural Gasoline (Pentanes Plus)	0.04	0.04	0.07	0.11	0.10	0.10	0.07	0.07	0.05	0.06	0.06	0.07	0.07	0.08	0.06
HGL Inventories (million barrels)															
Ethane/Ethylene	33.76	45.19	50.71	53.65	52.99	57.13	57.23	57.16	56.24	59.40	57.44	56.78	45.86	56.14	57.47
Propane/Propylene	66.38	85.18	103.83	84.10	43.98	60.61	80.25	68.17	43.94	67.56	87.95	75.65	84.10	68.17	75.65
Butanes/Butylenes	32.39	54.10	73.35	40.33	31.68	57.30	72.47	43.02	35.37	57.86	73.51	44.06	40.33	43.02	44.06
Natural Gasoline (Pentanes Plus)	20.40	20.94	24.86	25.03	21.49	19.95	21.10	20.55	19.67	21.44	22.41	22.17	25.03	20.55	22.17
Refinery and Blender Net Inputs															
Crude Oil	16.00	16.22	16.53	16.06	15.91	17.10	16.93	16.16	15.93	16.97	16.87	16.22	16.20	16.53	16.50
Hydrocarbon Gas Liquids	0.57	0.43	0.46	0.66	0.58	0.47	0.48	0.64	0.56	0.46	0.48	0.65	0.53	0.54	0.54
Other Hydrocarbons/Oxygenates	1.15	1.22	1.23	1.20	1.16	1.23	1.28	1.27	1.19	1.27	1.30	1.28	1.20	1.24	1.26
Unfinished Oils	0.19	0.53	0.46	0.39	0.25	0.29	0.43	0.39	0.25	0.45	0.48	0.38	0.39	0.34	0.39
Motor Gasoline Blend Components	0.31	0.82	0.91	0.47	0.39	0.66	0.70	0.50	0.59	0.85	0.70	0.50	0.63	0.56	0.66
Aviation Gasoline Blend Components	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Refinery and Blender Net Inputs	18.22	19.22	19.60	18.78	18.30	19.76	19.81	18.97	18.52	20.00	19.83	19.03	18.96	19.21	19.35
Refinery Processing Gain															
.....	1.07	1.10	1.15	1.11	1.09	1.12	1.13	1.09	1.06	1.10	1.11	1.09	1.11	1.11	1.09
Refinery and Blender Net Production															
Hydrocarbon Gas Liquids	0.47	0.86	0.78	0.38	0.48	0.88	0.79	0.42	0.52	0.87	0.78	0.41	0.62	0.64	0.65
Finished Motor Gasoline	9.68	10.06	10.19	10.02	9.57	10.06	10.18	10.13	9.82	10.28	10.19	10.15	9.99	9.99	10.11
Jet Fuel	1.57	1.61	1.75	1.64	1.63	1.74	1.72	1.60	1.53	1.65	1.67	1.61	1.64	1.67	1.62
Distillate Fuel	4.70	4.80	4.93	4.95	4.75	5.13	5.08	4.96	4.78	5.18	5.17	5.01	4.84	4.98	5.03
Residual Fuel	0.40	0.42	0.42	0.44	0.46	0.41	0.41	0.41	0.44	0.45	0.41	0.40	0.42	0.42	0.43
Other Oils (a)	2.47	2.57	2.68	2.47	2.50	2.66	2.75	2.54	2.48	2.68	2.72	2.55	2.55	2.61	2.61
Total Refinery and Blender Net Production	19.29	20.32	20.75	19.89	19.40	20.88	20.94	20.06	19.58	21.11	20.95	20.13	20.07	20.32	20.44
Refinery Distillation Inputs															
.....	16.27	16.50	16.89	16.41	16.23	17.40	17.21	16.44	16.20	17.14	17.12	16.49	16.52	16.82	16.74
Refinery Operable Distillation Capacity															
.....	18.31	18.36	18.44	18.49	18.62	18.58	18.56	18.56	18.56	18.59	18.59	18.59	18.40	18.58	18.58
Refinery Distillation Utilization Factor															
.....	0.89	0.90	0.92	0.89	0.87	0.94	0.93	0.89	0.87	0.92	0.92	0.89	0.90	0.91	0.90

- = 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 - August 2017

	2016				2017				2018				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017	2018
Prices (cents per gallon)															
Refiner Wholesale Price	119	158	150	153	163	166	<i>164</i>	<i>147</i>	<i>147</i>	<i>165</i>	<i>164</i>	<i>152</i>	145	<i>160</i>	<i>157</i>
Gasoline Regular Grade Retail Prices Including Taxes															
PADD 1	187	220	215	223	231	233	<i>233</i>	<i>226</i>	<i>223</i>	<i>237</i>	<i>238</i>	<i>231</i>	212	<i>231</i>	<i>232</i>
PADD 2	176	221	215	212	223	228	<i>226</i>	<i>214</i>	<i>210</i>	<i>233</i>	<i>234</i>	<i>220</i>	207	<i>223</i>	<i>225</i>
PADD 3	167	201	199	201	210	215	<i>209</i>	<i>197</i>	<i>196</i>	<i>214</i>	<i>213</i>	<i>201</i>	192	<i>208</i>	<i>206</i>
PADD 4	184	221	226	220	227	239	<i>239</i>	<i>223</i>	<i>205</i>	<i>229</i>	<i>240</i>	<i>226</i>	213	<i>232</i>	<i>225</i>
PADD 5	241	265	264	263	276	289	<i>280</i>	<i>260</i>	<i>258</i>	<i>287</i>	<i>286</i>	<i>267</i>	259	<i>276</i>	<i>275</i>
U.S. Average	190	225	221	223	233	238	<i>235</i>	<i>224</i>	<i>220</i>	<i>241</i>	<i>241</i>	<i>229</i>	215	<i>233</i>	<i>233</i>
Gasoline All Grades Including Taxes	200	235	232	234	244	250	<i>247</i>	<i>235</i>	<i>232</i>	<i>252</i>	<i>253</i>	<i>241</i>	226	<i>244</i>	<i>244</i>
End-of-period Inventories (million barrels)															
Total Gasoline Inventories															
PADD 1	65.9	73.0	58.6	65.0	65.3	66.2	<i>61.0</i>	<i>64.8</i>	<i>66.2</i>	<i>66.2</i>	<i>62.5</i>	<i>65.9</i>	65.0	<i>64.8</i>	<i>65.9</i>
PADD 2	56.7	53.3	50.6	52.8	57.0	53.2	<i>49.9</i>	<i>52.7</i>	<i>54.0</i>	<i>51.4</i>	<i>49.9</i>	<i>52.7</i>	52.8	<i>52.7</i>	<i>52.7</i>
PADD 3	83.0	80.4	83.3	82.7	79.1	82.4	<i>80.6</i>	<i>84.4</i>	<i>82.3</i>	<i>81.7</i>	<i>81.4</i>	<i>86.1</i>	82.7	<i>84.4</i>	<i>86.1</i>
PADD 4	8.4	7.5	6.9	7.9	7.9	6.9	<i>7.0</i>	<i>7.8</i>	<i>7.4</i>	<i>7.5</i>	<i>7.3</i>	<i>8.0</i>	7.9	<i>7.8</i>	<i>8.0</i>
PADD 5	29.4	27.9	27.6	29.3	29.7	28.3	<i>27.5</i>	<i>31.3</i>	<i>30.0</i>	<i>28.1</i>	<i>27.9</i>	<i>31.3</i>	29.3	<i>31.3</i>	<i>31.3</i>
U.S. Total	243.3	242.1	227.0	237.7	239.0	237.1	<i>225.9</i>	<i>241.1</i>	<i>240.0</i>	<i>234.9</i>	<i>229.1</i>	<i>243.9</i>	237.7	<i>241.1</i>	<i>243.9</i>
Finished Gasoline Inventories															
U.S. Total	26.5	24.9	25.1	28.6	21.7	22.5	<i>26.1</i>	<i>27.9</i>	<i>25.2</i>	<i>23.9</i>	<i>24.3</i>	<i>25.9</i>	28.6	<i>27.9</i>	<i>25.9</i>
Gasoline Blending Components Inventories															
U.S. Total	216.9	217.2	201.9	209.1	217.2	214.6	<i>199.8</i>	<i>213.2</i>	<i>214.8</i>	<i>211.1</i>	<i>204.7</i>	<i>218.0</i>	209.1	<i>213.2</i>	<i>218.0</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 - August 2017

	2016				2017				2018				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017	2018
Supply (billion cubic feet per day)															
Total Marketed Production	78.66	77.52	76.83	76.24	76.45	77.37	<i>79.65</i>	<i>82.10</i>	<i>83.10</i>	<i>83.37</i>	<i>83.17</i>	<i>83.55</i>	77.31	<i>78.91</i>	<i>83.30</i>
Alaska	0.98	0.86	0.87	1.04	1.01	0.94	<i>0.78</i>	<i>0.93</i>	<i>1.00</i>	<i>0.85</i>	<i>0.77</i>	<i>0.93</i>	0.94	<i>0.91</i>	<i>0.89</i>
Federal GOM (a)	3.48	3.34	3.24	3.35	3.35	3.16	<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>3.23</i>	<i>3.28</i>
Lower 48 States (excl GOM)	74.20	73.32	72.72	71.85	72.10	73.28	<i>75.66</i>	<i>77.95</i>	<i>78.74</i>	<i>79.19</i>	<i>79.20</i>	<i>79.40</i>	73.02	<i>74.77</i>	<i>79.13</i>
Total Dry Gas Production	73.77	72.38	71.84	71.20	71.35	72.05	<i>74.11</i>	<i>76.35</i>	<i>77.22</i>	<i>77.43</i>	<i>77.20</i>	<i>77.50</i>	72.29	<i>73.48</i>	<i>77.34</i>
LNG Gross Imports	0.33	0.19	0.18	0.26	0.29	0.17	<i>0.18</i>	<i>0.22</i>	<i>0.29</i>	<i>0.16</i>	<i>0.18</i>	<i>0.22</i>	0.24	<i>0.21</i>	<i>0.21</i>
LNG Gross Exports	0.15	0.40	0.64	0.85	1.63	1.80	<i>1.83</i>	<i>2.52</i>	<i>2.96</i>	<i>2.82</i>	<i>3.22</i>	<i>3.97</i>	0.51	<i>1.95</i>	<i>3.25</i>
Pipeline Gross Imports	8.08	7.84	8.14	7.82	8.88	7.72	<i>7.67</i>	<i>7.39</i>	<i>8.91</i>	<i>7.87</i>	<i>7.95</i>	<i>7.96</i>	7.97	<i>7.91</i>	<i>8.17</i>
Pipeline Gross Exports	5.63	5.64	5.93	6.28	7.24	6.31	<i>6.36</i>	<i>6.94</i>	<i>7.99</i>	<i>7.19</i>	<i>6.82</i>	<i>7.51</i>	5.87	<i>6.71</i>	<i>7.37</i>
Supplemental Gaseous Fuels	0.17	0.13	0.17	0.17	0.16	0.14	<i>0.16</i>	<i>0.16</i>	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	0.16	<i>0.16</i>	<i>0.17</i>
Net Inventory Withdrawals	13.09	-7.77	-5.64	4.33	13.71	-9.40	<i>-7.70</i>	<i>3.74</i>	<i>16.53</i>	<i>-9.88</i>	<i>-8.75</i>	<i>3.72</i>	0.99	<i>0.04</i>	<i>0.35</i>
Total Supply	89.67	66.74	68.11	76.65	85.52	62.58	<i>66.23</i>	<i>78.40</i>	<i>92.17</i>	<i>65.73</i>	<i>66.70</i>	<i>78.08</i>	75.28	<i>73.14</i>	<i>75.61</i>
Balancing Item (b)	-0.54	-0.12	0.94	-0.95	0.04	-0.33	<i>-0.71</i>	<i>-1.10</i>	<i>0.29</i>	<i>0.02</i>	<i>0.20</i>	<i>0.23</i>	-0.17	<i>-0.53</i>	<i>0.18</i>
Total Primary Supply	89.13	66.62	69.05	75.70	85.57	62.25	<i>65.52</i>	<i>77.30</i>	<i>92.47</i>	<i>65.74</i>	<i>66.89</i>	<i>78.32</i>	75.11	<i>72.62</i>	<i>75.79</i>
Consumption (billion cubic feet per day)															
Residential	22.47	7.15	3.48	14.96	22.21	6.74	<i>3.69</i>	<i>15.67</i>	<i>24.78</i>	<i>7.32</i>	<i>3.72</i>	<i>15.54</i>	12.00	<i>12.04</i>	<i>12.79</i>
Commercial	13.42	5.98	4.56	10.20	13.44	5.82	<i>4.51</i>	<i>10.51</i>	<i>14.76</i>	<i>5.99</i>	<i>4.54</i>	<i>10.49</i>	8.53	<i>8.55</i>	<i>8.92</i>
Industrial	22.44	20.02	20.07	21.83	22.86	20.29	<i>20.25</i>	<i>21.87</i>	<i>23.33</i>	<i>20.94</i>	<i>20.63</i>	<i>22.38</i>	21.09	<i>21.31</i>	<i>21.81</i>
Electric Power (c)	24.17	27.45	34.91	22.54	20.63	23.50	<i>30.99</i>	<i>22.69</i>	<i>22.60</i>	<i>25.11</i>	<i>31.56</i>	<i>23.11</i>	27.28	<i>24.47</i>	<i>25.61</i>
Lease and Plant Fuel	4.34	4.28	4.24	4.21	4.22	4.27	<i>4.39</i>	<i>4.53</i>	<i>4.59</i>	<i>4.60</i>	<i>4.59</i>	<i>4.61</i>	4.27	<i>4.35</i>	<i>4.60</i>
Pipeline and Distribution Use	2.17	1.63	1.68	1.85	2.09	1.51	<i>1.58</i>	<i>1.91</i>	<i>2.30</i>	<i>1.67</i>	<i>1.74</i>	<i>2.07</i>	1.83	<i>1.77</i>	<i>1.94</i>
Vehicle Use	0.11	0.11	0.12	0.12	0.12	0.12	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	0.11	<i>0.12</i>	<i>0.12</i>
Total Consumption	89.13	66.62	69.05	75.70	85.57	62.25	<i>65.52</i>	<i>77.30</i>	<i>92.47</i>	<i>65.74</i>	<i>66.89</i>	<i>78.32</i>	75.11	<i>72.62</i>	<i>75.79</i>
End-of-period Inventories (billion cubic feet)															
Working Gas Inventory	2,495	3,194	3,714	3,305	2,072	2,919	<i>3,628</i>	<i>3,284</i>	<i>1,796</i>	<i>2,695</i>	<i>3,501</i>	<i>3,158</i>	3,305	<i>3,284</i>	<i>3,158</i>
East Region (d)	436	654	898	720	259	564	<i>840</i>	<i>710</i>	<i>271</i>	<i>555</i>	<i>801</i>	<i>675</i>	720	<i>710</i>	<i>675</i>
Midwest Region (d)	543	763	1,042	906	478	699	<i>998</i>	<i>869</i>	<i>347</i>	<i>604</i>	<i>962</i>	<i>829</i>	906	<i>869</i>	<i>829</i>
South Central Region (d)	1,080	1,236	1,185	1,170	947	1,151	<i>1,206</i>	<i>1,181</i>	<i>808</i>	<i>1,036</i>	<i>1,166</i>	<i>1,138</i>	1,170	<i>1,181</i>	<i>1,138</i>
Mountain Region (d)	144	196	232	204	142	187	<i>236</i>	<i>207</i>	<i>136</i>	<i>172</i>	<i>223</i>	<i>204</i>	204	<i>207</i>	<i>204</i>
Pacific Region (d)	266	316	321	271	219	287	<i>314</i>	<i>283</i>	<i>201</i>	<i>295</i>	<i>315</i>	<i>278</i>	271	<i>283</i>	<i>278</i>
Alaska	25	30	36	33	27	31	<i>33</i>	<i>33</i>	<i>33</i>	<i>33</i>	<i>33</i>	<i>33</i>	33	<i>33</i>	<i>33</i>

- = no data available

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

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

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

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

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

LNG: liquefied natural gas.

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

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

Projections: EIA Regional Short-Term Energy Model.

Table 5b. U.S. Regional Natural Gas Prices (dollars per thousand cubic feet)
 U.S. Energy Information Administration | Short-Term Energy Outlook - August 2017

	2016				2017				2018				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017	2018
Wholesale/Spot															
Henry Hub Spot Price	2.07	2.22	2.99	3.15	3.12	3.19	<i>3.10</i>	<i>3.28</i>	<i>3.50</i>	<i>3.29</i>	<i>3.32</i>	<i>3.54</i>	2.61	<i>3.17</i>	<i>3.41</i>
Residential Retail															
New England	11.79	13.12	17.80	13.42	12.91	14.10	<i>17.06</i>	<i>13.52</i>	<i>13.16</i>	<i>14.20</i>	<i>17.11</i>	<i>13.79</i>	12.90	<i>13.54</i>	<i>13.77</i>
Middle Atlantic	8.84	10.70	16.17	10.15	9.86	12.23	<i>16.48</i>	<i>11.13</i>	<i>10.24</i>	<i>12.33</i>	<i>16.68</i>	<i>11.35</i>	10.03	<i>11.02</i>	<i>11.31</i>
E. N. Central	6.79	9.37	17.83	8.27	7.77	11.25	<i>16.49</i>	<i>9.00</i>	<i>8.15</i>	<i>11.11</i>	<i>16.84</i>	<i>9.22</i>	8.27	<i>9.21</i>	<i>9.40</i>
W. N. Central	7.38	10.51	17.88	9.14	8.31	11.75	<i>17.76</i>	<i>9.80</i>	<i>8.94</i>	<i>11.81</i>	<i>17.77</i>	<i>9.96</i>	8.98	<i>9.85</i>	<i>10.18</i>
S. Atlantic	10.21	15.41	23.58	13.12	12.32	18.74	<i>22.35</i>	<i>12.94</i>	<i>11.48</i>	<i>16.50</i>	<i>22.39</i>	<i>13.06</i>	12.66	<i>14.09</i>	<i>13.30</i>
E. S. Central	8.52	13.11	19.55	11.33	10.47	15.76	<i>20.43</i>	<i>12.74</i>	<i>10.29</i>	<i>14.70</i>	<i>20.50</i>	<i>13.07</i>	10.50	<i>12.51</i>	<i>12.20</i>
W. S. Central	8.27	14.10	20.93	13.26	10.34	16.48	<i>20.35</i>	<i>12.21</i>	<i>9.51</i>	<i>14.46</i>	<i>20.03</i>	<i>12.43</i>	11.60	<i>12.75</i>	<i>11.92</i>
Mountain	8.22	9.65	13.76	8.52	8.21	10.11	<i>13.92</i>	<i>9.42</i>	<i>9.13</i>	<i>10.48</i>	<i>13.98</i>	<i>9.46</i>	8.96	<i>9.34</i>	<i>9.84</i>
Pacific	11.00	11.28	13.02	12.20	12.06	12.56	<i>12.80</i>	<i>11.30</i>	<i>12.21</i>	<i>12.51</i>	<i>12.98</i>	<i>11.77</i>	11.69	<i>12.00</i>	<i>12.22</i>
U.S. Average	8.54	11.17	17.01	10.19	9.73	12.84	<i>16.61</i>	<i>10.70</i>	<i>9.86</i>	<i>12.49</i>	<i>16.76</i>	<i>10.93</i>	10.06	<i>11.02</i>	<i>11.07</i>
Commercial Retail															
New England	8.76	9.60	10.49	9.52	9.51	10.07	<i>10.25</i>	<i>10.41</i>	<i>10.85</i>	<i>10.78</i>	<i>10.62</i>	<i>10.28</i>	9.30	<i>9.94</i>	<i>10.67</i>
Middle Atlantic	6.84	6.41	6.02	6.68	7.67	7.38	<i>6.95</i>	<i>7.67</i>	<i>7.96</i>	<i>7.93</i>	<i>7.31</i>	<i>7.87</i>	6.61	<i>7.53</i>	<i>7.85</i>
E. N. Central	5.87	6.58	8.78	6.53	6.63	7.83	<i>9.09</i>	<i>7.13</i>	<i>6.88</i>	<i>7.95</i>	<i>9.28</i>	<i>7.32</i>	6.41	<i>7.17</i>	<i>7.35</i>
W. N. Central	6.22	6.73	8.68	6.80	6.93	7.76	<i>9.01</i>	<i>7.41</i>	<i>7.67</i>	<i>8.18</i>	<i>9.22</i>	<i>7.66</i>	6.68	<i>7.38</i>	<i>7.86</i>
S. Atlantic	7.54	8.32	9.27	8.55	8.92	9.99	<i>9.94</i>	<i>8.99</i>	<i>8.83</i>	<i>9.56</i>	<i>10.09</i>	<i>9.15</i>	8.17	<i>9.26</i>	<i>9.20</i>
E. S. Central	7.49	8.56	9.75	9.03	9.04	10.21	<i>10.32</i>	<i>9.12</i>	<i>8.66</i>	<i>9.72</i>	<i>10.28</i>	<i>9.29</i>	8.36	<i>9.41</i>	<i>9.18</i>
W. S. Central	6.29	6.89	8.27	8.13	7.69	8.21	<i>8.28</i>	<i>7.72</i>	<i>7.34</i>	<i>7.72</i>	<i>8.34</i>	<i>7.95</i>	7.19	<i>7.89</i>	<i>7.72</i>
Mountain	6.94	7.09	7.96	6.89	6.87	7.32	<i>8.26</i>	<i>7.28</i>	<i>7.48</i>	<i>7.81</i>	<i>8.62</i>	<i>7.58</i>	7.06	<i>7.23</i>	<i>7.70</i>
Pacific	8.42	8.17	9.15	9.18	9.06	8.92	<i>9.07</i>	<i>8.68</i>	<i>8.76</i>	<i>8.58</i>	<i>8.99</i>	<i>8.83</i>	8.73	<i>8.92</i>	<i>8.79</i>
U.S. Average	6.84	7.23	8.21	7.49	7.70	8.28	<i>8.66</i>	<i>7.96</i>	<i>7.94</i>	<i>8.41</i>	<i>8.83</i>	<i>8.14</i>	7.26	<i>7.98</i>	<i>8.17</i>
Industrial Retail															
New England	7.07	6.88	6.27	7.10	8.12	7.65	<i>7.36</i>	<i>8.42</i>	<i>8.72</i>	<i>8.00</i>	<i>7.38</i>	<i>8.43</i>	6.90	<i>7.97</i>	<i>8.26</i>
Middle Atlantic	6.72	6.17	5.91	6.99	7.98	7.61	<i>7.49</i>	<i>7.75</i>	<i>8.13</i>	<i>7.63</i>	<i>7.63</i>	<i>7.97</i>	6.59	<i>7.79</i>	<i>7.94</i>
E. N. Central	5.05	4.73	5.33	5.40	5.82	5.88	<i>5.97</i>	<i>5.99</i>	<i>6.65</i>	<i>6.35</i>	<i>6.28</i>	<i>6.30</i>	5.13	<i>5.90</i>	<i>6.46</i>
W. N. Central	4.31	3.49	3.98	4.39	4.95	4.26	<i>4.55</i>	<i>5.17</i>	<i>5.73</i>	<i>4.99</i>	<i>4.82</i>	<i>5.45</i>	4.09	<i>4.77</i>	<i>5.29</i>
S. Atlantic	4.40	3.80	4.44	4.83	5.29	4.90	<i>4.96</i>	<i>5.36</i>	<i>5.65</i>	<i>5.15</i>	<i>5.12</i>	<i>5.58</i>	4.38	<i>5.14</i>	<i>5.39</i>
E. S. Central	3.96	3.38	4.09	4.60	4.97	4.54	<i>4.50</i>	<i>4.99</i>	<i>5.24</i>	<i>4.76</i>	<i>4.71</i>	<i>5.21</i>	4.01	<i>4.77</i>	<i>5.00</i>
W. S. Central	2.28	2.15	3.07	3.21	3.48	3.35	<i>3.37</i>	<i>3.48</i>	<i>3.70</i>	<i>3.47</i>	<i>3.58</i>	<i>3.77</i>	2.68	<i>3.42</i>	<i>3.63</i>
Mountain	5.28	4.96	5.42	5.12	5.30	5.35	<i>5.85</i>	<i>5.86</i>	<i>6.03</i>	<i>5.85</i>	<i>6.19</i>	<i>6.25</i>	5.19	<i>5.58</i>	<i>6.08</i>
Pacific	6.69	6.09	6.74	7.16	7.53	6.95	<i>6.76</i>	<i>6.76</i>	<i>7.16</i>	<i>6.71</i>	<i>6.78</i>	<i>6.95</i>	6.70	<i>7.02</i>	<i>6.92</i>
U.S. Average	3.44	2.93	3.63	4.03	4.52	4.06	<i>3.98</i>	<i>4.38</i>	<i>4.81</i>	<i>4.21</i>	<i>4.18</i>	<i>4.63</i>	3.51	<i>4.25</i>	<i>4.47</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 - August 2017

	2016				2017				2018				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017	2018
Supply (million short tons)															
Production	173.0	160.5	195.1	199.5	197.0	190.2	<i>205.9</i>	<i>192.9</i>	<i>199.3</i>	<i>179.5</i>	<i>207.2</i>	<i>210.1</i>	728.2	<i>786.1</i>	<i>796.0</i>
Appalachia	44.3	43.2	44.8	47.6	50.7	48.7	<i>50.1</i>	<i>47.3</i>	<i>47.8</i>	<i>45.2</i>	<i>49.6</i>	<i>49.7</i>	180.0	<i>196.8</i>	<i>192.4</i>
Interior	36.9	34.4	35.7	37.2	38.5	39.7	<i>40.2</i>	<i>40.2</i>	<i>42.0</i>	<i>38.4</i>	<i>42.4</i>	<i>44.9</i>	144.2	<i>158.5</i>	<i>167.7</i>
Western	91.8	82.8	114.6	114.8	107.8	101.8	<i>115.7</i>	<i>105.4</i>	<i>109.4</i>	<i>95.9</i>	<i>115.1</i>	<i>115.5</i>	404.0	<i>430.7</i>	<i>436.0</i>
Primary Inventory Withdrawals	-1.4	0.2	3.6	-0.1	-1.0	0.5	<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	1.9	2.6	<i>3.2</i>	<i>2.8</i>	<i>1.6</i>	<i>2.2</i>	<i>3.2</i>	<i>2.8</i>	9.8	<i>10.5</i>	<i>9.8</i>
Exports	14.2	14.2	12.6	19.3	22.3	20.8	<i>15.1</i>	<i>12.2</i>	<i>14.1</i>	<i>16.3</i>	<i>15.0</i>	<i>13.6</i>	60.3	<i>70.4</i>	<i>59.0</i>
Metallurgical Coal	10.2	10.1	9.1	11.6	12.2	13.1	<i>9.1</i>	<i>7.9</i>	<i>8.5</i>	<i>11.1</i>	<i>10.0</i>	<i>8.8</i>	40.9	<i>42.2</i>	<i>38.4</i>
Steam Coal	4.0	4.2	3.5	7.7	10.1	7.6	<i>6.1</i>	<i>4.3</i>	<i>5.5</i>	<i>5.3</i>	<i>5.0</i>	<i>4.8</i>	19.3	<i>28.1</i>	<i>20.6</i>
Total Primary Supply	160.1	148.8	188.9	182.2	175.6	172.5	<i>196.9</i>	<i>182.7</i>	<i>185.6</i>	<i>165.1</i>	<i>198.6</i>	<i>196.3</i>	680.0	<i>727.8</i>	<i>745.6</i>
Secondary Inventory Withdrawals	4.1	9.2	25.2	-5.6	0.8	2.1	<i>18.2</i>	<i>-2.8</i>	<i>-1.2</i>	<i>2.4</i>	<i>15.0</i>	<i>-16.7</i>	32.9	<i>18.2</i>	<i>-0.5</i>
Waste Coal (a)	2.5	1.9	2.4	2.0	2.4	2.5	<i>2.5</i>	<i>2.5</i>	<i>2.4</i>	<i>2.4</i>	<i>2.4</i>	<i>2.4</i>	8.7	<i>9.9</i>	<i>9.6</i>
Total Supply	166.7	159.9	216.5	178.5	178.8	177.2	<i>217.6</i>	<i>182.4</i>	<i>186.8</i>	<i>169.9</i>	<i>216.0</i>	<i>182.0</i>	721.7	<i>756.0</i>	<i>754.6</i>
Consumption (million short tons)															
Coke Plants	4.1	4.1	4.2	4.1	4.2	3.3	<i>4.9</i>	<i>5.7</i>	<i>4.0</i>	<i>3.6</i>	<i>4.8</i>	<i>5.9</i>	16.5	<i>18.1</i>	<i>18.3</i>
Electric Power Sector (b)	152.2	147.2	210.3	167.6	160.5	156.1	<i>208.4</i>	<i>167.8</i>	<i>173.5</i>	<i>157.5</i>	<i>202.3</i>	<i>166.8</i>	677.3	<i>692.9</i>	<i>700.2</i>
Retail and Other Industry	9.6	8.6	8.6	9.0	8.8	8.4	<i>8.5</i>	<i>8.9</i>	<i>9.3</i>	<i>8.7</i>	<i>8.9</i>	<i>9.2</i>	35.8	<i>34.7</i>	<i>36.1</i>
Residential and Commercial	0.4	0.2	0.2	0.3	0.4	0.2	<i>0.2</i>	<i>0.2</i>	<i>0.3</i>	<i>0.1</i>	<i>0.1</i>	<i>0.2</i>	1.2	<i>0.9</i>	<i>0.7</i>
Other Industrial	9.1	8.4	8.4	8.7	8.4	8.3	<i>8.4</i>	<i>8.6</i>	<i>9.0</i>	<i>8.6</i>	<i>8.8</i>	<i>9.0</i>	34.7	<i>33.8</i>	<i>35.4</i>
Total Consumption	165.9	160.0	223.1	180.6	173.5	167.9	<i>221.9</i>	<i>182.4</i>	<i>186.8</i>	<i>169.9</i>	<i>216.0</i>	<i>182.0</i>	729.6	<i>745.7</i>	<i>754.6</i>
Discrepancy (c)	0.8	-0.1	-6.6	-2.1	5.3	9.3	<i>-4.3</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	-8.0	<i>10.3</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	34.2	<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	168.8	166.7	<i>148.5</i>	<i>151.4</i>	<i>152.6</i>	<i>150.2</i>	<i>135.2</i>	<i>151.9</i>	169.6	<i>151.4</i>	<i>151.9</i>
Electric Power Sector	192.3	183.2	158.2	163.9	163.9	159.1	<i>142.1</i>	<i>145.9</i>	<i>147.7</i>	<i>144.7</i>	<i>129.3</i>	<i>145.6</i>	163.9	<i>145.9</i>	<i>145.6</i>
Retail and General Industry	3.9	3.8	3.7	3.6	3.2	5.3	<i>4.3</i>	<i>3.3</i>	<i>3.1</i>	<i>3.3</i>	<i>3.8</i>	<i>4.1</i>	3.6	<i>3.3</i>	<i>4.1</i>
Coke Plants	1.9	1.8	1.7	1.7	1.4	1.9	<i>1.8</i>	<i>1.8</i>	<i>1.5</i>	<i>1.9</i>	<i>1.8</i>	<i>1.8</i>	1.7	<i>1.8</i>	<i>1.8</i>
Coal Market Indicators															
Coal Miner Productivity															
(Tons per hour)	6.23	6.23	6.23	6.23	6.19	6.19	<i>6.19</i>	<i>6.19</i>	<i>6.10</i>	<i>6.10</i>	<i>6.10</i>	<i>6.10</i>	6.23	<i>6.19</i>	<i>6.10</i>
Total Raw Steel Production															
(Million short tons per day)	0.238	0.247	0.238	0.230	0.248	0.247	<i>0.233</i>	<i>0.192</i>	<i>0.238</i>	<i>0.240</i>	<i>0.220</i>	<i>0.181</i>	0.239	<i>0.230</i>	<i>0.220</i>
Cost of Coal to Electric Utilities															
(Dollars per million Btu)	2.13	2.13	2.11	2.08	2.08	2.14	<i>2.20</i>	<i>2.17</i>	<i>2.20</i>	<i>2.20</i>	<i>2.23</i>	<i>2.22</i>	2.11	<i>2.15</i>	<i>2.21</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 - August 2017

	2016				2017				2018				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017	2018
Electricity Supply (billion kilowatthours per day)															
Electricity Generation	10.67	10.75	12.76	10.39	10.53	10.68	<i>12.39</i>	<i>10.44</i>	<i>10.98</i>	<i>10.87</i>	<i>12.44</i>	<i>10.55</i>	11.15	<i>11.01</i>	<i>11.22</i>
Electric Power Sector (a)	10.23	10.32	12.32	9.96	10.10	10.27	<i>11.94</i>	<i>10.02</i>	<i>10.55</i>	<i>10.45</i>	<i>12.00</i>	<i>10.13</i>	10.71	<i>10.59</i>	<i>10.78</i>
Comm. and Indus. Sectors (b)	0.44	0.43	0.45	0.42	0.43	0.41	<i>0.44</i>	<i>0.42</i>	<i>0.43</i>	<i>0.43</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	0.17	<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	10.72	10.86	<i>12.57</i>	<i>10.59</i>	<i>11.14</i>	<i>11.02</i>	<i>12.62</i>	<i>10.68</i>	11.34	<i>11.19</i>	<i>11.37</i>
Losses and Unaccounted for (c)	0.66	0.97	0.90	0.73	0.61	0.82	<i>0.74</i>	<i>0.67</i>	<i>0.56</i>	<i>0.83</i>	<i>0.72</i>	<i>0.67</i>	0.82	<i>0.71</i>	<i>0.70</i>
Electricity Consumption (billion kilowatthours per day unless noted)															
Retail Sales	9.81	9.58	11.69	9.47	9.73	9.67	<i>11.44</i>	<i>9.55</i>	<i>10.19</i>	<i>9.82</i>	<i>11.50</i>	<i>9.64</i>	10.14	<i>10.10</i>	<i>10.29</i>
Residential Sector	3.81	3.37	4.77	3.42	3.70	3.38	<i>4.53</i>	<i>3.43</i>	<i>4.05</i>	<i>3.44</i>	<i>4.56</i>	<i>3.49</i>	3.85	<i>3.76</i>	<i>3.88</i>
Commercial Sector	3.49	3.62	4.20	3.55	3.51	3.64	<i>4.17</i>	<i>3.57</i>	<i>3.57</i>	<i>3.69</i>	<i>4.17</i>	<i>3.57</i>	3.71	<i>3.72</i>	<i>3.75</i>
Industrial Sector	2.48	2.57	2.70	2.48	2.49	2.62	<i>2.72</i>	<i>2.53</i>	<i>2.55</i>	<i>2.66</i>	<i>2.75</i>	<i>2.55</i>	2.56	<i>2.59</i>	<i>2.63</i>
Transportation Sector	0.02	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>	0.02	<i>0.02</i>	<i>0.02</i>
Direct Use (d)	0.39	0.38	0.40	0.38	0.38	0.37	<i>0.39</i>	<i>0.37</i>	<i>0.38</i>	<i>0.38</i>	<i>0.40</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	10.11	10.03	<i>11.83</i>	<i>9.92</i>	<i>10.57</i>	<i>10.19</i>	<i>11.89</i>	<i>10.01</i>	10.52	<i>10.48</i>	<i>10.67</i>
Average residential electricity usage per customer (kWh)	2,645	2,342	3,348	2,401	2,527	2,356	<i>3,171</i>	<i>2,394</i>	<i>2,734</i>	<i>2,350</i>	<i>3,146</i>	<i>2,410</i>	10,736	<i>10,448</i>	<i>10,640</i>
Prices															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	2.13	2.13	2.11	2.08	2.08	2.14	<i>2.20</i>	<i>2.17</i>	<i>2.20</i>	<i>2.20</i>	<i>2.23</i>	<i>2.22</i>	2.11	<i>2.15</i>	<i>2.21</i>
Natural Gas	2.65	2.51	3.00	3.36	3.69	3.35	<i>3.27</i>	<i>3.75</i>	<i>4.24</i>	<i>3.66</i>	<i>3.51</i>	<i>4.04</i>	2.88	<i>3.49</i>	<i>3.82</i>
Residual Fuel Oil	6.15	8.51	9.70	9.08	11.16	10.42	<i>9.75</i>	<i>9.68</i>	<i>9.58</i>	<i>10.20</i>	<i>9.94</i>	<i>10.15</i>	8.41	<i>10.23</i>	<i>9.96</i>
Distillate Fuel Oil	9.00	11.01	11.64	12.14	12.75	14.03	<i>13.45</i>	<i>13.90</i>	<i>14.79</i>	<i>15.63</i>	<i>14.25</i>	<i>14.59</i>	10.86	<i>13.50</i>	<i>14.81</i>
Retail Prices (cents per kilowatthour)															
Residential Sector	12.20	12.66	12.81	12.45	12.61	12.99	<i>13.35</i>	<i>12.89</i>	<i>12.87</i>	<i>13.50</i>	<i>13.85</i>	<i>13.28</i>	12.55	<i>12.98</i>	<i>13.39</i>
Commercial Sector	10.12	10.34	10.68	10.27	10.38	10.61	<i>10.71</i>	<i>10.42</i>	<i>10.57</i>	<i>10.70</i>	<i>10.84</i>	<i>10.56</i>	10.37	<i>10.54</i>	<i>10.67</i>
Industrial Sector	6.42	6.67	7.20	6.67	6.65	6.93	<i>7.53</i>	<i>6.93</i>	<i>6.86</i>	<i>7.12</i>	<i>7.71</i>	<i>7.12</i>	6.75	<i>7.02</i>	<i>7.21</i>

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

Prices are not adjusted for inflation.

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

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

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

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

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

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

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

Projections: EIA Regional Short-Term Energy Model.

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

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

	2016				2017				2018				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017	2018
Residential Sector															
New England	133	109	152	114	135	112	141	115	136	111	145	114	127	126	126
Middle Atlantic	367	309	461	320	368	301	420	320	385	320	427	320	364	352	363
E. N. Central	522	447	619	459	507	431	563	458	548	436	557	461	512	490	500
W. N. Central	298	243	322	255	298	244	318	260	324	242	311	266	279	280	285
S. Atlantic	968	874	1,223	852	891	886	1,157	858	1,017	897	1,154	874	980	948	986
E. S. Central	337	274	412	279	305	274	373	280	359	278	374	287	326	308	325
W. S. Central	526	518	810	517	501	526	764	513	580	540	796	532	593	577	612
Mountain	240	251	337	232	245	255	350	231	251	251	352	236	265	270	273
Pacific contiguous	406	336	422	381	439	344	431	383	435	354	430	388	386	399	402
AK and HI	13	12	12	14	14	12	12	13	14	12	12	13	13	13	13
Total	3,810	3,373	4,771	3,421	3,704	3,384	4,527	3,433	4,048	3,441	4,557	3,491	3,845	3,763	3,885
Commercial Sector															
New England	141	137	160	135	140	134	155	137	138	132	151	131	143	142	138
Middle Atlantic	422	408	488	408	423	406	473	405	423	407	469	400	432	427	425
E. N. Central	488	493	567	483	490	492	553	485	499	496	548	483	508	505	506
W. N. Central	271	271	308	271	272	268	308	274	280	276	309	274	280	281	285
S. Atlantic	792	844	977	802	784	859	957	803	801	858	951	807	854	851	855
E. S. Central	231	242	295	234	227	246	294	236	242	253	295	237	251	251	257
W. S. Central	473	519	623	511	477	531	635	519	508	557	656	536	532	541	565
Mountain	240	258	290	250	246	263	294	250	247	267	298	254	260	264	266
Pacific contiguous	418	428	475	436	431	425	482	441	421	430	475	437	440	445	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	3,508	3,639	4,168	3,565	3,575	3,692	4,168	3,575	3,715	3,721	3,753
Industrial Sector															
New England	45	47	49	45	44	45	48	44	43	44	46	43	47	45	44
Middle Atlantic	192	191	202	189	192	199	200	191	196	195	204	191	193	196	197
E. N. Central	502	504	528	485	493	510	527	495	512	518	527	493	505	506	512
W. N. Central	223	228	246	227	228	242	260	242	244	252	266	247	231	243	252
S. Atlantic	362	384	393	362	363	382	374	358	347	370	374	352	375	369	361
E. S. Central	258	269	274	261	264	279	284	270	277	281	278	265	265	274	275
W. S. Central	456	471	481	458	476	485	495	468	473	501	517	485	467	481	494
Mountain	214	232	247	215	210	232	251	221	220	243	258	227	227	229	237
Pacific contiguous	215	236	262	224	211	236	268	232	222	243	264	233	234	237	241
AK and HI	13	14	15	14	13	14	15	14	13	14	15	14	14	14	14
Total	2,480	2,575	2,697	2,480	2,493	2,624	2,721	2,533	2,547	2,661	2,749	2,550	2,558	2,593	2,627
Total All Sectors (a)															
New England	320	294	362	295	320	293	346	297	318	289	344	289	318	314	310
Middle Atlantic	993	918	1,162	927	994	916	1,105	927	1,016	933	1,111	923	1,000	986	996
E. N. Central	1,514	1,446	1,716	1,429	1,492	1,435	1,644	1,439	1,561	1,451	1,633	1,438	1,526	1,503	1,521
W. N. Central	792	742	877	753	798	755	885	776	848	771	886	787	791	804	823
S. Atlantic	2,126	2,106	2,596	2,020	2,042	2,130	2,491	2,021	2,170	2,130	2,483	2,036	2,213	2,172	2,205
E. S. Central	827	785	981	774	796	799	952	786	878	811	947	790	842	833	856
W. S. Central	1,455	1,509	1,914	1,487	1,455	1,541	1,894	1,500	1,562	1,598	1,970	1,554	1,592	1,599	1,671
Mountain	694	741	875	697	701	750	895	703	718	762	908	717	752	763	777
Pacific contiguous	1,042	1,002	1,162	1,043	1,083	1,007	1,183	1,059	1,080	1,030	1,171	1,061	1,062	1,083	1,086
AK and HI	42	41	43	44	43	41	43	43	43	41	43	43	43	43	42
Total	9,805	9,584	11,688	9,469	9,726	9,667	11,438	9,553	10,193	9,816	11,497	9,637	10,139	10,099	10,287

- = no data available

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

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

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

Regions refer to U.S. Census divisions.

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

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

Projections: EIA Regional Short-Term Energy Model.

Table 7c. U.S. Regional Retail Electricity Prices (Cents per Kilowatt-hour)
 U.S. Energy Information Administration | Short-Term Energy Outlook - August 2017

	2016				2017				2018				Year		
	Q1	Q2	Q4	Q4	Q1	Q2	Q4	Q4	Q1	Q2	Q4	Q4	2016	2017	2018
Residential Sector															
New England	19.08	19.30	18.47	18.68	19.08	19.58	19.43	19.49	20.50	20.99	20.63	20.81	18.85	19.38	20.71
Middle Atlantic	15.29	15.88	16.08	15.74	15.56	16.32	16.72	16.17	15.90	16.72	17.23	16.65	15.76	16.21	16.64
E. N. Central	12.51	13.25	12.91	13.04	12.90	13.54	13.45	13.61	13.42	14.19	14.08	14.17	12.91	13.37	13.95
W. N. Central	10.61	12.31	12.67	11.27	10.94	12.56	12.99	11.53	11.12	12.96	13.42	11.79	11.73	12.02	12.30
S. Atlantic	11.40	11.75	11.88	11.47	11.73	12.03	12.36	11.86	11.93	12.47	12.81	12.20	11.65	12.02	12.38
E. S. Central	10.35	10.94	10.90	11.14	11.10	11.54	11.75	11.87	11.54	12.14	12.22	12.18	10.82	11.57	12.01
W. S. Central	10.34	10.69	10.65	10.52	10.55	10.94	11.18	10.96	10.72	11.32	11.58	11.32	10.56	10.94	11.27
Mountain	11.05	11.91	12.12	11.45	11.28	12.11	12.38	11.70	11.55	12.45	12.74	12.01	11.68	11.93	12.24
Pacific	14.13	13.95	16.09	13.85	14.52	14.44	16.50	14.10	14.97	15.11	17.15	14.51	14.56	14.94	15.48
U.S. Average	12.20	12.66	12.81	12.45	12.61	12.99	13.35	12.89	12.87	13.50	13.85	13.28	12.55	12.98	13.39
Commercial Sector															
New England	15.33	15.01	15.19	14.89	15.12	14.67	13.33	13.48	14.58	13.94	12.89	13.39	15.11	14.12	13.67
Middle Atlantic	12.02	12.48	13.29	12.22	12.07	12.73	13.42	12.45	12.11	12.75	13.53	12.69	12.54	12.69	12.80
E. N. Central	9.65	9.87	9.91	9.98	10.02	10.23	10.17	10.28	10.32	10.50	10.37	10.44	9.86	10.17	10.41
W. N. Central	8.86	9.70	10.15	9.07	9.12	10.06	10.37	9.33	9.25	10.25	10.64	9.62	9.47	9.74	9.96
S. Atlantic	9.37	9.27	9.26	9.21	9.48	9.39	9.38	9.48	10.00	9.75	9.63	9.70	9.28	9.43	9.76
E. S. Central	9.93	9.99	10.12	10.35	10.53	10.54	10.42	10.85	10.83	10.79	10.59	10.98	10.10	10.58	10.78
W. S. Central	7.80	7.79	7.86	7.78	8.26	8.24	7.55	7.69	7.85	7.82	7.34	7.68	7.81	7.91	7.65
Mountain	9.02	9.75	10.03	9.34	9.14	9.88	9.89	9.40	9.21	9.94	9.97	9.52	9.56	9.60	9.68
Pacific	12.21	13.08	14.69	12.96	12.53	13.40	15.22	13.32	13.45	13.90	15.80	13.63	13.28	13.67	14.24
U.S. Average	10.12	10.34	10.68	10.27	10.38	10.61	10.71	10.42	10.57	10.70	10.84	10.56	10.37	10.54	10.67
Industrial Sector															
New England	12.22	11.86	12.25	12.03	12.42	12.14	12.42	12.14	12.89	12.48	12.68	12.32	12.09	12.29	12.59
Middle Atlantic	7.05	7.01	7.12	6.92	6.93	6.99	7.12	7.01	6.92	7.07	7.18	7.12	7.03	7.01	7.07
E. N. Central	6.74	6.88	7.04	6.96	7.02	7.04	7.15	7.08	7.17	7.15	7.23	7.19	6.91	7.07	7.18
W. N. Central	6.65	7.10	7.82	6.64	6.89	7.37	7.92	6.72	7.01	7.48	8.04	6.83	7.07	7.25	7.35
S. Atlantic	6.15	6.33	6.78	6.30	6.35	6.49	7.03	6.52	6.59	6.70	7.15	6.69	6.40	6.60	6.79
E. S. Central	5.45	5.72	6.14	5.99	5.91	6.09	6.56	6.28	6.17	6.30	6.75	6.49	5.83	6.22	6.43
W. S. Central	5.06	5.03	5.44	5.32	5.27	5.62	6.24	6.04	5.69	5.99	6.58	6.41	5.22	5.80	6.18
Mountain	5.83	6.29	7.01	6.08	6.08	6.60	7.45	6.38	6.35	6.84	7.71	6.59	6.33	6.66	6.91
Pacific	7.99	9.08	10.54	8.65	8.24	9.16	10.79	8.61	8.15	9.09	10.97	8.64	9.14	9.29	9.29
U.S. Average	6.42	6.67	7.20	6.67	6.65	6.93	7.53	6.93	6.86	7.12	7.71	7.12	6.75	7.02	7.21
All Sectors (a)															
New England	16.41	16.07	16.13	15.88	16.38	16.11	15.67	15.59	16.85	16.41	16.10	16.13	16.13	15.93	16.37
Middle Atlantic	12.25	12.47	13.31	12.34	12.35	12.70	13.50	12.59	12.53	12.90	13.77	12.89	12.63	12.81	13.05
E. N. Central	9.67	9.87	10.11	9.93	10.00	10.12	10.32	10.23	10.37	10.41	10.62	10.52	9.90	10.17	10.48
W. N. Central	8.90	9.75	10.42	9.08	9.16	10.03	10.59	9.26	9.32	10.19	10.83	9.48	9.57	9.78	9.97
S. Atlantic	9.74	9.76	10.12	9.64	9.90	9.98	10.40	9.96	10.36	10.36	10.73	10.25	9.84	10.08	10.44
E. S. Central	8.70	8.86	9.33	9.17	9.22	9.34	9.79	9.64	9.65	9.70	10.11	9.91	9.03	9.51	9.85
W. S. Central	7.86	7.92	8.43	7.97	8.07	8.33	8.69	8.29	8.26	8.43	8.85	8.53	8.07	8.37	8.54
Mountain	8.74	9.40	9.98	9.03	8.97	9.64	10.18	9.21	9.15	9.78	10.40	9.41	9.33	9.55	9.73
Pacific	12.08	12.42	14.25	12.35	12.49	12.78	14.68	12.56	12.96	13.17	15.19	12.84	12.82	13.18	13.59
U.S. Average	9.99	10.17	10.75	10.11	10.27	10.45	11.00	10.38	10.55	10.71	11.28	10.63	10.28	10.55	10.82

- = 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 - August 2017

	2016				2017				2018				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017	2018
United States															
Coal	3,059	2,967	4,202	3,317	3,250	3,146	4,178	3,336	3,581	3,194	4,055	3,311	3,388	3,480	3,536
Natural Gas	3,426	3,762	4,702	3,191	2,917	3,248	4,199	3,197	3,183	3,443	4,252	3,240	3,771	3,393	3,532
Petroleum (a)	68	63	72	59	61	57	71	61	76	69	77	64	65	62	71
Other Gases	40	35	35	32	39	37	36	33	41	38	36	33	36	36	37
Nuclear	2,245	2,155	2,254	2,148	2,247	2,032	2,252	2,124	2,224	2,098	2,280	2,122	2,200	2,164	2,181
Renewable Energy Sources:	1,804	1,747	1,487	1,625	1,994	2,141	1,631	1,669	1,859	2,005	1,719	1,762	1,665	1,857	1,836
Conventional Hydropower	842	810	618	637	917	1,002	729	634	758	805	744	637	726	820	736
Wind	667	614	517	682	752	742	504	710	756	774	543	782	620	676	714
Wood Biomass	114	104	116	108	114	111	118	111	114	106	116	111	111	113	112
Waste Biomass	60	61	61	59	59	57	60	59	59	59	61	60	60	59	60
Geothermal	47	46	47	50	49	48	46	47	48	46	47	47	48	48	47
Solar	73	112	127	89	103	182	174	108	123	214	207	125	100	142	168
Pumped Storage Hydropower	-12	-14	-26	-21	-16	-14	-17	-15	-14	-12	-16	-14	-18	-16	-14
Other Nonrenewable Fuels (b)	36	38	39	36	36	36	40	36	35	37	40	36	37	37	37
Total Generation	10,667	10,754	12,764	10,386	10,527	10,683	12,389	10,441	10,985	10,871	12,443	10,554	11,145	11,013	11,215
Northeast Census Region															
Coal	162	141	203	150	154	133	235	198	213	126	209	187	164	180	184
Natural Gas	512	599	795	521	474	474	652	505	474	517	683	514	607	527	547
Petroleum (a)	7	3	6	6	4	3	6	4	9	6	9	6	5	4	7
Other Gases	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Nuclear	543	461	516	525	539	476	541	501	522	493	536	503	511	514	514
Hydropower (c)	111	94	78	82	103	106	93	88	82	92	89	89	91	98	88
Other Renewables (d)	77	63	61	73	71	74	65	76	79	71	64	77	69	71	73
Other Nonrenewable Fuels (b)	11	12	12	11	11	11	12	11	11	11	12	11	12	11	11
Total Generation	1,426	1,375	1,674	1,371	1,359	1,280	1,606	1,385	1,393	1,318	1,603	1,389	1,462	1,408	1,426
South Census Region															
Coal	1,270	1,347	1,950	1,462	1,334	1,470	1,945	1,408	1,500	1,458	1,933	1,420	1,508	1,540	1,579
Natural Gas	2,013	2,235	2,645	1,825	1,721	2,032	2,415	1,832	1,845	2,056	2,412	1,853	2,180	2,001	2,043
Petroleum (a)	29	30	35	23	26	23	30	23	32	28	31	24	29	26	29
Other Gases	15	13	14	13	14	14	15	13	15	14	15	14	14	14	14
Nuclear	951	998	994	936	979	886	981	948	996	939	1,021	958	970	948	979
Hydropower (c)	191	84	71	63	135	130	88	71	110	112	84	71	102	106	94
Other Renewables (d)	330	307	305	335	399	408	318	379	410	448	360	419	320	376	409
Other Nonrenewable Fuels (b)	16	18	18	16	15	16	18	15	15	16	18	15	17	16	16
Total Generation	4,815	5,033	6,032	4,673	4,623	4,979	5,808	4,690	4,923	5,071	5,874	4,775	5,140	5,027	5,162
Midwest Census Region															
Coal	1,202	1,109	1,498	1,197	1,292	1,187	1,460	1,210	1,356	1,173	1,407	1,182	1,252	1,288	1,279
Natural Gas	357	368	454	295	283	293	399	300	361	386	437	325	368	319	377
Petroleum (a)	10	9	8	7	7	9	12	10	11	11	12	10	9	10	11
Other Gases	16	13	14	11	17	15	14	12	18	15	14	12	14	14	15
Nuclear	573	543	572	523	555	542	561	519	542	511	556	504	553	544	528
Hydropower (c)	48	43	39	37	55	56	44	40	44	48	42	40	42	49	44
Other Renewables (d)	282	245	185	300	307	286	189	306	321	293	199	338	253	272	288
Other Nonrenewable Fuels (b)	4	4	4	3	4	4	4	4	4	4	5	4	4	4	4
Total Generation	2,492	2,334	2,773	2,374	2,520	2,391	2,685	2,399	2,657	2,441	2,671	2,415	2,494	2,499	2,546
West Census Region															
Coal	426	370	551	508	470	356	538	520	512	437	506	522	464	471	494
Natural Gas	543	560	809	549	440	450	732	560	503	485	721	548	616	546	565
Petroleum (a)	21	20	23	23	23	22	23	24	24	24	25	25	22	23	24
Other Gases	7	6	5	6	6	6	5	6	6	6	5	6	6	6	6
Nuclear	178	152	172	164	175	127	169	157	163	154	168	157	166	157	161
Hydropower (c)	480	575	404	434	607	696	487	420	508	542	513	422	473	552	496
Other Renewables (d)	273	322	317	280	299	371	330	275	289	389	352	291	298	318	330
Other Nonrenewable Fuels (b)	4	5	5	5	5	5	6	5	5	5	6	5	5	5	5
Total Generation	1,933	2,011	2,285	1,968	2,025	2,033	2,290	1,967	2,011	2,042	2,295	1,975	2,050	2,079	2,081

(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 - August 2017

	2016				2017				2018				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017	2018
Fuel Consumption for Electricity Generation, All Sectors															
United States															
Coal (thousand st/d)	1,676	1,619	2,288	1,822	1,785	1,717	2,267	1,824	1,926	1,731	2,199	1,812	1,852	1,899	1,917
Natural Gas (million cf/d)	25,226	28,572	36,107	23,726	21,813	24,644	32,163	23,813	23,718	26,272	32,758	24,253	28,416	25,632	26,768
Petroleum (thousand b/d)	121	112	130	103	108	100	124	108	135	121	136	114	116	110	126
Residual Fuel Oil	29	22	35	25	24	24	27	24	32	29	34	28	28	25	31
Distillate Fuel Oil	30	23	24	25	29	26	28	25	33	28	29	25	26	27	29
Petroleum Coke (a)	57	63	66	48	50	46	64	54	63	61	68	57	58	54	62
Other Petroleum Liquids (b)	5	3	5	4	4	4	5	5	7	4	5	5	4	4	5
Northeast Census Region															
Coal (thousand st/d)	80	66	94	70	74	62	113	95	100	60	101	90	77	86	88
Natural Gas (million cf/d)	3,829	4,578	6,203	3,899	3,638	3,667	5,107	3,838	3,625	3,996	5,378	3,927	4,630	4,066	4,236
Petroleum (thousand b/d)	12	5	12	8	8	6	10	8	16	12	18	11	9	8	14
South Census Region															
Coal (thousand st/d)	671	718	1,035	789	717	787	1,028	750	778	767	1,020	757	804	821	831
Natural Gas (million cf/d)	14,754	16,920	20,179	13,502	12,676	15,265	18,261	13,462	13,539	15,516	18,320	13,676	16,342	14,927	15,272
Petroleum (thousand b/d)	55	56	66	43	48	43	56	44	59	52	57	45	55	48	53
Midwest Census Region															
Coal (thousand st/d)	680	626	848	675	725	666	824	684	759	660	794	668	708	725	720
Natural Gas (million cf/d)	2,692	2,910	3,743	2,283	2,189	2,271	3,222	2,310	2,777	3,029	3,555	2,522	2,908	2,500	2,972
Petroleum (thousand b/d)	19	19	18	16	15	18	22	20	21	20	21	20	18	18	20
West Census Region															
Coal (thousand st/d)	244	208	312	288	269	202	302	295	290	244	284	296	263	267	278
Natural Gas (million cf/d)	3,951	4,164	5,982	4,041	3,310	3,441	5,573	4,204	3,777	3,731	5,504	4,128	4,537	4,139	4,290
Petroleum (thousand b/d)	34	32	35	35	37	34	36	37	38	38	39	39	34	36	39
End-of-period U.S. Fuel Inventories Held by Electric Power Sector															
Coal (million short tons)	192.3	183.2	158.2	163.9	163.9	159.1	142.1	145.9	147.7	144.7	129.3	145.6	163.9	145.9	145.6
Residual Fuel Oil (mmb)	11.9	12.2	11.7	11.7	12.0	11.7	11.6	12.2	12.2	12.1	12.0	12.6	11.7	12.2	12.6
Distillate Fuel Oil (mmb)	17.3	17.4	21.0	17.1	15.6	15.5	15.7	16.3	16.5	16.4	16.5	16.9	17.1	16.3	16.9
Petroleum Coke (mmb)	6.2	4.5	3.8	4.4	4.4	4.4	4.4	4.3	4.3	4.3	4.2	4.2	4.4	4.3	4.2

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

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

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

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

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

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

Projections: EIA Regional Short-Term Energy Model.

Table 8a. U.S. Renewable Energy Consumption (Quadrillion Btu)
 U.S. Energy Information Administration | Short-Term Energy Outlook - August 2017

	2016				2017				2018				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017	2018
Electric Power Sector															
Geothermal	0.040	0.039	0.040	0.043	0.041	0.040	<i>0.040</i>	<i>0.040</i>	<i>0.040</i>	<i>0.039</i>	<i>0.040</i>	<i>0.041</i>	0.162	<i>0.162</i>	<i>0.160</i>
Hydroelectric Power (a)	0.710	0.684	0.528	0.543	0.765	0.846	<i>0.622</i>	<i>0.541</i>	<i>0.632</i>	<i>0.679</i>	<i>0.636</i>	<i>0.543</i>	2.465	<i>2.775</i>	<i>2.490</i>
Solar (b)	0.061	0.093	0.107	0.075	0.085	0.153	<i>0.147</i>	<i>0.091</i>	<i>0.102</i>	<i>0.179</i>	<i>0.175</i>	<i>0.105</i>	0.337	<i>0.476</i>	<i>0.561</i>
Waste Biomass (c)	0.070	0.072	0.072	0.072	0.071	0.067	<i>0.072</i>	<i>0.072</i>	<i>0.069</i>	<i>0.072</i>	<i>0.074</i>	<i>0.073</i>	0.287	<i>0.282</i>	<i>0.288</i>
Wood Biomass	0.061	0.049	0.060	0.052	0.057	0.057	<i>0.064</i>	<i>0.057</i>	<i>0.057</i>	<i>0.051</i>	<i>0.062</i>	<i>0.056</i>	0.222	<i>0.236</i>	<i>0.226</i>
Wind	0.565	0.520	0.443	0.584	0.630	0.628	<i>0.431</i>	<i>0.608</i>	<i>0.634</i>	<i>0.656</i>	<i>0.465</i>	<i>0.670</i>	2.112	<i>2.298</i>	<i>2.424</i>
Subtotal	1.508	1.457	1.250	1.370	1.650	1.792	<i>1.378</i>	<i>1.408</i>	<i>1.533</i>	<i>1.676</i>	<i>1.453</i>	<i>1.487</i>	5.585	<i>6.228</i>	<i>6.149</i>
Industrial Sector															
Biofuel Losses and Co-products (d)	0.196	0.193	0.203	0.205	0.201	0.203	<i>0.206</i>	<i>0.206</i>	<i>0.197</i>	<i>0.200</i>	<i>0.204</i>	<i>0.204</i>	0.796	<i>0.816</i>	<i>0.804</i>
Geothermal	0.001	0.001	0.001	0.001	0.001	0.001	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	0.004	<i>0.004</i>	<i>0.004</i>
Hydroelectric Power (a)	0.004	0.003	0.002	0.003	0.004	0.003	<i>0.002</i>	<i>0.003</i>	<i>0.004</i>	<i>0.004</i>	<i>0.002</i>	<i>0.003</i>	0.012	<i>0.012</i>	<i>0.012</i>
Solar (b)	0.003	0.005	0.005	0.004	0.004	0.007	<i>0.007</i>	<i>0.005</i>	<i>0.006</i>	<i>0.008</i>	<i>0.009</i>	<i>0.006</i>	0.017	<i>0.024</i>	<i>0.029</i>
Waste Biomass (c)	0.046	0.047	0.047	0.046	0.050	0.049	<i>0.048</i>	<i>0.049</i>	<i>0.048</i>	<i>0.047</i>	<i>0.049</i>	<i>0.049</i>	0.186	<i>0.196</i>	<i>0.193</i>
Wood Biomass	0.321	0.315	0.320	0.326	0.322	0.307	<i>0.314</i>	<i>0.315</i>	<i>0.307</i>	<i>0.302</i>	<i>0.312</i>	<i>0.315</i>	1.283	<i>1.257</i>	<i>1.236</i>
Subtotal	0.573	0.564	0.578	0.585	0.582	0.567	<i>0.576</i>	<i>0.578</i>	<i>0.562</i>	<i>0.559</i>	<i>0.573</i>	<i>0.575</i>	2.300	<i>2.304</i>	<i>2.268</i>
Commercial Sector															
Geothermal	0.005	0.005	0.005	0.005	0.005	0.005	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	0.020	<i>0.020</i>	<i>0.020</i>
Solar (b)	0.015	0.021	0.021	0.015	0.017	0.024	<i>0.024</i>	<i>0.018</i>	<i>0.020</i>	<i>0.029</i>	<i>0.029</i>	<i>0.021</i>	0.072	<i>0.083</i>	<i>0.098</i>
Waste Biomass (c)	0.013	0.012	0.012	0.013	0.012	0.012	<i>0.012</i>	<i>0.012</i>	<i>0.012</i>	<i>0.012</i>	<i>0.012</i>	<i>0.012</i>	0.049	<i>0.047</i>	<i>0.047</i>
Wood Biomass	0.020	0.020	0.021	0.021	0.020	0.019	<i>0.019</i>	<i>0.018</i>	<i>0.020</i>	<i>0.019</i>	<i>0.019</i>	<i>0.018</i>	0.082	<i>0.076</i>	<i>0.077</i>
Subtotal	0.060	0.065	0.066	0.060	0.061	0.066	<i>0.068</i>	<i>0.059</i>	<i>0.064</i>	<i>0.071</i>	<i>0.072</i>	<i>0.062</i>	0.250	<i>0.254</i>	<i>0.269</i>
Residential Sector															
Geothermal	0.010	0.010	0.010	0.010	0.010	0.010	<i>0.012</i>	<i>0.012</i>	<i>0.013</i>	<i>0.013</i>	<i>0.013</i>	<i>0.013</i>	0.040	<i>0.044</i>	<i>0.052</i>
Solar (e)	0.030	0.047	0.049	0.034	0.037	0.058	<i>0.060</i>	<i>0.043</i>	<i>0.046</i>	<i>0.071</i>	<i>0.074</i>	<i>0.053</i>	0.161	<i>0.198</i>	<i>0.243</i>
Wood Biomass	0.093	0.093	0.094	0.094	0.094	0.096	<i>0.099</i>	<i>0.099</i>	<i>0.103</i>	<i>0.103</i>	<i>0.104</i>	<i>0.104</i>	0.373	<i>0.388</i>	<i>0.413</i>
Subtotal	0.133	0.150	0.153	0.138	0.140	0.164	<i>0.171</i>	<i>0.154</i>	<i>0.161</i>	<i>0.186</i>	<i>0.191</i>	<i>0.170</i>	0.573	<i>0.630</i>	<i>0.708</i>
Transportation Sector															
Biomass-based Diesel (f)	0.051	0.066	0.088	0.084	0.051	0.080	<i>0.090</i>	<i>0.095</i>	<i>0.070</i>	<i>0.077</i>	<i>0.090</i>	<i>0.091</i>	0.289	<i>0.316</i>	<i>0.328</i>
Ethanol (f)	0.277	0.283	0.293	0.288	0.267	0.291	<i>0.297</i>	<i>0.289</i>	<i>0.270</i>	<i>0.290</i>	<i>0.296</i>	<i>0.289</i>	1.141	<i>1.144</i>	<i>1.146</i>
Subtotal	0.328	0.349	0.381	0.372	0.319	0.367	<i>0.388</i>	<i>0.384</i>	<i>0.340</i>	<i>0.368</i>	<i>0.386</i>	<i>0.380</i>	1.430	<i>1.457</i>	<i>1.474</i>
All Sectors Total															
Biomass-based Diesel (f)	0.051	0.066	0.088	0.084	0.051	0.080	<i>0.090</i>	<i>0.095</i>	<i>0.070</i>	<i>0.077</i>	<i>0.090</i>	<i>0.091</i>	0.289	<i>0.316</i>	<i>0.328</i>
Biofuel Losses and Co-products (d)	0.196	0.193	0.203	0.205	0.201	0.203	<i>0.206</i>	<i>0.206</i>	<i>0.197</i>	<i>0.200</i>	<i>0.204</i>	<i>0.204</i>	0.796	<i>0.816</i>	<i>0.804</i>
Ethanol (f)	0.287	0.295	0.305	0.299	0.278	0.300	<i>0.309</i>	<i>0.300</i>	<i>0.281</i>	<i>0.302</i>	<i>0.308</i>	<i>0.300</i>	1.186	<i>1.188</i>	<i>1.191</i>
Geothermal	0.056	0.055	0.056	0.059	0.057	0.058	<i>0.058</i>	<i>0.058</i>	<i>0.059</i>	<i>0.058</i>	<i>0.059</i>	<i>0.060</i>	0.226	<i>0.230</i>	<i>0.236</i>
Hydroelectric Power (a)	0.714	0.687	0.530	0.546	0.769	0.850	<i>0.625</i>	<i>0.544</i>	<i>0.636</i>	<i>0.683</i>	<i>0.638</i>	<i>0.546</i>	2.477	<i>2.787</i>	<i>2.503</i>
Solar (b)(e)	0.110	0.166	0.183	0.128	0.143	0.238	<i>0.239</i>	<i>0.157</i>	<i>0.173</i>	<i>0.287</i>	<i>0.286</i>	<i>0.185</i>	0.587	<i>0.777</i>	<i>0.931</i>
Waste Biomass (c)	0.129	0.131	0.130	0.131	0.133	0.128	<i>0.133</i>	<i>0.132</i>	<i>0.130</i>	<i>0.131</i>	<i>0.135</i>	<i>0.133</i>	0.522	<i>0.527</i>	<i>0.528</i>
Wood Biomass	0.496	0.477	0.495	0.492	0.493	0.478	<i>0.497</i>	<i>0.489</i>	<i>0.487</i>	<i>0.475</i>	<i>0.498</i>	<i>0.492</i>	1.959	<i>1.957</i>	<i>1.952</i>
Wind	0.565	0.520	0.443	0.584	0.630	0.628	<i>0.431</i>	<i>0.608</i>	<i>0.634</i>	<i>0.656</i>	<i>0.465</i>	<i>0.670</i>	2.112	<i>2.298</i>	<i>2.424</i>
Total Consumption	2.601	2.585	2.428	2.524	2.752	2.951	<i>2.581</i>	<i>2.584</i>	<i>2.660</i>	<i>2.860</i>	<i>2.674</i>	<i>2.675</i>	10.138	<i>10.867</i>	<i>10.868</i>

- = no data available

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

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

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

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

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

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

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

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

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

Projections: EIA Regional Short-Term Energy Model.

Table 8b. U.S. Renewable Electricity Generation and Capacity
 U.S. Energy Information Administration | Short-Term Energy Outlook - August 2017

	2016				2017				2018				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017	2018
Renewable Energy Electric Generating Capacity (megawatts, end of period)															
Electric Power Sector (a)															
Biomass	7,323	7,345	7,322	7,354	7,349	7,388	7,430	7,429	7,486	7,580	7,580	7,582	7,354	7,429	7,582
Waste	4,143	4,165	4,160	4,185	4,197	4,236	4,227	4,226	4,284	4,284	4,284	4,287	4,185	4,226	4,287
Wood	3,180	3,180	3,162	3,169	3,152	3,152	3,202	3,202	3,202	3,296	3,296	3,296	3,169	3,202	3,296
Conventional Hydroelectric	79,531	79,597	79,618	79,663	79,665	79,673	79,762	79,851	79,862	79,878	80,005	80,172	79,663	79,851	80,172
Geothermal	2,513	2,513	2,513	2,513	2,453	2,453	2,453	2,490	2,490	2,490	2,490	2,521	2,513	2,490	2,521
Large-Scale Solar (b)	14,274	15,076	17,507	21,590	22,433	23,410	24,492	29,332	29,989	30,524	31,097	32,378	21,590	29,332	32,378
Wind	73,285	74,166	74,720	81,164	82,864	83,326	84,768	88,195	88,314	89,565	90,554	102,004	81,164	88,195	102,004
Other Sectors (c)															
Biomass	6,811	6,807	6,806	6,759	6,808	6,827	6,828	6,828	6,828	6,829	6,829	6,831	6,759	6,828	6,831
Waste	944	943	942	895	892	896	897	897	897	897	897	899	895	897	899
Wood	5,867	5,864	5,864	5,864	5,915	5,931	5,931	5,931	5,931	5,931	5,931	5,931	5,864	5,931	5,931
Conventional Hydroelectric	325	327	327	327	327	327	327	327	327	327	327	327	327	327	327
Large-Scale Solar (b)	303	307	309	313	313	330	330	332	332	332	332	331	313	332	331
Small-Scale Solar (d)	10,810	11,569	12,305	13,183	14,107	14,761	15,756	16,721	17,732	18,734	19,814	20,957	13,183	16,721	20,957
Residential Sector	5,775	6,352	6,874	7,421	8,070	8,662	9,295	9,964	10,666	11,393	12,154	12,951	7,421	9,964	12,951
Commercial Sector	4,104	4,239	4,405	4,681	4,727	4,738	5,021	5,246	5,482	5,690	5,935	6,205	4,681	5,246	6,205
Industrial Sector	930	978	1,027	1,081	1,311	1,361	1,440	1,511	1,583	1,651	1,725	1,801	1,081	1,511	1,801
Wind	89	89	89	89	89	87	93	93	93	93	93	93	89	93	93
Renewable Electricity Generation (thousand megawatthours per day)															
Electric Power Sector (a)															
Biomass	89	84	92	84	87	86	93	87	87	84	92	87	87	88	88
Waste	49	52	51	50	49	48	50	49	49	50	51	50	51	49	50
Wood	39	32	41	34	38	38	43	37	38	34	41	37	37	39	37
Conventional Hydroelectric	837	806	615	634	912	998	726	631	754	800	742	633	723	816	732
Geothermal	47	46	47	50	49	48	46	47	48	46	47	47	48	48	47
Large-Scale Solar (b)	72	110	125	88	102	180	172	106	121	212	204	123	99	140	165
Wind	667	613	517	681	751	741	503	709	756	773	543	781	619	675	713
Other Sectors (c)															
Biomass	85	82	85	83	86	82	85	83	86	82	85	83	84	84	84
Waste	75	72	75	74	76	73	75	74	76	73	75	74	74	75	75
Wood	11	10	9	9	10	9	9	9	10	9	9	9	10	9	9
Conventional Hydroelectric	5	4	3	3	5	5	3	3	5	5	3	3	4	4	4
Large-Scale Solar (b)	1	2	2	1	1	2	2	2	2	3	3	2	2	2	2
Small-Scale Solar (d)	42	63	64	45	53	80	82	59	68	101	103	74	53	68	87
Residential Sector	21	34	35	24	29	46	48	34	39	60	62	45	29	39	52
Commercial Sector	16	23	23	16	19	26	26	18	22	31	31	22	20	22	26
Industrial Sector	4	6	6	4	5	8	8	6	7	10	10	7	5	7	8
Wind	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1

-- = no data available

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

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

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

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

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

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

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

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

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

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

	2016				2017				2018				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017	2018
Macroeconomic															
Real Gross Domestic Product (billion chained 2009 dollars - SAAR)	16,525	16,583	16,727	16,813	16,873	16,980	17,103	17,208	17,321	17,430	17,534	17,632	16,662	17,041	17,480
Real Personal Consumption Expend. (billion chained 2009 dollars - SAAR)	11,365	11,485	11,569	11,670	11,701	11,789	11,854	11,927	12,021	12,115	12,206	12,293	11,522	11,818	12,159
Real Fixed Investment (billion chained 2009 dollars - SAAR)	2,787	2,779	2,779	2,799	2,873	2,897	2,941	2,976	3,003	3,032	3,055	3,080	2,786	2,922	3,042
Business Inventory Change (billion chained 2009 dollars - SAAR)	42	-15	4	52	0	26	8	5	19	31	42	47	21	10	35
Real Government Expenditures (billion chained 2009 dollars - SAAR)	2,913	2,901	2,906	2,908	2,901	2,899	2,914	2,921	2,929	2,936	2,941	2,941	2,907	2,909	2,937
Real Exports of Goods & Services (billion chained 2009 dollars - SAAR)	2,102	2,111	2,162	2,137	2,174	2,171	2,189	2,206	2,220	2,236	2,253	2,272	2,128	2,185	2,245
Real Imports of Goods & Services (billion chained 2009 dollars - SAAR)	2,668	2,670	2,684	2,742	2,770	2,790	2,793	2,817	2,861	2,909	2,955	2,992	2,691	2,792	2,929
Real Disposable Personal Income (billion chained 2009 dollars - SAAR)	12,556	12,647	12,738	12,729	12,783	12,895	12,963	13,061	13,225	13,322	13,426	13,532	12,668	12,925	13,376
Non-Farm Employment (millions)	143.4	144.0	144.7	145.2	145.7	146.2	146.7	147.1	147.4	147.8	148.2	148.6	144.3	146.4	148.0
Civilian Unemployment Rate (percent)	4.9	4.9	4.9	4.7	4.7	4.4	4.3	4.3	4.2	4.1	4.1	4.1	4.9	4.4	4.1
Housing Starts (millions - SAAR)	1.15	1.16	1.15	1.25	1.24	1.13	1.22	1.25	1.31	1.32	1.34	1.36	1.18	1.21	1.33
Industrial Production Indices (Index, 2012=100)															
Total Industrial Production	103.1	102.9	103.1	103.3	103.7	104.9	105.2	105.8	106.7	107.5	108.1	108.7	103.1	104.9	107.7
Manufacturing	102.9	102.6	102.7	103.1	103.7	104.1	104.4	105.0	105.8	106.6	107.2	107.8	102.8	104.3	106.8
Food	107.0	107.7	108.3	107.5	110.1	111.4	111.7	112.0	112.4	112.8	113.3	113.8	107.6	111.3	113.0
Paper	96.1	95.3	95.0	96.7	96.3	95.6	95.6	95.5	95.5	95.5	95.5	95.6	95.8	95.7	95.5
Petroleum and Coal Products	100.0	100.9	101.4	101.4	102.5	106.5	106.7	107.1	107.5	108.0	108.6	109.1	100.9	105.7	108.3
Chemicals	98.8	98.0	97.1	98.1	97.7	97.9	98.4	99.1	99.9	100.8	101.8	102.8	98.0	98.3	101.4
Nonmetallic Mineral Products	113.6	112.2	111.0	112.3	116.8	116.3	117.1	118.3	119.5	120.9	122.2	123.0	112.3	117.1	121.4
Primary Metals	94.8	95.0	92.1	92.8	96.7	95.6	94.9	95.1	95.5	96.0	96.4	96.8	93.7	95.6	96.2
Coal-weighted Manufacturing (a)	100.8	100.3	99.4	100.2	102.5	102.5	102.5	103.0	103.6	104.3	105.0	105.7	100.2	102.6	104.7
Distillate-weighted Manufacturing (a)	105.6	105.5	105.1	106.2	108.4	108.9	109.4	110.0	110.7	111.5	112.2	112.8	105.6	109.2	111.8
Electricity-weighted Manufacturing (a)	101.5	101.2	100.9	101.6	103.1	103.1	103.2	103.8	104.6	105.4	106.2	107.0	101.3	103.3	105.8
Natural Gas-weighted Manufacturing (a)	100.8	100.5	100.5	101.4	102.9	103.1	103.3	103.9	104.8	105.8	106.8	107.8	100.8	103.3	106.3
Price Indexes															
Consumer Price Index (all urban consumers) (index, 1982-1984=1.00)	2.38	2.39	2.40	2.42	2.44	2.44	2.45	2.46	2.48	2.49	2.50	2.51	2.40	2.45	2.49
Producer Price Index: All Commodities (index, 1982=1.00)	1.84	1.85	1.85	1.88	1.93	1.94	1.94	1.95	1.96	1.97	1.98	1.99	1.85	1.94	1.98
Producer Price Index: Petroleum (index, 1982=1.00)	1.21	1.46	1.53	1.55	1.66	1.69	1.68	1.62	1.61	1.69	1.71	1.69	1.44	1.66	1.68
GDP Implicit Price Deflator (index, 2009=100)	110.6	111.3	111.7	112.2	112.8	113.2	113.8	114.4	115.2	115.9	116.5	117.1	111.5	113.6	116.2
Miscellaneous															
Vehicle Miles Traveled (b) (million miles/day)	8,079	9,024	8,912	8,566	8,301	9,138	9,015	8,649	8,282	9,274	9,140	8,790	8,646	8,777	8,874
Air Travel Capacity (Available ton-miles/day, thousands)	548	603	609	590	565	618	618	575	547	607	619	579	588	594	588
Aircraft Utilization (Revenue ton-miles/day, thousands)	326	366	375	357	342	380	387	349	328	379	387	351	356	365	361
Airline Ticket Price Index (index, 1982-1984=100)	281.8	305.0	273.0	270.4	277.8	297.0	277.3	288.1	289.3	319.2	298.7	302.6	282.6	285.0	302.5
Raw Steel Production (million short tons per day)	0.238	0.247	0.238	0.230	0.248	0.247	0.233	0.192	0.238	0.240	0.220	0.181	0.239	0.230	0.220
Carbon Dioxide (CO₂) Emissions (million metric tons)															
Petroleum	571	571	589	589	564	579	595	588	570	585	601	595	2,320	2,327	2,352
Natural Gas	439	327	343	376	416	306	325	384	450	323	332	389	1,485	1,431	1,494
Coal	309	298	413	335	322	311	412	340	347	315	401	340	1,354	1,385	1,402
Total Energy (c)	1,322	1,199	1,347	1,302	1,306	1,199	1,335	1,315	1,370	1,225	1,337	1,327	5,170	5,154	5,259

- = 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 - August 2017

	2016				2017				2018				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017	2018
Real Gross State Product (Billion \$2009)															
New England	881	883	891	896	898	903	<i>909</i>	<i>914</i>	<i>918</i>	<i>923</i>	<i>928</i>	<i>932</i>	888	<i>906</i>	<i>925</i>
Middle Atlantic	2,462	2,468	2,472	2,479	2,483	2,493	<i>2,509</i>	<i>2,521</i>	<i>2,535</i>	<i>2,548</i>	<i>2,559</i>	<i>2,569</i>	2,470	<i>2,501</i>	<i>2,553</i>
E. N. Central	2,263	2,270	2,289	2,299	2,304	2,315	<i>2,327</i>	<i>2,338</i>	<i>2,350</i>	<i>2,363</i>	<i>2,374</i>	<i>2,385</i>	2,280	<i>2,321</i>	<i>2,368</i>
W. N. Central	1,050	1,055	1,065	1,068	1,071	1,078	<i>1,085</i>	<i>1,090</i>	<i>1,096</i>	<i>1,102</i>	<i>1,107</i>	<i>1,113</i>	1,060	<i>1,081</i>	<i>1,105</i>
S. Atlantic	2,926	2,938	2,969	2,985	2,998	3,018	<i>3,042</i>	<i>3,062</i>	<i>3,084</i>	<i>3,105</i>	<i>3,125</i>	<i>3,144</i>	2,955	<i>3,030</i>	<i>3,115</i>
E. S. Central	740	744	751	754	757	762	<i>767</i>	<i>771</i>	<i>775</i>	<i>779</i>	<i>784</i>	<i>787</i>	747	<i>764</i>	<i>781</i>
W. S. Central	2,010	2,005	2,014	2,029	2,043	2,060	<i>2,080</i>	<i>2,098</i>	<i>2,114</i>	<i>2,129</i>	<i>2,146</i>	<i>2,162</i>	2,015	<i>2,070</i>	<i>2,138</i>
Mountain	1,049	1,051	1,068	1,073	1,077	1,086	<i>1,097</i>	<i>1,105</i>	<i>1,115</i>	<i>1,122</i>	<i>1,130</i>	<i>1,138</i>	1,060	<i>1,091</i>	<i>1,126</i>
Pacific	3,043	3,065	3,104	3,125	3,138	3,160	<i>3,183</i>	<i>3,203</i>	<i>3,226</i>	<i>3,251</i>	<i>3,273</i>	<i>3,294</i>	3,084	<i>3,171</i>	<i>3,261</i>
Industrial Output, Manufacturing (Index, Year 2012=100)															
New England	98.2	97.8	97.8	97.9	98.0	97.9	<i>97.9</i>	<i>98.3</i>	<i>99.0</i>	<i>99.4</i>	<i>99.8</i>	<i>100.2</i>	97.9	<i>98.0</i>	<i>99.6</i>
Middle Atlantic	98.8	98.4	98.2	97.9	98.2	97.3	<i>97.5</i>	<i>97.9</i>	<i>98.6</i>	<i>99.2</i>	<i>99.7</i>	<i>100.2</i>	98.3	<i>97.7</i>	<i>99.4</i>
E. N. Central	105.0	104.9	105.0	105.7	106.2	106.3	<i>106.6</i>	<i>107.1</i>	<i>107.9</i>	<i>108.7</i>	<i>109.4</i>	<i>110.1</i>	105.1	<i>106.6</i>	<i>109.0</i>
W. N. Central	102.4	102.0	102.0	102.2	102.4	103.1	<i>103.3</i>	<i>103.8</i>	<i>104.7</i>	<i>105.4</i>	<i>106.0</i>	<i>106.6</i>	102.1	<i>103.1</i>	<i>105.7</i>
S. Atlantic	105.5	105.5	105.9	106.9	107.2	108.0	<i>108.2</i>	<i>108.6</i>	<i>109.3</i>	<i>109.9</i>	<i>110.4</i>	<i>111.0</i>	106.0	<i>108.0</i>	<i>110.1</i>
E. S. Central	107.3	107.7	108.5	108.9	110.1	110.6	<i>111.0</i>	<i>111.4</i>	<i>112.3</i>	<i>113.0</i>	<i>113.6</i>	<i>114.2</i>	108.1	<i>110.8</i>	<i>113.3</i>
W. S. Central	97.8	96.7	96.1	96.4	98.1	99.5	<i>100.0</i>	<i>100.7</i>	<i>101.8</i>	<i>102.8</i>	<i>103.8</i>	<i>104.7</i>	96.7	<i>99.6</i>	<i>103.3</i>
Mountain	106.1	106.0	106.3	107.2	108.3	108.4	<i>108.9</i>	<i>109.6</i>	<i>110.6</i>	<i>111.3</i>	<i>111.9</i>	<i>112.5</i>	106.4	<i>108.8</i>	<i>111.6</i>
Pacific	104.0	103.7	103.3	103.7	103.8	104.5	<i>104.9</i>	<i>105.6</i>	<i>106.5</i>	<i>107.4</i>	<i>108.0</i>	<i>108.7</i>	103.7	<i>104.7</i>	<i>107.7</i>
Real Personal Income (Billion \$2009)															
New England	775	783	791	782	785	791	<i>796</i>	<i>802</i>	<i>808</i>	<i>813</i>	<i>818</i>	<i>825</i>	783	<i>793</i>	<i>816</i>
Middle Atlantic	1,966	1,978	1,991	1,987	1,992	2,004	<i>2,014</i>	<i>2,027</i>	<i>2,042</i>	<i>2,053</i>	<i>2,066</i>	<i>2,081</i>	1,980	<i>2,009</i>	<i>2,060</i>
E. N. Central	2,092	2,106	2,118	2,115	2,122	2,139	<i>2,148</i>	<i>2,161</i>	<i>2,178</i>	<i>2,190</i>	<i>2,205</i>	<i>2,221</i>	2,108	<i>2,143</i>	<i>2,198</i>
W. N. Central	994	1,000	1,006	1,001	1,001	1,010	<i>1,014</i>	<i>1,020</i>	<i>1,028</i>	<i>1,034</i>	<i>1,041</i>	<i>1,049</i>	1,000	<i>1,011</i>	<i>1,038</i>
S. Atlantic	2,703	2,723	2,750	2,752	2,769	2,793	<i>2,810</i>	<i>2,833</i>	<i>2,860</i>	<i>2,881</i>	<i>2,906</i>	<i>2,933</i>	2,732	<i>2,801</i>	<i>2,895</i>
E. S. Central	773	777	783	782	786	792	<i>796</i>	<i>802</i>	<i>809</i>	<i>814</i>	<i>819</i>	<i>826</i>	779	<i>794</i>	<i>817</i>
W. S. Central	1,731	1,739	1,746	1,737	1,748	1,765	<i>1,778</i>	<i>1,796</i>	<i>1,814</i>	<i>1,829</i>	<i>1,846</i>	<i>1,865</i>	1,738	<i>1,772</i>	<i>1,839</i>
Mountain	949	957	969	963	967	977	<i>984</i>	<i>993</i>	<i>1,003</i>	<i>1,011</i>	<i>1,020</i>	<i>1,031</i>	959	<i>980</i>	<i>1,016</i>
Pacific	2,316	2,336	2,356	2,367	2,377	2,395	<i>2,410</i>	<i>2,430</i>	<i>2,452</i>	<i>2,470</i>	<i>2,490</i>	<i>2,513</i>	2,344	<i>2,403</i>	<i>2,481</i>
Households (Thousands)															
New England	5,827	5,832	5,835	5,838	5,840	5,823	<i>5,830</i>	<i>5,839</i>	<i>5,849</i>	<i>5,859</i>	<i>5,869</i>	<i>5,880</i>	5,838	<i>5,839</i>	<i>5,880</i>
Middle Atlantic	15,961	15,971	15,977	15,982	15,983	15,931	<i>15,948</i>	<i>15,967</i>	<i>15,991</i>	<i>16,013</i>	<i>16,037</i>	<i>16,062</i>	15,982	<i>15,967</i>	<i>16,062</i>
E. N. Central	18,744	18,760	18,769	18,776	18,784	18,722	<i>18,741</i>	<i>18,763</i>	<i>18,789</i>	<i>18,818</i>	<i>18,849</i>	<i>18,881</i>	18,776	<i>18,763</i>	<i>18,881</i>
W. N. Central	8,523	8,540	8,554	8,568	8,583	8,566	<i>8,584</i>	<i>8,606</i>	<i>8,629</i>	<i>8,654</i>	<i>8,678</i>	<i>8,702</i>	8,568	<i>8,606</i>	<i>8,702</i>
S. Atlantic	25,028	25,127	25,216	25,301	25,382	25,372	<i>25,466</i>	<i>25,566</i>	<i>25,668</i>	<i>25,773</i>	<i>25,878</i>	<i>25,985</i>	25,301	<i>25,566</i>	<i>25,985</i>
E. S. Central	7,585	7,599	7,611	7,622	7,633	7,616	<i>7,632</i>	<i>7,649</i>	<i>7,667</i>	<i>7,687</i>	<i>7,707</i>	<i>7,727</i>	7,622	<i>7,649</i>	<i>7,727</i>
W. S. Central	14,512	14,564	14,613	14,657	14,701	14,695	<i>14,751</i>	<i>14,810</i>	<i>14,871</i>	<i>14,932</i>	<i>14,993</i>	<i>15,055</i>	14,657	<i>14,810</i>	<i>15,055</i>
Mountain	8,934	8,973	9,010	9,047	9,081	9,083	<i>9,123</i>	<i>9,164</i>	<i>9,207</i>	<i>9,252</i>	<i>9,296</i>	<i>9,341</i>	9,047	<i>9,164</i>	<i>9,341</i>
Pacific	18,622	18,677	18,725	18,774	18,821	18,808	<i>18,873</i>	<i>18,941</i>	<i>19,012</i>	<i>19,075</i>	<i>19,138</i>	<i>19,197</i>	18,774	<i>18,941</i>	<i>19,197</i>
Total Non-farm Employment (Millions)															
New England	7.3	7.3	7.3	7.3	7.4	7.4	<i>7.4</i>	<i>7.4</i>	<i>7.4</i>	<i>7.4</i>	<i>7.4</i>	<i>7.4</i>	7.3	<i>7.4</i>	<i>7.4</i>
Middle Atlantic	19.2	19.2	19.3	19.4	19.4	19.5	<i>19.5</i>	<i>19.5</i>	<i>19.6</i>	<i>19.6</i>	<i>19.6</i>	<i>19.6</i>	19.3	<i>19.5</i>	<i>19.6</i>
E. N. Central	21.7	21.7	21.8	21.8	21.9	21.9	<i>22.0</i>	<i>22.0</i>	<i>22.0</i>	<i>22.1</i>	<i>22.1</i>	<i>22.1</i>	21.7	<i>21.9</i>	<i>22.1</i>
W. N. Central	10.5	10.5	10.6	10.6	10.6	10.7	<i>10.7</i>	<i>10.7</i>	<i>10.7</i>	<i>10.8</i>	<i>10.8</i>	<i>10.8</i>	10.6	<i>10.7</i>	<i>10.8</i>
S. Atlantic	27.4	27.6	27.8	27.9	28.0	28.1	<i>28.2</i>	<i>28.3</i>	<i>28.4</i>	<i>28.5</i>	<i>28.6</i>	<i>28.7</i>	27.7	<i>28.2</i>	<i>28.6</i>
E. S. Central	7.9	7.9	8.0	8.0	8.0	8.1	<i>8.1</i>	<i>8.1</i>	<i>8.1</i>	<i>8.2</i>	<i>8.2</i>	<i>8.2</i>	8.0	<i>8.1</i>	<i>8.2</i>
W. S. Central	16.8	16.8	16.8	16.9	17.0	17.1	<i>17.2</i>	<i>17.2</i>	<i>17.3</i>	<i>17.4</i>	<i>17.4</i>	<i>17.5</i>	16.8	<i>17.1</i>	<i>17.4</i>
Mountain	10.2	10.2	10.3	10.4	10.4	10.5	<i>10.5</i>	<i>10.6</i>	<i>10.6</i>	<i>10.6</i>	<i>10.7</i>	<i>10.7</i>	10.3	<i>10.5</i>	<i>10.7</i>
Pacific	22.2	22.4	22.5	22.6	22.7	22.8	<i>22.9</i>	<i>22.9</i>	<i>23.0</i>	<i>23.1</i>	<i>23.1</i>	<i>23.2</i>	22.4	<i>22.8</i>	<i>23.1</i>

- = 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 - August 2017

	2016				2017				2018				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017	2018
Heating Degree Days															
New England	2,841	901	77	2,114	2,989	806	140	2,171	3,095	848	130	2,112	5,933	6,106	6,185
Middle Atlantic	2,668	751	39	1,903	2,662	604	83	1,985	2,881	676	83	1,942	5,360	5,335	5,582
E. N. Central	2,868	753	48	2,032	2,691	629	120	2,212	3,163	724	119	2,227	5,702	5,651	6,233
W. N. Central	2,894	659	103	2,131	2,813	663	142	2,388	3,273	684	149	2,416	5,788	6,005	6,521
South Atlantic	1,381	210	2	858	1,147	124	13	964	1,429	199	14	963	2,451	2,247	2,605
E. S. Central	1,754	233	5	1,099	1,374	153	20	1,288	1,849	248	20	1,308	3,090	2,835	3,425
W. S. Central	1,050	78	1	620	772	66	5	801	1,183	82	4	801	1,749	1,644	2,070
Mountain	2,083	678	160	1,705	2,059	698	133	1,830	2,236	676	138	1,846	4,625	4,720	4,896
Pacific	1,302	465	95	1,149	1,550	530	78	1,221	1,504	567	87	1,183	3,012	3,379	3,341
U.S. Average	1,948	480	51	1,397	1,856	427	71	1,526	2,128	481	72	1,518	3,876	3,881	4,199
Heating Degree Days, Prior 10-year Average															
New England	3,212	824	133	2,105	3,200	830	122	2,125	3,172	818	124	2,121	6,273	6,278	6,235
Middle Atlantic	2,983	651	90	1,927	2,982	661	81	1,941	2,947	646	82	1,947	5,650	5,664	5,622
E. N. Central	3,246	689	125	2,205	3,254	701	114	2,197	3,208	692	118	2,205	6,266	6,266	6,223
W. N. Central	3,298	693	150	2,393	3,302	707	142	2,379	3,264	705	144	2,379	6,534	6,530	6,492
South Atlantic	1,498	184	14	972	1,502	188	12	965	1,476	176	12	975	2,668	2,666	2,639
E. S. Central	1,898	225	19	1,308	1,905	231	16	1,287	1,867	217	17	1,302	3,450	3,438	3,403
W. S. Central	1,221	83	5	815	1,227	88	4	799	1,180	80	4	807	2,123	2,118	2,072
Mountain	2,231	725	147	1,880	2,216	734	142	1,862	2,195	737	142	1,858	4,982	4,953	4,931
Pacific	1,495	610	88	1,212	1,461	597	88	1,204	1,463	592	84	1,199	3,406	3,351	3,338
U.S. Average	2,199	483	76	1,534	2,192	487	71	1,526	2,160	478	71	1,528	4,292	4,276	4,237
Cooling Degree Days															
New England	0	80	539	0	0	77	413	1	0	94	455	1	618	492	550
Middle Atlantic	0	145	734	6	0	140	571	4	0	173	590	6	884	715	769
E. N. Central	4	230	704	19	1	209	547	7	0	219	543	8	957	764	770
W. N. Central	10	319	711	30	9	262	712	10	3	274	676	12	1,071	993	965
South Atlantic	136	651	1,344	277	156	666	1,194	233	124	652	1,180	243	2,409	2,249	2,199
E. S. Central	42	533	1,253	129	66	483	1,057	66	29	522	1,062	72	1,957	1,673	1,685
W. S. Central	123	836	1,599	329	214	831	1,499	196	93	912	1,574	219	2,886	2,740	2,798
Mountain	33	464	889	112	35	463	971	75	23	451	964	85	1,499	1,545	1,523
Pacific	36	230	597	72	30	215	661	61	34	214	636	83	935	966	967
U.S. Average	54	411	965	128	69	401	881	92	45	418	886	102	1,558	1,443	1,452
Cooling Degree Days, Prior 10-year Average															
New England	0	81	419	1	0	81	433	1	0	81	438	0	501	515	519
Middle Atlantic	0	168	549	5	0	169	566	6	0	166	574	3	722	741	743
E. N. Central	3	229	528	6	3	234	543	8	3	228	539	6	766	788	776
W. N. Central	7	279	674	9	7	281	673	12	7	276	668	11	969	973	962
South Atlantic	114	661	1,147	222	117	666	1,167	230	119	675	1,165	224	2,144	2,180	2,182
E. S. Central	32	541	1,038	56	33	544	1,056	65	34	539	1,041	62	1,668	1,698	1,677
W. S. Central	90	890	1,518	191	90	877	1,528	205	100	887	1,536	202	2,689	2,699	2,725
Mountain	21	429	930	76	23	424	931	81	24	426	928	80	1,456	1,459	1,457
Pacific	29	180	611	72	30	181	608	74	30	185	618	74	892	893	907
U.S. Average	42	404	845	89	43	406	857	94	45	408	860	92	1,380	1,400	1,405

- = no data available

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

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

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

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

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

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

Appendix

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

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

Table a1. Summary of Estimated Petroleum and Other Liquids Quantities

	June 2017	July 2017	June-July 2017 Average	June-July 2016 Average	2014 – 2016 Average
Global Petroleum and Other Liquids (million barrels per day)					
Global Petroleum and Other Liquids Production (a)	99.2	99.3	99.2	97.1	95.9
Global Petroleum and Other Liquids Consumption (b)	98.9	99.3	99.1	96.3	95.3
Biofuels Production (c)	2.5	2.4	2.5	2.4	2.1
Biofuels Consumption (c)	2.2	2.2	2.2	2.1	2.0
Iran Liquid Fuels Production	4.9	4.9	4.9	4.3	3.7
Iran Liquid Fuels Consumption	1.9	1.9	1.9	1.8	1.9
Petroleum and Petroleum Products Produced and Consumed in Countries Other Than Iran (million barrels per day)					
Production (d)	91.8	92.0	91.9	90.4	90.1
Consumption (d)	94.8	95.3	95.1	92.4	91.4
Production minus Consumption	-3.0	-3.3	-3.1	-2.0	-1.3
World Inventory Net Withdrawals Including Iran	-0.3	0.1	-0.1	-0.7	-0.6
Estimated OECD Inventory Level (e) (million barrels)	3,043	3,029	3,036	3,061	2,840
OPEC Surplus Crude Oil Production Capacity (f)	2.0	2.0	2.0	1.0	1.6

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

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

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

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

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

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

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

Source: U.S. Energy Information Administration.

Table a2. Crude Oil and Petroleum Product Price Data

Item	June 2017	July 2017	June-July 2017 Average	June-July 2016 Average	2014 – 2016 Average
Brent Front Month Futures Price (\$ per barrel)	47.55	49.15	48.31	48.31	66.06
WTI Front Month Futures Price (\$ per barrel)	45.20	46.68	45.90	46.92	61.71
Dubai Front Month Futures Price (\$ per barrel)	46.34	47.75	47.01	45.02	63.38
Brent 1st - 13th Month Futures Spread (\$ per barrel)	-2.39	-2.21	-2.30	-4.09	-3.42
WTI 1st - 13th Month Futures Spread (\$ per barrel)	-2.01	-1.72	-1.87	-4.21	-2.04
RBOB Front Month Futures Price (\$ per gallon)	1.48	1.57	1.52	1.47	1.89
Heating Oil Front Month Futures Price (\$ per gallon)	1.43	1.53	1.47	1.45	1.93
RBOB - Brent Futures Crack Spread (\$ per gallon)	0.35	0.40	0.37	0.32	0.31
Heating Oil - Brent Futures Crack Spread (\$ per gallon)	0.29	0.36	0.32	0.30	0.36

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

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

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

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