



## Short-Term Energy Outlook (STEO)

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### Forecast highlights

#### *Global liquid fuels*

- Brent crude oil spot prices averaged \$72 per barrel (b) in April, an increase of \$6/b from the March level and the first time monthly Brent crude oil prices have averaged more than \$70/b since November 2014. EIA forecasts Brent spot prices will average \$71/b in 2018 and \$66/b in 2019, which are \$7/b and \$3/b higher, respectively, than in the April STEO. EIA expects West Texas Intermediate (WTI) crude oil prices to average \$5/b lower than Brent prices in both 2018 and 2019. NYMEX WTI futures and options contract values for August 2018 delivery traded during the five-day period ending May 3, 2018, suggest a range of \$54/b to \$84/b encompasses the market expectation for August 2018 WTI prices at the 95% confidence level.
- For the 2018 April–September summer driving season, EIA forecasts U.S. regular gasoline retail prices to average \$2.90/gallon (gal), 17 cents/gal higher than in last month's STEO and up from an average of \$2.41/gal last summer. The higher forecast gasoline prices are primarily the result of higher forecast crude oil prices. For the year 2018, EIA expects U.S. regular gasoline retail prices to average \$2.79/gal. Monthly average gasoline prices are forecast to reach a summer peak of \$2.97/gal in June, before falling to \$2.86/gal in September.
- EIA estimates that U.S. crude oil production averaged 10.5 million barrels per day (b/d) in April, up 120,000 b/d from the March level. EIA projects that U.S. crude oil production will average 10.7 million b/d in 2018, up from [9.4 million b/d in 2017](#), and will average 11.9 million b/d in 2019, 0.4 million b/d higher than forecast in the April STEO. In the current outlook, EIA forecasts U.S. crude oil production will end 2019 at more than 12 million b/d.
- EIA forecasts that total crude oil and petroleum product net imports will fall from an annual average of 3.7 million b/d in 2017 to an average of 2.6 million b/d in 2018 and to 1.5 million b/d in 2019, which would be the lowest level of net imports since 1958.
- EIA estimates global petroleum and other liquid fuels inventories declined by 0.5 million b/d in 2017. In this forecast, global inventories grow by 0.2 million b/d in 2018 and by 0.6 million b/d in 2019.

## *Natural gas*

- U.S. dry natural gas production averaged **73.6 billion cubic feet per day (Bcf/d) in 2017**. EIA forecasts dry natural gas production will average 80.5 Bcf/d in 2018, establishing a new record. EIA expects natural gas production will rise again by 2.9 Bcf/d in 2019 to 83.3 Bcf/d.
- Growing U.S. natural gas production is expected to support increasing natural gas exports in the forecast. EIA forecasts **net natural gas exports** to increase from 0.4 Bcf/d in 2017 to an annual average of 2.0 Bcf/d in 2018 and 4.6 Bcf/d in 2019.
- EIA estimates that natural gas inventories increased by 22 billion cubic feet (Bcf) in April, ending the month 27% below the five-year average for the end of April. If confirmed in the monthly data, the April 2018 injection would be the smallest April injection since 1983. Preliminary data indicate April temperatures were the coldest for that month in the past 21 years, which contributed to low injections. Based on EIA's forecast of rising production, natural gas inventories should increase by more than the five-year average rate of growth during current the injection season (April–October) to reach more than 3.5 trillion cubic feet on October 31, which would be 8% lower than the five-year average for the end of October.
- EIA expects Henry Hub natural gas spot prices to average \$3.01/million British thermal units (MMBtu) in 2018 and \$3.11/MMBtu in 2019. NYMEX futures and options contract values for August 2018 delivery that traded during the five-day period ending May 3, 2018, suggest that a range of \$2.32/MMBtu to \$3.40/MMBtu encompasses the market expectation for August 2018 Henry Hub natural gas prices at the 95% confidence level.

## *Electricity, coal, renewables, and emissions*

- EIA expects the share of U.S. total utility-scale electricity generation from natural gas-fired power plants to rise from 32% in 2017 to 34% in both 2018 and 2019. The forecast electricity generation share from coal averages 29% in both 2018 and 2019, down from 30% in 2017. The nuclear share of generation was 20% in 2017 and is forecast to be 20% in 2018 and 19% in 2019. Nonhydropower renewables provided slightly less than 10% of electricity generation in 2017 and are expected to provide more than 10% in 2018 and nearly 11% in 2019. The generation share of hydropower was 7% in 2017 and is forecast to fall slightly below that level both 2018 and 2019.
- EIA forecasts coal production to decline by 3% to 751 million short tons (MMst) in 2018. The production decrease is largely attributable to a forecast decline of 4% in domestic coal consumption in 2018, with most of the decline expected to be in the electric power sector. A 9% forecast decline in coal exports also contributes to lower expected coal production in 2018. EIA expects coal production to remain nearly unchanged in 2019 at 752 MMst.

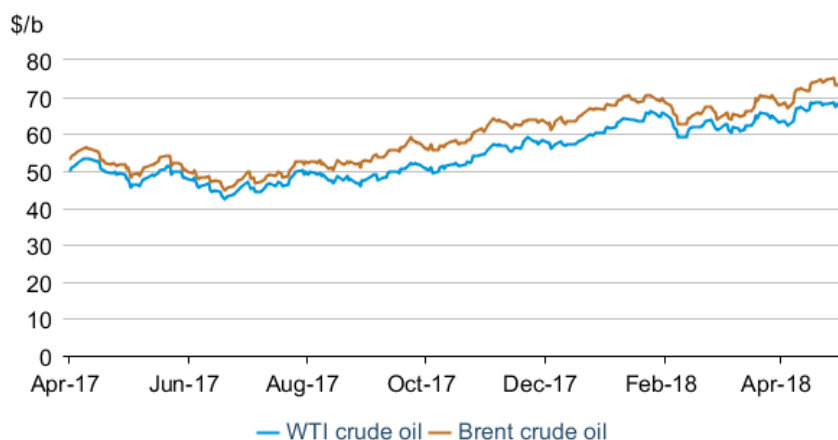
- In 2017, EIA estimates that wind generated an average of 697,000 megawatt-hours per day (MWh/d). EIA forecasts that wind generation will rise to 741,000 MWh/d in 2018 and to 766,000 MWh/d in 2019. If factors such as precipitation and snowpack remain as forecast, conventional hydropower is forecast to generate 747,000 MWh/d in 2019, making it the first year that wind generation would exceed hydropower generation in the United States.
- After declining by 0.9% in 2017, EIA forecasts that energy-related carbon dioxide (CO<sub>2</sub>) emissions will increase by 1.4% in 2018 and by 0.4% in 2019. Energy-related CO<sub>2</sub> emissions are sensitive to changes in weather, economic growth, and energy prices.

## Petroleum and natural gas markets review

### Crude oil

**Prices:** The front-month futures price for North Sea Brent crude oil settled at \$73.62 per barrel (b) on May 3, an increase of \$5.98/b from April 2. Front-month futures prices for West Texas Intermediate (WTI) crude oil for delivery at Cushing, Oklahoma, increased by \$5.42/b during the same period, settling at \$68.43/b on May 3 (**Figure 1**). April Brent and WTI monthly average spot prices were \$6.09/b higher and \$3.53/b higher, respectively, than the March average spot prices.

**Figure 1. Crude oil front-month futures prices**



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

At the end of April, crude oil prices reached their highest levels since 2014, following five consecutive quarters of global oil inventory draws. Since January 2017, the beginning of the crude oil production cut agreement among certain countries within and outside the Organization of the Petroleum Exporting Countries (OPEC), global petroleum inventories have declined at an average rate of more than 0.5 million barrels per day (b/d). Excluding Libya, Nigeria, and Equatorial Guinea— countries not subject to the production reductions—OPEC

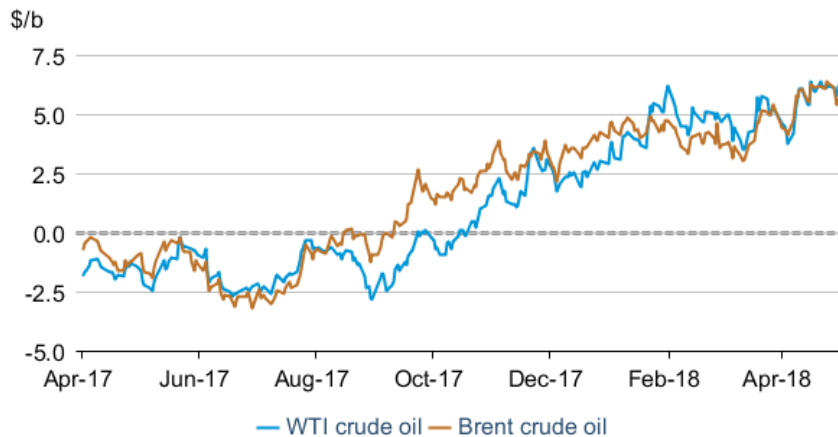
countries produced an estimated 29.3 million barrels b/d in April, the lowest levels since April 2015 and 0.4 million b/d below the agreed-upon production reductions.

Oil prices may have also risen in anticipation of the potential reinstatement of sanctions on Iran, which could contribute to declines in the country's crude oil production. Uncertainty surrounding extension of the [Joint Comprehensive Plan of Action](#) (JCPOA) could contribute to increased price volatility.

Further, strong global oil demand growth has added to upward price pressures. EIA estimates that global oil consumption in the first quarter of 2018 was 1.9 million b/d (2%) higher than it was in the first quarter of 2017.

Backwardation (when near-term prices are higher than longer-dated prices) also increased in April and reached the highest levels since 2014, indicating high demand for immediate oil deliveries. The Brent and WTI 1st–13th spread increased \$1.05/b and \$1.50/b, respectively, from April 2 to settle at \$5.66/b and \$6.23/b, respectively, on May 3 (**Figure 2**). The increase in the backwardation of crude oil prices suggests there is an incentive for holders of oil in physical storage to sell on spot markets. STEO estimates that U.S. commercial crude oil inventories in April were 1.5% lower than the five-year average for that month, and total petroleum inventories in countries within the Organization for Economic Cooperation and Development (OECD) are estimated to have ended April slightly below the five-year average.

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



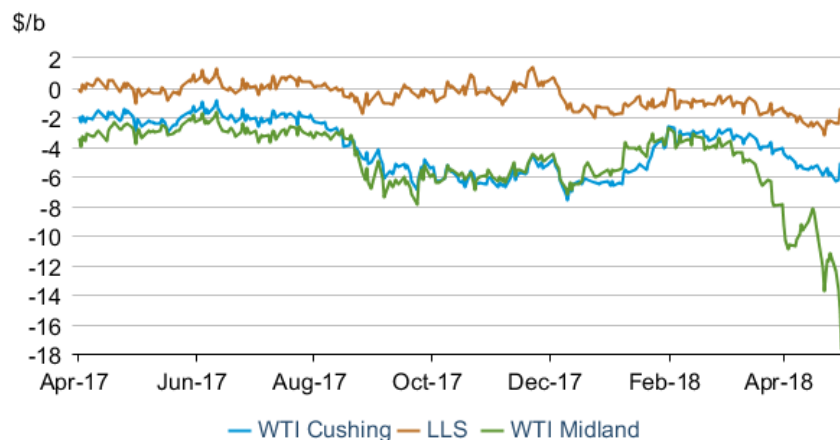
 CME Group and Intercontinental Exchange, as compiled by Bloomberg L.P.

**Crude oil price spreads:** WTI crude oil priced in Midland, Texas, declined sharply compared with Brent in April. Pipeline constraints in the Permian region continue to contribute to lower crude oil prices there relative to other regions, as discussed in the [April STEO](#). As production grows beyond the capacity of existing pipeline infrastructure, producers must use more expensive forms of transportation, including rail and trucks. As a result, WTI Midland price spreads widened to the largest discount to Brent since 2014. The WTI Midland differential to Brent settled at -\$17.69/b on May 3, which represents a widening of \$9.76/b since April 2 (**Figure 3**).

U.S. light, sweet crude oil priced outside of the Permian region also declined in comparison to Brent, but not to the same extent as WTI Midland crude oil. Transportation constraints are not a significant factor for crude oil priced in Cushing, Oklahoma, or on the U.S. Gulf Coast. However, more negative [U.S. light, sweet crude oil](#) differentials may suggest other constraints, including limitations in processing increasing amounts of this type of crude oil on the part of U.S. refineries. Midwest and Gulf Coast refinery inputs are at or near all-time highs for this time of year. Light Louisiana Sweet crude oil prices reached their lowest level compared with Brent prices in more than two years in late April, settling at -\$1.59/b below Brent on May 3. WTI Cushing spot prices also fell relative to Brent, declining by \$1.06/b from April 2 to settle at -\$5.19/b on May 3. In addition to some potential refinery constraints, [infrastructure at export terminals](#) on the U.S. Gulf Coast could limit the scale of U.S. crude oil exports in the near-term. These low differentials may reflect the additional transportation costs to export light sweet crude oil to other regions such as Asia.

By mid-2019, EIA expects enough pipeline capacity will exist in the Permian region to transport crude oil to the U.S. Gulf Coast, eventually decreasing the spread between U.S. and international crude oil prices.

**Figure 3. U.S. crude oil spot price differentials to Brent**



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

EIA is revising higher its Brent price forecast for 2018 and 2019 by \$7/b and \$3/b, respectively, from the April STEO. EIA projects Brent prices to remain higher than \$70/b through the remainder of 2018, and then decline to \$65/b by the end of 2019. Because of the increasing transportation and export constraints in the United States, EIA expects the spread between Brent and WTI to average \$5/b in both 2018 and 2019. Despite these factors, WTI prices are still expected to be higher than forecasted in the April STEO.

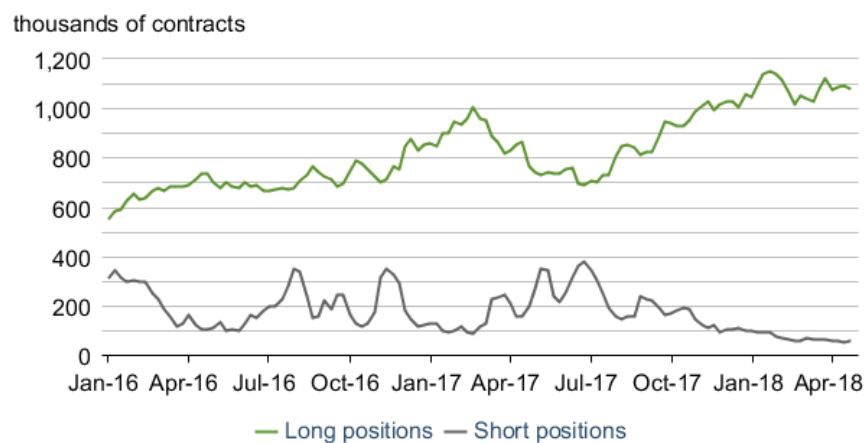
Because of the higher price environment, EIA is increasing its U.S. crude oil production forecast for 2019 by 0.4 million b/d, compared with the April STEO. EIA now expects U.S. crude oil production to average 10.7 million b/d in 2018 and 11.9 million b/d in 2019. However, because crude oil prices in the Permian region are expected to remain significantly lower than WTI

Cushing prices until mid-2019, EIA does not expect crude oil production in that region to rise as sharply as it would under a scenario with no transportation constraints.

The revised U.S. crude oil production growth forecast is the main contributor to increased global liquid fuels supply in 2018 and 2019. With increased U.S. crude oil production, EIA expects global petroleum inventories to increase by 0.6 million b/d on average in 2019, compared with the expectation of a less than 0.2 million b/d build 2018. EIA expects the higher forecast inventory growth in 2019 compared with 2018 will put downward pressure on oil prices toward the end of 2018 and into 2019.

**Money manager positions:** Money managers increased their net long positions in both Brent and WTI futures contracts in March and April, pushing the ratio of their long positions to short positions to the highest level since 2011, when data on Brent positions first became available (**Figure 4**). Combined money manager long positions increased by 41% during the past year, whereas short positions declined by 72%. Money manager net long positions tend to increase when crude oil prices increase. Other [sentiment indicators](#) include an increase in the price of call options (derivatives that increase in value when the underlying security price increases) compared with put options (derivatives which increase in value when the underlying security price decreases). Declining crude oil inventories and increased geopolitical concerns have contributed to a more bullish sentiment in crude oil markets.

**Figure 4. Combined WTI and Brent money manager open interest**



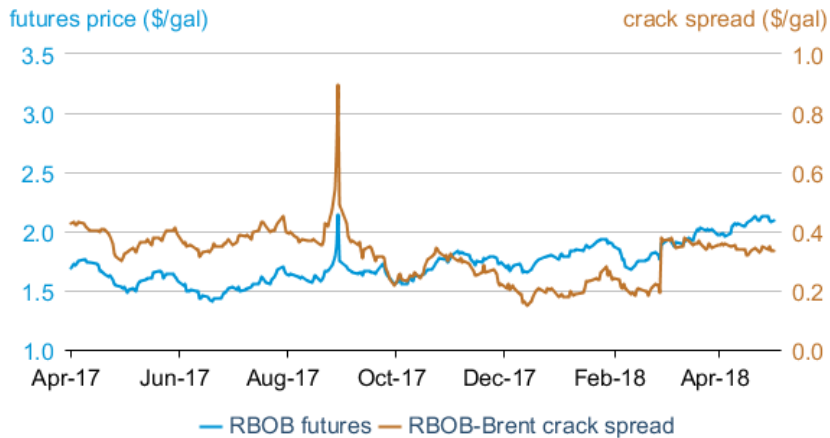
 U.S. Commodity Futures Trading Commission, Intercontinental Exchange, as compiled by Bloomberg L.P.

## Petroleum products

**Gasoline prices:** The front-month futures price of reformulated blendstock for oxygenate blending (RBOB, the petroleum component of gasoline used in many parts of the country) settled at \$2.09 per gallon (gal) on May 3 (**Figure 5**), an increase of 12 cents/gal since April 2. The RBOB–Brent crack spread (the difference between the price of RBOB and the price of Brent crude oil) declined slightly by 2 cents/gal to settle at 33 cents/gal over the same period.

The U.S. gasoline crack spread averaged 34 cents/gal in April, the lowest for April since 2011. Despite continued year-over-year growth in U.S. gasoline consumption and gasoline exports in April, gasoline stocks remain high in much of the United States. STEO estimates that U.S. gasoline stocks in April were 7 million barrels higher than the five-year average for that month.

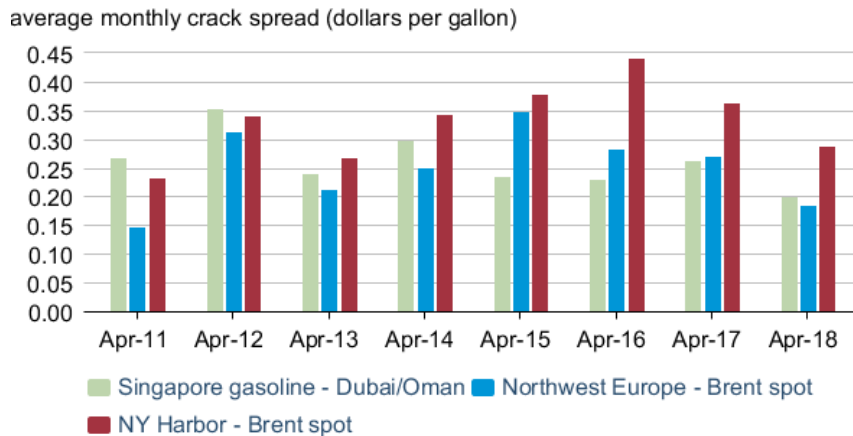
**Figure 5. Historical RBOB front-month futures prices and crack spread**



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

Weak gasoline crack spreads are also evident in other regions of the world. The Northwest Europe gasoline–Brent spot price crack spread averaged 19 cents/gal in April, the lowest for that month since 2011 (**Figure 6**). The Singapore gasoline–Dubai/Oman spot price crack spread averaged 20 cents/gal in April, the lowest since at least 2011.

**Figure 6. International gasoline crack spreads**



eia Bloomberg, L.P.

Gasoline stocks in the Amsterdam-Rotterdam-Antwerp trade hub in Europe reached a record high at the end of March and have been above the five-year average since the start of 2018.

Similarly, light distillate stocks (which include gasoline) in Singapore also reached a record high at the end of March and have been above the five-year average for most of the year.

Trade press reports indicate that higher refinery runs in areas including China and Europe have resulted in increased supply of gasoline. China has been increasing refinery yields of gasoline relative to distillate over the past several years and is exporting more gasoline, depressing regional prices. High gasoline inventories in Europe may be tempered in the coming months by the potential for increased exports to the United States, when U.S. gasoline consumption reaches its seasonal high.

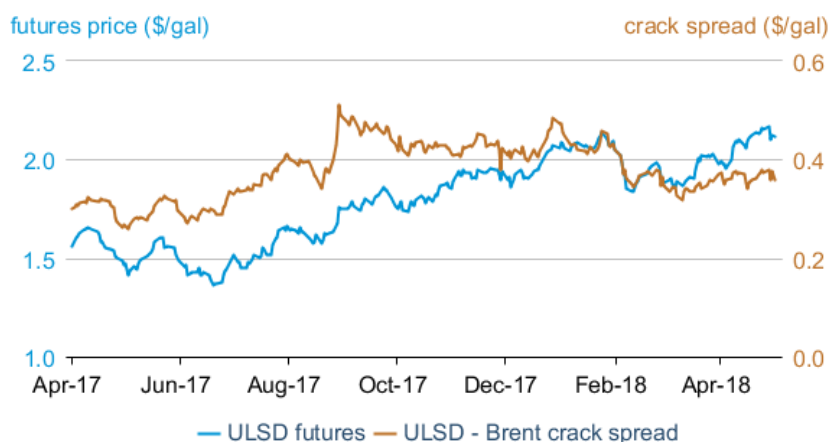
**Ultra-low sulfur diesel prices:** The ultra-low sulfur diesel (ULSD) front-month futures price increased 13 cents/gal from April 2 to settle at \$2.11/gal on May 3. The ULSD–Brent crack spread (the difference between the price of ULSD and the price of Brent crude oil) declined by 1 cent/gal to settle at 36 cents/gal over the same period (**Figure 7**).

ULSD front-month futures prices were at a premium to RBOB front-month futures prices on average in April, an unusual occurrence for that time of year. Gasoline prices generally start trading at a premium to ULSD prices in March when the RBOB futures contract represents the more expensive summer grade of gasoline. In addition to the factors that may be weakening gasoline prices globally, [colder-than-normal temperatures](#) in parts of the United States may have increased demand for heating oil in April, and strong economic growth and rising oil and natural gas drilling activity could also be contributing to growing diesel demand and supporting ULSD prices.

In [Petroleum Administration for Defense District \(PADD\) 1B](#), which includes the New York Harbor delivery point of the ULSD futures contract, distillate stocks have fallen since February and reached 17.8 million barrels at the end of April, close to the five-year low. Further, trade press reports indicate that less distillate is being transported from the U.S. Gulf Coast to the U.S. East Coast because of increased exports and international demand for distillate. Initial estimates for [distillate exports](#) indicate exports reached a weekly record of 1.7 million b/d for the week of April 20, 2018. Further, distillate exports averaged 1.4 million b/d for the four weeks ending April 27, 2018, which would be a record high for the month of April if confirmed in monthly data.



**Figure 7. Historical ULSD front-month futures price and crack spread**



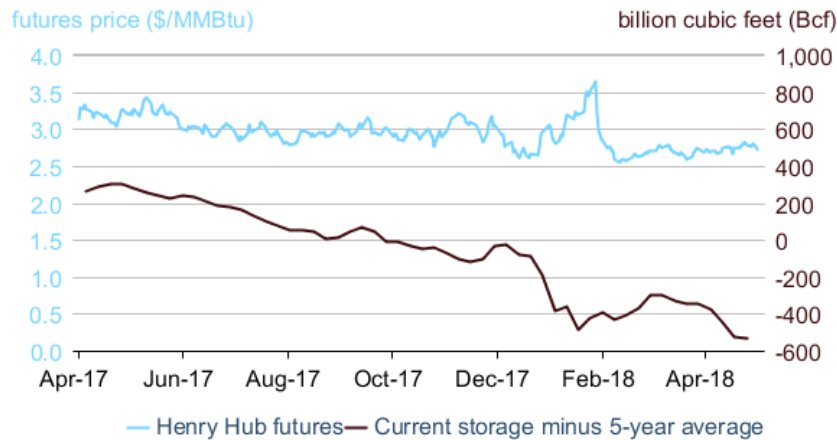
 CME Group, as compiled by Bloomberg L.P., ULSD=ultra-low sulfur diesel

## Natural Gas

The front-month natural gas futures contract for delivery at Henry Hub settled at \$2.73 per million British thermal units (MMBtu) on May 3, an increase of 4 cents/MMBtu from April 2 (**Figure 8**). April 2018 was the coldest April in the past 21 years. Cold temperatures contributed to withdrawals from working natural gas stocks during the first three weeks of the month. This month is the first time since at least 1994 that net withdrawals from storage continued into the third week of April. As of April 27, [working gas stocks](#) were 40% lower than the year-ago level and 28% lower than the five-year (2013–17) average for that time of year.

Despite inventories falling to more than 500 Bcf below the five-year average by end of April, natural gas prices have remained relatively flat. Similar to price movements in March, natural gas futures prices in April traded in the narrowest range since 1995, with a difference of just 22 cents/MMBtu between the high and low prices. In comparison, natural gas futures prices traded in a 41-cent range on average each month in 2017. EIA expects that higher natural gas production during the injection season will offset current low storage levels and keep price movements moderate. The Henry Hub natural gas spot price averaged \$2.80/MMBtu in April, 10 cents/MMBtu higher than in March.

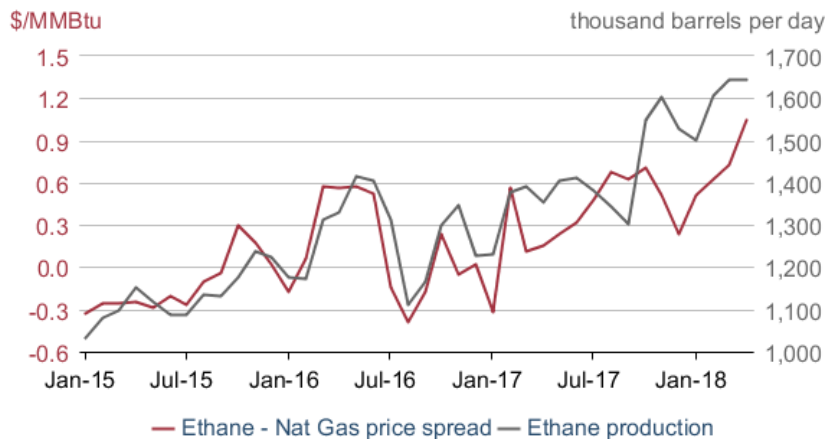
**Figure 8. U.S. natural gas front-month futures prices and storage**



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

Increasing demand for ethane has contributed to a widening spread between ethane spot prices and natural gas futures prices, which averaged \$1.04/MMBtu in April 2018 (Figure 9). The wider differential provides incentives for natural gas processors to extract more ethane from the natural gas stream for consumption and export. Ethane production has grown from 1.3 million barrels per day (b/d) in September 2017 to an estimated 1.6 million b/d in April 2018. STEO projects ethane production will average 1.7 million b/d in 2018 and 1.9 million b/d in 2019.

**Figure 9. Ethane price spread and production**



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

### Notable forecast changes

- EIA forecasts that Brent crude oil spot prices will average \$71 per barrel (b) in 2018 and \$66/b in 2019. These are \$7/b and \$3/b higher, respectively, than in the April STEO.

- EIA forecasts that U.S. crude oil production will average 11.9 million barrels per day (b/d) in 2019, 0.4 million b/d higher than forecast in the April STEO. The higher crude oil production forecast in 2019 reflects West Texas Intermediate (WTI) crude oil prices that are expected to average \$64/b during the second half of 2018 and first half of 2019, compared with last month's forecast of \$57/b during this period. However, because crude oil prices in the Permian region are expected to remain significantly lower than WTI Cushing prices until mid-2019, EIA does not expect crude oil production growth in that region to rise as sharply as it would under a scenario with no transportation constraints.
- For more information, see the [detailed table of STEO forecast changes](#).

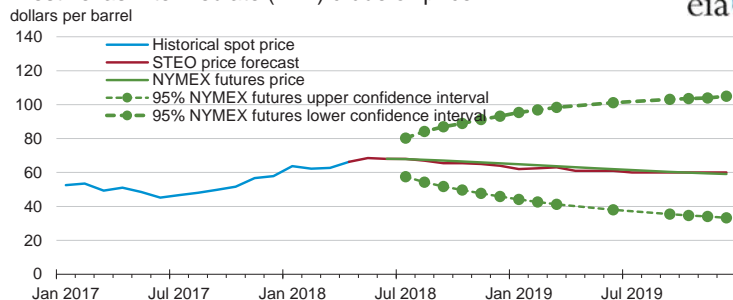
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# Short-Term Energy Outlook

## Chart Gallery for May 2018

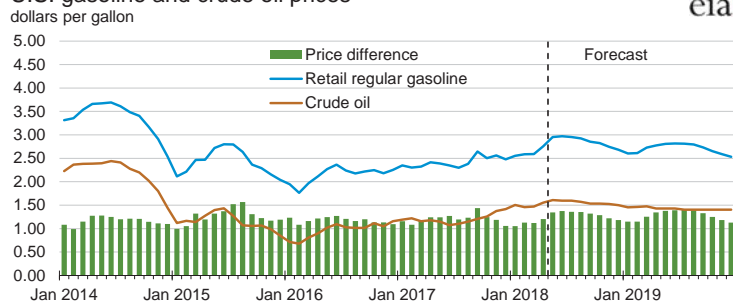
West Texas Intermediate (WTI) crude oil price



Note: Confidence interval derived from options market information for the 5 trading days ending May 3, 2018. Intervals not calculated for months with sparse trading in near-the-money options contracts.

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

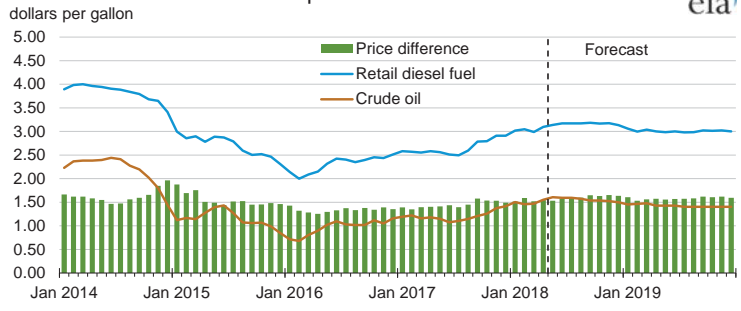
U.S. gasoline and crude oil prices



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

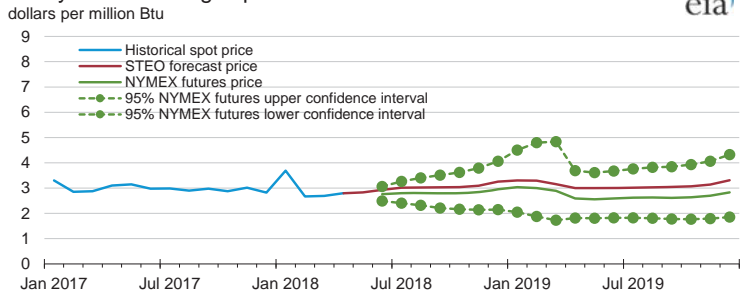
Source: Short-Term Energy Outlook, May 2018.

### U.S. diesel fuel and crude oil prices



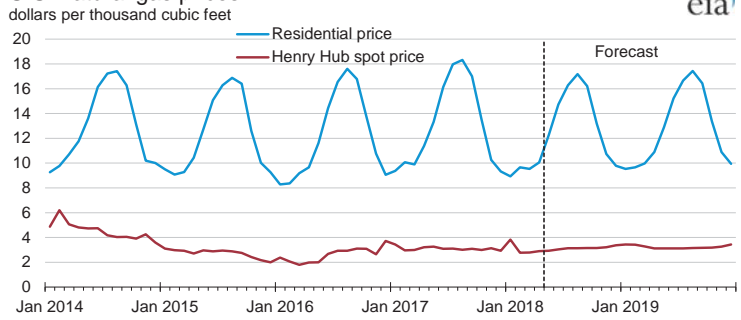
Crude oil price is composite refiner acquisition cost. Retail prices include state and federal taxes.  
 Source: Short-Term Energy Outlook, May 2018.

### Henry Hub natural gas price



Note: Confidence interval derived from options market information for the 5 trading days ending May 3, 2018. Intervals not calculated for months with sparse trading in near-the-money options contracts.  
 Source: Short-Term Energy Outlook, May 2018, and CME Group.

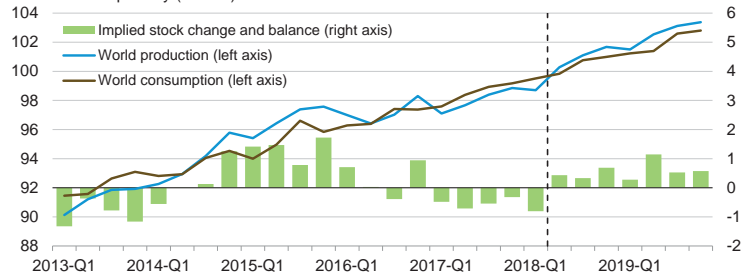
### U.S. natural gas prices



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

### World liquid fuels production and consumption balance

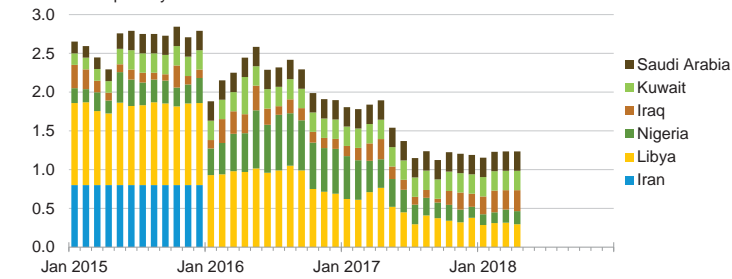
million barrels per day (MMb/d)



Source: Short-Term Energy Outlook, May 2018.

### Estimated historical unplanned OPEC crude oil production outages

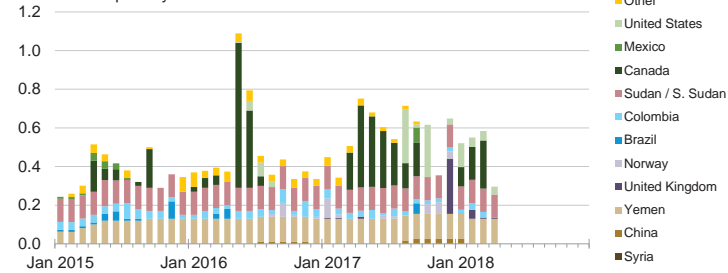
million barrels per day



Source: Short-Term Energy Outlook, May 2018.

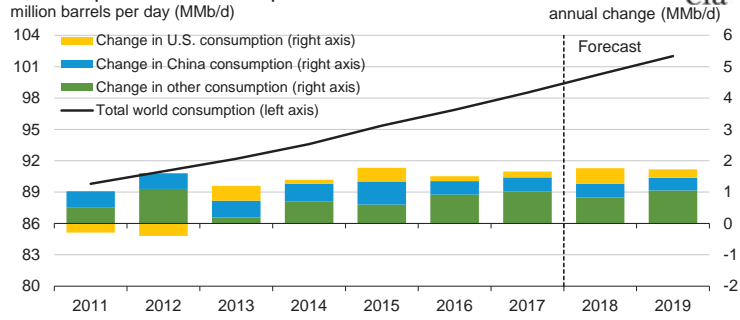
### Estimated historical unplanned non-OPEC liquid fuels production outages

million barrels per day



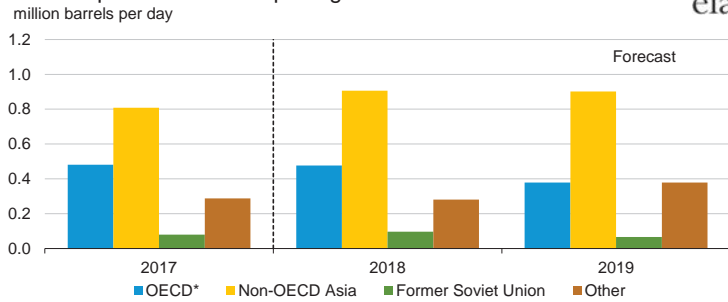
Source: Short-Term Energy Outlook, May 2018.

### World liquid fuels consumption



Source: Short-Term Energy Outlook, May 2018.

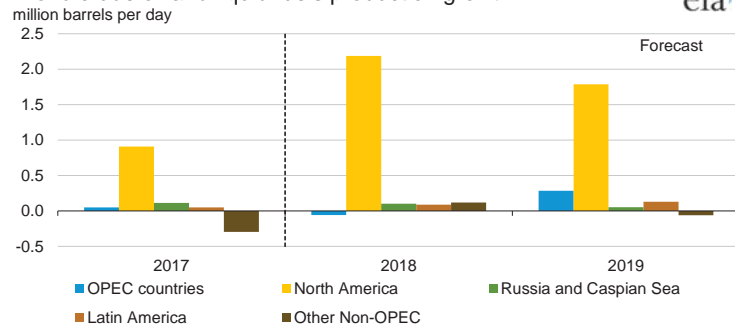
### World liquid fuels consumption growth



\* Countries belonging to the Organization for Economic Cooperation and Development

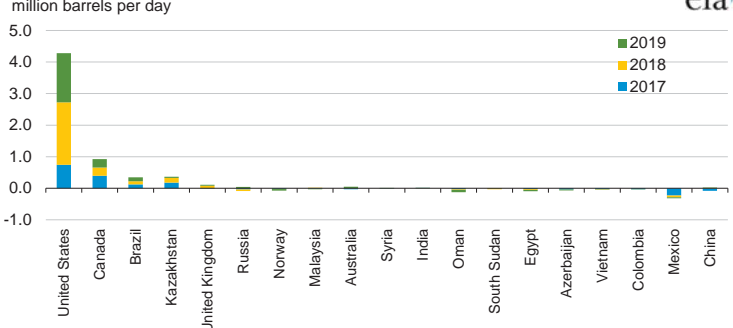
Source: Short-Term Energy Outlook, May 2018.

### World crude oil and liquid fuels production growth



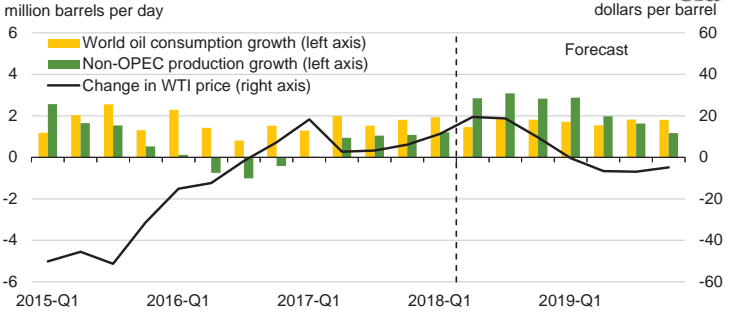
Source: Short-Term Energy Outlook, May 2018.

### Non-OPEC crude oil and liquid fuels production growth



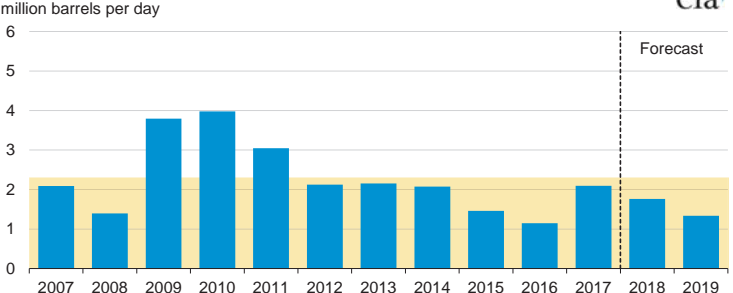
Source: Short-Term Energy Outlook, May 2018.

### World consumption and non-OPEC production growth



Source: Short-Term Energy Outlook, May 2018.

### OPEC surplus crude oil production capacity

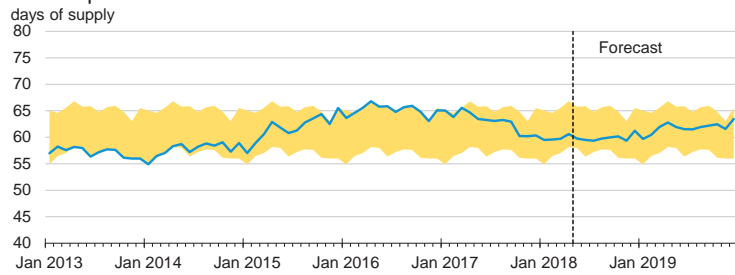


Note: Shaded area represents 2007-2017 average (2.3 million barrels per day).

Source: Short-Term Energy Outlook, May 2018.

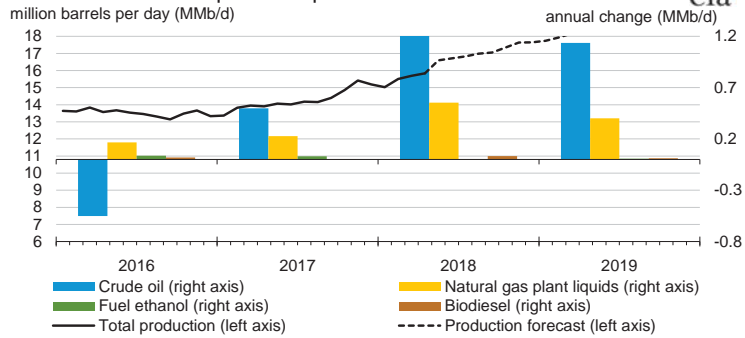


### OECD commercial stocks of crude oil and other liquids



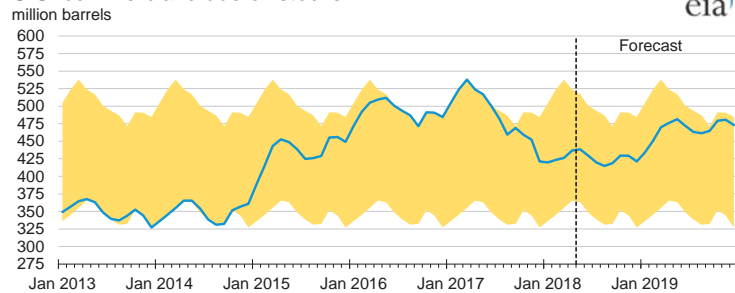
Note: Colored band around days of supply of crude oil and other liquids stocks represents the range between the minimum and maximum from Jan. 2013 - Dec. 2017.  
Source: Short-Term Energy Outlook, May 2018.

### U.S. crude oil and liquid fuels production



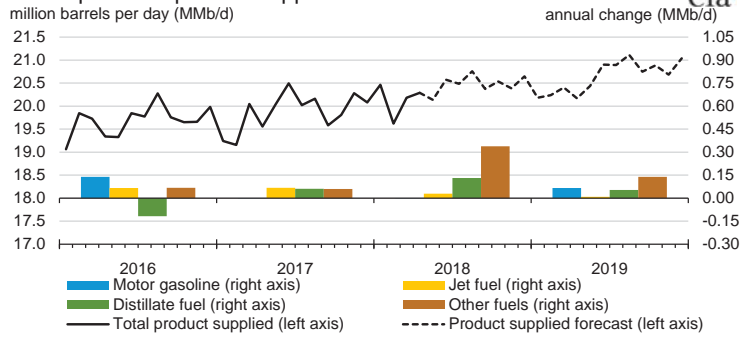
Source: Short-Term Energy Outlook, May 2018.

### U.S. commercial crude oil stocks



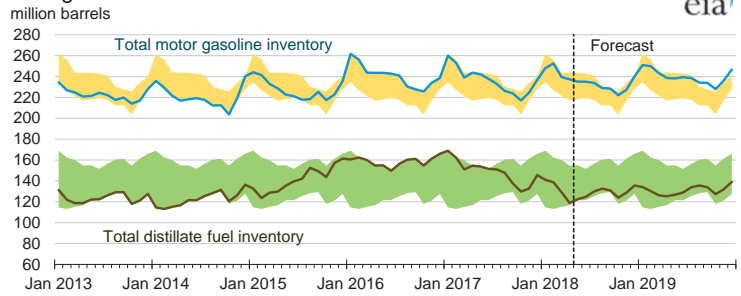
Note: Colored band around storage levels represents the range between the minimum and maximum from Jan. 2013 - Dec. 2017.  
Source: Short-Term Energy Outlook, May 2018.

### U.S. liquid fuels product supplied



Source: Short-Term Energy Outlook, May 2018.

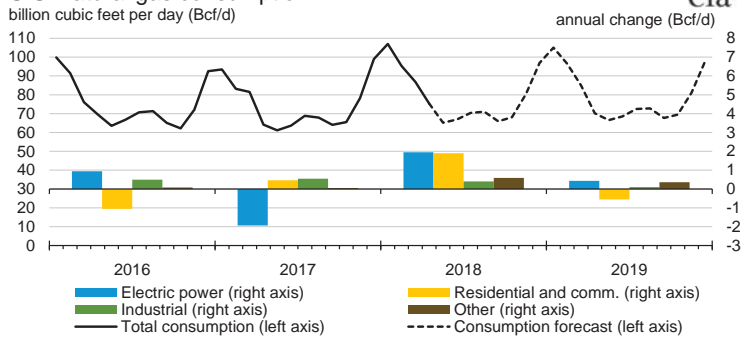
### U.S. gasoline and distillate inventories



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

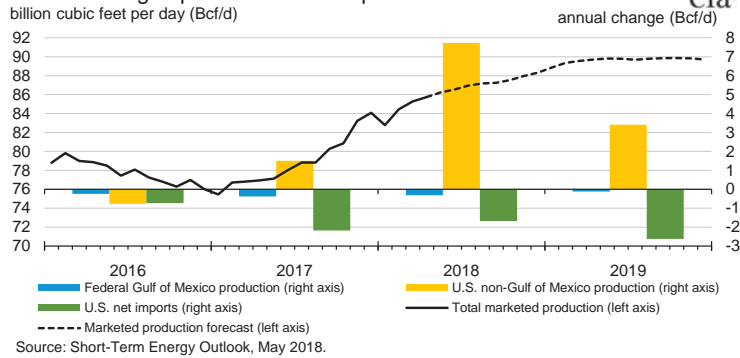
Source: Short-Term Energy Outlook, May 2018.

### U.S. natural gas consumption

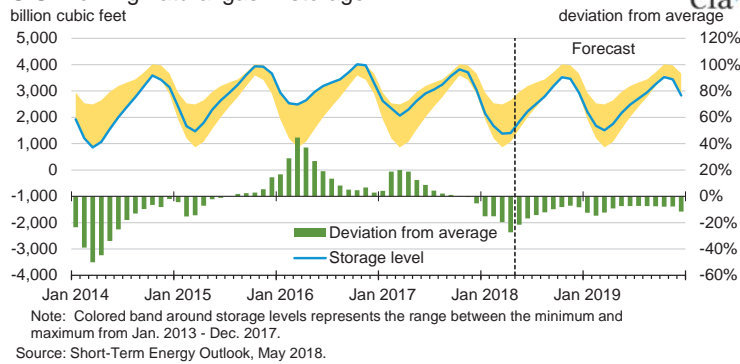


Source: Short-Term Energy Outlook, May 2018.

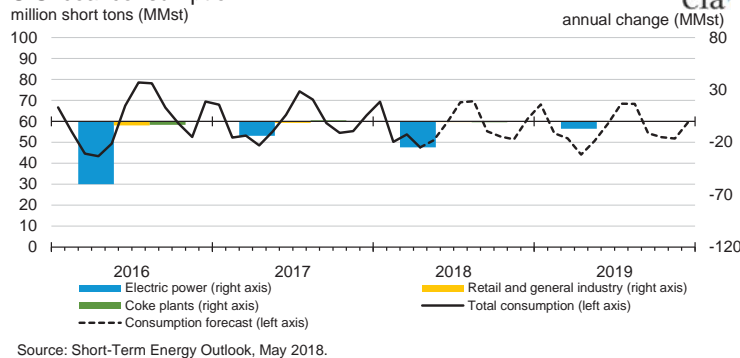
### U.S. natural gas production and imports



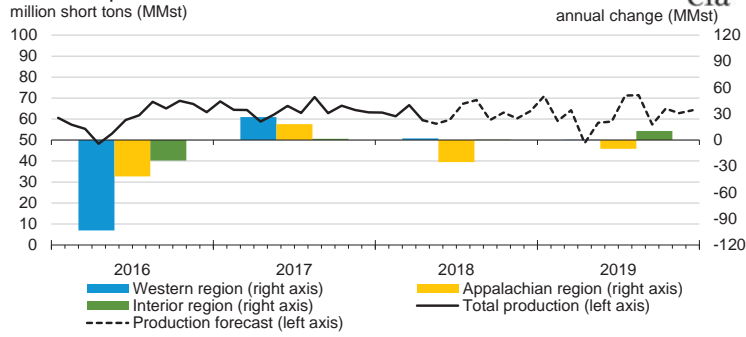
### U.S. working natural gas in storage



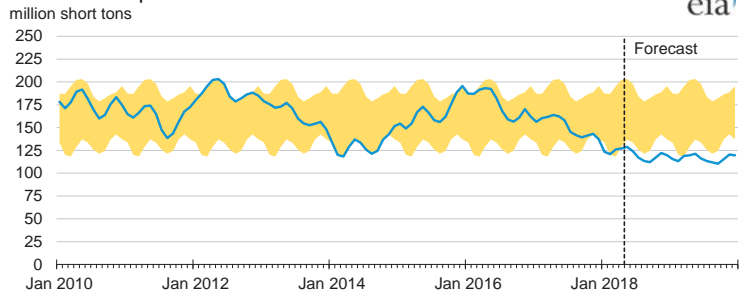
### U.S. coal consumption



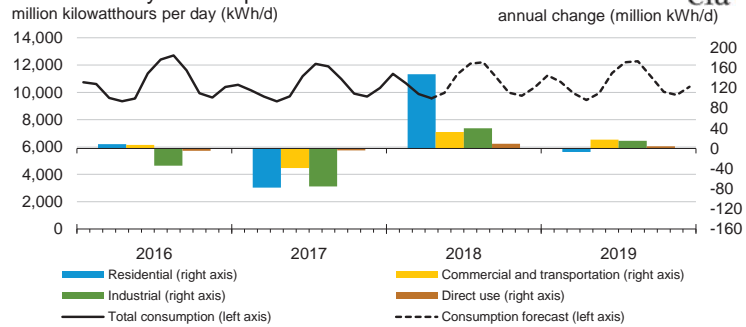
### U.S. coal production



### U.S. electric power coal stocks

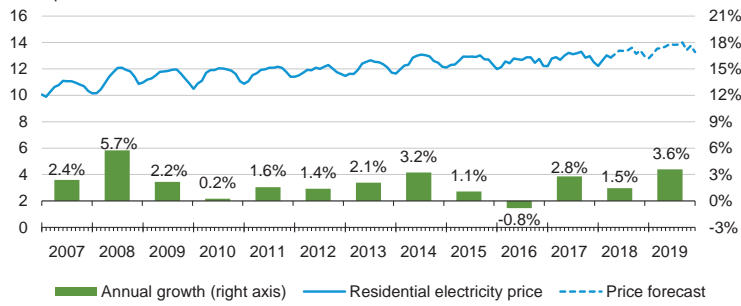


### U.S. electricity consumption



### U.S. residential electricity price

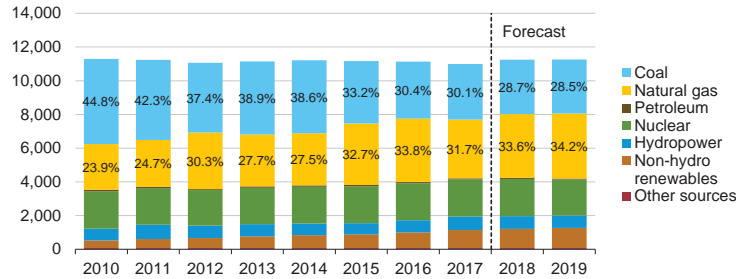
cents per kilowatthour



Source: Short-Term Energy Outlook, May 2018.

### U.S. electricity generation by fuel, all sectors

thousand megawatthours per day

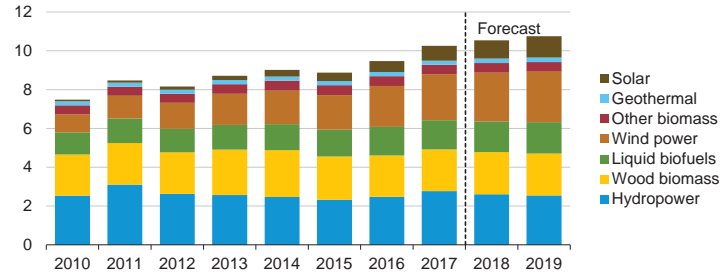


Note: Labels show percentage share of total generation provided by coal and natural gas.

Source: Short-Term Energy Outlook, May 2018.

### U.S. renewable energy supply

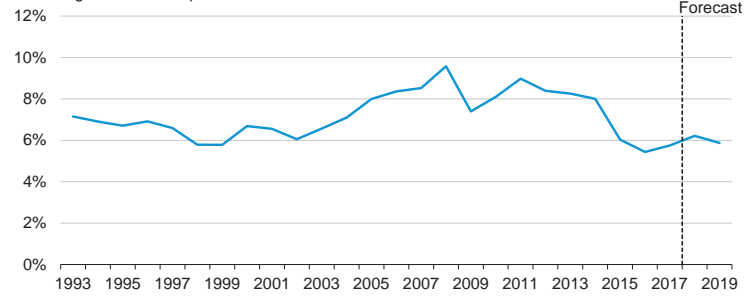
quadrillion British thermal units (Btu)



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

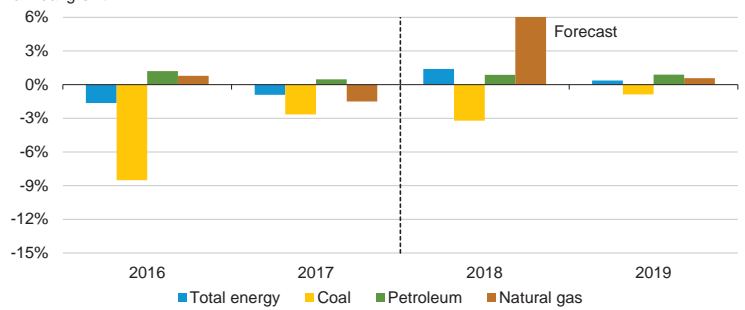
Source: Short-Term Energy Outlook, May 2018.

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



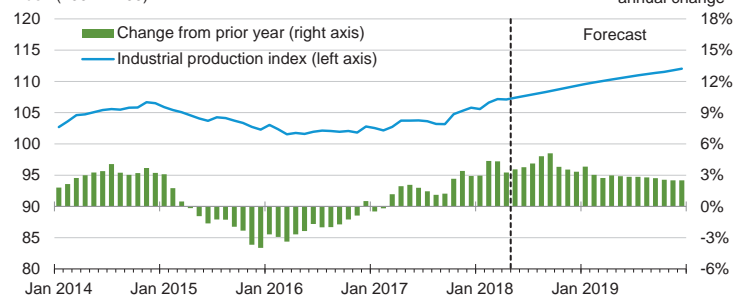
Source: Short-Term Energy Outlook, May 2018.

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



Source: Short-Term Energy Outlook, May 2018.

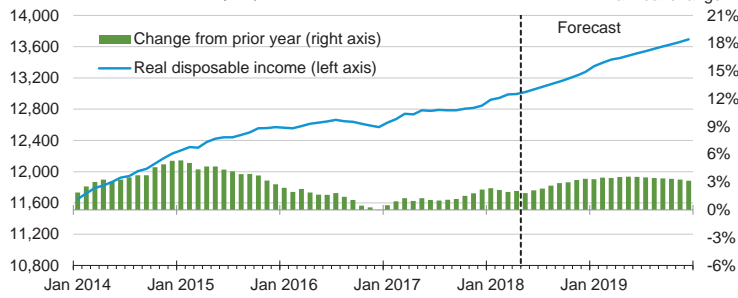
### U.S. total industrial production index index (2007 = 100)



Source: Short-Term Energy Outlook, May 2018.

### U.S. disposable income

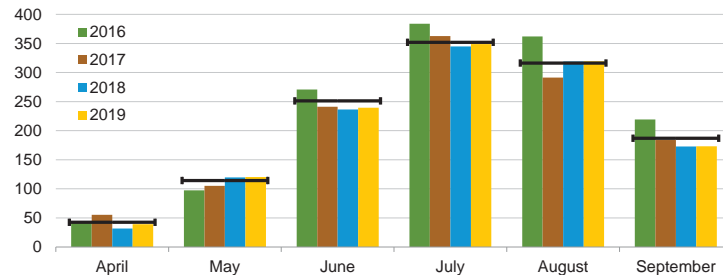
billion 2009 dollars, seasonally adjusted



Source: Short-Term Energy Outlook, May 2018.

### U.S. summer cooling degree days

population-weighted

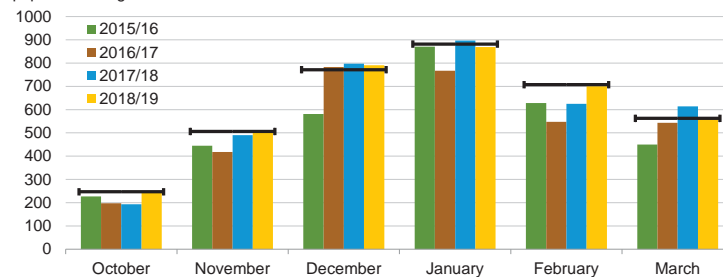


Note: EIA calculations based on from the National Oceanic and Atmospheric Administration data. Horizontal lines indicate each month's prior 10-year average (2008-2017). Projections reflect NOAA's 14-16 month outlook.

Source: Short-Term Energy Outlook, May 2018.

### U.S. winter heating degree days

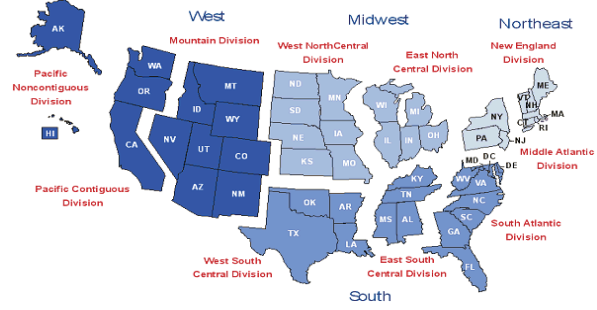
population-weighted



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

Source: Short-Term Energy Outlook, May 2018.

# U.S. census regions and divisions



Source: Short-Term Energy Outlook, May 2018.



**Table 1. U.S. Energy Markets Summary**

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

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
<b>Energy Supply</b>															
Crude Oil Production (a) (million barrels per day) .....	9.01	9.13	9.33	9.93	10.23	10.62	10.78	11.26	11.70	11.91	11.81	12.00	9.35	10.72	11.86
Dry Natural Gas Production (billion cubic feet per day) .....	71.24	72.04	73.97	76.98	78.49	80.31	81.15	81.85	83.03	83.46	83.42	83.39	73.57	80.46	83.33
Coal Production (million short tons) .....	197	187	196	194	191	177	196	187	194	166	200	192	774	751	752
<b>Energy Consumption</b>															
Liquid Fuels (million barrels per day) .....	19.49	20.03	19.92	20.05	20.10	20.33	20.54	20.52	20.28	20.50	20.92	20.87	19.88	20.38	20.64
Natural Gas (billion cubic feet per day) .....	86.15	62.97	66.97	80.94	96.44	69.12	69.18	81.77	95.49	68.41	71.00		74.22	79.06	79.39
Coal (b) (million short tons) .....	173	167	204	173	173	158	194	165	174	154	191	164	717	691	683
Electricity (billion kilowatt hours per day) .....	10.13	10.08	11.66	9.98	10.64	10.29	11.82	10.04	10.65	10.26	11.90	10.09	10.47	10.70	10.73
Renewables (c) (quadrillion Btu) .....	2.79	2.99	2.57	2.66	2.84	2.99	2.71	2.73	2.78	3.07	2.81	2.84	11.02	11.27	11.51
Total Energy Consumption (d) (quadrillion Btu) .....	25.05	23.25	24.35	25.09	26.02	23.42	24.37	24.84	25.83	23.41	24.66	25.09	97.73	98.65	98.99
<b>Energy Prices</b>															
Crude Oil West Texas Intermediate Spot (dollars per barrel) .....	51.64	48.15	48.16	55.27	62.90	67.60	66.88	64.87	62.50	61.00	60.00	60.00	50.79	65.58	60.86
Natural Gas Henry Hub Spot (dollars per million Btu) .....	3.01	3.08	2.95	2.90	3.02	2.85	3.02	3.13	3.25	3.00	3.03	3.17	2.99	3.01	3.11
Coal (dollars per million Btu) .....	2.08	2.12	2.07	2.04	2.11	2.24	2.24	2.21	2.24	2.22	2.23	2.20	2.08	2.20	2.22
<b>Macroeconomic</b>															
Real Gross Domestic Product (billion chained 2009 dollars - SAAR) .....	16,903	17,031	17,164	17,286	17,356	17,481	17,614	17,743	17,865	17,976	18,080	18,182	17,096	17,548	18,026
Percent change from prior year .....	2.0	2.2	2.3	2.6	2.7	2.6	2.6	2.6	2.9	2.8	2.6	2.5	2.3	2.6	2.7
GDP Implicit Price Deflator (Index, 2009=100) .....	112.8	113.0	113.6	114.3	114.9	115.5	116.2	116.9	117.7	118.5	119.4	120.1	113.4	115.9	118.9
Percent change from prior year .....	2.0	1.6	1.8	1.9	1.9	2.1	2.2	2.3	2.5	2.7	2.8	2.7	1.8	2.1	2.7
Real Disposable Personal Income (billion chained 2009 dollars - SAAR) .....	12,680	12,766	12,788	12,822	12,952	13,020	13,120	13,231	13,393	13,485	13,573	13,662	12,764	13,081	13,528
Percent change from prior year .....	0.9	1.1	1.1	1.8	2.1	2.0	2.6	3.2	3.4	3.6	3.4	3.3	1.2	2.5	3.4
Manufacturing Production Index (Index, 2012=100) .....	102.0	102.7	102.2	103.6	104.5	105.1	105.8	106.7	107.4	108.0	108.5	109.0	102.6	105.5	108.3
Percent change from prior year .....	0.6	1.9	1.2	2.2	2.5	2.3	3.5	3.0	2.8	2.8	2.6	2.2	1.5	2.8	2.6
<b>Weather</b>															
U.S. Heating Degree-Days .....	1,858	427	65	1,481	2,136	568	76	1,542	2,137	487	76	1,540	3,831	4,322	4,240
U.S. Cooling Degree-Days .....	70	402	838	115	51	388	837	89	41	399	841	90	1,424	1,365	1,371

- = no data available

Prices are not adjusted for inflation.

(a) Includes lease condensate.

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

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

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

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

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

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

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

Weather projections from National Oceanic and Atmospheric Administration.

**Table 2. Energy Prices**

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

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
<b>Crude Oil</b> (dollars per barrel)															
West Texas Intermediate Spot Average .....	<b>51.64</b>	<b>48.15</b>	<b>48.16</b>	<b>55.27</b>	<b>62.90</b>	<i>67.60</i>	<i>66.88</i>	<i>64.87</i>	<i>62.50</i>	<i>61.00</i>	<i>60.00</i>	<i>60.00</i>	<b>50.79</b>	<i>65.58</i>	<i>60.86</i>
Brent Spot Average .....	<b>53.57</b>	<b>49.59</b>	<b>52.09</b>	<b>61.42</b>	<b>66.84</b>	<i>73.05</i>	<i>72.03</i>	<i>70.69</i>	<i>68.00</i>	<i>66.00</i>	<i>65.00</i>	<i>65.00</i>	<b>54.15</b>	<i>70.68</i>	<i>65.98</i>
U.S. Imported Average .....	<b>47.94</b>	<b>46.12</b>	<b>47.49</b>	<b>55.29</b>	<b>59.14</b>	<i>64.10</i>	<i>63.37</i>	<i>61.33</i>	<i>59.00</i>	<i>57.50</i>	<i>56.50</i>	<i>56.50</i>	<b>49.00</b>	<i>62.05</i>	<i>57.39</i>
U.S. Refiner Average Acquisition Cost .....	<b>49.91</b>	<b>47.66</b>	<b>48.32</b>	<b>56.79</b>	<b>62.06</b>	<i>66.61</i>	<i>65.87</i>	<i>63.82</i>	<i>61.50</i>	<i>60.00</i>	<i>59.00</i>	<i>59.00</i>	<b>50.68</b>	<i>64.64</i>	<i>59.86</i>
<b>U.S. Liquid Fuels</b> (cents per gallon)															
<b>Refiner Prices for Resale</b>															
Gasoline .....	<b>163</b>	<b>165</b>	<b>172</b>	<b>175</b>	<b>187</b>	<i>218</i>	<i>213</i>	<i>197</i>	<i>190</i>	<i>202</i>	<i>199</i>	<i>180</i>	<b>169</b>	<i>204</i>	<i>193</i>
Diesel Fuel .....	<b>162</b>	<b>155</b>	<b>169</b>	<b>190</b>	<b>200</b>	<i>220</i>	<i>223</i>	<i>219</i>	<i>208</i>	<i>205</i>	<i>206</i>	<i>205</i>	<b>169</b>	<i>216</i>	<i>206</i>
Heating Oil .....	<b>154</b>	<b>144</b>	<b>154</b>	<b>179</b>	<b>193</b>	<i>207</i>	<i>214</i>	<i>211</i>	<i>205</i>	<i>194</i>	<i>196</i>	<i>197</i>	<b>160</b>	<i>205</i>	<i>201</i>
<b>Refiner Prices to End Users</b>															
Jet Fuel .....	<b>158</b>	<b>150</b>	<b>162</b>	<b>181</b>	<b>197</b>	<i>216</i>	<i>221</i>	<i>216</i>	<i>206</i>	<i>202</i>	<i>203</i>	<i>202</i>	<b>163</b>	<i>213</i>	<i>203</i>
No. 6 Residual Fuel Oil (a) .....	<b>128</b>	<b>120</b>	<b>124</b>	<b>140</b>	<b>150</b>	<i>159</i>	<i>163</i>	<i>158</i>	<i>153</i>	<i>147</i>	<i>146</i>	<i>146</i>	<b>129</b>	<i>158</i>	<i>148</i>
<b>Retail Prices Including Taxes</b>															
Gasoline Regular Grade (b) .....	<b>233</b>	<b>238</b>	<b>244</b>	<b>251</b>	<b>258</b>	<i>290</i>	<i>291</i>	<i>275</i>	<i>265</i>	<i>280</i>	<i>278</i>	<i>259</i>	<b>242</b>	<i>279</i>	<i>271</i>
Gasoline All Grades (b) .....	<b>244</b>	<b>250</b>	<b>255</b>	<b>263</b>	<b>269</b>	<i>301</i>	<i>302</i>	<i>287</i>	<i>277</i>	<i>291</i>	<i>290</i>	<i>271</i>	<b>253</b>	<i>290</i>	<i>282</i>
On-highway Diesel Fuel .....	<b>257</b>	<b>255</b>	<b>263</b>	<b>287</b>	<b>302</b>	<i>313</i>	<i>317</i>	<i>316</i>	<i>303</i>	<i>300</i>	<i>300</i>	<i>301</i>	<b>265</b>	<i>312</i>	<i>301</i>
Heating Oil .....	<b>247</b>	<b>238</b>	<b>234</b>	<b>265</b>	<b>287</b>	<i>292</i>	<i>300</i>	<i>306</i>	<i>307</i>	<i>288</i>	<i>285</i>	<i>292</i>	<b>251</b>	<i>295</i>	<i>297</i>
<b>Natural Gas</b>															
Henry Hub Spot (dollars per thousand cubic feet) .....	<b>3.12</b>	<b>3.19</b>	<b>3.06</b>	<b>3.01</b>	<b>3.13</b>	<i>2.96</i>	<i>3.13</i>	<i>3.24</i>	<i>3.37</i>	<i>3.12</i>	<i>3.14</i>	<i>3.29</i>	<b>3.10</b>	<i>3.12</i>	<i>3.23</i>
Henry Hub Spot (dollars per million Btu) .....	<b>3.01</b>	<b>3.08</b>	<b>2.95</b>	<b>2.90</b>	<b>3.02</b>	<i>2.85</i>	<i>3.02</i>	<i>3.13</i>	<i>3.25</i>	<i>3.00</i>	<i>3.03</i>	<i>3.17</i>	<b>2.99</b>	<i>3.01</i>	<i>3.11</i>
<b>U.S. Retail Prices</b> (dollars per thousand cubic feet)															
Industrial Sector .....	<b>4.50</b>	<b>4.11</b>	<b>3.89</b>	<b>4.00</b>	<b>4.49</b>	<i>3.81</i>	<i>3.99</i>	<i>4.37</i>	<i>4.72</i>	<i>4.05</i>	<i>4.02</i>	<i>4.42</i>	<b>4.14</b>	<i>4.18</i>	<i>4.32</i>
Commercial Sector .....	<b>7.71</b>	<b>8.33</b>	<b>8.69</b>	<b>7.56</b>	<b>7.68</b>	<i>8.02</i>	<i>8.59</i>	<i>7.90</i>	<i>7.84</i>	<i>8.32</i>	<i>8.70</i>	<i>7.98</i>	<b>7.87</b>	<i>7.90</i>	<i>8.06</i>
Residential Sector .....	<b>9.73</b>	<b>13.00</b>	<b>17.74</b>	<b>10.19</b>	<b>9.31</b>	<i>11.43</i>	<i>16.54</i>	<i>10.59</i>	<i>9.69</i>	<i>12.33</i>	<i>16.82</i>	<i>10.76</i>	<b>10.92</b>	<i>10.52</i>	<i>10.91</i>
<b>U.S. Electricity</b>															
<b>Power Generation Fuel Costs</b> (dollars per million Btu)															
Coal .....	<b>2.08</b>	<b>2.12</b>	<b>2.07</b>	<b>2.04</b>	<b>2.11</b>	<i>2.24</i>	<i>2.24</i>	<i>2.21</i>	<i>2.24</i>	<i>2.22</i>	<i>2.23</i>	<i>2.20</i>	<b>2.08</b>	<i>2.20</i>	<i>2.22</i>
Natural Gas .....	<b>3.69</b>	<b>3.38</b>	<b>3.19</b>	<b>3.38</b>	<b>4.01</b>	<i>3.14</i>	<i>3.32</i>	<i>3.61</i>	<i>3.87</i>	<i>3.29</i>	<i>3.27</i>	<i>3.62</i>	<b>3.38</b>	<i>3.49</i>	<i>3.49</i>
Residual Fuel Oil (c) .....	<b>11.16</b>	<b>10.60</b>	<b>10.03</b>	<b>11.93</b>	<b>11.55</b>	<i>13.72</i>	<i>13.65</i>	<i>13.27</i>	<i>13.24</i>	<i>13.39</i>	<i>12.50</i>	<i>12.20</i>	<b>10.97</b>	<i>12.78</i>	<i>12.87</i>
Distillate Fuel Oil .....	<b>12.74</b>	<b>12.23</b>	<b>13.13</b>	<b>14.54</b>	<b>15.86</b>	<i>16.78</i>	<i>17.18</i>	<i>16.97</i>	<i>16.28</i>	<i>15.93</i>	<i>15.87</i>	<i>15.93</i>	<b>13.26</b>	<i>16.41</i>	<i>16.02</i>
<b>Retail Prices</b> (cents per kilowatthour)															
Industrial Sector .....	<b>6.64</b>	<b>6.89</b>	<b>7.27</b>	<b>6.79</b>	<b>6.90</b>	<i>7.11</i>	<i>7.56</i>	<i>7.06</i>	<i>7.05</i>	<i>7.19</i>	<i>7.64</i>	<i>7.15</i>	<b>6.91</b>	<i>7.17</i>	<i>7.26</i>
Commercial Sector .....	<b>10.39</b>	<b>10.68</b>	<b>11.03</b>	<b>10.56</b>	<b>10.56</b>	<i>10.87</i>	<i>11.34</i>	<i>10.93</i>	<i>10.85</i>	<i>11.00</i>	<i>11.36</i>	<i>10.95</i>	<b>10.68</b>	<i>10.94</i>	<i>11.06</i>
Residential Sector .....	<b>12.59</b>	<b>12.99</b>	<b>13.19</b>	<b>12.75</b>	<b>12.58</b>	<i>13.14</i>	<i>13.45</i>	<i>13.15</i>	<i>13.12</i>	<i>13.73</i>	<i>13.89</i>	<i>13.46</i>	<b>12.90</b>	<i>13.09</i>	<i>13.56</i>

- = no data available

Prices are not adjusted for inflation.

(a) Average for all sulfur contents.

(b) Average self-service cash price.

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

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

Prices exclude taxes unless otherwise noted.

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

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

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

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

**Projections:** EIA Regional Short-Term Energy Model.

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

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

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
<b>Supply (million barrels per day) (a)</b>															
OECD .....	<b>27.12</b>	<b>26.95</b>	<b>27.14</b>	<b>28.29</b>	<b>28.46</b>	<i>29.55</i>	<i>29.89</i>	<i>30.74</i>	<i>31.15</i>	<i>31.48</i>	<i>31.42</i>	<i>31.87</i>	<b>27.37</b>	<i>29.67</i>	<i>31.48</i>
U.S. (50 States) .....	<b>15.02</b>	<b>15.35</b>	<b>15.53</b>	<b>16.49</b>	<b>16.71</b>	<i>17.41</i>	<i>17.80</i>	<i>18.37</i>	<i>18.77</i>	<i>19.19</i>	<i>19.19</i>	<i>19.41</i>	<b>15.60</b>	<i>17.58</i>	<i>19.14</i>
Canada .....	<b>5.05</b>	<b>4.71</b>	<b>4.99</b>	<b>5.19</b>	<b>4.90</b>	<i>5.26</i>	<i>5.37</i>	<i>5.47</i>	<i>5.49</i>	<i>5.48</i>	<i>5.52</i>	<i>5.57</i>	<b>4.99</b>	<i>5.25</i>	<i>5.51</i>
Mexico .....	<b>2.35</b>	<b>2.34</b>	<b>2.19</b>	<b>2.16</b>	<b>2.20</b>	<i>2.22</i>	<i>2.20</i>	<i>2.20</i>	<i>2.19</i>	<i>2.17</i>	<i>2.16</i>	<i>2.15</i>	<b>2.26</b>	<i>2.21</i>	<i>2.17</i>
Other OECD .....	<b>4.70</b>	<b>4.54</b>	<b>4.43</b>	<b>4.44</b>	<b>4.65</b>	<i>4.66</i>	<i>4.52</i>	<i>4.70</i>	<i>4.71</i>	<i>4.64</i>	<i>4.54</i>	<i>4.74</i>	<b>4.53</b>	<i>4.63</i>	<i>4.66</i>
Non-OECD .....	<b>69.98</b>	<b>70.73</b>	<b>71.26</b>	<b>70.57</b>	<b>70.24</b>	<i>70.73</i>	<i>71.21</i>	<i>70.93</i>	<i>70.36</i>	<i>71.06</i>	<i>71.70</i>	<i>71.51</i>	<b>70.64</b>	<i>70.78</i>	<i>71.16</i>
OPEC .....	<b>38.84</b>	<b>39.32</b>	<b>39.68</b>	<b>39.28</b>	<b>39.25</b>	<i>39.07</i>	<i>39.31</i>	<i>39.28</i>	<i>39.17</i>	<i>39.35</i>	<i>39.69</i>	<i>39.81</i>	<b>39.28</b>	<i>39.22</i>	<i>39.51</i>
Crude Oil Portion .....	<b>32.08</b>	<b>32.32</b>	<b>32.89</b>	<b>32.48</b>	<b>32.35</b>	<i>32.13</i>	<i>32.32</i>	<i>32.26</i>	<i>32.12</i>	<i>32.23</i>	<i>32.50</i>	<i>32.54</i>	<b>32.44</b>	<i>32.26</i>	<i>32.35</i>
Other Liquids (b) .....	<b>6.77</b>	<b>7.00</b>	<b>6.79</b>	<b>6.81</b>	<b>6.90</b>	<i>6.94</i>	<i>6.98</i>	<i>7.02</i>	<i>7.05</i>	<i>7.12</i>	<i>7.19</i>	<i>7.27</i>	<b>6.84</b>	<i>6.96</i>	<i>7.16</i>
Eurasia .....	<b>14.43</b>	<b>14.30</b>	<b>14.22</b>	<b>14.32</b>	<b>14.43</b>	<i>14.43</i>	<i>14.37</i>	<i>14.50</i>	<i>14.52</i>	<i>14.42</i>	<i>14.44</i>	<i>14.53</i>	<b>14.32</b>	<i>14.43</i>	<i>14.48</i>
China .....	<b>4.81</b>	<b>4.82</b>	<b>4.74</b>	<b>4.75</b>	<b>4.76</b>	<i>4.78</i>	<i>4.78</i>	<i>4.82</i>	<i>4.77</i>	<i>4.80</i>	<i>4.80</i>	<i>4.84</i>	<b>4.78</b>	<i>4.79</i>	<i>4.80</i>
Other Non-OECD .....	<b>11.89</b>	<b>12.29</b>	<b>12.62</b>	<b>12.22</b>	<b>11.81</b>	<i>12.45</i>	<i>12.75</i>	<i>12.33</i>	<i>11.90</i>	<i>12.48</i>	<i>12.76</i>	<i>12.34</i>	<b>12.26</b>	<i>12.34</i>	<i>12.37</i>
Total World Supply .....	<b>97.10</b>	<b>97.67</b>	<b>98.39</b>	<b>98.86</b>	<b>98.71</b>	<i>100.27</i>	<i>101.10</i>	<i>101.67</i>	<i>101.51</i>	<i>102.54</i>	<i>103.12</i>	<i>103.38</i>	<b>98.01</b>	<i>100.45</i>	<i>102.64</i>
Non-OPEC Supply .....	<b>58.26</b>	<b>58.36</b>	<b>58.72</b>	<b>59.57</b>	<b>59.46</b>	<i>61.21</i>	<i>61.80</i>	<i>62.40</i>	<i>62.34</i>	<i>63.18</i>	<i>63.42</i>	<i>63.57</i>	<b>58.73</b>	<i>61.23</i>	<i>63.13</i>
<b>Consumption (million barrels per day) (c)</b>															
OECD .....	<b>46.79</b>	<b>46.92</b>	<b>47.46</b>	<b>47.72</b>	<b>47.48</b>	<i>47.04</i>	<i>48.03</i>	<i>48.25</i>	<i>47.83</i>	<i>47.27</i>	<i>48.52</i>	<i>48.70</i>	<b>47.23</b>	<i>47.70</i>	<i>48.08</i>
U.S. (50 States) .....	<b>19.49</b>	<b>20.03</b>	<b>19.92</b>	<b>20.05</b>	<b>20.10</b>	<i>20.33</i>	<i>20.54</i>	<i>20.52</i>	<i>20.28</i>	<i>20.50</i>	<i>20.92</i>	<i>20.87</i>	<b>19.88</b>	<i>20.38</i>	<i>20.64</i>
U.S. Territories .....	<b>0.15</b>	<b>0.15</b>	<b>0.13</b>	<b>0.09</b>	<b>0.09</b>	<i>0.09</i>	<i>0.10</i>	<i>0.10</i>	<i>0.11</i>	<i>0.11</i>	<i>0.12</i>	<i>0.13</i>	<b>0.13</b>	<i>0.10</i>	<i>0.12</i>
Canada .....	<b>2.35</b>	<b>2.34</b>	<b>2.50</b>	<b>2.50</b>	<b>2.38</b>	<i>2.33</i>	<i>2.45</i>	<i>2.43</i>	<i>2.39</i>	<i>2.33</i>	<i>2.45</i>	<i>2.43</i>	<b>2.42</b>	<i>2.40</i>	<i>2.40</i>
Europe .....	<b>13.95</b>	<b>14.33</b>	<b>14.76</b>	<b>14.44</b>	<b>14.02</b>	<i>14.36</i>	<i>14.83</i>	<i>14.53</i>	<i>14.14</i>	<i>14.36</i>	<i>14.88</i>	<i>14.57</i>	<b>14.37</b>	<i>14.44</i>	<i>14.49</i>
Japan .....	<b>4.33</b>	<b>3.64</b>	<b>3.69</b>	<b>4.12</b>	<b>4.35</b>	<i>3.50</i>	<i>3.62</i>	<i>3.98</i>	<i>4.27</i>	<i>3.45</i>	<i>3.58</i>	<i>3.95</i>	<b>3.94</b>	<i>3.86</i>	<i>3.81</i>
Other OECD .....	<b>6.52</b>	<b>6.44</b>	<b>6.46</b>	<b>6.53</b>	<b>6.55</b>	<i>6.43</i>	<i>6.50</i>	<i>6.68</i>	<i>6.63</i>	<i>6.51</i>	<i>6.57</i>	<i>6.75</i>	<b>6.49</b>	<i>6.54</i>	<i>6.62</i>
Non-OECD .....	<b>50.79</b>	<b>51.46</b>	<b>51.47</b>	<b>51.46</b>	<b>52.03</b>	<i>52.80</i>	<i>52.74</i>	<i>52.74</i>	<i>53.41</i>	<i>54.12</i>	<i>54.07</i>	<i>54.11</i>	<b>51.30</b>	<i>52.58</i>	<i>53.93</i>
Eurasia .....	<b>4.76</b>	<b>4.75</b>	<b>5.02</b>	<b>4.89</b>	<b>4.80</b>	<i>4.84</i>	<i>5.11</i>	<i>4.99</i>	<i>4.85</i>	<i>4.90</i>	<i>5.17</i>	<i>5.05</i>	<b>4.86</b>	<i>4.94</i>	<i>4.99</i>
Europe .....	<b>0.69</b>	<b>0.70</b>	<b>0.72</b>	<b>0.72</b>	<b>0.71</b>	<i>0.71</i>	<i>0.73</i>	<i>0.73</i>	<i>0.72</i>	<i>0.72</i>	<i>0.74</i>	<i>0.74</i>	<b>0.70</b>	<i>0.72</i>	<i>0.73</i>
China .....	<b>13.48</b>	<b>13.29</b>	<b>13.01</b>	<b>13.27</b>	<b>13.98</b>	<i>13.74</i>	<i>13.40</i>	<i>13.64</i>	<i>14.42</i>	<i>14.15</i>	<i>13.80</i>	<i>14.04</i>	<b>13.26</b>	<i>13.69</i>	<i>14.10</i>
Other Asia .....	<b>12.99</b>	<b>13.31</b>	<b>13.03</b>	<b>13.36</b>	<b>13.55</b>	<i>13.82</i>	<i>13.46</i>	<i>13.77</i>	<i>14.12</i>	<i>14.30</i>	<i>13.91</i>	<i>14.24</i>	<b>13.17</b>	<i>13.65</i>	<i>14.14</i>
Other Non-OECD .....	<b>18.86</b>	<b>19.42</b>	<b>19.71</b>	<b>19.21</b>	<b>19.00</b>	<i>19.68</i>	<i>20.04</i>	<i>19.61</i>	<i>19.30</i>	<i>20.05</i>	<i>20.45</i>	<i>20.04</i>	<b>19.30</b>	<i>19.58</i>	<i>19.96</i>
Total World Consumption .....	<b>97.58</b>	<b>98.38</b>	<b>98.93</b>	<b>99.18</b>	<b>99.52</b>	<i>99.84</i>	<i>100.77</i>	<i>100.99</i>	<i>101.23</i>	<i>101.39</i>	<i>102.59</i>	<i>102.80</i>	<b>98.52</b>	<i>100.28</i>	<i>102.01</i>
<b>Total Crude Oil and Other Liquids Inventory Net Withdrawals (million barrels per day)</b>															
U.S. (50 States) .....	<b>0.00</b>	<b>0.22</b>	<b>0.34</b>	<b>0.91</b>	<b>0.44</b>	<i>-0.36</i>	<i>-0.28</i>	<i>0.41</i>	<i>-0.29</i>	<i>-0.51</i>	<i>-0.23</i>	<i>0.29</i>	<b>0.37</b>	<i>0.05</i>	<i>-0.18</i>
Other OECD .....	<b>-0.30</b>	<b>0.02</b>	<b>0.30</b>	<b>0.45</b>	<b>-0.19</b>	<i>-0.02</i>	<i>-0.02</i>	<i>-0.38</i>	<i>0.01</i>	<i>-0.21</i>	<i>-0.10</i>	<i>-0.29</i>	<b>0.12</b>	<i>-0.15</i>	<i>-0.15</i>
Other Stock Draws and Balance .....	<b>0.78</b>	<b>0.47</b>	<b>-0.09</b>	<b>-1.04</b>	<b>0.56</b>	<i>-0.05</i>	<i>-0.04</i>	<i>-0.72</i>	<i>0.00</i>	<i>-0.43</i>	<i>-0.20</i>	<i>-0.57</i>	<b>0.02</b>	<i>-0.06</i>	<i>-0.30</i>
Total Stock Draw .....	<b>0.48</b>	<b>0.71</b>	<b>0.54</b>	<b>0.32</b>	<b>0.81</b>	<i>-0.43</i>	<i>-0.33</i>	<i>-0.69</i>	<i>-0.27</i>	<i>-1.15</i>	<i>-0.53</i>	<i>-0.57</i>	<b>0.51</b>	<i>-0.17</i>	<i>-0.63</i>
<b>End-of-period Commercial Crude Oil and Other Liquids Inventories (million barrels)</b>															
U.S. Commercial Inventory .....	<b>1,338</b>	<b>1,330</b>	<b>1,305</b>	<b>1,232</b>	<b>1,190</b>	<i>1,227</i>	<i>1,255</i>	<i>1,221</i>	<i>1,250</i>	<i>1,301</i>	<i>1,326</i>	<i>1,300</i>	<b>1,232</b>	<i>1,221</i>	<i>1,300</i>
OECD Commercial Inventory .....	<b>3,012</b>	<b>3,001</b>	<b>2,954</b>	<b>2,839</b>	<b>2,812</b>	<i>2,850</i>	<i>2,880</i>	<i>2,881</i>	<i>2,910</i>	<i>2,979</i>	<i>3,014</i>	<i>3,015</i>	<b>2,839</b>	<i>2,881</i>	<i>3,015</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 *Retroleum Supply Monthly*, DOE/EIA-0109.

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

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

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

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

**Projections:** EIA Regional Short-Term Energy Model.

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

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

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
<b>North America</b> .....	<b>22.43</b>	<b>22.40</b>	<b>22.71</b>	<b>23.84</b>	<b>23.82</b>	<i>24.89</i>	<i>25.37</i>	<i>26.04</i>	<i>26.44</i>	<i>26.84</i>	<i>26.87</i>	<i>27.12</i>	<b>22.85</b>	<i>25.04</i>	<i>26.82</i>
Canada .....	<b>5.05</b>	<b>4.71</b>	<b>4.99</b>	<b>5.19</b>	<b>4.90</b>	<i>5.26</i>	<i>5.37</i>	<i>5.47</i>	<i>5.49</i>	<i>5.48</i>	<i>5.52</i>	<i>5.57</i>	<b>4.99</b>	<i>5.25</i>	<i>5.51</i>
Mexico .....	<b>2.35</b>	<b>2.34</b>	<b>2.19</b>	<b>2.16</b>	<b>2.20</b>	<i>2.22</i>	<i>2.20</i>	<i>2.20</i>	<i>2.19</i>	<i>2.17</i>	<i>2.16</i>	<i>2.15</i>	<b>2.26</b>	<i>2.21</i>	<i>2.17</i>
United States .....	<b>15.02</b>	<b>15.35</b>	<b>15.53</b>	<b>16.49</b>	<b>16.71</b>	<i>17.41</i>	<i>17.80</i>	<i>18.37</i>	<i>18.77</i>	<i>19.19</i>	<i>19.19</i>	<i>19.41</i>	<b>15.60</b>	<i>17.58</i>	<i>19.14</i>
<b>Central and South America</b> .....	<b>4.91</b>	<b>5.40</b>	<b>5.70</b>	<b>5.29</b>	<b>4.88</b>	<i>5.51</i>	<i>5.83</i>	<i>5.44</i>	<i>5.01</i>	<i>5.63</i>	<i>5.95</i>	<i>5.57</i>	<b>5.33</b>	<i>5.42</i>	<i>5.55</i>
Argentina .....	<b>0.67</b>	<b>0.67</b>	<b>0.67</b>	<b>0.68</b>	<b>0.66</b>	<i>0.66</i>	<i>0.67</i>	<i>0.69</i>	<i>0.65</i>	<i>0.65</i>	<i>0.66</i>	<i>0.68</i>	<b>0.67</b>	<i>0.67</i>	<i>0.66</i>
Brazil .....	<b>2.95</b>	<b>3.44</b>	<b>3.73</b>	<b>3.32</b>	<b>2.96</b>	<i>3.55</i>	<i>3.86</i>	<i>3.44</i>	<i>3.08</i>	<i>3.69</i>	<i>3.99</i>	<i>3.58</i>	<b>3.36</b>	<i>3.46</i>	<i>3.59</i>
Colombia .....	<b>0.87</b>	<b>0.88</b>	<b>0.88</b>	<b>0.87</b>	<b>0.84</b>	<i>0.88</i>	<i>0.88</i>	<i>0.88</i>	<i>0.86</i>	<i>0.87</i>	<i>0.87</i>	<i>0.88</i>	<b>0.87</b>	<i>0.87</i>	<i>0.87</i>
Other Central and S. America .....	<b>0.42</b>	<b>0.41</b>	<b>0.42</b>	<b>0.42</b>	<b>0.41</b>	<i>0.42</i>	<i>0.42</i>	<i>0.43</i>	<i>0.42</i>	<i>0.42</i>	<i>0.43</i>	<i>0.44</i>	<b>0.42</b>	<i>0.42</i>	<i>0.43</i>
<b>Europe</b> .....	<b>4.21</b>	<b>4.05</b>	<b>3.92</b>	<b>3.96</b>	<b>4.14</b>	<i>4.13</i>	<i>3.99</i>	<i>4.16</i>	<i>4.15</i>	<i>4.06</i>	<i>3.95</i>	<i>4.13</i>	<b>4.03</b>	<i>4.11</i>	<i>4.07</i>
Norway .....	<b>2.08</b>	<b>2.00</b>	<b>1.91</b>	<b>1.92</b>	<b>2.01</b>	<i>1.98</i>	<i>1.97</i>	<i>1.99</i>	<i>1.98</i>	<i>1.91</i>	<i>1.89</i>	<i>1.96</i>	<b>1.98</b>	<i>1.99</i>	<i>1.94</i>
United Kingdom .....	<b>1.09</b>	<b>1.07</b>	<b>1.00</b>	<b>1.02</b>	<b>1.13</b>	<i>1.17</i>	<i>1.04</i>	<i>1.17</i>	<i>1.18</i>	<i>1.18</i>	<i>1.08</i>	<i>1.18</i>	<b>1.05</b>	<i>1.13</i>	<i>1.15</i>
<b>Eurasia</b> .....	<b>14.43</b>	<b>14.30</b>	<b>14.22</b>	<b>14.32</b>	<b>14.43</b>	<i>14.43</i>	<i>14.37</i>	<i>14.50</i>	<i>14.52</i>	<i>14.42</i>	<i>14.44</i>	<i>14.53</i>	<b>14.32</b>	<i>14.43</i>	<i>14.48</i>
Azerbaijan .....	<b>0.79</b>	<b>0.80</b>	<b>0.79</b>	<b>0.81</b>	<b>0.82</b>	<i>0.81</i>	<i>0.79</i>	<i>0.77</i>	<i>0.79</i>	<i>0.79</i>	<i>0.77</i>	<i>0.76</i>	<b>0.80</b>	<i>0.80</i>	<i>0.78</i>
Kazakhstan .....	<b>1.87</b>	<b>1.87</b>	<b>1.86</b>	<b>1.92</b>	<b>1.99</b>	<i>1.99</i>	<i>2.03</i>	<i>2.10</i>	<i>2.11</i>	<i>2.00</i>	<i>2.04</i>	<i>2.11</i>	<b>1.88</b>	<i>2.03</i>	<i>2.06</i>
Russia .....	<b>11.32</b>	<b>11.18</b>	<b>11.14</b>	<b>11.16</b>	<b>11.18</b>	<i>11.17</i>	<i>11.09</i>	<i>11.17</i>	<i>11.18</i>	<i>11.20</i>	<i>11.19</i>	<i>11.22</i>	<b>11.20</b>	<i>11.15</i>	<i>11.20</i>
Turkmenistan .....	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<i>0.29</i>	<i>0.29</i>	<i>0.28</i>	<i>0.28</i>	<i>0.28</i>	<i>0.28</i>	<i>0.28</i>	<b>0.28</b>	<i>0.28</i>	<i>0.28</i>
Other Eurasia .....	<b>0.16</b>	<b>0.17</b>	<b>0.16</b>	<b>0.16</b>	<b>0.17</b>	<i>0.18</i>	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	<i>0.16</i>	<b>0.16</b>	<i>0.17</i>	<i>0.16</i>
<b>Middle East</b> .....	<b>1.07</b>	<b>1.07</b>	<b>1.07</b>	<b>1.08</b>	<b>1.09</b>	<i>1.09</i>	<i>1.07</i>	<i>1.05</i>	<i>1.05</i>	<i>1.03</i>	<i>1.02</i>	<i>1.00</i>	<b>1.08</b>	<i>1.07</i>	<i>1.03</i>
Oman .....	<b>0.98</b>	<b>0.98</b>	<b>0.98</b>	<b>0.98</b>	<b>0.98</b>	<i>0.97</i>	<i>0.95</i>	<i>0.94</i>	<i>0.92</i>	<i>0.90</i>	<i>0.88</i>	<i>0.87</i>	<b>0.98</b>	<i>0.96</i>	<i>0.89</i>
<b>Asia and Oceania</b> .....	<b>9.34</b>	<b>9.27</b>	<b>9.18</b>	<b>9.17</b>	<b>9.27</b>	<i>9.32</i>	<i>9.31</i>	<i>9.35</i>	<i>9.33</i>	<i>9.36</i>	<i>9.36</i>	<i>9.39</i>	<b>9.24</b>	<i>9.31</i>	<i>9.36</i>
Australia .....	<b>0.35</b>	<b>0.36</b>	<b>0.37</b>	<b>0.35</b>	<b>0.35</b>	<i>0.36</i>	<i>0.36</i>	<i>0.37</i>	<i>0.38</i>	<i>0.40</i>	<i>0.41</i>	<i>0.43</i>	<b>0.36</b>	<i>0.36</i>	<i>0.41</i>
China .....	<b>4.81</b>	<b>4.82</b>	<b>4.74</b>	<b>4.75</b>	<b>4.76</b>	<i>4.78</i>	<i>4.78</i>	<i>4.82</i>	<i>4.77</i>	<i>4.80</i>	<i>4.80</i>	<i>4.84</i>	<b>4.78</b>	<i>4.79</i>	<i>4.80</i>
India .....	<b>1.01</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<i>1.01</i>	<i>1.01</i>	<i>1.00</i>	<i>1.00</i>	<i>1.01</i>	<i>1.01</i>	<i>1.00</i>	<b>1.00</b>	<i>1.00</i>	<i>1.01</i>
Indonesia .....	<b>0.93</b>	<b>0.91</b>	<b>0.91</b>	<b>0.90</b>	<b>0.90</b>	<i>0.90</i>	<i>0.90</i>	<i>0.90</i>	<i>0.90</i>	<i>0.89</i>	<i>0.88</i>	<i>0.87</i>	<b>0.91</b>	<i>0.90</i>	<i>0.89</i>
Malaysia .....	<b>0.74</b>	<b>0.72</b>	<b>0.71</b>	<b>0.72</b>	<b>0.75</b>	<i>0.74</i>	<i>0.74</i>	<i>0.73</i>	<i>0.74</i>	<i>0.73</i>	<i>0.72</i>	<i>0.70</i>	<b>0.72</b>	<i>0.74</i>	<i>0.72</i>
Vietnam .....	<b>0.29</b>	<b>0.29</b>	<b>0.28</b>	<b>0.27</b>	<b>0.27</b>	<i>0.27</i>	<i>0.27</i>	<i>0.26</i>	<i>0.27</i>	<i>0.27</i>	<i>0.26</i>	<i>0.27</i>	<b>0.28</b>	<i>0.27</i>	<i>0.27</i>
<b>Africa</b> .....	<b>1.86</b>	<b>1.86</b>	<b>1.91</b>	<b>1.91</b>	<b>1.83</b>	<i>1.85</i>	<i>1.85</i>	<i>1.85</i>	<i>1.83</i>	<i>1.83</i>	<i>1.83</i>	<i>1.83</i>	<b>1.88</b>	<i>1.85</i>	<i>1.83</i>
Egypt .....	<b>0.64</b>	<b>0.65</b>	<b>0.66</b>	<b>0.66</b>	<b>0.63</b>	<i>0.63</i>	<i>0.63</i>	<i>0.63</i>	<i>0.58</i>	<i>0.58</i>	<i>0.58</i>	<i>0.58</i>	<b>0.65</b>	<i>0.63</i>	<i>0.58</i>
South Sudan .....	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	<b>0.12</b>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<b>0.15</b>	<i>0.12</i>	<i>0.12</i>
<b>Total non-OPEC liquids</b> .....	<b>58.26</b>	<b>58.36</b>	<b>58.72</b>	<b>59.57</b>	<b>59.46</b>	<i>61.21</i>	<i>61.80</i>	<i>62.40</i>	<i>62.34</i>	<i>63.18</i>	<i>63.42</i>	<i>63.57</i>	<b>58.73</b>	<i>61.23</i>	<i>63.13</i>
<b>OPEC non-crude liquids</b> .....	<b>6.77</b>	<b>7.00</b>	<b>6.79</b>	<b>6.81</b>	<b>6.90</b>	<i>6.94</i>	<i>6.98</i>	<i>7.02</i>	<i>7.05</i>	<i>7.12</i>	<i>7.19</i>	<i>7.27</i>	<b>6.84</b>	<i>6.96</i>	<i>7.16</i>
<b>Non-OPEC + OPEC non-crude</b> .....	<b>65.02</b>	<b>65.36</b>	<b>65.50</b>	<b>66.38</b>	<b>66.36</b>	<i>68.15</i>	<i>68.78</i>	<i>69.42</i>	<i>69.39</i>	<i>70.30</i>	<i>70.61</i>	<i>70.84</i>	<b>65.57</b>	<i>68.19</i>	<i>70.29</i>
<b>Unplanned non-OPEC Production Outages</b> .....	<b>0.43</b>	<b>0.68</b>	<b>0.63</b>	<b>0.54</b>	<b>0.55</b>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<b>0.57</b>	<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 - May 2018

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
<b>Crude Oil</b>															
Algeria .....	1.04	1.03	1.03	1.00	1.02	-	-	-	-	-	-	-	1.03	-	-
Angola .....	1.64	1.66	1.66	1.63	1.59	-	-	-	-	-	-	-	1.65	-	-
Ecuador .....	0.53	0.53	0.54	0.52	0.52	-	-	-	-	-	-	-	0.53	-	-
Equatorial Guinea .....	0.14	0.14	0.13	0.13	0.14	-	-	-	-	-	-	-	0.13	-	-
Gabon .....	0.19	0.20	0.20	0.20	0.20	-	-	-	-	-	-	-	0.20	-	-
Iran .....	3.80	3.81	3.83	3.84	3.83	-	-	-	-	-	-	-	3.82	-	-
Iraq .....	4.46	4.44	4.50	4.36	4.46	-	-	-	-	-	-	-	4.44	-	-
Kuwait .....	2.74	2.71	2.72	2.72	2.71	-	-	-	-	-	-	-	2.72	-	-
Libya .....	0.65	0.72	0.94	0.95	1.00	-	-	-	-	-	-	-	0.82	-	-
Nigeria .....	1.38	1.49	1.68	1.72	1.72	-	-	-	-	-	-	-	1.57	-	-
Qatar .....	0.62	0.61	0.61	0.60	0.61	-	-	-	-	-	-	-	0.61	-	-
Saudi Arabia .....	9.98	10.09	10.18	10.12	10.11	-	-	-	-	-	-	-	10.09	-	-
United Arab Emirates .....	2.92	2.90	2.92	2.90	2.88	-	-	-	-	-	-	-	2.91	-	-
Venezuela .....	1.99	1.97	1.95	1.78	1.57	-	-	-	-	-	-	-	1.92	-	-
OPEC Total .....	32.08	32.32	32.89	32.48	32.35	32.13	32.32	32.26	32.12	32.23	32.50	32.54	32.44	32.26	32.35
<b>Other Liquids (a)</b> .....	6.77	7.00	6.79	6.81	6.90	6.94	6.98	7.02	7.05	7.12	7.19	7.27	6.84	6.96	7.16
<b>Total OPEC Supply</b> .....	38.84	39.32	39.68	39.28	39.25	39.07	39.31	39.28	39.17	39.35	39.69	39.81	39.28	39.22	39.51
<b>Crude Oil Production Capacity</b>															
Africa .....	5.04	5.24	5.64	5.64	5.66	5.57	5.55	5.54	5.51	5.53	5.56	5.63	5.39	5.58	5.56
Middle East .....	26.70	26.69	26.71	26.64	26.51	26.43	26.60	26.68	26.43	26.52	26.65	26.69	26.69	26.56	26.57
South America .....	2.53	2.51	2.49	2.31	2.09	1.94	1.84	1.70	1.63	1.58	1.53	1.49	2.46	1.89	1.55
OPEC Total .....	34.27	34.44	34.84	34.58	34.26	33.94	33.99	33.92	33.57	33.63	33.74	33.81	34.54	34.03	33.69
<b>Surplus Crude Oil Production Capacity</b>															
Africa .....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.01
Middle East .....	2.19	2.13	1.95	2.10	1.91	1.81	1.67	1.67	1.43	1.38	1.24	1.27	2.09	1.76	1.33
South America .....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEC Total .....	2.19	2.13	1.95	2.10	1.91	1.81	1.67	1.67	1.45	1.40	1.24	1.27	2.09	1.76	1.34
<b>Unplanned OPEC Production Outages</b> .....	1.81	1.60	1.17	1.21	1.21	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1.45	n/a	n/a

- = no data available

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

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

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

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

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

**Projections:** EIA Regional Short-Term Energy Model.

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

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

	2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
<b>North America</b> .....	<b>23.81</b>	<b>24.35</b>	<b>24.33</b>	<b>24.44</b>	<b>24.38</b>	24.58	24.90	24.90	24.59	24.77	25.29	25.25	<b>24.24</b>	24.69	24.98
Canada .....	2.35	2.34	2.50	2.50	2.38	2.33	2.45	2.43	2.39	2.33	2.45	2.43	2.42	2.40	2.40
Mexico .....	1.96	1.98	1.90	1.88	1.88	1.90	1.90	1.94	1.91	1.92	1.92	1.95	1.93	1.91	1.92
United States .....	19.49	20.03	19.92	20.05	20.10	20.33	20.54	20.52	20.28	20.50	20.92	20.87	19.88	20.38	20.64
<b>Central and South America</b> .....	<b>6.98</b>	<b>7.04</b>	<b>7.12</b>	<b>7.05</b>	<b>6.86</b>	7.01	7.13	7.13	6.97	7.16	7.29	7.31	<b>7.05</b>	7.03	7.18
Brazil .....	3.02	3.01	3.09	3.10	3.00	3.08	3.17	3.19	3.11	3.20	3.30	3.34	3.06	3.11	3.24
<b>Europe</b> .....	<b>14.61</b>	<b>14.98</b>	<b>15.43</b>	<b>15.12</b>	<b>14.69</b>	15.03	15.51	15.22	14.82	15.04	15.58	15.27	<b>15.04</b>	15.12	15.18
<b>Eurasia</b> .....	<b>4.80</b>	<b>4.79</b>	<b>5.06</b>	<b>4.93</b>	<b>4.83</b>	4.88	5.16	5.03	4.89	4.94	5.22	5.09	<b>4.89</b>	4.98	5.04
Russia .....	3.61	3.62	3.82	3.69	3.61	3.68	3.89	3.76	3.66	3.73	3.94	3.81	3.68	3.73	3.78
<b>Middle East</b> .....	<b>8.21</b>	<b>8.74</b>	<b>9.07</b>	<b>8.45</b>	<b>8.34</b>	8.90	9.25	8.63	8.48	9.05	9.40	8.79	<b>8.62</b>	8.78	8.93
<b>Asia and Oceania</b> .....	<b>34.83</b>	<b>34.17</b>	<b>33.73</b>	<b>34.87</b>	<b>35.99</b>	35.02	34.49	35.58	36.97	35.91	35.35	36.47	<b>34.40</b>	35.27	36.17
China .....	13.48	13.29	13.01	13.27	13.98	13.74	13.40	13.64	14.42	14.15	13.80	14.04	13.26	13.69	14.10
Japan .....	4.33	3.64	3.69	4.12	4.35	3.50	3.62	3.98	4.27	3.45	3.58	3.95	3.94	3.86	3.81
India .....	4.40	4.64	4.42	4.75	4.77	4.96	4.66	4.95	5.20	5.28	4.95	5.26	4.55	4.84	5.17
<b>Africa</b> .....	<b>4.34</b>	<b>4.30</b>	<b>4.19</b>	<b>4.31</b>	<b>4.42</b>	4.40	4.32	4.48	4.50	4.51	4.44	4.61	<b>4.28</b>	4.41	4.51
<b>Total OECD Liquid Fuels Consumption</b> .....	<b>46.79</b>	<b>46.92</b>	<b>47.46</b>	<b>47.72</b>	<b>47.48</b>	47.04	48.03	48.25	47.83	47.27	48.52	48.70	<b>47.23</b>	47.70	48.08
<b>Total non-OECD Liquid Fuels Consumption</b> .....	<b>50.79</b>	<b>51.46</b>	<b>51.47</b>	<b>51.46</b>	<b>52.03</b>	52.80	52.74	52.74	53.41	54.12	54.07	54.11	<b>51.30</b>	52.58	53.93
<b>Total World Liquid Fuels Consumption</b> .....	<b>97.58</b>	<b>98.38</b>	<b>98.93</b>	<b>99.18</b>	<b>99.52</b>	99.84	100.77	100.99	101.23	101.39	102.59	102.80	<b>98.52</b>	100.28	102.01
<b>Oil-weighted Real Gross Domestic Product (a)</b>															
World Index, 2015 Q1 = 100 .....	105.7	106.5	107.3	108.2	109.3	110.1	110.9	111.9	112.9	113.7	114.6	115.4	107.0	110.5	114.2
Percent change from prior year .....	3.6	2.9	3.1	3.1	3.4	3.4	3.3	3.4	3.4	3.3	3.3	3.1	3.2	3.4	3.3
OECD Index, 2015 Q1 = 100 .....	103.9	104.5	105.1	105.8	106.5	107.1	107.6	108.4	109.1	109.5	110.0	110.4	104.8	107.4	109.7
Percent change from prior year .....	3.0	2.1	2.4	2.4	2.5	2.5	2.4	2.4	2.4	2.2	2.1	1.9	2.5	2.5	2.2
Non-OECD Index, 2015 Q1 = 100 .....	107.5	108.5	109.5	110.6	111.9	113.0	114.1	115.4	116.7	117.8	119.0	120.3	109.0	113.6	118.5
Percent change from prior year .....	4.2	3.6	3.8	3.8	4.1	4.2	4.2	4.3	4.2	4.3	4.3	4.3	3.9	4.2	4.3
<b>Real U.S. Dollar Exchange Rate (a)</b>															
Index, 2015 Q1 = 100 .....	104.91	103.44	101.86	102.15	100.38	99.98	99.67	99.20	99.05	98.94	98.85	98.68	103.09	99.81	98.88
Percent change from prior year .....	-0.1	0.4	-1.0	-2.5	-4.3	-3.3	-2.1	-2.9	-1.3	-1.0	-0.8	-0.5	-0.8	-3.2	-0.9

- = no data available

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

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

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

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

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

**Projections:** EIA Regional Short-Term Energy Model.

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

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
<b>Supply (million barrels per day)</b>															
<b>Crude Oil Supply</b>															
Domestic Production (a) .....	9.01	9.13	9.33	9.93	10.23	10.62	10.78	11.26	11.70	11.91	11.81	12.00	9.35	10.72	11.86
Alaska .....	0.52	0.50	0.45	0.51	0.51	0.48	0.43	0.49	0.51	0.49	0.44	0.50	0.49	0.48	0.48
Federal Gulf of Mexico (b) .....	1.75	1.66	1.72	1.59	1.70	1.78	1.70	1.81	1.89	1.89	1.78	1.88	1.68	1.75	1.86
Lower 48 States (excl GOM) .....	6.74	6.98	7.16	7.84	8.02	8.36	8.64	8.96	9.30	9.53	9.59	9.62	7.18	8.49	9.51
Crude Oil Net Imports (c) .....	7.24	7.24	6.63	6.08	6.23	6.53	6.26	5.25	5.14	5.35	5.21	4.58	6.79	6.07	5.07
SPR Net Withdrawals .....	0.04	0.14	0.06	0.12	-0.03	0.04	0.03	0.04	0.04	0.04	0.04	0.02	0.09	0.02	0.04
Commercial Inventory Net Withdrawals .....	-0.59	0.41	0.34	0.52	-0.06	-0.04	0.12	-0.03	-0.54	-0.02	0.08	-0.09	0.17	0.00	-0.14
Crude Oil Adjustment (d) .....	0.22	0.21	0.24	0.07	0.06	0.17	0.21	0.15	0.19	0.19	0.21	0.15	0.18	0.15	0.19
Total Crude Oil Input to Refineries .....	15.91	17.13	16.60	16.72	16.43	17.32	17.40	16.68	16.53	17.47	17.36	16.66	16.59	16.96	17.01
<b>Other Supply</b>															
Refinery Processing Gain .....	1.09	1.13	1.07	1.12	1.10	1.13	1.14	1.12	1.08	1.12	1.13	1.12	1.10	1.12	1.11
Natural Gas Plant Liquids Production .....	3.54	3.70	3.72	3.99	3.97	4.22	4.42	4.54	4.56	4.67	4.75	4.79	3.74	4.29	4.69
Renewables and Oxygenate Production (e) .....	1.17	1.16	1.19	1.23	1.20	1.20	1.21	1.21	1.18	1.22	1.24	1.25	1.19	1.21	1.22
Fuel Ethanol Production .....	1.04	1.01	1.02	1.06	1.05	1.03	1.03	1.03	1.03	1.04	1.05	1.05	1.03	1.04	1.04
Petroleum Products Adjustment (f) .....	0.21	0.22	0.21	0.22	0.21	0.25	0.25	0.25	0.25	0.26	0.26	0.26	0.22	0.24	0.25
Product Net Imports (c) .....	-2.96	-2.99	-2.80	-3.49	-3.34	-3.42	-3.45	-3.67	-3.54	-3.71	-3.46	-3.56	-3.06	-3.47	-3.57
Hydrocarbon Gas Liquids .....	-1.20	-1.18	-1.16	-1.29	-1.26	-1.37	-1.44	-1.60	-1.61	-1.66	-1.61	-1.68	-1.21	-1.42	-1.64
Unfinished Oils .....	0.37	0.34	0.38	0.38	0.39	0.36	0.40	0.32	0.38	0.38	0.41	0.32	0.37	0.37	0.37
Other HC/Oxygenates .....	-0.13	-0.09	-0.09	-0.13	-0.18	-0.09	-0.07	-0.08	-0.12	-0.09	-0.08	-0.08	-0.11	-0.11	-0.09
Motor Gasoline Blend Comp. ....	0.43	0.68	0.64	0.36	0.48	0.66	0.49	0.41	0.50	0.66	0.49	0.45	0.53	0.51	0.53
Finished Motor Gasoline .....	-0.66	-0.62	-0.63	-0.94	-1.01	-0.78	-0.63	-0.80	-0.89	-0.77	-0.59	-0.76	-0.71	-0.80	-0.75
Jet Fuel .....	-0.04	-0.07	-0.01	0.02	-0.12	-0.09	-0.08	-0.04	-0.06	-0.07	-0.07	-0.02	-0.02	-0.08	-0.06
Distillate Fuel Oil .....	-1.01	-1.36	-1.32	-1.22	-0.93	-1.31	-1.40	-1.16	-1.07	-1.35	-1.31	-1.06	-1.23	-1.20	-1.20
Residual Fuel Oil .....	-0.10	-0.11	-0.12	-0.09	-0.08	-0.11	-0.08	-0.09	-0.07	-0.13	-0.09	-0.11	-0.10	-0.09	-0.10
Other Oils (g) .....	-0.61	-0.60	-0.50	-0.59	-0.64	-0.68	-0.63	-0.62	-0.60	-0.68	-0.62	-0.61	-0.57	-0.64	-0.63
Product Inventory Net Withdrawals .....	0.56	-0.33	-0.07	0.27	0.52	-0.37	-0.42	0.40	0.21	-0.53	-0.35	0.36	0.11	0.03	-0.08
Total Supply .....	19.52	20.03	19.92	20.05	20.10	20.33	20.54	20.52	20.28	20.50	20.92	20.87	19.88	20.38	20.64
<b>Consumption (million barrels per day)</b>															
Hydrocarbon Gas Liquids .....	2.79	2.45	2.33	2.81	3.20	2.68	2.75	3.16	3.25	2.82	2.97	3.30	2.60	2.95	3.08
Unfinished Oils .....	0.02	0.02	-0.01	-0.04	0.09	-0.02	-0.03	0.01	0.00	-0.03	-0.03	0.01	0.00	0.01	-0.01
Motor Gasoline .....	8.95	9.54	9.56	9.23	8.94	9.51	9.56	9.26	8.99	9.55	9.63	9.37	9.32	9.32	9.39
Fuel Ethanol blended into Motor Gasoline .....	0.90	0.96	0.96	0.95	0.90	0.97	0.98	0.95	0.92	0.98	0.98	0.96	0.94	0.95	0.96
Jet Fuel .....	1.60	1.68	1.71	1.73	1.63	1.72	1.76	1.73	1.63	1.73	1.78	1.75	1.68	1.71	1.72
Distillate Fuel Oil .....	3.95	3.91	3.87	4.02	4.13	4.08	3.98	4.08	4.15	4.09	4.07	4.18	3.94	4.07	4.12
Residual Fuel Oil .....	0.37	0.37	0.30	0.39	0.31	0.33	0.34	0.32	0.36	0.32	0.34	0.30	0.36	0.33	0.33
Other Oils (g) .....	1.83	2.06	2.15	1.91	1.80	2.03	2.17	1.97	1.89	2.02	2.16	1.97	1.99	2.00	2.01
Total Consumption .....	19.49	20.03	19.92	20.05	20.10	20.33	20.54	20.52	20.28	20.50	20.92	20.87	19.88	20.38	20.64
<b>Total Petroleum and Other Liquids Net Imports</b> .....	<b>4.28</b>	<b>4.25</b>	<b>3.83</b>	<b>2.59</b>	<b>2.89</b>	<b>3.11</b>	<b>2.81</b>	<b>1.59</b>	<b>1.60</b>	<b>1.64</b>	<b>1.75</b>	<b>1.02</b>	<b>3.73</b>	<b>2.60</b>	<b>1.50</b>
<b>End-of-period Inventories (million barrels)</b>															
<b>Commercial Inventory</b>															
Crude Oil (excluding SPR) .....	537.9	500.4	469.1	421.1	426.3	429.5	418.6	421.4	470.1	471.9	464.8	473.1	421.1	421.4	473.1
Hydrocarbon Gas Liquids .....	148.1	190.6	229.7	190.9	136.8	187.5	233.7	185.5	152.2	203.8	244.3	198.8	190.9	185.5	198.8
Unfinished Oils .....	89.3	88.7	89.2	86.3	95.7	89.0	86.4	79.9	90.5	88.6	86.7	80.0	86.3	79.9	80.0
Other HC/Oxygenates .....	32.6	29.3	28.3	30.1	30.2	29.4	28.7	29.3	31.1	30.1	29.3	30.0	30.1	29.3	30.0
Total Motor Gasoline .....	239.0	237.9	223.8	236.7	239.6	235.1	228.4	240.0	243.2	239.3	233.8	246.6	236.7	240.0	246.6
Finished Motor Gasoline .....	21.7	22.5	21.8	24.6	24.5	23.6	24.0	27.4	25.0	24.0	24.6	25.3	24.6	27.4	25.3
Motor Gasoline Blend Comp. ....	217.2	215.5	202.0	212.1	215.1	211.5	204.4	212.6	218.3	215.4	209.2	221.3	212.1	212.6	221.3
Jet Fuel .....	42.3	41.0	43.3	41.2	40.1	40.6	42.1	40.1	40.3	42.0	43.7	41.6	41.2	40.1	41.6
Distillate Fuel Oil .....	151.1	151.6	137.5	145.6	129.2	124.8	131.0	135.7	126.2	128.9	133.9	138.9	145.6	135.7	138.9
Residual Fuel Oil .....	40.8	35.2	35.9	29.4	35.2	35.2	35.8	36.9	39.2	39.9	38.7	38.9	29.4	36.9	38.9
Other Oils (g) .....	56.6	55.2	47.9	50.9	57.1	55.7	49.8	51.9	57.5	56.1	50.3	52.5	50.9	51.9	52.5
Total Commercial Inventory .....	1,338	1,330	1,305	1,232	1,190	1,227	1,255	1,221	1,250	1,301	1,326	1,300	1,232	1,221	1,300
Crude Oil in SPR .....	692	679	674	663	665	662	660	656	652	648	644	642	663	656	642

- = no data available

(a) Includes lease condensate.

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

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

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

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

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

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

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

SPR: Strategic Petroleum Reserve

HC: Hydrocarbons

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

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

**Projections:** EIA Regional Short-Term Energy Model.

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

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

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
<b>HGL Production</b>															
<b>Natural Gas Processing Plants</b>															
Ethane .....	1.33	1.39	1.34	1.56	1.58	1.67	1.78	1.88	1.87	1.88	1.94	2.00	1.41	1.73	1.92
Propane .....	1.16	1.21	1.23	1.28	1.27	1.33	1.38	1.40	1.43	1.47	1.47	1.47	1.22	1.35	1.46
Butanes .....	0.63	0.65	0.67	0.69	0.68	0.72	0.75	0.75	0.77	0.79	0.79	0.79	0.66	0.73	0.78
Natural Gasoline (Pentanes Plus) .....	0.41	0.45	0.48	0.46	0.44	0.50	0.52	0.51	0.49	0.53	0.55	0.53	0.45	0.49	0.53
<b>Refinery and Blender Net Production</b>															
Ethane/Ethylene .....	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00
Propane .....	0.29	0.32	0.30	0.32	0.30	0.33	0.33	0.31	0.31	0.33	0.33	0.32	0.31	0.32	0.32
Propylene (refinery-grade) .....	0.27	0.29	0.27	0.30	0.29	0.29	0.28	0.29	0.28	0.29	0.28	0.29	0.29	0.28	0.28
Butanes/Butylenes .....	-0.09	0.27	0.16	-0.22	-0.10	0.27	0.19	-0.20	-0.07	0.26	0.19	-0.20	0.03	0.04	0.05
<b>Renewable Fuels and Oxygenate Plant Net Production</b>															
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
<b>HGL Net Imports</b>															
Ethane .....	-0.15	-0.16	-0.20	-0.21	-0.22	-0.24	-0.30	-0.30	-0.30	-0.30	-0.30	-0.32	-0.18	-0.27	-0.31
Propane/Propylene .....	-0.79	-0.71	-0.68	-0.83	-0.71	-0.74	-0.71	-0.89	-0.84	-0.91	-0.86	-0.93	-0.75	-0.76	-0.88
Butanes/Butylenes .....	-0.09	-0.12	-0.11	-0.11	-0.13	-0.17	-0.20	-0.17	-0.22	-0.21	-0.19	-0.18	-0.11	-0.17	-0.20
Natural Gasoline (Pentanes Plus) .....	-0.18	-0.18	-0.16	-0.14	-0.20	-0.22	-0.24	-0.24	-0.24	-0.24	-0.26	-0.25	-0.16	-0.22	-0.25
<b>HGL Refinery and Blender Net Inputs</b>															
Butanes/Butylenes .....	0.43	0.30	0.33	0.50	0.44	0.31	0.33	0.51	0.40	0.31	0.33	0.51	0.39	0.40	0.39
Natural Gasoline (Pentanes Plus) .....	0.16	0.18	0.18	0.19	0.15	0.17	0.18	0.18	0.17	0.18	0.18	0.18	0.18	0.17	0.18
<b>HGL Consumption</b>															
Ethane/Ethylene .....	1.19	1.23	1.13	1.33	1.40	1.41	1.49	1.60	1.58	1.56	1.66	1.71	1.22	1.47	1.63
Propane .....	1.05	0.60	0.67	0.85	1.19	0.66	0.70	0.99	1.10	0.62	0.69	0.98	0.79	0.88	0.84
Propylene (refinery-grade) .....	0.34	0.31	0.28	0.32	0.30	0.31	0.30	0.30	0.31	0.31	0.30	0.29	0.31	0.30	0.30
Butanes/Butylenes .....	0.12	0.23	0.18	0.16	0.23	0.24	0.20	0.20	0.19	0.26	0.25	0.23	0.17	0.22	0.23
Natural Gasoline (Pentanes Plus) .....	0.10	0.08	0.08	0.15	0.08	0.06	0.07	0.08	0.07	0.07	0.07	0.08	0.10	0.07	0.07
<b>HGL Inventories (million barrels)</b>															
Ethane .....	49.65	51.89	51.77	57.73	52.47	55.37	54.58	54.82	51.20	53.77	52.03	51.09	52.78	54.32	52.02
Propane .....	40.23	57.06	71.59	62.37	31.19	52.45	78.09	61.99	42.71	64.99	86.37	73.86	62.37	61.99	73.86
Propylene (refinery-grade) .....	3.75	4.01	5.21	4.82	4.94	5.47	5.70	5.96	5.06	5.16	5.48	6.13	4.82	5.96	6.13
Butanes/Butylenes .....	31.68	57.24	76.10	47.95	28.85	53.07	72.04	42.31	32.02	56.85	75.82	46.09	47.95	42.31	46.09
Natural Gasoline (Pentanes Plus) .....	21.49	20.55	23.40	20.14	18.45	21.05	22.76	21.88	20.76	23.05	24.60	23.47	20.14	21.88	23.47
<b>Refinery and Blender Net Inputs</b>															
Crude Oil .....	15.91	17.13	16.60	16.72	16.43	17.32	17.40	16.68	16.53	17.47	17.36	16.66	16.59	16.96	17.01
Hydrocarbon Gas Liquids .....	0.58	0.48	0.51	0.69	0.59	0.48	0.51	0.69	0.57	0.48	0.51	0.69	0.57	0.57	0.56
Other Hydrocarbons/Oxygenates .....	1.16	1.24	1.22	1.21	1.16	1.29	1.32	1.30	1.21	1.32	1.34	1.33	1.21	1.27	1.30
Unfinished Oils .....	0.25	0.33	0.38	0.45	0.20	0.45	0.46	0.39	0.26	0.43	0.46	0.38	0.36	0.37	0.38
Motor Gasoline Blend Components .....	0.39	0.65	0.67	0.22	0.34	0.78	0.65	0.47	0.57	0.84	0.66	0.49	0.49	0.56	0.64
Aviation Gasoline Blend Components .....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Refinery and Blender Net Inputs .....	18.30	19.83	19.38	19.30	18.72	20.32	20.33	19.52	19.13	20.54	20.34	19.55	19.21	19.73	19.89
<b>Refinery Processing Gain</b>															
.....	1.09	1.13	1.07	1.12	1.10	1.13	1.14	1.12	1.08	1.12	1.13	1.12	1.10	1.12	1.11
<b>Refinery and Blender Net Production</b>															
Hydrocarbon Gas Liquids .....	0.48	0.89	0.73	0.40	0.50	0.89	0.80	0.41	0.52	0.89	0.80	0.41	0.63	0.65	0.65
Finished Motor Gasoline .....	9.57	10.10	10.04	10.13	9.82	10.34	10.26	10.23	9.96	10.42	10.31	10.28	9.96	10.17	10.24
Jet Fuel .....	1.63	1.74	1.75	1.69	1.74	1.82	1.86	1.74	1.69	1.82	1.87	1.75	1.70	1.79	1.78
Distillate Fuel .....	4.75	5.18	4.94	5.25	4.81	5.26	5.37	5.22	5.03	5.39	5.36	5.21	5.03	5.17	5.25
Residual Fuel .....	0.46	0.41	0.43	0.41	0.45	0.45	0.43	0.42	0.46	0.46	0.42	0.42	0.43	0.44	0.44
Other Oils (a) .....	2.50	2.64	2.56	2.53	2.51	2.70	2.74	2.61	2.55	2.69	2.72	2.60	2.56	2.64	2.64
Total Refinery and Blender Net Production .....	19.40	20.97	20.46	20.41	19.83	21.44	21.47	20.64	20.22	21.67	21.47	20.66	20.31	20.85	21.01
<b>Refinery Distillation Inputs</b>															
.....	16.23	17.42	16.90	17.00	16.78	17.47	17.59	16.90	16.73	17.57	17.55	16.88	16.89	17.18	17.19
<b>Refinery Operable Distillation Capacity</b>															
.....	18.62	18.58	18.55	18.52	18.57	18.60	18.60	18.60	18.61	18.61	18.65	18.65	18.57	18.59	18.63
<b>Refinery Distillation Utilization Factor</b>															
.....	0.87	0.94	0.91	0.92	0.90	0.94	0.95	0.91	0.90	0.94	0.94	0.90	0.91	0.92	0.92

- = no data available

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

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

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

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

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

**Projections:** EIA Regional Short-Term Energy Model.



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

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

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
<b>Prices (cents per gallon)</b>															
<b>Refiner Wholesale Price .....</b>	<b>163</b>	<b>165</b>	<b>172</b>	<b>175</b>	<b>187</b>	<i>218</i>	<i>213</i>	<i>197</i>	<i>190</i>	<i>202</i>	<i>199</i>	<i>180</i>	<b>169</b>	<i>204</i>	<i>193</i>
<b>Gasoline Regular Grade Retail Prices Including Taxes</b>															
PADD 1 .....	<b>231</b>	<b>233</b>	<b>241</b>	<b>249</b>	<b>255</b>	<i>286</i>	<i>288</i>	<i>276</i>	<i>268</i>	<i>277</i>	<i>275</i>	<i>261</i>	<b>239</b>	<i>277</i>	<i>270</i>
PADD 2 .....	<b>223</b>	<b>228</b>	<b>232</b>	<b>242</b>	<b>246</b>	<i>278</i>	<i>283</i>	<i>265</i>	<i>255</i>	<i>272</i>	<i>271</i>	<i>250</i>	<b>231</b>	<i>269</i>	<i>262</i>
PADD 3 .....	<b>210</b>	<b>216</b>	<b>222</b>	<b>225</b>	<b>230</b>	<i>263</i>	<i>262</i>	<i>247</i>	<i>239</i>	<i>252</i>	<i>248</i>	<i>230</i>	<b>218</b>	<i>251</i>	<i>243</i>
PADD 4 .....	<b>227</b>	<b>239</b>	<b>245</b>	<b>252</b>	<b>247</b>	<i>281</i>	<i>290</i>	<i>272</i>	<i>250</i>	<i>269</i>	<i>277</i>	<i>256</i>	<b>241</b>	<i>273</i>	<i>263</i>
PADD 5 .....	<b>276</b>	<b>289</b>	<b>290</b>	<b>299</b>	<b>312</b>	<i>343</i>	<i>339</i>	<i>318</i>	<i>304</i>	<i>328</i>	<i>325</i>	<i>299</i>	<b>288</b>	<i>328</i>	<i>314</i>
U.S. Average .....	<b>233</b>	<b>238</b>	<b>244</b>	<b>251</b>	<b>258</b>	<i>290</i>	<i>291</i>	<i>275</i>	<i>265</i>	<i>280</i>	<i>278</i>	<i>259</i>	<b>242</b>	<i>279</i>	<i>271</i>
<b>Gasoline All Grades Including Taxes</b>	<b>244</b>	<b>250</b>	<b>255</b>	<b>263</b>	<b>269</b>	<i>301</i>	<i>302</i>	<i>287</i>	<i>277</i>	<i>291</i>	<i>290</i>	<i>271</i>	<b>253</b>	<i>290</i>	<i>282</i>
<b>End-of-period Inventories (million barrels)</b>															
<b>Total Gasoline Inventories</b>															
PADD 1 .....	<b>65.3</b>	<b>67.2</b>	<b>58.8</b>	<b>60.6</b>	<b>58.3</b>	<i>65.2</i>	<i>62.3</i>	<i>65.2</i>	<i>66.7</i>	<i>67.0</i>	<i>63.7</i>	<i>67.1</i>	<b>60.6</b>	<i>65.2</i>	<i>67.1</i>
PADD 2 .....	<b>57.0</b>	<b>53.6</b>	<b>50.4</b>	<b>52.2</b>	<b>57.8</b>	<i>52.4</i>	<i>49.9</i>	<i>51.9</i>	<i>54.9</i>	<i>52.8</i>	<i>51.2</i>	<i>53.4</i>	<b>52.2</b>	<i>51.9</i>	<i>53.4</i>
PADD 3 .....	<b>79.1</b>	<b>82.4</b>	<b>78.5</b>	<b>83.2</b>	<b>83.8</b>	<i>80.9</i>	<i>80.6</i>	<i>83.8</i>	<i>83.8</i>	<i>83.3</i>	<i>83.2</i>	<i>86.5</i>	<b>83.2</b>	<i>83.8</i>	<i>86.5</i>
PADD 4 .....	<b>7.9</b>	<b>7.0</b>	<b>6.9</b>	<b>7.6</b>	<b>7.8</b>	<i>7.4</i>	<i>7.3</i>	<i>7.8</i>	<i>7.7</i>	<i>7.7</i>	<i>7.5</i>	<i>8.0</i>	<b>7.6</b>	<i>7.8</i>	<i>8.0</i>
PADD 5 .....	<b>29.7</b>	<b>27.7</b>	<b>29.2</b>	<b>33.1</b>	<b>31.9</b>	<i>29.1</i>	<i>28.3</i>	<i>31.3</i>	<i>30.2</i>	<i>28.5</i>	<i>28.3</i>	<i>31.7</i>	<b>33.1</b>	<i>31.3</i>	<i>31.7</i>
U.S. Total .....	<b>239.0</b>	<b>237.9</b>	<b>223.8</b>	<b>236.7</b>	<b>239.6</b>	<i>235.1</i>	<i>228.4</i>	<i>240.0</i>	<i>243.2</i>	<i>239.3</i>	<i>233.8</i>	<i>246.6</i>	<b>236.7</b>	<i>240.0</i>	<i>246.6</i>
<b>Finished Gasoline Inventories</b>															
U.S. Total .....	<b>21.7</b>	<b>22.5</b>	<b>21.8</b>	<b>24.6</b>	<b>24.5</b>	<i>23.6</i>	<i>24.0</i>	<i>27.4</i>	<i>25.0</i>	<i>24.0</i>	<i>24.6</i>	<i>25.3</i>	<b>24.6</b>	<i>27.4</i>	<i>25.3</i>
<b>Gasoline Blending Components Inventories</b>															
U.S. Total .....	<b>217.2</b>	<b>215.5</b>	<b>202.0</b>	<b>212.1</b>	<b>215.1</b>	<i>211.5</i>	<i>204.4</i>	<i>212.6</i>	<i>218.3</i>	<i>215.4</i>	<i>209.2</i>	<i>221.3</i>	<b>212.1</b>	<i>212.6</i>	<i>221.3</i>

- = no data available

Prices are not adjusted for inflation.

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

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

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

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

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

**Projections:** EIA Regional Short-Term Energy Model.

**Table 5a. U.S. Natural Gas Supply, Consumption, and Inventories**  
U.S. Energy Information Administration | Short-Term Energy Outlook - May 2018

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
<b>Supply (billion cubic feet per day)</b>															
Total Marketed Production .....	<b>76.32</b>	<b>77.36</b>	<b>79.30</b>	<b>82.72</b>	<b>84.16</b>	<i>86.18</i>	<i>87.13</i>	<i>87.94</i>	<i>89.26</i>	<i>89.77</i>	<i>89.78</i>	<i>89.81</i>	<b>78.94</b>	<i>86.36</i>	<i>89.66</i>
Alaska .....	<b>1.01</b>	<b>0.97</b>	<b>0.82</b>	<b>0.98</b>	<b>1.00</b>	<i>0.85</i>	<i>0.77</i>	<i>0.93</i>	<i>1.00</i>	<i>0.86</i>	<i>0.78</i>	<i>0.94</i>	<b>0.94</b>	<i>0.89</i>	<i>0.90</i>
Federal GOM (a) .....	<b>3.26</b>	<b>2.99</b>	<b>2.91</b>	<b>2.52</b>	<b>2.58</b>	<i>2.68</i>	<i>2.57</i>	<i>2.60</i>	<i>2.58</i>	<i>2.53</i>	<i>2.42</i>	<i>2.41</i>	<b>2.92</b>	<i>2.60</i>	<i>2.48</i>
Lower 48 States (excl GOM) .....	<b>72.05</b>	<b>73.40</b>	<b>75.56</b>	<b>79.22</b>	<b>80.58</b>	<i>82.65</i>	<i>83.79</i>	<i>84.41</i>	<i>85.67</i>	<i>86.38</i>	<i>86.59</i>	<i>86.45</i>	<b>75.08</b>	<i>82.87</i>	<i>86.28</i>
Total Dry Gas Production .....	<b>71.24</b>	<b>72.04</b>	<b>73.97</b>	<b>76.98</b>	<b>78.49</b>	<i>80.31</i>	<i>81.15</i>	<i>81.85</i>	<i>83.03</i>	<i>83.46</i>	<i>83.42</i>	<i>83.39</i>	<b>73.57</b>	<i>80.46</i>	<i>83.33</i>
LNG Gross Imports .....	<b>0.29</b>	<b>0.18</b>	<b>0.17</b>	<b>0.21</b>	<b>0.33</b>	<i>0.14</i>	<i>0.18</i>	<i>0.26</i>	<i>0.32</i>	<i>0.17</i>	<i>0.17</i>	<i>0.21</i>	<b>0.21</b>	<i>0.23</i>	<i>0.22</i>
LNG Gross Exports .....	<b>1.63</b>	<b>1.80</b>	<b>1.67</b>	<b>2.64</b>	<b>2.61</b>	<i>2.83</i>	<i>2.94</i>	<i>3.27</i>	<i>3.61</i>	<i>3.84</i>	<i>4.84</i>	<i>6.38</i>	<b>1.94</b>	<i>2.92</i>	<i>4.67</i>
Pipeline Gross Imports .....	<b>8.89</b>	<b>7.76</b>	<b>7.74</b>	<b>8.08</b>	<b>8.62</b>	<i>7.97</i>	<i>7.86</i>	<i>7.81</i>	<i>8.79</i>	<i>7.93</i>	<i>8.05</i>	<i>8.37</i>	<b>8.11</b>	<i>8.06</i>	<i>8.28</i>
Pipeline Gross Exports .....	<b>7.24</b>	<b>6.49</b>	<b>6.43</b>	<b>6.81</b>	<b>7.51</b>	<i>7.08</i>	<i>7.03</i>	<i>7.99</i>	<i>9.22</i>	<i>8.09</i>	<i>7.95</i>	<i>8.66</i>	<b>6.74</b>	<i>7.40</i>	<i>8.48</i>
Supplemental Gaseous Fuels .....	<b>0.16</b>	<b>0.13</b>	<b>0.16</b>	<b>0.16</b>	<b>0.17</b>	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	<i>0.18</i>	<i>0.18</i>	<i>0.18</i>	<b>0.15</b>	<i>0.17</i>	<i>0.18</i>
Net Inventory Withdrawals .....	<b>13.73</b>	<b>-9.02</b>	<b>-7.19</b>	<b>5.77</b>	<b>18.35</b>	<i>-9.29</i>	<i>-10.39</i>	<i>2.68</i>	<i>15.88</i>	<i>-10.67</i>	<i>-8.49</i>	<i>4.62</i>	<b>0.78</b>	<i>0.26</i>	<i>0.28</i>
Total Supply .....	<b>85.44</b>	<b>62.80</b>	<b>66.75</b>	<b>81.76</b>	<b>95.85</b>	<i>69.39</i>	<i>69.00</i>	<i>81.52</i>	<i>95.37</i>	<i>69.14</i>	<i>70.54</i>	<i>81.73</i>	<b>74.16</b>	<i>78.87</i>	<i>79.13</i>
Balancing Item (b) .....	<b>0.70</b>	<b>0.17</b>	<b>0.22</b>	<b>-0.82</b>	<b>0.60</b>	<i>-0.26</i>	<i>0.17</i>	<i>0.25</i>	<i>0.12</i>	<i>-0.73</i>	<i>0.47</i>	<i>1.17</i>	<b>0.06</b>	<i>0.19</i>	<i>0.26</i>
Total Primary Supply .....	<b>86.15</b>	<b>62.97</b>	<b>66.97</b>	<b>80.94</b>	<b>96.44</b>	<i>69.12</i>	<i>69.18</i>	<i>81.77</i>	<i>95.49</i>	<i>68.41</i>	<i>71.00</i>	<i>82.89</i>	<b>74.22</b>	<i>79.06</i>	<i>79.39</i>
<b>Consumption (billion cubic feet per day)</b>															
Residential .....	<b>22.17</b>	<b>6.65</b>	<b>3.55</b>	<b>16.26</b>	<b>25.74</b>	<i>8.39</i>	<i>3.60</i>	<i>16.37</i>	<i>24.89</i>	<i>7.33</i>	<i>3.67</i>	<i>16.35</i>	<b>12.12</b>	<i>13.47</i>	<i>13.01</i>
Commercial .....	<b>13.50</b>	<b>5.83</b>	<b>4.55</b>	<b>11.01</b>	<b>15.12</b>	<i>6.63</i>	<i>4.59</i>	<i>10.74</i>	<i>14.97</i>	<i>6.17</i>	<i>4.72</i>	<i>10.84</i>	<b>8.70</b>	<i>9.25</i>	<i>9.15</i>
Industrial .....	<b>22.96</b>	<b>20.45</b>	<b>20.34</b>	<b>22.85</b>	<b>24.04</b>	<i>21.02</i>	<i>20.54</i>	<i>22.63</i>	<i>23.76</i>	<i>21.33</i>	<i>20.77</i>	<i>22.75</i>	<b>21.65</b>	<i>22.05</i>	<i>22.15</i>
Electric Power (c) .....	<b>20.95</b>	<b>24.00</b>	<b>32.28</b>	<b>24.03</b>	<b>24.26</b>	<i>26.34</i>	<i>33.64</i>	<i>24.85</i>	<i>24.24</i>	<i>26.56</i>	<i>34.67</i>	<i>25.34</i>	<b>25.34</b>	<i>27.29</i>	<i>27.73</i>
Lease and Plant Fuel .....	<b>4.26</b>	<b>4.32</b>	<b>4.43</b>	<b>4.62</b>	<b>4.70</b>	<i>4.81</i>	<i>4.86</i>	<i>4.91</i>	<i>4.98</i>	<i>5.01</i>	<i>5.01</i>	<i>5.01</i>	<b>4.41</b>	<i>4.82</i>	<i>5.01</i>
Pipeline and Distribution Use .....	<b>2.19</b>	<b>1.60</b>	<b>1.70</b>	<b>2.05</b>	<b>2.46</b>	<i>1.81</i>	<i>1.82</i>	<i>2.15</i>	<i>2.51</i>	<i>1.89</i>	<i>2.05</i>	<i>2.48</i>	<b>1.88</b>	<i>2.06</i>	<i>2.23</i>
Vehicle Use .....	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<b>0.12</b>	<i>0.12</i>	<i>0.12</i>
Total Consumption .....	<b>86.15</b>	<b>62.97</b>	<b>66.97</b>	<b>80.94</b>	<b>96.44</b>	<i>69.12</i>	<i>69.18</i>	<i>81.77</i>	<i>95.49</i>	<i>68.41</i>	<i>71.00</i>	<i>82.89</i>	<b>74.22</b>	<i>79.06</i>	<i>79.39</i>
<b>End-of-period Inventories (billion cubic feet)</b>															
Working Gas Inventory .....	<b>2,063</b>	<b>2,907</b>	<b>3,567</b>	<b>3,032</b>	<b>1,381</b>	<i>2,227</i>	<i>3,182</i>	<i>2,936</i>	<i>1,507</i>	<i>2,478</i>	<i>3,259</i>	<i>2,834</i>	<b>3,032</b>	<i>2,936</i>	<i>2,834</i>
East Region (d) .....	<b>260</b>	<b>563</b>	<b>866</b>	<b>710</b>	<b>227</b>	<i>480</i>	<i>791</i>	<i>691</i>	<i>212</i>	<i>513</i>	<i>805</i>	<i>636</i>	<b>710</b>	<i>691</i>	<i>636</i>
Midwest Region (d) .....	<b>477</b>	<b>701</b>	<b>993</b>	<b>829</b>	<b>263</b>	<i>482</i>	<i>878</i>	<i>768</i>	<i>280</i>	<i>551</i>	<i>895</i>	<i>770</i>	<b>829</b>	<i>768</i>	<i>770</i>
South Central Region (d) .....	<b>938</b>	<b>1,139</b>	<b>1,137</b>	<b>1,016</b>	<b>608</b>	<i>842</i>	<i>990</i>	<i>996</i>	<i>667</i>	<i>920</i>	<i>993</i>	<i>937</i>	<b>1,016</b>	<i>996</i>	<i>937</i>
Mountain Region (d) .....	<b>142</b>	<b>184</b>	<b>218</b>	<b>177</b>	<b>86</b>	<i>124</i>	<i>186</i>	<i>178</i>	<i>123</i>	<i>163</i>	<i>202</i>	<i>167</i>	<b>177</b>	<i>178</i>	<i>167</i>
Pacific Region (d) .....	<b>219</b>	<b>288</b>	<b>314</b>	<b>264</b>	<b>167</b>	<i>268</i>	<i>306</i>	<i>272</i>	<i>194</i>	<i>300</i>	<i>334</i>	<i>293</i>	<b>264</b>	<i>272</i>	<i>293</i>
Alaska .....	<b>27</b>	<b>32</b>	<b>39</b>	<b>36</b>	<b>30</b>	<i>31</i>	<i>31</i>	<i>31</i>	<i>31</i>	<i>31</i>	<i>31</i>	<i>31</i>	<b>36</b>	<i>31</i>	<i>31</i>

- = no data available

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

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

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

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

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

LNG: liquefied natural gas.

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

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

**Projections:** EIA Regional Short-Term Energy Model.

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

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

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
<b>Wholesale/Spot</b>															
Henry Hub Spot Price .....	<b>3.12</b>	<b>3.19</b>	<b>3.06</b>	<b>3.01</b>	<b>3.13</b>	2.96	3.13	3.24	3.37	3.12	3.14	3.29	<b>3.10</b>	3.12	3.23
<b>Residential Retail</b>															
New England .....	<b>12.85</b>	<b>14.08</b>	<b>18.12</b>	<b>13.57</b>	<b>14.40</b>	14.18	17.12	13.58	13.07	14.00	17.21	13.65	<b>13.60</b>	14.31	13.66
Middle Atlantic .....	<b>9.92</b>	<b>12.18</b>	<b>17.11</b>	<b>11.33</b>	<b>9.94</b>	11.33	16.25	10.87	9.98	11.95	16.57	11.06	<b>11.17</b>	10.82	11.03
E. N. Central .....	<b>7.77</b>	<b>11.52</b>	<b>17.80</b>	<b>7.81</b>	<b>7.26</b>	10.21	16.42	8.85	8.03	10.97	16.65	8.97	<b>8.86</b>	8.69	9.25
W. N. Central .....	<b>8.32</b>	<b>11.85</b>	<b>18.79</b>	<b>9.56</b>	<b>8.31</b>	10.90	17.71	10.05	9.23	12.07	17.82	9.95	<b>9.80</b>	9.72	10.39
S. Atlantic .....	<b>12.29</b>	<b>20.05</b>	<b>26.86</b>	<b>13.20</b>	<b>11.21</b>	15.54	22.21	12.79	11.24	16.23	22.50	12.94	<b>14.63</b>	13.03	13.15
E. S. Central .....	<b>10.53</b>	<b>15.83</b>	<b>20.82</b>	<b>11.32</b>	<b>9.55</b>	13.42	19.62	12.27	9.98	14.51	20.64	12.91	<b>12.05</b>	11.38	11.95
W. S. Central .....	<b>10.33</b>	<b>16.49</b>	<b>22.10</b>	<b>13.09</b>	<b>8.93</b>	13.13	19.76	11.62	8.43	13.99	20.27	11.82	<b>13.18</b>	11.25	11.10
Mountain .....	<b>8.21</b>	<b>10.17</b>	<b>13.91</b>	<b>8.76</b>	<b>8.14</b>	9.42	13.42	9.00	8.87	10.24	13.94	9.27	<b>9.14</b>	9.04	9.63
Pacific .....	<b>12.02</b>	<b>12.64</b>	<b>12.90</b>	<b>11.30</b>	<b>11.52</b>	11.82	12.83	11.64	12.51	12.63	12.95	11.81	<b>12.01</b>	11.77	12.36
U.S. Average .....	<b>9.73</b>	<b>13.00</b>	<b>17.74</b>	<b>10.19</b>	<b>9.31</b>	11.43	16.54	10.59	9.69	12.33	16.82	10.76	<b>10.92</b>	10.52	10.91
<b>Commercial Retail</b>															
New England .....	<b>9.55</b>	<b>9.97</b>	<b>10.61</b>	<b>9.53</b>	<b>10.86</b>	10.75	10.67	10.30	10.40	10.47	10.36	10.15	<b>9.71</b>	10.67	10.33
Middle Atlantic .....	<b>7.66</b>	<b>7.42</b>	<b>6.82</b>	<b>7.38</b>	<b>8.11</b>	7.79	7.07	7.59	7.74	7.60	7.04	7.63	<b>7.43</b>	7.77	7.59
E. N. Central .....	<b>6.63</b>	<b>7.90</b>	<b>8.98</b>	<b>6.21</b>	<b>6.29</b>	7.51	8.98	7.04	6.80	7.79	9.10	7.13	<b>6.84</b>	6.90	7.22
W. N. Central .....	<b>6.96</b>	<b>7.80</b>	<b>9.11</b>	<b>7.04</b>	<b>7.12</b>	7.52	8.98	7.45	7.66	8.04	9.06	7.47	<b>7.28</b>	7.42	7.77
S. Atlantic .....	<b>8.89</b>	<b>10.00</b>	<b>9.56</b>	<b>8.91</b>	<b>8.45</b>	9.00	9.65	8.82	8.65	9.51	9.90	8.98	<b>9.16</b>	8.79	9.04
E. S. Central .....	<b>9.05</b>	<b>10.28</b>	<b>10.76</b>	<b>9.30</b>	<b>8.61</b>	9.31	10.05	9.08	8.66	9.68	10.18	9.11	<b>9.53</b>	9.01	9.11
W. S. Central .....	<b>7.63</b>	<b>8.20</b>	<b>8.86</b>	<b>8.18</b>	<b>7.06</b>	7.24	8.37	7.83	7.38	7.83	8.38	7.78	<b>8.09</b>	7.48	7.72
Mountain .....	<b>6.88</b>	<b>7.37</b>	<b>8.27</b>	<b>7.21</b>	<b>6.94</b>	7.16	8.13	7.21	7.44	7.74	8.49	7.42	<b>7.22</b>	7.19	7.60
Pacific .....	<b>9.09</b>	<b>9.06</b>	<b>9.08</b>	<b>8.54</b>	<b>8.90</b>	8.44	8.82	8.54	8.77	8.85	9.15	8.80	<b>8.92</b>	8.69	8.86
U.S. Average .....	<b>7.71</b>	<b>8.33</b>	<b>8.69</b>	<b>7.56</b>	<b>7.68</b>	8.02	8.59	7.90	7.84	8.32	8.70	7.98	<b>7.87</b>	7.90	8.06
<b>Industrial Retail</b>															
New England .....	<b>7.81</b>	<b>7.04</b>	<b>6.39</b>	<b>7.05</b>	<b>8.85</b>	7.81	6.88	7.95	8.43	7.64	7.05	8.10	<b>7.19</b>	8.06	7.93
Middle Atlantic .....	<b>7.69</b>	<b>7.59</b>	<b>7.62</b>	<b>7.18</b>	<b>8.23</b>	7.65	7.45	7.67	8.08	7.43	7.43	7.69	<b>7.53</b>	7.90	7.80
E. N. Central .....	<b>5.86</b>	<b>5.96</b>	<b>5.59</b>	<b>5.30</b>	<b>5.92</b>	5.77	6.05	6.04	6.63	6.26	6.12	6.04	<b>5.66</b>	5.95	6.33
W. N. Central .....	<b>5.00</b>	<b>4.28</b>	<b>4.24</b>	<b>4.68</b>	<b>5.21</b>	4.50	4.67	5.29	5.78	4.90	4.68	5.28	<b>4.59</b>	4.96	5.22
S. Atlantic .....	<b>5.35</b>	<b>5.00</b>	<b>4.88</b>	<b>4.93</b>	<b>5.37</b>	4.64	4.86	5.22	5.54	4.94	4.91	5.29	<b>5.05</b>	5.05	5.19
E. S. Central .....	<b>5.06</b>	<b>4.59</b>	<b>4.40</b>	<b>4.56</b>	<b>4.96</b>	4.25	4.40	4.85	5.05	4.56	4.50	4.92	<b>4.67</b>	4.64	4.78
W. S. Central .....	<b>3.42</b>	<b>3.42</b>	<b>3.30</b>	<b>3.14</b>	<b>3.33</b>	3.10	3.40	3.50	3.61	3.31	3.40	3.53	<b>3.32</b>	3.33	3.47
Mountain .....	<b>5.31</b>	<b>5.36</b>	<b>5.61</b>	<b>5.50</b>	<b>5.46</b>	5.44	6.00	6.11	6.21	5.87	6.06	6.09	<b>5.43</b>	5.74	6.07
Pacific .....	<b>7.31</b>	<b>6.71</b>	<b>6.32</b>	<b>6.35</b>	<b>6.99</b>	6.34	6.55	6.71	7.13	6.55	6.68	6.76	<b>6.71</b>	6.66	6.80
U.S. Average .....	<b>4.50</b>	<b>4.11</b>	<b>3.89</b>	<b>4.00</b>	<b>4.49</b>	3.81	3.99	4.37	4.72	4.05	4.02	4.42	<b>4.14</b>	4.18	4.32

- = no data available

Prices are not adjusted for inflation.

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

Regions refer to U.S. Census divisions.

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

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

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

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

**Projections:** EIA Regional Short-Term Energy Model.

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

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

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
<b>Supply (million short tons)</b>															
Production .....	<b>197.0</b>	<b>187.1</b>	<b>196.2</b>	<b>193.8</b>	<b>191.1</b>	<i>176.9</i>	<i>195.9</i>	<i>187.2</i>	<i>194.3</i>	<i>165.6</i>	<i>200.0</i>	<i>191.9</i>	<b>774.1</b>	<i>751.2</i>	<i>751.8</i>
Appalachia .....	<b>50.7</b>	<b>51.2</b>	<b>46.3</b>	<b>50.2</b>	<b>50.5</b>	<i>43.9</i>	<i>40.3</i>	<i>38.6</i>	<i>44.4</i>	<i>40.0</i>	<i>39.4</i>	<i>39.4</i>	<b>198.5</b>	<i>173.2</i>	<i>163.3</i>
Interior .....	<b>38.5</b>	<b>36.4</b>	<b>34.9</b>	<b>35.6</b>	<b>35.3</b>	<i>32.9</i>	<i>38.6</i>	<i>39.1</i>	<i>43.2</i>	<i>33.0</i>	<i>39.7</i>	<i>40.4</i>	<b>145.4</b>	<i>145.9</i>	<i>156.2</i>
Western .....	<b>107.8</b>	<b>99.4</b>	<b>115.0</b>	<b>108.0</b>	<b>105.2</b>	<i>100.1</i>	<i>117.1</i>	<i>109.6</i>	<i>106.6</i>	<i>92.6</i>	<i>120.9</i>	<i>112.2</i>	<b>430.2</b>	<i>432.0</i>	<i>432.3</i>
Primary Inventory Withdrawals .....	<b>0.1</b>	<b>1.8</b>	<b>1.4</b>	<b>0.9</b>	<b>-2.8</b>	<i>2.3</i>	<i>1.3</i>	<i>-0.1</i>	<i>-3.6</i>	<i>1.7</i>	<i>1.5</i>	<i>-2.7</i>	<b>4.2</b>	<i>0.8</i>	<i>-3.1</i>
Imports .....	<b>1.9</b>	<b>2.2</b>	<b>2.3</b>	<b>1.4</b>	<b>1.5</b>	<i>2.0</i>	<i>2.7</i>	<i>2.4</i>	<i>1.4</i>	<i>2.3</i>	<i>2.9</i>	<i>2.6</i>	<b>7.8</b>	<i>8.6</i>	<i>9.3</i>
Exports .....	<b>22.3</b>	<b>21.8</b>	<b>24.6</b>	<b>28.2</b>	<b>26.1</b>	<i>22.8</i>	<i>20.3</i>	<i>18.8</i>	<i>21.4</i>	<i>20.7</i>	<i>21.3</i>	<i>21.2</i>	<b>97.0</b>	<i>88.1</i>	<i>84.6</i>
Metallurgical Coal .....	<b>12.2</b>	<b>13.5</b>	<b>14.8</b>	<b>14.8</b>	<b>15.2</b>	<i>13.8</i>	<i>13.3</i>	<i>12.9</i>	<i>13.8</i>	<i>13.2</i>	<i>13.5</i>	<i>13.1</i>	<b>55.3</b>	<i>55.1</i>	<i>53.5</i>
Steam Coal .....	<b>10.1</b>	<b>8.3</b>	<b>9.8</b>	<b>13.4</b>	<b>11.0</b>	<i>9.1</i>	<i>7.0</i>	<i>5.9</i>	<i>7.7</i>	<i>7.4</i>	<i>7.9</i>	<i>8.1</i>	<b>41.7</b>	<i>33.0</i>	<i>31.1</i>
Total Primary Supply .....	<b>176.8</b>	<b>169.2</b>	<b>175.3</b>	<b>167.9</b>	<b>163.7</b>	<i>158.4</i>	<i>179.7</i>	<i>170.7</i>	<i>170.6</i>	<i>148.9</i>	<i>183.2</i>	<i>170.7</i>	<b>689.1</b>	<i>672.5</i>	<i>673.3</i>
Secondary Inventory Withdrawals .....	<b>1.0</b>	<b>3.7</b>	<b>18.2</b>	<b>2.4</b>	<b>11.5</b>	<i>1.6</i>	<i>11.9</i>	<i>-7.7</i>	<i>1.3</i>	<i>2.4</i>	<i>5.6</i>	<i>-9.1</i>	<b>25.2</b>	<i>17.3</i>	<i>0.2</i>
Waste Coal (a) .....	<b>2.5</b>	<b>1.8</b>	<b>2.3</b>	<b>2.1</b>	<b>2.4</b>	<i>2.4</i>	<i>2.4</i>	<i>2.4</i>	<i>2.4</i>	<i>2.4</i>	<i>2.4</i>	<i>2.4</i>	<b>8.7</b>	<i>9.6</i>	<i>9.6</i>
Total Supply .....	<b>180.3</b>	<b>174.8</b>	<b>195.8</b>	<b>172.3</b>	<b>177.6</b>	<i>162.4</i>	<i>194.0</i>	<i>165.3</i>	<i>174.3</i>	<i>153.7</i>	<i>191.1</i>	<i>164.0</i>	<b>723.1</b>	<i>699.3</i>	<i>683.0</i>
<b>Consumption (million short tons)</b>															
Coke Plants .....	<b>4.2</b>	<b>4.3</b>	<b>4.5</b>	<b>4.5</b>	<b>4.2</b>	<i>3.4</i>	<i>4.1</i>	<i>5.0</i>	<i>3.7</i>	<i>3.4</i>	<i>4.2</i>	<i>5.3</i>	<b>17.5</b>	<i>16.7</i>	<i>16.6</i>
Electric Power Sector (b) .....	<b>160.3</b>	<b>154.2</b>	<b>190.6</b>	<b>159.6</b>	<b>160.3</b>	<i>146.2</i>	<i>181.6</i>	<i>151.8</i>	<i>161.8</i>	<i>142.0</i>	<i>178.7</i>	<i>150.3</i>	<b>664.7</b>	<i>639.9</i>	<i>632.8</i>
Retail and Other Industry .....	<b>8.9</b>	<b>8.3</b>	<b>8.8</b>	<b>8.7</b>	<b>8.9</b>	<i>8.2</i>	<i>8.3</i>	<i>8.5</i>	<i>8.9</i>	<i>8.2</i>	<i>8.2</i>	<i>8.4</i>	<b>34.7</b>	<i>33.9</i>	<i>33.7</i>
Residential and Commercial .....	<b>0.4</b>	<b>0.2</b>	<b>0.2</b>	<b>0.3</b>	<b>0.3</b>	<i>0.1</i>	<i>0.1</i>	<i>0.2</i>	<i>0.2</i>	<i>0.1</i>	<i>0.1</i>	<i>0.2</i>	<b>1.1</b>	<i>0.7</i>	<i>0.5</i>
Other Industrial .....	<b>8.5</b>	<b>8.1</b>	<b>8.6</b>	<b>8.4</b>	<b>8.6</b>	<i>8.1</i>	<i>8.2</i>	<i>8.3</i>	<i>8.7</i>	<i>8.1</i>	<i>8.1</i>	<i>8.3</i>	<b>33.6</b>	<i>33.3</i>	<i>33.2</i>
Total Consumption .....	<b>173.5</b>	<b>166.8</b>	<b>203.9</b>	<b>172.7</b>	<b>173.3</b>	<i>157.8</i>	<i>194.0</i>	<i>165.3</i>	<i>174.3</i>	<i>153.7</i>	<i>191.1</i>	<i>164.0</i>	<b>717.0</b>	<i>690.5</i>	<i>683.0</i>
Discrepancy (c) .....	<b>6.8</b>	<b>7.9</b>	<b>-8.1</b>	<b>-0.4</b>	<b>4.3</b>	<i>4.6</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<b>6.2</b>	<i>8.8</i>	<i>0.0</i>
<b>End-of-period Inventories (million short tons)</b>															
Primary Inventories (d) .....	<b>25.2</b>	<b>23.4</b>	<b>22.0</b>	<b>21.1</b>	<b>23.9</b>	<i>21.6</i>	<i>20.2</i>	<i>20.3</i>	<i>24.0</i>	<i>22.3</i>	<i>20.7</i>	<i>23.4</i>	<b>21.1</b>	<i>20.3</i>	<i>23.4</i>
Secondary Inventories .....	<b>166.6</b>	<b>163.0</b>	<b>144.8</b>	<b>142.4</b>	<b>130.9</b>	<i>129.3</i>	<i>117.4</i>	<i>125.1</i>	<i>123.8</i>	<i>121.4</i>	<i>115.9</i>	<i>125.0</i>	<b>142.4</b>	<i>125.1</i>	<i>125.0</i>
Electric Power Sector .....	<b>161.7</b>	<b>157.7</b>	<b>139.3</b>	<b>137.2</b>	<b>125.9</b>	<i>124.1</i>	<i>112.0</i>	<i>119.8</i>	<i>118.8</i>	<i>116.1</i>	<i>110.3</i>	<i>119.5</i>	<b>137.2</b>	<i>119.8</i>	<i>119.5</i>
Retail and General Industry .....	<b>3.2</b>	<b>3.3</b>	<b>3.5</b>	<b>3.2</b>	<b>3.4</b>	<i>3.4</i>	<i>3.5</i>	<i>3.4</i>	<i>3.5</i>	<i>3.5</i>	<i>3.7</i>	<i>3.6</i>	<b>3.2</b>	<i>3.4</i>	<i>3.6</i>
Coke Plants .....	<b>1.4</b>	<b>1.6</b>	<b>1.7</b>	<b>1.7</b>	<b>1.3</b>	<i>1.6</i>	<i>1.6</i>	<i>1.7</i>	<i>1.2</i>	<i>1.5</i>	<i>1.6</i>	<i>1.6</i>	<b>1.7</b>	<i>1.7</i>	<i>1.6</i>
<b>Coal Market Indicators</b>															
Coal Miner Productivity															
(Tons per hour) .....	<b>6.19</b>	<b>6.19</b>	<b>6.19</b>	<b>6.19</b>	<b>6.10</b>	<i>6.10</i>	<i>6.10</i>	<i>6.10</i>	<i>6.02</i>	<i>6.02</i>	<i>6.02</i>	<i>6.02</i>	<b>6.19</b>	<i>6.10</i>	<i>6.02</i>
Total Raw Steel Production															
(Million short tons per day) .....	<b>0.248</b>	<b>0.247</b>	<b>0.250</b>	<b>0.245</b>	<b>0.251</b>	<i>0.259</i>	<i>0.241</i>	<i>0.207</i>	<i>0.262</i>	<i>0.260</i>	<i>0.240</i>	<i>0.206</i>	<b>0.248</b>	<i>0.239</i>	<i>0.242</i>
Cost of Coal to Electric Utilities															
(Dollars per million Btu) .....	<b>2.08</b>	<b>2.12</b>	<b>2.07</b>	<b>2.04</b>	<b>2.11</b>	<i>2.24</i>	<i>2.24</i>	<i>2.21</i>	<i>2.24</i>	<i>2.22</i>	<i>2.23</i>	<i>2.20</i>	<b>2.08</b>	<i>2.20</i>	<i>2.22</i>

- = no data available

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

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

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

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

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

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

**Projections:** EIA Regional Short-Term Energy Model.

**Table 7a. U.S. Electricity Industry Overview**

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

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
<b>Electricity Supply (billion kilowatthours per day)</b>															
Electricity Generation .....	<b>10.58</b>	<b>10.69</b>	<b>12.15</b>	<b>10.57</b>	<b>11.16</b>	<i>10.94</i>	<i>12.33</i>	<i>10.55</i>	<i>11.07</i>	<i>10.92</i>	<i>12.43</i>	<i>10.62</i>	<b>11.00</b>	<i>11.25</i>	<i>11.26</i>
Electric Power Sector (a) .....	<b>10.15</b>	<b>10.27</b>	<b>11.71</b>	<b>10.14</b>	<b>10.72</b>	<i>10.51</i>	<i>11.88</i>	<i>10.12</i>	<i>10.62</i>	<i>10.49</i>	<i>11.97</i>	<i>10.18</i>	<b>10.57</b>	<i>10.81</i>	<i>10.82</i>
Comm. and Indus. Sectors (b) .....	<b>0.43</b>	<b>0.42</b>	<b>0.44</b>	<b>0.42</b>	<b>0.44</b>	<i>0.43</i>	<i>0.45</i>	<i>0.44</i>	<i>0.44</i>	<i>0.44</i>	<i>0.46</i>	<i>0.44</i>	<b>0.43</b>	<i>0.44</i>	<i>0.44</i>
Net Imports .....	<b>0.13</b>	<b>0.14</b>	<b>0.15</b>	<b>0.13</b>	<b>0.15</b>	<i>0.19</i>	<i>0.20</i>	<i>0.16</i>	<i>0.17</i>	<i>0.17</i>	<i>0.19</i>	<i>0.15</i>	<b>0.14</b>	<i>0.17</i>	<i>0.17</i>
Total Supply .....	<b>10.71</b>	<b>10.83</b>	<b>12.30</b>	<b>10.70</b>	<b>11.31</b>	<i>11.13</i>	<i>12.53</i>	<i>10.71</i>	<i>11.23</i>	<i>11.09</i>	<i>12.62</i>	<i>10.77</i>	<b>11.14</b>	<i>11.42</i>	<i>11.43</i>
Losses and Unaccounted for (c) .....	<b>0.58</b>	<b>0.76</b>	<b>0.63</b>	<b>0.72</b>	<b>0.67</b>	<i>0.84</i>	<i>0.72</i>	<i>0.68</i>	<i>0.58</i>	<i>0.83</i>	<i>0.72</i>	<i>0.68</i>	<b>0.67</b>	<i>0.73</i>	<i>0.70</i>
<b>Electricity Consumption (billion kilowatthours per day unless noted)</b>															
Retail Sales .....	<b>9.75</b>	<b>9.70</b>	<b>11.28</b>	<b>9.60</b>	<b>10.25</b>	<i>9.90</i>	<i>11.42</i>	<i>9.65</i>	<i>10.26</i>	<i>9.88</i>	<i>11.49</i>	<i>9.70</i>	<b>10.09</b>	<i>10.31</i>	<i>10.33</i>
Residential Sector .....	<b>3.71</b>	<b>3.43</b>	<b>4.46</b>	<b>3.51</b>	<b>4.09</b>	<i>3.55</i>	<i>4.53</i>	<i>3.53</i>	<i>4.07</i>	<i>3.49</i>	<i>4.56</i>	<i>3.55</i>	<b>3.78</b>	<i>3.92</i>	<i>3.92</i>
Commercial Sector .....	<b>3.51</b>	<b>3.64</b>	<b>4.08</b>	<b>3.55</b>	<b>3.60</b>	<i>3.65</i>	<i>4.10</i>	<i>3.56</i>	<i>3.61</i>	<i>3.67</i>	<i>4.13</i>	<i>3.57</i>	<b>3.70</b>	<i>3.73</i>	<i>3.75</i>
Industrial Sector .....	<b>2.50</b>	<b>2.62</b>	<b>2.72</b>	<b>2.53</b>	<b>2.54</b>	<i>2.68</i>	<i>2.77</i>	<i>2.55</i>	<i>2.56</i>	<i>2.70</i>	<i>2.78</i>	<i>2.56</i>	<b>2.59</b>	<i>2.63</i>	<i>2.65</i>
Transportation Sector .....	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<b>0.02</b>	<i>0.02</i>	<i>0.02</i>
Direct Use (d) .....	<b>0.38</b>	<b>0.37</b>	<b>0.38</b>	<b>0.37</b>	<b>0.39</b>	<i>0.38</i>	<i>0.40</i>	<i>0.38</i>	<i>0.39</i>	<i>0.39</i>	<i>0.40</i>	<i>0.39</i>	<b>0.38</b>	<i>0.39</i>	<i>0.39</i>
Total Consumption .....	<b>10.13</b>	<b>10.08</b>	<b>11.66</b>	<b>9.98</b>	<b>10.64</b>	<i>10.29</i>	<i>11.82</i>	<i>10.04</i>	<i>10.65</i>	<i>10.26</i>	<i>11.90</i>	<i>10.09</i>	<b>10.47</b>	<i>10.70</i>	<i>10.73</i>
Average residential electricity usage per customer (kWh) .....	<b>2,532</b>	<b>2,365</b>	<b>3,109</b>	<b>2,446</b>	<b>2,781</b>	<i>2,446</i>	<i>3,123</i>	<i>2,431</i>	<i>2,716</i>	<i>2,353</i>	<i>3,112</i>	<i>2,421</i>	<b>10,453</b>	<i>10,781</i>	<i>10,602</i>
<b>Prices</b>															
<b>Power Generation Fuel Costs (dollars per million Btu)</b>															
Coal .....	<b>2.08</b>	<b>2.12</b>	<b>2.07</b>	<b>2.04</b>	<b>2.11</b>	<i>2.24</i>	<i>2.24</i>	<i>2.21</i>	<i>2.24</i>	<i>2.22</i>	<i>2.23</i>	<i>2.20</i>	<b>2.08</b>	<i>2.20</i>	<i>2.22</i>
Natural Gas .....	<b>3.69</b>	<b>3.38</b>	<b>3.19</b>	<b>3.38</b>	<b>4.01</b>	<i>3.14</i>	<i>3.32</i>	<i>3.61</i>	<i>3.87</i>	<i>3.29</i>	<i>3.27</i>	<i>3.62</i>	<b>3.38</b>	<i>3.49</i>	<i>3.49</i>
Residual Fuel Oil .....	<b>11.16</b>	<b>10.60</b>	<b>10.03</b>	<b>11.93</b>	<b>11.55</b>	<i>13.72</i>	<i>13.65</i>	<i>13.27</i>	<i>13.24</i>	<i>13.39</i>	<i>12.50</i>	<i>12.20</i>	<b>10.97</b>	<i>12.78</i>	<i>12.87</i>
Distillate Fuel Oil .....	<b>12.74</b>	<b>12.23</b>	<b>13.13</b>	<b>14.54</b>	<b>15.86</b>	<i>16.78</i>	<i>17.18</i>	<i>16.97</i>	<i>16.28</i>	<i>15.93</i>	<i>15.87</i>	<i>15.93</i>	<b>13.26</b>	<i>16.41</i>	<i>16.02</i>
<b>Retail Prices (cents per kilowatthour)</b>															
Residential Sector .....	<b>12.59</b>	<b>12.99</b>	<b>13.19</b>	<b>12.75</b>	<b>12.58</b>	<i>13.14</i>	<i>13.45</i>	<i>13.15</i>	<i>13.12</i>	<i>13.73</i>	<i>13.89</i>	<i>13.46</i>	<b>12.90</b>	<i>13.09</i>	<i>13.56</i>
Commercial Sector .....	<b>10.39</b>	<b>10.68</b>	<b>11.03</b>	<b>10.56</b>	<b>10.56</b>	<i>10.87</i>	<i>11.34</i>	<i>10.93</i>	<i>10.85</i>	<i>11.00</i>	<i>11.36</i>	<i>10.95</i>	<b>10.68</b>	<i>10.94</i>	<i>11.06</i>
Industrial Sector .....	<b>6.64</b>	<b>6.89</b>	<b>7.27</b>	<b>6.79</b>	<b>6.90</b>	<i>7.11</i>	<i>7.56</i>	<i>7.06</i>	<i>7.05</i>	<i>7.19</i>	<i>7.64</i>	<i>7.15</i>	<b>6.91</b>	<i>7.17</i>	<i>7.26</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 - May 2018

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
<b>Residential Sector</b>															
New England .....	142	119	143	126	142	119	149	126	142	116	149	126	133	134	133
Middle Atlantic .....	368	307	403	327	395	322	412	322	393	313	414	322	351	363	360
E. N. Central .....	507	435	545	475	555	457	561	467	544	443	562	467	491	510	504
W. N. Central .....	298	246	303	261	327	262	316	262	318	253	320	267	277	292	290
S. Atlantic .....	891	891	1,131	889	1,039	930	1,137	892	1,037	904	1,149	897	951	999	996
E. S. Central .....	305	277	368	288	367	292	380	292	366	284	384	293	310	333	332
W. S. Central .....	501	536	760	516	608	558	787	530	596	557	797	537	579	621	622
Mountain .....	245	259	347	232	237	258	351	235	242	259	353	238	271	270	273
Pacific contiguous .....	439	346	447	381	409	342	425	389	420	347	423	390	404	391	395
AK and HI .....	14	12	12	13	13	11	12	13	13	11	12	13	13	13	12
Total .....	3,712	3,428	4,458	3,507	4,092	3,551	4,530	3,527	4,071	3,488	4,563	3,549	3,778	3,925	3,918
<b>Commercial Sector</b>															
New England .....	155	150	168	149	143	140	165	147	142	138	162	142	156	149	146
Middle Atlantic .....	423	404	462	412	435	410	464	409	433	406	463	407	425	429	427
E. N. Central .....	489	486	537	482	502	493	543	481	503	492	545	481	498	505	505
W. N. Central .....	272	270	302	269	278	267	305	271	278	268	308	273	278	280	282
S. Atlantic .....	785	853	941	807	814	844	941	806	812	846	946	807	847	851	853
E. S. Central .....	225	241	275	229	242	241	277	228	243	242	281	231	243	247	249
W. S. Central .....	471	522	598	501	500	543	616	513	510	559	635	525	523	543	557
Mountain .....	246	265	301	249	247	266	304	251	249	268	306	253	265	267	269
Pacific contiguous .....	431	431	480	438	427	434	470	437	426	436	469	438	445	442	442
AK and HI .....	16	16	16	16	16	15	16	16	16	15	16	16	16	16	16
Total .....	3,513	3,637	4,079	3,551	3,604	3,652	4,100	3,558	3,611	3,670	4,132	3,573	3,696	3,729	3,747
<b>Industrial Sector</b>															
New England .....	46	46	49	47	43	45	47	45	42	44	46	44	47	45	44
Middle Atlantic .....	192	194	204	195	199	196	207	196	200	197	208	197	196	200	201
E. N. Central .....	495	504	522	489	513	525	531	492	515	526	530	491	502	515	516
W. N. Central .....	228	240	253	235	233	244	260	241	239	250	266	246	239	244	251
S. Atlantic .....	362	386	390	372	359	380	388	368	355	376	383	363	377	374	369
E. S. Central .....	267	275	280	262	260	273	281	259	258	270	278	257	271	268	266
W. S. Central .....	480	503	511	484	482	527	529	497	494	539	540	508	495	509	520
Mountain .....	210	228	245	210	211	238	250	214	215	242	254	217	223	228	232
Pacific contiguous .....	211	230	253	220	221	241	259	222	223	242	260	223	229	236	237
AK and HI .....	13	14	14	13	13	14	14	13	13	14	14	13	14	14	14
Total .....	2,504	2,619	2,722	2,526	2,535	2,681	2,766	2,548	2,555	2,699	2,779	2,559	2,593	2,633	2,648
<b>Total All Sectors (a)</b>															
New England .....	345	317	362	323	330	306	363	318	327	299	358	313	337	329	324
Middle Atlantic .....	994	915	1,079	943	1,041	937	1,094	937	1,037	925	1,096	936	983	1,002	999
E. N. Central .....	1,493	1,427	1,605	1,447	1,572	1,477	1,636	1,442	1,564	1,463	1,639	1,441	1,493	1,532	1,527
W. N. Central .....	798	755	857	765	839	773	882	774	836	771	895	787	794	817	822
S. Atlantic .....	2,042	2,134	2,465	2,070	2,216	2,158	2,469	2,069	2,207	2,129	2,481	2,070	2,179	2,228	2,222
E. S. Central .....	797	793	924	779	870	805	938	779	867	797	943	780	823	848	847
W. S. Central .....	1,452	1,561	1,869	1,501	1,590	1,628	1,932	1,540	1,601	1,655	1,973	1,570	1,597	1,673	1,701
Mountain .....	701	752	893	691	694	762	905	700	707	770	913	707	760	766	775
Pacific contiguous .....	1,084	1,010	1,184	1,042	1,059	1,019	1,155	1,050	1,071	1,027	1,154	1,053	1,080	1,071	1,077
AK and HI .....	43	41	43	43	42	40	43	42	42	40	42	42	42	42	42
Total .....	9,750	9,704	11,280	9,605	10,253	9,904	11,417	9,652	10,259	9,877	11,494	9,700	10,088	10,308	10,334

- = 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 - May 2018

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
<b>Residential Sector</b>															
New England .....	18.57	18.92	18.97	19.28	20.34	20.01	19.74	20.35	21.53	21.29	20.86	21.29	18.93	20.10	21.23
Middle Atlantic .....	15.55	16.27	16.43	15.87	15.65	16.49	16.76	16.34	16.17	17.09	17.23	16.74	16.04	16.31	16.80
E. N. Central .....	12.90	13.58	13.28	13.19	13.04	13.92	13.79	13.92	13.82	14.70	14.36	14.35	13.23	13.65	14.28
W. N. Central .....	10.94	12.66	13.16	11.51	10.88	12.74	13.48	11.95	11.38	13.29	13.81	12.16	12.07	12.25	12.65
S. Atlantic .....	11.69	12.01	12.26	11.81	11.64	12.01	12.49	12.20	12.13	12.56	12.88	12.45	11.96	12.10	12.52
E. S. Central .....	11.08	11.44	11.32	11.20	10.82	11.44	11.75	11.91	11.51	11.95	11.85	11.89	11.26	11.46	11.79
W. S. Central .....	10.54	10.93	10.87	10.76	10.42	10.77	10.87	10.92	10.76	11.15	11.15	11.11	10.79	10.75	11.05
Mountain .....	11.28	12.16	12.31	11.82	11.57	12.37	12.60	12.17	11.97	12.80	12.97	12.46	11.94	12.23	12.60
Pacific .....	14.51	14.69	16.50	14.37	14.94	15.37	16.70	14.30	15.22	16.09	17.64	14.91	15.07	15.35	15.99
U.S. Average .....	12.59	12.99	13.19	12.75	12.58	13.14	13.45	13.15	13.12	13.73	13.89	13.46	12.90	13.09	13.56
<b>Commercial Sector</b>															
New England .....	14.64	14.65	15.30	15.20	16.56	15.60	15.92	15.78	16.55	15.16	15.43	15.54	14.95	15.96	15.66
Middle Atlantic .....	12.07	12.75	13.34	12.08	12.30	12.86	13.47	12.20	12.30	12.84	13.49	12.35	12.58	12.73	12.76
E. N. Central .....	10.02	10.24	10.05	9.99	10.21	10.42	10.37	10.41	10.58	10.68	10.46	10.43	10.08	10.35	10.54
W. N. Central .....	9.12	10.11	10.57	9.26	9.11	10.26	10.87	9.61	9.38	10.55	11.12	9.86	9.79	9.99	10.25
S. Atlantic .....	9.44	9.38	9.55	9.53	9.61	9.52	9.80	9.92	10.19	9.88	9.96	9.97	9.48	9.72	10.00
E. S. Central .....	10.58	10.56	10.62	10.57	10.47	10.73	11.18	11.38	10.81	10.89	11.01	11.14	10.58	10.95	10.96
W. S. Central .....	8.37	8.40	8.38	8.28	8.35	8.36	8.39	8.33	8.08	7.99	8.08	8.27	8.36	8.36	8.10
Mountain .....	9.14	9.92	10.04	9.49	9.29	10.17	10.30	9.76	9.33	10.20	10.34	9.84	9.67	9.91	9.96
Pacific .....	12.53	13.56	15.36	13.61	12.84	14.09	16.29	14.32	13.67	14.68	16.77	14.50	13.82	14.44	14.96
U.S. Average .....	10.39	10.68	11.03	10.56	10.56	10.87	11.34	10.93	10.85	11.00	11.36	10.95	10.68	10.94	11.06
<b>Industrial Sector</b>															
New England .....	12.38	12.19	12.55	12.37	13.72	13.28	13.46	13.11	14.58	13.83	13.84	13.35	12.37	13.39	13.89
Middle Atlantic .....	6.94	6.94	6.88	6.81	7.50	7.12	7.03	6.96	7.39	7.05	6.98	6.93	6.89	7.15	7.08
E. N. Central .....	7.03	7.05	7.04	6.96	7.23	7.25	7.32	7.25	7.38	7.31	7.38	7.31	7.02	7.26	7.35
W. N. Central .....	6.89	7.35	8.07	6.87	7.13	7.63	8.37	7.12	7.30	7.75	8.49	7.21	7.31	7.58	7.71
S. Atlantic .....	6.31	6.39	6.79	6.34	6.55	6.59	7.12	6.68	6.68	6.64	7.17	6.73	6.46	6.74	6.81
E. S. Central .....	5.90	5.96	6.18	5.89	5.84	6.07	6.47	6.21	6.09	6.19	6.58	6.32	5.98	6.15	6.30
W. S. Central .....	5.28	5.55	5.72	5.41	5.53	5.74	6.04	5.71	5.63	5.79	6.10	5.82	5.50	5.76	5.84
Mountain .....	6.08	6.54	7.12	6.13	6.17	6.65	7.28	6.27	6.37	6.85	7.48	6.45	6.50	6.63	6.82
Pacific .....	8.23	9.35	10.73	9.73	8.63	9.66	10.95	9.87	8.73	9.74	11.03	9.93	9.57	9.83	9.90
U.S. Average .....	6.64	6.89	7.27	6.79	6.90	7.11	7.56	7.06	7.05	7.19	7.64	7.15	6.91	7.17	7.26
<b>All Sectors (a)</b>															
New England .....	15.93	15.87	16.35	16.35	17.79	16.97	17.15	17.18	18.43	17.32	17.46	17.51	16.13	17.27	17.68
Middle Atlantic .....	12.35	12.68	13.26	12.29	12.64	12.89	13.48	12.51	12.80	13.03	13.65	12.70	12.67	12.90	13.07
E. N. Central .....	10.00	10.13	10.16	10.01	10.26	10.38	10.55	10.47	10.65	10.68	10.80	10.63	10.08	10.42	10.69
W. N. Central .....	9.15	10.06	10.75	9.29	9.26	10.28	11.07	9.63	9.54	10.54	11.30	9.81	9.84	10.08	10.32
S. Atlantic .....	9.86	9.93	10.35	9.93	10.06	10.09	10.62	10.33	10.54	10.44	10.88	10.48	10.04	10.28	10.60
E. S. Central .....	9.20	9.27	9.55	9.23	9.24	9.43	10.00	9.86	9.70	9.67	10.04	9.84	9.32	9.64	9.82
W. S. Central .....	8.10	8.35	8.67	8.21	8.31	8.36	8.76	8.38	8.32	8.34	8.78	8.45	8.35	8.47	8.49
Mountain .....	8.97	9.67	10.12	9.25	9.15	9.84	10.35	9.50	9.33	10.02	10.56	9.68	9.55	9.76	9.95
Pacific .....	12.48	12.98	14.79	13.06	12.81	13.46	15.23	13.36	13.24	13.98	15.78	13.67	13.38	13.76	14.21
U.S. Average .....	10.26	10.47	10.98	10.37	10.48	10.68	11.26	10.72	10.80	10.92	11.46	10.87	10.54	10.80	11.03

- = no data available

Prices are not adjusted for inflation.

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

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

Regions refer to U.S. Census divisions.

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

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

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

**Projections:** EIA Regional Short-Term Energy Model.

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

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

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
<b>United States</b>															
Coal .....	<b>3,242</b>	<b>3,100</b>	<b>3,762</b>	<b>3,128</b>	<b>3,251</b>	2,996	3,646	3,015	3,367	2,912	3,585	2,982	<b>3,309</b>	3,228	3,211
Natural Gas .....	<b>2,969</b>	<b>3,286</b>	<b>4,359</b>	<b>3,322</b>	<b>3,408</b>	3,635	4,564	3,495	3,437	3,678	4,712	3,570	<b>3,487</b>	3,778	3,852
Petroleum (a) .....	59	54	56	62	105	58	63	56	74	58	64	56	58	70	63
Other Gases .....	40	39	40	36	38	39	40	36	38	39	41	36	39	38	39
Nuclear .....	<b>2,242</b>	<b>2,034</b>	<b>2,302</b>	<b>2,243</b>	<b>2,293</b>	2,097	2,282	2,154	2,191	2,052	2,222	2,088	<b>2,205</b>	2,206	2,138
Renewable Energy Sources:	<b>2,008</b>	<b>2,157</b>	<b>1,615</b>	<b>1,757</b>	<b>2,043</b>	2,089	1,712	1,774	1,935	2,161	1,786	1,864	<b>1,883</b>	1,903	1,936
Conventional Hydropower .....	918	1,010	717	647	828	875	723	641	762	873	723	633	822	766	747
Wind .....	768	748	501	771	848	785	555	777	813	827	587	839	697	741	766
Wood Biomass .....	118	115	122	119	122	113	124	117	120	114	125	119	119	119	120
Waste Biomass .....	59	56	56	57	59	59	60	59	58	59	60	59	57	59	59
Geothermal .....	45	43	44	43	46	45	45	46	46	45	45	46	44	45	45
Solar .....	101	185	175	120	140	211	205	133	136	242	246	168	145	172	198
Pumped Storage Hydropower .....	-16	-16	-22	-17	-14	-12	-18	-14	-13	-12	-18	-14	-18	-15	-14
Other Nonrenewable Fuels (b) .....	35	35	38	35	37	38	39	37	35	37	39	37	36	38	37
Total Generation .....	<b>10,579</b>	<b>10,690</b>	<b>12,151</b>	<b>10,566</b>	<b>11,160</b>	10,940	12,329	10,552	11,065	10,925	12,430	10,620	<b>10,999</b>	11,247	11,262
<b>Northeast Census Region</b>															
Coal .....	154	134	136	139	218	226	241	215	245	174	242	224	141	225	221
Natural Gas .....	486	482	637	492	489	537	721	567	574	590	750	591	525	579	627
Petroleum (a) .....	4	2	3	11	33	3	4	4	13	3	4	4	5	11	6
Other Gases .....	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Nuclear .....	539	476	549	529	528	439	472	439	442	409	435	395	523	469	420
Hydropower (c) .....	102	107	99	99	94	87	88	94	92	89	92	94	102	91	92
Other Renewables (d) .....	72	76	68	74	81	72	65	77	80	72	66	80	73	74	74
Other Nonrenewable Fuels (b) .....	11	11	12	12	12	12	12	12	11	12	12	12	11	12	12
Total Generation .....	<b>1,370</b>	<b>1,290</b>	<b>1,506</b>	<b>1,359</b>	<b>1,456</b>	1,378	1,606	1,411	1,458	1,351	1,603	1,402	<b>1,381</b>	1,463	1,454
<b>South Census Region</b>															
Coal .....	1,330	1,416	1,681	1,293	1,313	1,334	1,626	1,236	1,357	1,245	1,544	1,179	1,431	1,378	1,332
Natural Gas .....	1,763	2,087	2,565	1,922	2,055	2,263	2,654	2,001	2,008	2,277	2,753	2,045	2,086	2,244	2,272
Petroleum (a) .....	25	22	23	21	40	25	27	22	29	25	28	22	23	29	26
Other Gases .....	15	15	15	13	13	15	14	13	13	14	14	12	14	14	13
Nuclear .....	973	888	1,003	1,012	1,001	918	1,004	952	992	932	1,015	962	969	969	975
Hydropower (c) .....	128	138	99	103	118	114	91	100	114	117	96	99	117	106	106
Other Renewables (d) .....	401	403	323	391	448	446	365	414	440	485	409	465	379	418	450
Other Nonrenewable Fuels (b) .....	15	15	16	15	16	17	17	16	15	16	16	15	15	16	16
Total Generation .....	<b>4,650</b>	<b>4,984</b>	<b>5,726</b>	<b>4,769</b>	<b>5,004</b>	5,132	5,799	4,753	4,969	5,112	5,875	4,800	<b>5,034</b>	5,173	5,190
<b>Midwest Census Region</b>															
Coal .....	1,288	1,177	1,394	1,216	1,300	1,111	1,314	1,124	1,288	1,129	1,338	1,133	1,269	1,212	1,222
Natural Gas .....	289	272	407	349	386	375	505	398	414	385	527	411	330	416	434
Petroleum (a) .....	7	7	7	8	10	9	10	8	10	9	10	8	7	9	10
Other Gases .....	17	16	17	15	15	16	17	15	16	17	18	16	16	16	17
Nuclear .....	555	543	580	535	579	538	582	552	538	505	549	520	553	563	528
Hydropower (c) .....	52	58	37	36	52	48	33	35	52	49	34	35	46	42	42
Other Renewables (d) .....	315	304	198	340	354	304	209	336	339	318	219	368	289	300	311
Other Nonrenewable Fuels (b) .....	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Total Generation .....	<b>2,528</b>	<b>2,381</b>	<b>2,643</b>	<b>2,503</b>	<b>2,700</b>	2,405	2,675	2,473	2,661	2,417	2,699	2,496	<b>2,514</b>	2,563	2,568
<b>West Census Region</b>															
Coal .....	470	373	551	480	420	325	464	440	477	363	461	446	469	412	437
Natural Gas .....	430	446	751	558	479	460	685	529	441	426	682	523	547	539	519
Petroleum (a) .....	23	22	23	22	22	21	22	22	22	21	22	21	23	22	21
Other Gases .....	6	6	6	6	7	6	6	6	7	6	6	6	6	6	6
Nuclear .....	175	127	171	167	185	202	223	211	219	206	224	212	160	205	215
Hydropower (c) .....	619	692	460	392	551	613	494	398	491	606	483	390	540	513	492
Other Renewables (d) .....	302	364	308	305	332	392	349	305	315	412	370	318	320	345	354
Other Nonrenewable Fuels (b) .....	5	5	6	5	5	5	6	5	5	5	6	5	5	5	5
Total Generation .....	<b>2,031</b>	<b>2,035</b>	<b>2,277</b>	<b>1,934</b>	<b>2,000</b>	2,025	2,249	1,916	1,977	2,046	2,254	1,922	<b>2,069</b>	2,048	2,050

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

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

(c) Conventional hydroelectric and pumped storage generation.

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

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

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

**Projections:** EIA Regional Short-Term Energy Model.



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

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

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
<b>Fuel Consumption for Electricity Generation, All Sectors</b>															
<b>United States</b>															
Coal (thousand st/d) .....	1,777	1,692	2,068	1,731	1,777	1,601	1,969	1,643	1,790	1,554	1,937	1,627	1,818	1,748	1,727
Natural Gas (million cf/d) .....	21,452	24,555	32,799	24,545	24,777	27,003	34,312	25,546	24,921	27,274	35,361	26,036	25,865	27,929	28,420
Petroleum (thousand b/d) .....	107	100	105	111	185	105	114	101	134	105	115	101	106	126	114
Residual Fuel Oil .....	26	27	28	33	52	26	30	26	39	26	29	26	29	33	30
Distillate Fuel Oil .....	28	24	23	32	72	24	22	25	32	24	23	26	27	36	26
Petroleum Coke (a) .....	49	45	48	42	51	52	58	46	57	52	59	46	46	52	54
Other Petroleum Liquids (b) ....	4	4	7	5	9	3	4	4	5	3	4	4	5	5	4
<b>Northeast Census Region</b>															
Coal (thousand st/d) .....	75	63	66	65	107	106	118	104	117	83	118	109	67	109	107
Natural Gas (million cf/d) .....	3,603	3,640	4,893	3,706	3,558	4,005	5,481	4,181	4,206	4,381	5,678	4,335	3,963	4,311	4,653
Petroleum (thousand b/d) .....	7	4	7	18	54	4	7	6	23	4	7	7	9	18	10
<b>South Census Region</b>															
Coal (thousand st/d) .....	715	761	902	705	687	694	856	657	691	643	815	629	771	724	695
Natural Gas (million cf/d) .....	12,471	15,401	19,033	14,045	14,809	16,613	19,658	14,402	14,299	16,677	20,357	14,685	15,252	16,378	16,516
Petroleum (thousand b/d) .....	47	42	43	40	74	47	50	42	55	47	51	42	43	53	49
<b>Midwest Census Region</b>															
Coal (thousand st/d) .....	717	655	787	688	741	616	730	627	708	622	742	632	712	678	676
Natural Gas (million cf/d) .....	2,186	2,134	3,249	2,676	2,854	2,889	4,009	3,029	3,122	2,972	4,177	3,121	2,564	3,198	3,350
Petroleum (thousand b/d) .....	15	16	16	16	20	18	20	17	20	19	20	17	16	19	19
<b>West Census Region</b>															
Coal (thousand st/d) .....	269	213	313	273	242	186	265	254	274	206	263	257	267	237	250
Natural Gas (million cf/d) .....	3,192	3,378	5,624	4,117	3,556	3,496	5,164	3,934	3,295	3,244	5,149	3,895	4,085	4,041	3,901
Petroleum (thousand b/d) .....	39	37	39	37	37	35	37	36	36	35	36	36	38	36	36
<b>End-of-period U.S. Fuel Inventories Held by Electric Power Sector</b>															
Coal (million short tons) .....	161.7	157.7	139.3	137.2	125.9	124.1	112.0	119.8	118.8	116.1	110.3	119.5	137.2	119.8	119.5
Residual Fuel Oil (mmb) .....	12.5	11.9	11.4	11.0	10.5	10.3	10.5	11.2	11.1	11.1	11.1	11.6	11.0	11.2	11.6
Distillate Fuel Oil (mmb) .....	17.0	16.6	16.4	15.8	15.0	15.0	15.2	15.8	16.0	15.9	15.9	16.3	15.8	15.8	16.3
Petroleum Coke (mmb) .....	4.3	4.3	4.9	5.6	5.0	4.9	4.8	4.8	4.7	4.6	4.6	4.5	5.6	4.8	4.5

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

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

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

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

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

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

**Projections:** EIA Regional Short-Term Energy Model.

**Table 8a. U.S. Renewable Energy Consumption (Quadrillion Btu)**

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

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
<b>Electric Power Sector</b>															
Geothermal .....	<b>0.037</b>	<b>0.036</b>	<b>0.037</b>	<b>0.037</b>	<b>0.038</b>	<i>0.038</i>	<i>0.038</i>	<i>0.039</i>	<i>0.038</i>	<i>0.038</i>	<i>0.038</i>	<i>0.039</i>	<b>0.147</b>	<i>0.153</i>	<i>0.153</i>
Hydroelectric Power (a) .....	<b>0.759</b>	<b>0.844</b>	<b>0.605</b>	<b>0.546</b>	<b>0.689</b>	<i>0.738</i>	<i>0.617</i>	<i>0.546</i>	<i>0.635</i>	<i>0.736</i>	<i>0.616</i>	<i>0.539</i>	<b>2.755</b>	<i>2.589</i>	<i>2.526</i>
Solar (b) .....	<b>0.084</b>	<b>0.155</b>	<b>0.148</b>	<b>0.101</b>	<b>0.116</b>	<i>0.177</i>	<i>0.173</i>	<i>0.112</i>	<i>0.112</i>	<i>0.203</i>	<i>0.208</i>	<i>0.142</i>	<b>0.488</b>	<i>0.579</i>	<i>0.665</i>
Waste Biomass (c) .....	<b>0.070</b>	<b>0.066</b>	<b>0.068</b>	<b>0.068</b>	<b>0.071</b>	<i>0.072</i>	<i>0.073</i>	<i>0.072</i>	<i>0.069</i>	<i>0.071</i>	<i>0.073</i>	<i>0.072</i>	<b>0.272</b>	<i>0.287</i>	<i>0.286</i>
Wood Biomass .....	<b>0.061</b>	<b>0.059</b>	<b>0.064</b>	<b>0.063</b>	<b>0.062</b>	<i>0.056</i>	<i>0.066</i>	<i>0.060</i>	<i>0.060</i>	<i>0.057</i>	<i>0.069</i>	<i>0.062</i>	<b>0.247</b>	<i>0.244</i>	<i>0.247</i>
Wind .....	<b>0.644</b>	<b>0.634</b>	<b>0.429</b>	<b>0.660</b>	<b>0.711</b>	<i>0.665</i>	<i>0.476</i>	<i>0.666</i>	<i>0.681</i>	<i>0.701</i>	<i>0.503</i>	<i>0.718</i>	<b>2.367</b>	<i>2.517</i>	<i>2.603</i>
Subtotal .....	<b>1.654</b>	<b>1.794</b>	<b>1.352</b>	<b>1.475</b>	<b>1.686</b>	<i>1.745</i>	<i>1.443</i>	<i>1.494</i>	<i>1.596</i>	<i>1.806</i>	<i>1.507</i>	<i>1.573</i>	<b>6.276</b>	<i>6.368</i>	<i>6.481</i>
<b>Industrial Sector</b>															
Biofuel Losses and Co-products (d) .....	<b>0.203</b>	<b>0.199</b>	<b>0.204</b>	<b>0.211</b>	<b>0.206</b>	<i>0.205</i>	<i>0.206</i>	<i>0.205</i>	<i>0.201</i>	<i>0.206</i>	<i>0.208</i>	<i>0.210</i>	<b>0.817</b>	<i>0.823</i>	<i>0.825</i>
Geothermal .....	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<b>0.004</b>	<i>0.004</i>	<i>0.004</i>
Hydroelectric Power (a) .....	<b>0.003</b>	<b>0.004</b>	<b>0.003</b>	<b>0.003</b>	<b>0.003</b>	<i>0.004</i>	<i>0.003</i>	<i>0.003</i>	<i>0.003</i>	<i>0.004</i>	<i>0.003</i>	<i>0.003</i>	<b>0.013</b>	<i>0.013</i>	<i>0.013</i>
Solar (b) .....	<b>0.005</b>	<b>0.007</b>	<b>0.007</b>	<b>0.005</b>	<b>0.006</b>	<i>0.008</i>	<i>0.008</i>	<i>0.006</i>	<i>0.006</i>	<i>0.009</i>	<i>0.010</i>	<i>0.007</i>	<b>0.024</b>	<i>0.028</i>	<i>0.032</i>
Waste Biomass (c) .....	<b>0.044</b>	<b>0.040</b>	<b>0.038</b>	<b>0.044</b>	<b>0.043</b>	<i>0.041</i>	<i>0.041</i>	<i>0.043</i>	<i>0.042</i>	<i>0.041</i>	<i>0.041</i>	<i>0.043</i>	<b>0.165</b>	<i>0.167</i>	<i>0.167</i>
Wood Biomass .....	<b>0.370</b>	<b>0.361</b>	<b>0.375</b>	<b>0.374</b>	<b>0.361</b>	<i>0.353</i>	<i>0.360</i>	<i>0.361</i>	<i>0.349</i>	<i>0.346</i>	<i>0.358</i>	<i>0.360</i>	<b>1.480</b>	<i>1.435</i>	<i>1.414</i>
Subtotal .....	<b>0.625</b>	<b>0.609</b>	<b>0.625</b>	<b>0.638</b>	<b>0.619</b>	<i>0.608</i>	<i>0.615</i>	<i>0.618</i>	<i>0.601</i>	<i>0.603</i>	<i>0.616</i>	<i>0.622</i>	<b>2.498</b>	<i>2.460</i>	<i>2.442</i>
<b>Commercial Sector</b>															
Geothermal .....	<b>0.005</b>	<b>0.005</b>	<b>0.005</b>	<b>0.005</b>	<b>0.005</b>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<b>0.020</b>	<i>0.020</i>	<i>0.020</i>
Solar (b) .....	<b>0.015</b>	<b>0.023</b>	<b>0.023</b>	<b>0.016</b>	<b>0.019</b>	<i>0.029</i>	<i>0.030</i>	<i>0.022</i>	<i>0.025</i>	<i>0.036</i>	<i>0.037</i>	<i>0.026</i>	<b>0.077</b>	<i>0.100</i>	<i>0.123</i>
Waste Biomass (c) .....	<b>0.012</b>	<b>0.011</b>	<b>0.011</b>	<b>0.011</b>	<b>0.011</b>	<i>0.011</i>	<i>0.011</i>	<i>0.011</i>	<i>0.011</i>	<i>0.011</i>	<i>0.012</i>	<i>0.011</i>	<b>0.045</b>	<i>0.045</i>	<i>0.045</i>
Wood Biomass .....	<b>0.021</b>	<b>0.021</b>	<b>0.021</b>	<b>0.021</b>	<b>0.021</b>	<i>0.021</i>	<i>0.021</i>	<i>0.021</i>	<i>0.021</i>	<i>0.021</i>	<i>0.021</i>	<i>0.021</i>	<b>0.084</b>	<i>0.084</i>	<i>0.084</i>
Subtotal .....	<b>0.059</b>	<b>0.067</b>	<b>0.068</b>	<b>0.061</b>	<b>0.063</b>	<i>0.074</i>	<i>0.075</i>	<i>0.066</i>	<i>0.068</i>	<i>0.080</i>	<i>0.081</i>	<i>0.071</i>	<b>0.254</b>	<i>0.278</i>	<i>0.301</i>
<b>Residential Sector</b>															
Geothermal .....	<b>0.010</b>	<b>0.010</b>	<b>0.010</b>	<b>0.010</b>	<b>0.012</b>	<i>0.013</i>	<i>0.013</i>	<i>0.013</i>	<i>0.013</i>	<i>0.013</i>	<i>0.013</i>	<i>0.013</i>	<b>0.040</b>	<i>0.051</i>	<i>0.053</i>
Solar (e) .....	<b>0.036</b>	<b>0.057</b>	<b>0.058</b>	<b>0.040</b>	<b>0.044</b>	<i>0.067</i>	<i>0.070</i>	<i>0.050</i>	<i>0.053</i>	<i>0.081</i>	<i>0.084</i>	<i>0.060</i>	<b>0.191</b>	<i>0.232</i>	<i>0.277</i>
Wood Biomass .....	<b>0.082</b>	<b>0.083</b>	<b>0.084</b>	<b>0.084</b>	<b>0.100</b>	<i>0.103</i>	<i>0.104</i>	<i>0.104</i>	<i>0.105</i>	<i>0.105</i>	<i>0.105</i>	<i>0.105</i>	<b>0.334</b>	<i>0.411</i>	<i>0.420</i>
Subtotal .....	<b>0.128</b>	<b>0.150</b>	<b>0.152</b>	<b>0.134</b>	<b>0.157</b>	<i>0.183</i>	<i>0.187</i>	<i>0.167</i>	<i>0.171</i>	<i>0.199</i>	<i>0.202</i>	<i>0.178</i>	<b>0.565</b>	<i>0.694</i>	<i>0.750</i>
<b>Transportation Sector</b>															
Biomass-based Diesel (f) .....	<b>0.054</b>	<b>0.079</b>	<b>0.080</b>	<b>0.066</b>	<b>0.058</b>	<i>0.081</i>	<i>0.092</i>	<i>0.095</i>	<i>0.069</i>	<i>0.088</i>	<i>0.100</i>	<i>0.104</i>	<b>0.279</b>	<i>0.326</i>	<i>0.361</i>
Ethanol (f) .....	<b>0.270</b>	<b>0.290</b>	<b>0.293</b>	<b>0.291</b>	<b>0.281</b>	<i>0.296</i>	<i>0.300</i>	<i>0.291</i>	<i>0.276</i>	<i>0.298</i>	<i>0.302</i>	<i>0.296</i>	<b>1.145</b>	<i>1.169</i>	<i>1.171</i>
Subtotal .....	<b>0.324</b>	<b>0.370</b>	<b>0.373</b>	<b>0.357</b>	<b>0.342</b>	<i>0.377</i>	<i>0.392</i>	<i>0.386</i>	<i>0.345</i>	<i>0.386</i>	<i>0.402</i>	<i>0.399</i>	<b>1.423</b>	<i>1.498</i>	<i>1.532</i>
<b>All Sectors Total</b>															
Biomass-based Diesel (f) .....	<b>0.054</b>	<b>0.079</b>	<b>0.080</b>	<b>0.066</b>	<b>0.058</b>	<i>0.081</i>	<i>0.092</i>	<i>0.095</i>	<i>0.069</i>	<i>0.088</i>	<i>0.100</i>	<i>0.104</i>	<b>0.279</b>	<i>0.326</i>	<i>0.361</i>
Biofuel Losses and Co-products (d) .....	<b>0.203</b>	<b>0.199</b>	<b>0.204</b>	<b>0.211</b>	<b>0.206</b>	<i>0.205</i>	<i>0.206</i>	<i>0.205</i>	<i>0.201</i>	<i>0.206</i>	<i>0.208</i>	<i>0.210</i>	<b>0.817</b>	<i>0.823</i>	<i>0.825</i>
Ethanol (f) .....	<b>0.281</b>	<b>0.301</b>	<b>0.304</b>	<b>0.302</b>	<b>0.281</b>	<i>0.306</i>	<i>0.312</i>	<i>0.302</i>	<i>0.286</i>	<i>0.309</i>	<i>0.314</i>	<i>0.307</i>	<b>1.189</b>	<i>1.201</i>	<i>1.216</i>
Geothermal .....	<b>0.053</b>	<b>0.052</b>	<b>0.053</b>	<b>0.053</b>	<b>0.055</b>	<i>0.057</i>	<i>0.057</i>	<i>0.058</i>	<i>0.057</i>	<i>0.057</i>	<i>0.057</i>	<i>0.058</i>	<b>0.211</b>	<i>0.227</i>	<i>0.230</i>
Hydroelectric Power (a) .....	<b>0.763</b>	<b>0.849</b>	<b>0.609</b>	<b>0.550</b>	<b>0.693</b>	<i>0.742</i>	<i>0.620</i>	<i>0.550</i>	<i>0.639</i>	<i>0.740</i>	<i>0.620</i>	<i>0.543</i>	<b>2.770</b>	<i>2.605</i>	<i>2.541</i>
Solar (b)(e) .....	<b>0.138</b>	<b>0.240</b>	<b>0.235</b>	<b>0.161</b>	<b>0.181</b>	<i>0.282</i>	<i>0.282</i>	<i>0.190</i>	<i>0.197</i>	<i>0.329</i>	<i>0.338</i>	<i>0.235</i>	<b>0.774</b>	<i>0.935</i>	<i>1.098</i>
Waste Biomass (c) .....	<b>0.126</b>	<b>0.117</b>	<b>0.117</b>	<b>0.122</b>	<b>0.123</b>	<i>0.123</i>	<i>0.125</i>	<i>0.127</i>	<i>0.122</i>	<i>0.123</i>	<i>0.126</i>	<i>0.126</i>	<b>0.482</b>	<i>0.498</i>	<i>0.498</i>
Wood Biomass .....	<b>0.534</b>	<b>0.524</b>	<b>0.543</b>	<b>0.543</b>	<b>0.545</b>	<i>0.532</i>	<i>0.551</i>	<i>0.545</i>	<i>0.535</i>	<i>0.530</i>	<i>0.553</i>	<i>0.548</i>	<b>2.145</b>	<i>2.173</i>	<i>2.166</i>
Wind .....	<b>0.644</b>	<b>0.634</b>	<b>0.429</b>	<b>0.660</b>	<b>0.711</b>	<i>0.665</i>	<i>0.476</i>	<i>0.666</i>	<i>0.681</i>	<i>0.701</i>	<i>0.503</i>	<i>0.718</i>	<b>2.367</b>	<i>2.517</i>	<i>2.603</i>
<b>Total Consumption</b> .....	<b>2.791</b>	<b>2.990</b>	<b>2.571</b>	<b>2.665</b>	<b>2.842</b>	<i>2.987</i>	<i>2.712</i>	<i>2.732</i>	<i>2.781</i>	<i>3.073</i>	<i>2.809</i>	<i>2.843</i>	<b>11.016</b>	<i>11.272</i>	<i>11.506</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 - May 2018

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
<b>Renewable Energy Electric Generating Capacity (megawatts, end of period)</b>															
<b>Electric Power Sector (a)</b>															
Biomass .....	7,218	7,253	7,310	7,303	7,304	7,342	7,340	7,373	7,536	7,536	7,536	7,536	7,303	7,373	7,536
Waste .....	4,187	4,222	4,225	4,223	4,225	4,263	4,261	4,294	4,298	4,298	4,298	4,298	4,223	4,294	4,298
Wood .....	3,031	3,031	3,085	3,079	3,079	3,079	3,079	3,079	3,238	3,238	3,238	3,238	3,079	3,079	3,238
Conventional Hydroelectric .....	79,586	79,594	79,695	79,695	79,707	79,731	79,852	79,873	79,906	79,934	79,886	79,921	79,695	79,873	79,921
Geothermal .....	2,450	2,450	2,450	2,487	2,503	2,503	2,503	2,503	2,511	2,511	2,511	2,546	2,487	2,503	2,546
Large-Scale Solar (b) .....	22,585	23,613	24,116	26,407	27,713	28,727	29,208	31,453	32,860	34,753	36,043	42,494	26,407	31,453	42,494
Wind .....	82,915	83,374	84,105	87,485	88,679	89,248	89,928	92,970	93,791	94,364	95,372	102,884	87,485	92,970	102,884
<b>Other Sectors (c)</b>															
Biomass .....	6,772	6,779	6,779	6,768	6,762	6,768	6,777	6,777	6,777	6,754	6,754	6,768	6,768	6,777	6,768
Waste .....	885	889	889	878	878	877	877	877	877	879	879	893	878	877	893
Wood .....	5,888	5,891	5,891	5,891	5,885	5,892	5,900	5,900	5,900	5,875	5,875	5,875	5,891	5,900	5,875
Conventional Hydroelectric .....	357	357	357	357	357	357	357	363	363	363	363	363	357	363	363
Large-Scale Solar (b) .....	322	340	340	348	348	356	356	355	355	355	355	355	348	355	355
Small-Scale Solar (d) .....	13,722	14,543	15,341	16,224	17,381	18,352	19,385	20,474	21,526	22,651	23,849	25,106	16,224	20,474	25,106
Residential Sector .....	8,124	8,618	9,105	9,574	10,193	10,828	11,478	12,148	12,839	13,554	14,291	15,048	9,574	12,148	15,048
Commercial Sector .....	4,286	4,555	4,797	5,146	5,636	5,914	6,235	6,589	6,890	7,236	7,629	8,057	5,146	6,589	8,057
Industrial Sector .....	1,312	1,370	1,438	1,504	1,553	1,610	1,672	1,737	1,797	1,861	1,929	2,001	1,504	1,737	2,001
Wind .....	94	93	93	97	99	102	102	102	102	102	102	102	97	102	102
<b>Renewable Electricity Generation (thousand megawatthours per day)</b>															
<b>Electric Power Sector (a)</b>															
Biomass .....	90	86	90	90	93	88	95	90	90	89	97	92	89	92	92
Waste .....	49	47	47	47	50	50	51	50	49	50	51	50	48	50	50
Wood .....	41	39	43	43	43	38	45	40	41	39	46	42	41	42	42
Conventional Hydroelectric .....	913	1,005	713	643	824	870	719	637	757	868	719	629	818	762	743
Geothermal .....	45	43	44	43	46	45	45	46	46	45	45	46	44	45	45
Large-Scale Solar (b) .....	100	182	173	118	138	209	202	131	134	239	243	166	143	170	196
Wind .....	767	748	501	770	847	784	555	776	813	826	586	838	696	740	765
<b>Other Sectors (c)</b>															
Biomass .....	87	84	88	86	88	84	88	86	88	84	88	86	86	87	87
Waste .....	78	75	79	77	78	75	79	77	78	75	79	77	77	77	77
Wood .....	10	9	9	9	9	9	9	9	9	9	9	9	9	9	9
Conventional Hydroelectric .....	5	5	4	4	5	5	4	4	5	5	4	4	5	5	5
Large-Scale Solar (b) .....	1	2	2	1	1	2	3	2	3	3	3	3	2	2	3
Small-Scale Solar (d) .....	51	79	80	55	66	99	101	72	82	123	125	88	66	84	105
Residential Sector .....	29	46	46	31	38	57	59	42	48	73	74	52	38	49	62
Commercial Sector .....	17	25	25	18	22	32	33	23	27	39	40	28	21	27	34
Industrial Sector .....	5	8	8	6	6	9	10	7	8	11	11	8	7	8	9
Wind .....	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1

-- = no data available

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

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

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

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

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

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

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

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

**Table 9a. U.S. Macroeconomic Indicators and CO<sub>2</sub> Emissions**

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

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
<b>Macroeconomic</b>															
Real Gross Domestic Product (billion chained 2009 dollars - SAAR) .....	<b>16,903</b>	<b>17,031</b>	<b>17,164</b>	<b>17,286</b>	<b>17,356</b>	<i>17,481</i>	<i>17,614</i>	<i>17,743</i>	<i>17,865</i>	<i>17,976</i>	<i>18,080</i>	<i>18,182</i>	<b>17,096</b>	<i>17,548</i>	<i>18,026</i>
Real Personal Consumption Expend. (billion chained 2009 dollars - SAAR) .....	<b>11,758</b>	<b>11,853</b>	<b>11,917</b>	<b>12,035</b>	<b>12,065</b>	<i>12,152</i>	<i>12,223</i>	<i>12,294</i>	<i>12,364</i>	<i>12,436</i>	<i>12,509</i>	<i>12,581</i>	<b>11,891</b>	<i>12,184</i>	<i>12,473</i>
Real Fixed Investment (billion chained 2009 dollars - SAAR) .....	<b>2,876</b>	<b>2,898</b>	<b>2,916</b>	<b>2,974</b>	<b>2,995</b>	<i>3,035</i>	<i>3,075</i>	<i>3,113</i>	<i>3,156</i>	<i>3,194</i>	<i>3,232</i>	<i>3,270</i>	<b>2,916</b>	<i>3,055</i>	<i>3,213</i>
Business Inventory Change (billion chained 2009 dollars - SAAR) .....	<b>0</b>	<b>5</b>	<b>42</b>	<b>16</b>	<b>66</b>	<i>62</i>	<i>76</i>	<i>77</i>	<i>79</i>	<i>82</i>	<i>79</i>	<i>77</i>	<b>16</b>	<i>70</i>	<i>79</i>
Real Government Expenditures (billion chained 2009 dollars - SAAR) .....	<b>2,897</b>	<b>2,895</b>	<b>2,900</b>	<b>2,922</b>	<b>2,928</b>	<i>2,945</i>	<i>2,964</i>	<i>2,987</i>	<i>3,004</i>	<i>3,014</i>	<i>3,020</i>	<i>3,021</i>	<b>2,903</b>	<i>2,956</i>	<i>3,015</i>
Real Exports of Goods & Services (billion chained 2009 dollars - SAAR) .....	<b>2,162</b>	<b>2,181</b>	<b>2,192</b>	<b>2,230</b>	<b>2,239</b>	<i>2,265</i>	<i>2,302</i>	<i>2,340</i>	<i>2,374</i>	<i>2,410</i>	<i>2,450</i>	<i>2,491</i>	<b>2,191</b>	<i>2,286</i>	<i>2,431</i>
Real Imports of Goods & Services (billion chained 2009 dollars - SAAR) .....	<b>2,785</b>	<b>2,795</b>	<b>2,790</b>	<b>2,884</b>	<b>2,932</b>	<i>2,968</i>	<i>3,014</i>	<i>3,057</i>	<i>3,101</i>	<i>3,150</i>	<i>3,200</i>	<i>3,250</i>	<b>2,813</b>	<i>2,993</i>	<i>3,175</i>
Real Disposable Personal Income (billion chained 2009 dollars - SAAR) .....	<b>12,680</b>	<b>12,766</b>	<b>12,788</b>	<b>12,822</b>	<b>12,952</b>	<i>13,020</i>	<i>13,120</i>	<i>13,231</i>	<i>13,393</i>	<i>13,485</i>	<i>13,573</i>	<i>13,662</i>	<b>12,764</b>	<i>13,081</i>	<i>13,528</i>
Non-Farm Employment (millions) .....	<b>145.9</b>	<b>146.3</b>	<b>146.9</b>	<b>147.4</b>	<b>148.1</b>	<i>148.7</i>	<i>149.4</i>	<i>150.1</i>	<i>150.7</i>	<i>151.3</i>	<i>151.7</i>	<i>152.1</i>	<b>146.6</b>	<i>149.0</i>	<i>151.4</i>
Civilian Unemployment Rate (percent) .....	<b>4.7</b>	<b>4.3</b>	<b>4.3</b>	<b>4.1</b>	<b>4.1</b>	<i>4.0</i>	<i>3.9</i>	<i>3.8</i>	<i>3.6</i>	<i>3.6</i>	<i>3.7</i>	<i>3.7</i>	<b>4.4</b>	<i>3.9</i>	<i>3.7</i>
Housing Starts (millions - SAAR) .....	<b>1.24</b>	<b>1.17</b>	<b>1.17</b>	<b>1.26</b>	<b>1.32</b>	<i>1.34</i>	<i>1.35</i>	<i>1.36</i>	<i>1.37</i>	<i>1.37</i>	<i>1.38</i>	<i>1.39</i>	<b>1.21</b>	<i>1.34</i>	<i>1.38</i>
<b>Industrial Production Indices (Index, 2012=100)</b>															
Total Industrial Production .....	<b>102.5</b>	<b>103.7</b>	<b>103.3</b>	<b>105.3</b>	<b>106.4</b>	<i>107.4</i>	<i>108.2</i>	<i>109.0</i>	<i>109.8</i>	<i>110.5</i>	<i>111.2</i>	<i>111.8</i>	<b>103.7</b>	<i>107.8</i>	<i>110.8</i>
Manufacturing .....	<b>102.0</b>	<b>102.7</b>	<b>102.2</b>	<b>103.6</b>	<b>104.5</b>	<i>105.1</i>	<i>105.8</i>	<i>106.7</i>	<i>107.4</i>	<i>108.0</i>	<i>108.5</i>	<i>109.0</i>	<b>102.6</b>	<i>105.5</i>	<i>108.3</i>
Food .....	<b>109.2</b>	<b>110.1</b>	<b>112.1</b>	<b>112.6</b>	<b>114.6</b>	<i>114.7</i>	<i>115.0</i>	<i>115.5</i>	<i>116.0</i>	<i>116.5</i>	<i>117.0</i>	<i>117.5</i>	<b>111.0</b>	<i>114.9</i>	<i>116.8</i>
Paper .....	<b>97.8</b>	<b>96.9</b>	<b>96.4</b>	<b>96.1</b>	<b>95.9</b>	<i>95.8</i>	<i>95.6</i>	<i>95.6</i>	<i>95.6</i>	<i>95.6</i>	<i>95.6</i>	<i>95.8</i>	<b>96.8</b>	<i>95.7</i>	<i>95.6</i>
Petroleum and Coal Products .....	<b>105.5</b>	<b>108.9</b>	<b>104.7</b>	<b>107.5</b>	<b>106.4</b>	<i>108.4</i>	<i>108.8</i>	<i>109.2</i>	<i>109.5</i>	<i>109.8</i>	<i>110.0</i>	<i>110.3</i>	<b>106.6</b>	<i>108.2</i>	<i>109.9</i>
Chemicals .....	<b>94.2</b>	<b>95.9</b>	<b>94.7</b>	<b>97.7</b>	<b>97.5</b>	<i>98.4</i>	<i>99.2</i>	<i>100.1</i>	<i>100.9</i>	<i>101.7</i>	<i>102.5</i>	<i>103.4</i>	<b>95.6</b>	<i>98.8</i>	<i>102.1</i>
Nonmetallic Mineral Products .....	<b>114.0</b>	<b>113.2</b>	<b>113.6</b>	<b>117.4</b>	<b>120.8</b>	<i>121.0</i>	<i>121.5</i>	<i>122.5</i>	<i>123.6</i>	<i>124.7</i>	<i>125.6</i>	<i>126.5</i>	<b>114.5</b>	<i>121.5</i>	<i>125.1</i>
Primary Metals .....	<b>94.0</b>	<b>92.9</b>	<b>93.6</b>	<b>95.3</b>	<b>96.6</b>	<i>97.8</i>	<i>98.5</i>	<i>98.8</i>	<i>98.8</i>	<i>98.9</i>	<i>99.1</i>	<i>99.4</i>	<b>94.0</b>	<i>97.9</i>	<i>99.0</i>
Coal-weighted Manufacturing (a) .....	<b>101.7</b>	<b>102.1</b>	<b>101.1</b>	<b>103.4</b>	<b>104.2</b>	<i>105.0</i>	<i>105.5</i>	<i>106.1</i>	<i>106.6</i>	<i>107.1</i>	<i>107.7</i>	<i>108.3</i>	<b>102.1</b>	<i>105.2</i>	<i>107.4</i>
Distillate-weighted Manufacturing (a) .....	<b>107.8</b>	<b>108.2</b>	<b>108.2</b>	<b>110.2</b>	<b>111.6</b>	<i>112.3</i>	<i>112.9</i>	<i>113.6</i>	<i>114.3</i>	<i>114.9</i>	<i>115.4</i>	<i>116.0</i>	<b>108.6</b>	<i>112.6</i>	<i>115.2</i>
Electricity-weighted Manufacturing (a) .....	<b>102.1</b>	<b>102.8</b>	<b>101.9</b>	<b>103.9</b>	<b>104.6</b>	<i>105.4</i>	<i>106.1</i>	<i>106.9</i>	<i>107.5</i>	<i>108.1</i>	<i>108.8</i>	<i>109.5</i>	<b>102.7</b>	<i>105.8</i>	<i>108.5</i>
Natural Gas-weighted Manufacturing (a) ...	<b>101.7</b>	<b>103.5</b>	<b>101.6</b>	<b>104.5</b>	<b>104.3</b>	<i>105.3</i>	<i>106.0</i>	<i>106.9</i>	<i>107.7</i>	<i>108.4</i>	<i>109.2</i>	<i>110.1</i>	<b>102.9</b>	<i>105.6</i>	<i>108.8</i>
<b>Price Indexes</b>															
Consumer Price Index (all urban consumers) (index, 1982-1984=1.00) .....	<b>2.44</b>	<b>2.44</b>	<b>2.45</b>	<b>2.47</b>	<b>2.49</b>	<i>2.51</i>	<i>2.52</i>	<i>2.53</i>	<i>2.54</i>	<i>2.56</i>	<i>2.58</i>	<i>2.59</i>	<b>2.45</b>	<i>2.51</i>	<i>2.57</i>
Producer Price Index: All Commodities (index, 1982=1.00) .....	<b>1.93</b>	<b>1.92</b>	<b>1.92</b>	<b>1.97</b>	<b>2.01</b>	<i>2.02</i>	<i>2.02</i>	<i>2.03</i>	<i>2.03</i>	<i>2.04</i>	<i>2.05</i>	<i>2.06</i>	<b>1.94</b>	<i>2.02</i>	<i>2.05</i>
Producer Price Index: Petroleum (index, 1982=1.00) .....	<b>1.66</b>	<b>1.67</b>	<b>1.75</b>	<b>1.91</b>	<b>2.00</b>	<i>2.18</i>	<i>2.20</i>	<i>2.10</i>	<i>2.02</i>	<i>2.06</i>	<i>2.04</i>	<i>1.96</i>	<b>1.75</b>	<i>2.12</i>	<i>2.02</i>
GDP Implicit Price Deflator (index, 2009=100) .....	<b>112.8</b>	<b>113.0</b>	<b>113.6</b>	<b>114.3</b>	<b>114.9</b>	<i>115.5</i>	<i>116.2</i>	<i>116.9</i>	<i>117.7</i>	<i>118.5</i>	<i>119.4</i>	<i>120.1</i>	<b>113.4</b>	<i>115.9</i>	<i>118.9</i>
<b>Miscellaneous</b>															
Vehicle Miles Traveled (b) (million miles/day) .....	<b>8,210</b>	<b>9,202</b>	<b>9,057</b>	<b>8,730</b>	<b>8,257</b>	<i>9,316</i>	<i>9,172</i>	<i>8,850</i>	<i>8,475</i>	<i>9,445</i>	<i>9,306</i>	<i>8,991</i>	<b>8,802</b>	<i>8,901</i>	<i>9,057</i>
Air Travel Capacity (Available ton-miles/day, thousands) .....	<b>567</b>	<b>619</b>	<b>661</b>	<b>631</b>	<b>569</b>	<i>589</i>	<i>645</i>	<i>626</i>	<i>573</i>	<i>588</i>	<i>645</i>	<i>630</i>	<b>620</b>	<i>608</i>	<i>609</i>
Aircraft Utilization (Revenue ton-miles/day, thousands) .....	<b>344</b>	<b>390</b>	<b>398</b>	<b>382</b>	<b>353</b>	<i>372</i>	<i>391</i>	<i>392</i>	<i>356</i>	<i>371</i>	<i>394</i>	<i>397</i>	<b>378</b>	<i>377</i>	<i>380</i>
Airline Ticket Price Index (index, 1982-1984=100) .....	<b>277.8</b>	<b>297.0</b>	<b>264.9</b>	<b>263.4</b>	<b>264.8</b>	<i>308.3</i>	<i>300.4</i>	<i>315.7</i>	<i>321.2</i>	<i>341.1</i>	<i>317.3</i>	<i>328.0</i>	<b>275.8</b>	<i>297.3</i>	<i>326.9</i>
Raw Steel Production (million short tons per day) .....	<b>0.248</b>	<b>0.247</b>	<b>0.250</b>	<b>0.245</b>	<b>0.251</b>	<i>0.259</i>	<i>0.241</i>	<i>0.207</i>	<i>0.262</i>	<i>0.260</i>	<i>0.240</i>	<i>0.206</i>	<b>0.248</b>	<i>0.239</i>	<i>0.242</i>
<b>Carbon Dioxide (CO<sub>2</sub>) Emissions (million metric tons)</b>															
Petroleum .....	<b>565</b>	<b>588</b>	<b>593</b>	<b>592</b>	<b>576</b>	<i>588</i>	<i>600</i>	<i>595</i>	<i>578</i>	<i>593</i>	<i>607</i>	<i>602</i>	<b>2,338</b>	<i>2,359</i>	<i>2,380</i>
Natural Gas .....	<b>422</b>	<b>311</b>	<b>334</b>	<b>405</b>	<b>470</b>	<i>341</i>	<i>346</i>	<i>409</i>	<i>468</i>	<i>338</i>	<i>355</i>	<i>415</i>	<b>1,472</b>	<i>1,566</i>	<i>1,575</i>
Coal .....	<b>319</b>	<b>307</b>	<b>375</b>	<b>317</b>	<b>318</b>	<i>291</i>	<i>359</i>	<i>308</i>	<i>322</i>	<i>284</i>	<i>354</i>	<i>306</i>	<b>1,318</b>	<i>1,276</i>	<i>1,265</i>
Total Energy (c) .....	<b>1,309</b>	<b>1,209</b>	<b>1,305</b>	<b>1,318</b>	<b>1,367</b>	<i>1,224</i>	<i>1,308</i>	<i>1,315</i>	<i>1,371</i>	<i>1,217</i>	<i>1,318</i>	<i>1,326</i>	<b>5,140</b>	<i>5,213</i>	<i>5,232</i>

- = no data available

SAAR = Seasonally-adjusted annual rate

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

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

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

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

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

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

**Table 9b. U.S. Regional Macroeconomic Data**

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

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
<b>Real Gross State Product (Billion \$2009)</b>															
New England .....	888	893	901	906	908	914	920	926	930	935	939	945	897	917	937
Middle Atlantic .....	2,483	2,496	2,516	2,531	2,538	2,552	2,568	2,582	2,594	2,606	2,617	2,630	2,507	2,560	2,612
E. N. Central .....	2,318	2,336	2,354	2,367	2,372	2,388	2,404	2,418	2,431	2,445	2,456	2,466	2,344	2,395	2,449
W. N. Central .....	1,070	1,075	1,081	1,087	1,089	1,095	1,102	1,109	1,115	1,121	1,126	1,132	1,078	1,099	1,123
S. Atlantic .....	3,008	3,029	3,050	3,071	3,087	3,110	3,135	3,159	3,184	3,203	3,221	3,239	3,039	3,123	3,212
E. S. Central .....	761	767	771	776	779	784	789	795	800	804	809	812	769	787	806
W. S. Central .....	2,021	2,050	2,071	2,092	2,105	2,125	2,146	2,167	2,187	2,204	2,221	2,236	2,059	2,136	2,212
Mountain .....	1,082	1,092	1,100	1,110	1,116	1,125	1,135	1,146	1,156	1,165	1,173	1,181	1,096	1,131	1,169
Pacific .....	3,168	3,188	3,213	3,240	3,254	3,279	3,306	3,332	3,358	3,384	3,406	3,430	3,202	3,293	3,394
<b>Industrial Output, Manufacturing (Index, Year 2012=100)</b>															
New England .....	96.8	97.2	96.8	98.5	98.9	99.1	99.6	100.3	100.8	101.0	101.3	101.6	97.3	99.5	101.2
Middle Atlantic .....	97.0	97.6	96.9	97.6	98.0	98.0	98.5	99.3	99.9	100.1	100.5	100.8	97.3	98.5	100.3
E. N. Central .....	104.3	105.2	104.4	106.1	106.5	107.5	108.3	109.2	110.0	111.1	111.5	111.9	105.0	107.9	111.1
W. N. Central .....	101.1	101.8	101.5	103.1	104.1	104.8	105.4	106.2	107.0	107.7	108.1	108.6	101.9	105.1	107.9
S. Atlantic .....	105.6	106.4	105.8	107.2	108.3	108.7	109.3	110.1	110.8	111.3	111.8	112.2	106.2	109.1	111.5
E. S. Central .....	107.8	108.3	107.4	108.6	109.4	110.0	110.7	111.7	112.4	113.2	113.8	114.3	108.0	110.4	113.4
W. S. Central .....	95.1	96.0	95.9	96.9	97.6	98.3	99.1	100.1	101.1	101.7	102.3	102.9	96.0	98.8	102.0
Mountain .....	106.5	107.8	108.1	110.1	111.8	112.6	113.7	114.7	115.6	116.2	116.8	117.5	108.1	113.2	116.5
Pacific .....	102.2	102.7	101.8	103.1	104.4	104.9	105.8	106.7	107.4	107.8	108.2	108.7	102.4	105.5	108.0
<b>Real Personal Income (Billion \$2009)</b>															
New England .....	774	776	782	786	790	794	799	805	812	816	821	825	779	797	818
Middle Atlantic .....	1,965	1,977	1,986	1,993	2,001	2,010	2,023	2,036	2,053	2,063	2,074	2,084	1,980	2,017	2,068
E. N. Central .....	2,106	2,109	2,121	2,130	2,142	2,153	2,168	2,184	2,202	2,216	2,227	2,239	2,117	2,162	2,221
W. N. Central .....	990	994	989	992	998	1,004	1,011	1,020	1,030	1,038	1,046	1,054	991	1,008	1,042
S. Atlantic .....	2,775	2,786	2,798	2,811	2,826	2,843	2,866	2,891	2,921	2,943	2,964	2,985	2,793	2,856	2,953
E. S. Central .....	778	780	781	785	788	792	798	804	811	816	821	826	781	795	818
W. S. Central .....	1,703	1,712	1,716	1,725	1,735	1,748	1,764	1,783	1,803	1,818	1,833	1,849	1,714	1,758	1,826
Mountain .....	976	980	991	997	1,003	1,010	1,019	1,030	1,041	1,050	1,059	1,067	986	1,016	1,054
Pacific .....	2,396	2,424	2,433	2,445	2,457	2,472	2,492	2,516	2,540	2,559	2,577	2,595	2,425	2,484	2,568
<b>Households (Thousands)</b>															
New England .....	5,859	5,868	5,888	5,896	5,905	5,913	5,921	5,930	5,939	5,948	5,957	5,966	5,896	5,930	5,966
Middle Atlantic .....	15,899	15,915	15,967	15,982	16,001	16,018	16,038	16,058	16,078	16,097	16,117	16,140	15,982	16,058	16,140
E. N. Central .....	18,823	18,840	18,900	18,917	18,943	18,969	18,996	19,021	19,043	19,068	19,096	19,127	18,917	19,021	19,127
W. N. Central .....	8,518	8,536	8,574	8,594	8,620	8,644	8,666	8,687	8,707	8,728	8,749	8,771	8,594	8,687	8,771
S. Atlantic .....	25,184	25,275	25,434	25,530	25,632	25,728	25,824	25,917	26,010	26,102	26,190	26,283	25,530	25,917	26,283
E. S. Central .....	7,602	7,617	7,649	7,665	7,685	7,703	7,721	7,739	7,757	7,775	7,794	7,814	7,665	7,739	7,814
W. S. Central .....	14,579	14,625	14,704	14,749	14,799	14,849	14,904	14,962	15,018	15,076	15,134	15,194	14,749	14,962	15,194
Mountain .....	9,036	9,074	9,132	9,172	9,216	9,259	9,302	9,343	9,384	9,425	9,466	9,508	9,172	9,343	9,508
Pacific .....	18,697	18,753	18,846	18,896	18,952	19,006	19,064	19,117	19,172	19,225	19,279	19,335	18,896	19,117	19,335
<b>Total Non-farm Employment (Millions)</b>															
New England .....	7.4	7.4	7.4	7.4	7.4	7.5	7.5	7.5	7.5	7.5	7.5	7.6	7.4	7.5	7.5
Middle Atlantic .....	19.5	19.5	19.6	19.7	19.7	19.8	19.8	19.9	20.0	20.0	20.0	20.1	19.6	19.8	20.0
E. N. Central .....	21.9	22.0	22.0	22.0	22.1	22.2	22.3	22.4	22.4	22.5	22.6	22.6	22.0	22.2	22.5
W. N. Central .....	10.6	10.6	10.7	10.7	10.7	10.7	10.8	10.8	10.9	10.9	10.9	10.9	10.6	10.8	10.9
S. Atlantic .....	28.0	28.1	28.2	28.3	28.4	28.6	28.7	28.9	29.0	29.2	29.2	29.3	28.2	28.7	29.2
E. S. Central .....	8.1	8.1	8.1	8.1	8.1	8.2	8.2	8.3	8.3	8.3	8.3	8.4	8.1	8.2	8.3
W. S. Central .....	17.0	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.8	17.9	17.1	17.4	17.8
Mountain .....	10.4	10.5	10.6	10.6	10.7	10.8	10.8	10.9	11.0	11.0	11.1	11.1	10.5	10.8	11.0
Pacific .....	22.8	22.9	23.0	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	24.0	23.0	23.5	23.9

- = no data available

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

Regions refer to U.S. Census divisions.

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

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

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

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

**Table 9c. U.S. Regional Weather Data**

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

	2017				2018				2019				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2017	2018	2019
<b>Heating Degree Days</b>															
New England .....	<b>2,985</b>	<b>803</b>	<b>92</b>	<b>2,176</b>	<b>3,072</b>	<i>945</i>	<i>130</i>	<i>2,166</i>	<i>3,186</i>	<i>860</i>	<i>131</i>	<i>2,166</i>	<b>6,056</b>	<i>6,313</i>	<i>6,343</i>
Middle Atlantic .....	<b>2,656</b>	<b>600</b>	<b>73</b>	<b>2,001</b>	<b>2,953</b>	<i>804</i>	<i>85</i>	<i>1,993</i>	<i>2,955</i>	<i>682</i>	<i>84</i>	<i>1,993</i>	<b>5,330</b>	<i>5,836</i>	<i>5,715</i>
E. N. Central .....	<b>2,691</b>	<b>628</b>	<b>105</b>	<b>2,263</b>	<b>3,214</b>	<i>908</i>	<i>130</i>	<i>2,237</i>	<i>3,151</i>	<i>726</i>	<i>129</i>	<i>2,237</i>	<b>5,687</b>	<i>6,489</i>	<i>6,244</i>
W. N. Central .....	<b>2,811</b>	<b>662</b>	<b>137</b>	<b>2,386</b>	<b>3,419</b>	<i>953</i>	<i>165</i>	<i>2,416</i>	<i>3,235</i>	<i>701</i>	<i>164</i>	<i>2,416</i>	<b>5,996</b>	<i>6,952</i>	<i>6,516</i>
South Atlantic .....	<b>1,149</b>	<b>125</b>	<b>15</b>	<b>947</b>	<b>1,453</b>	<i>251</i>	<i>14</i>	<i>999</i>	<i>1,458</i>	<i>191</i>	<i>14</i>	<i>997</i>	<b>2,236</b>	<i>2,717</i>	<i>2,660</i>
E. S. Central .....	<b>1,376</b>	<b>154</b>	<b>24</b>	<b>1,280</b>	<b>1,816</b>	<i>368</i>	<i>22</i>	<i>1,331</i>	<i>1,856</i>	<i>241</i>	<i>22</i>	<i>1,332</i>	<b>2,834</b>	<i>3,538</i>	<i>3,451</i>
W. S. Central .....	<b>775</b>	<b>66</b>	<b>4</b>	<b>741</b>	<b>1,192</b>	<i>169</i>	<i>5</i>	<i>809</i>	<i>1,178</i>	<i>80</i>	<i>4</i>	<i>808</i>	<b>1,585</b>	<i>2,175</i>	<i>2,070</i>
Mountain .....	<b>2,058</b>	<b>698</b>	<b>154</b>	<b>1,667</b>	<b>2,130</b>	<i>688</i>	<i>146</i>	<i>1,841</i>	<i>2,201</i>	<i>690</i>	<i>146</i>	<i>1,841</i>	<b>4,577</b>	<i>4,805</i>	<i>4,879</i>
Pacific .....	<b>1,561</b>	<b>531</b>	<b>68</b>	<b>1,027</b>	<b>1,440</b>	<i>530</i>	<i>90</i>	<i>1,221</i>	<i>1,517</i>	<i>603</i>	<i>92</i>	<i>1,222</i>	<b>3,186</b>	<i>3,281</i>	<i>3,433</i>
U.S. Average .....	<b>1,858</b>	<b>427</b>	<b>65</b>	<b>1,481</b>	<b>2,136</b>	<i>568</i>	<i>76</i>	<i>1,542</i>	<i>2,137</i>	<i>487</i>	<i>76</i>	<i>1,540</i>	<b>3,831</b>	<i>4,322</i>	<i>4,240</i>
<b>Heating Degree Days, Prior 10-year Average</b>															
New England .....	<b>3,201</b>	<b>831</b>	<b>122</b>	<b>2,125</b>	<b>3,172</b>	<i>818</i>	<i>119</i>	<i>2,121</i>	<i>3,168</i>	<i>824</i>	<i>117</i>	<i>2,109</i>	<b>6,279</b>	<i>6,230</i>	<i>6,218</i>
Middle Atlantic .....	<b>2,983</b>	<b>661</b>	<b>81</b>	<b>1,941</b>	<b>2,947</b>	<i>646</i>	<i>81</i>	<i>1,949</i>	<i>2,957</i>	<i>655</i>	<i>80</i>	<i>1,935</i>	<b>5,665</b>	<i>5,623</i>	<i>5,628</i>
E. N. Central .....	<b>3,255</b>	<b>701</b>	<b>114</b>	<b>2,198</b>	<b>3,209</b>	<i>692</i>	<i>116</i>	<i>2,211</i>	<i>3,196</i>	<i>706</i>	<i>119</i>	<i>2,189</i>	<b>6,267</b>	<i>6,228</i>	<i>6,209</i>
W. N. Central .....	<b>3,302</b>	<b>707</b>	<b>142</b>	<b>2,380</b>	<b>3,264</b>	<i>705</i>	<i>144</i>	<i>2,379</i>	<i>3,255</i>	<i>715</i>	<i>144</i>	<i>2,362</i>	<b>6,531</b>	<i>6,492</i>	<i>6,475</i>
South Atlantic .....	<b>1,502</b>	<b>188</b>	<b>12</b>	<b>966</b>	<b>1,476</b>	<i>177</i>	<i>12</i>	<i>974</i>	<i>1,481</i>	<i>180</i>	<i>13</i>	<i>967</i>	<b>2,667</b>	<i>2,639</i>	<i>2,640</i>
E. S. Central .....	<b>1,906</b>	<b>231</b>	<b>16</b>	<b>1,287</b>	<b>1,868</b>	<i>217</i>	<i>18</i>	<i>1,301</i>	<i>1,862</i>	<i>226</i>	<i>19</i>	<i>1,291</i>	<b>3,440</b>	<i>3,404</i>	<i>3,398</i>
W. S. Central .....	<b>1,228</b>	<b>88</b>	<b>4</b>	<b>799</b>	<b>1,181</b>	<i>80</i>	<i>4</i>	<i>801</i>	<i>1,183</i>	<i>87</i>	<i>4</i>	<i>797</i>	<b>2,119</b>	<i>2,067</i>	<i>2,072</i>
Mountain .....	<b>2,216</b>	<b>734</b>	<b>142</b>	<b>1,862</b>	<b>2,195</b>	<i>737</i>	<i>144</i>	<i>1,842</i>	<i>2,165</i>	<i>723</i>	<i>141</i>	<i>1,844</i>	<b>4,954</b>	<i>4,918</i>	<i>4,875</i>
Pacific .....	<b>1,462</b>	<b>598</b>	<b>89</b>	<b>1,205</b>	<b>1,465</b>	<i>592</i>	<i>84</i>	<i>1,181</i>	<i>1,444</i>	<i>581</i>	<i>83</i>	<i>1,185</i>	<b>3,354</b>	<i>3,322</i>	<i>3,293</i>
U.S. Average .....	<b>2,193</b>	<b>487</b>	<b>71</b>	<b>1,527</b>	<b>2,160</b>	<i>478</i>	<i>71</i>	<i>1,525</i>	<i>2,151</i>	<i>480</i>	<i>71</i>	<i>1,514</i>	<b>4,277</b>	<i>4,233</i>	<i>4,216</i>
<b>Cooling Degree Days</b>															
New England .....	<b>0</b>	<b>75</b>	<b>363</b>	<b>11</b>	<b>0</b>	<i>93</i>	<i>408</i>	<i>1</i>	<i>0</i>	<i>86</i>	<i>410</i>	<i>1</i>	<b>449</b>	<i>503</i>	<i>497</i>
Middle Atlantic .....	<b>0</b>	<b>139</b>	<b>501</b>	<b>22</b>	<b>0</b>	<i>157</i>	<i>526</i>	<i>4</i>	<i>0</i>	<i>158</i>	<i>536</i>	<i>4</i>	<b>662</b>	<i>688</i>	<i>698</i>
E. N. Central .....	<b>1</b>	<b>210</b>	<b>480</b>	<b>15</b>	<b>0</b>	<i>212</i>	<i>520</i>	<i>6</i>	<i>0</i>	<i>220</i>	<i>528</i>	<i>6</i>	<b>707</b>	<i>738</i>	<i>754</i>
W. N. Central .....	<b>9</b>	<b>265</b>	<b>624</b>	<b>14</b>	<b>2</b>	<i>258</i>	<i>652</i>	<i>10</i>	<i>3</i>	<i>266</i>	<i>658</i>	<i>10</i>	<b>911</b>	<i>922</i>	<i>937</i>
South Atlantic .....	<b>157</b>	<b>668</b>	<b>1,155</b>	<b>261</b>	<b>133</b>	<i>641</i>	<i>1,139</i>	<i>221</i>	<i>113</i>	<i>650</i>	<i>1,150</i>	<i>222</i>	<b>2,241</b>	<i>2,134</i>	<i>2,134</i>
E. S. Central .....	<b>65</b>	<b>481</b>	<b>965</b>	<b>73</b>	<b>36</b>	<i>472</i>	<i>1,022</i>	<i>61</i>	<i>26</i>	<i>522</i>	<i>1,034</i>	<i>61</i>	<b>1,585</b>	<i>1,591</i>	<i>1,643</i>
W. S. Central .....	<b>214</b>	<b>827</b>	<b>1,459</b>	<b>218</b>	<b>126</b>	<i>836</i>	<i>1,490</i>	<i>196</i>	<i>85</i>	<i>871</i>	<i>1,491</i>	<i>197</i>	<b>2,718</b>	<i>2,648</i>	<i>2,644</i>
Mountain .....	<b>36</b>	<b>466</b>	<b>919</b>	<b>119</b>	<b>20</b>	<i>426</i>	<i>928</i>	<i>76</i>	<i>18</i>	<i>420</i>	<i>924</i>	<i>76</i>	<b>1,540</b>	<i>1,450</i>	<i>1,438</i>
Pacific .....	<b>30</b>	<b>220</b>	<b>700</b>	<b>100</b>	<b>31</b>	<i>164</i>	<i>578</i>	<i>58</i>	<i>28</i>	<i>165</i>	<i>566</i>	<i>58</i>	<b>1,050</b>	<i>831</i>	<i>816</i>
U.S. Average .....	<b>70</b>	<b>402</b>	<b>838</b>	<b>115</b>	<b>51</b>	<i>388</i>	<i>837</i>	<i>89</i>	<i>41</i>	<i>399</i>	<i>841</i>	<i>90</i>	<b>1,424</b>	<i>1,365</i>	<i>1,371</i>
<b>Cooling Degree Days, Prior 10-year Average</b>															
New England .....	<b>0</b>	<b>81</b>	<b>433</b>	<b>1</b>	<b>0</b>	<i>81</i>	<i>433</i>	<i>1</i>	<i>0</i>	<i>80</i>	<i>438</i>	<i>1</i>	<b>515</b>	<i>515</i>	<i>519</i>
Middle Atlantic .....	<b>0</b>	<b>169</b>	<b>566</b>	<b>6</b>	<b>0</b>	<i>166</i>	<i>567</i>	<i>5</i>	<i>0</i>	<i>163</i>	<i>571</i>	<i>6</i>	<b>741</b>	<i>738</i>	<i>740</i>
E. N. Central .....	<b>3</b>	<b>234</b>	<b>542</b>	<b>8</b>	<b>3</b>	<i>228</i>	<i>533</i>	<i>7</i>	<i>3</i>	<i>230</i>	<i>536</i>	<i>7</i>	<b>788</b>	<i>770</i>	<i>776</i>
W. N. Central .....	<b>7</b>	<b>281</b>	<b>672</b>	<b>12</b>	<b>7</b>	<i>277</i>	<i>659</i>	<i>11</i>	<i>7</i>	<i>280</i>	<i>665</i>	<i>12</i>	<b>973</b>	<i>953</i>	<i>964</i>
South Atlantic .....	<b>117</b>	<b>666</b>	<b>1,167</b>	<b>230</b>	<b>119</b>	<i>675</i>	<i>1,160</i>	<i>227</i>	<i>120</i>	<i>675</i>	<i>1,167</i>	<i>233</i>	<b>2,179</b>	<i>2,181</i>	<i>2,195</i>
E. S. Central .....	<b>33</b>	<b>544</b>	<b>1,056</b>	<b>65</b>	<b>34</b>	<i>539</i>	<i>1,032</i>	<i>63</i>	<i>36</i>	<i>537</i>	<i>1,035</i>	<i>65</i>	<b>1,698</b>	<i>1,667</i>	<i>1,673</i>
W. S. Central .....	<b>90</b>	<b>876</b>	<b>1,528</b>	<b>205</b>	<b>100</b>	<i>887</i>	<i>1,532</i>	<i>204</i>	<i>103</i>	<i>880</i>	<i>1,545</i>	<i>208</i>	<b>2,698</b>	<i>2,722</i>	<i>2,737</i>
Mountain .....	<b>23</b>	<b>424</b>	<b>930</b>	<b>81</b>	<b>24</b>	<i>426</i>	<i>922</i>	<i>84</i>	<i>25</i>	<i>430</i>	<i>925</i>	<i>83</i>	<b>1,458</b>	<i>1,456</i>	<i>1,463</i>
Pacific .....	<b>30</b>	<b>180</b>	<b>608</b>	<b>74</b>	<b>30</b>	<i>185</i>	<i>621</i>	<i>78</i>	<i>31</i>	<i>183</i>	<i>616</i>	<i>75</i>	<b>892</b>	<i>914</i>	<i>906</i>
U.S. Average .....	<b>43</b>	<b>405</b>	<b>857</b>	<b>94</b>	<b>45</b>	<i>408</i>	<i>855</i>	<i>94</i>	<i>46</i>	<i>408</i>	<i>861</i>	<i>96</i>	<b>1,399</b>	<i>1,402</i>	<i>1,410</i>

- = 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](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>).