



## Short-Term Energy Outlook (STEO)

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### Forecast highlights

#### *Global liquid fuels*

- For the 2019 summer driving season that runs from April through September, EIA forecasts that U.S. regular gasoline retail prices will average \$2.76 per gallon (gal), down from an average of \$2.85/gal last summer. EIA's forecast is discussed in its [Summer Fuels Outlook](#). The lower forecast gasoline prices primarily reflect EIA's expectation of lower crude oil prices in 2019. For all of 2019, EIA expects U.S. regular gasoline retail prices to average \$2.60/gal and gasoline retail prices for all grades to average \$2.71/gal, which would result in the average U.S. household spending about \$100 (4%) less on motor fuel in 2019 compared with 2018.
- Brent crude oil spot prices averaged \$66 per barrel (b) in March, up \$2/b from February 2019. Brent prices for the first quarter of 2019 averaged \$63/b, which is \$4/b lower than the same period in 2018. Despite lower crude oil prices than last year, Brent prices in March were \$9/b higher than in December 2018, marking the largest December-to-March price increase since December 2011 to March 2012. EIA forecasts Brent spot prices will average \$65/b in 2019 and \$62/b in 2020, compared with an average of \$71/b in 2018. EIA expects that West Texas Intermediate (WTI) crude oil prices will average \$8/b lower than Brent prices in the first half of 2019 before the [discount gradually falls](#) to \$4/b in late-2019 and through 2020.
- EIA estimates that U.S. crude oil production averaged 12.1 million barrels per day (b/d) in March, up 0.3 million b/d from the February average. EIA forecasts that U.S. crude oil production will average 12.4 million b/d in 2019 and 13.1 million b/d in 2020, with most of the growth coming from the Permian region of Texas and New Mexico.

#### *Natural gas*

- The Henry Hub natural gas spot price averaged \$2.95/million British thermal units (MMBtu) in March, up 26 cents/MMBtu from February. Prices increased as a result of colder-than-normal temperatures across much of the United States, which increased the use of natural gas for space heating. EIA expects strong growth in U.S. natural gas production to put downward pressure on prices in 2019 and in 2020. EIA expects Henry Hub natural gas spot prices will average \$2.82/MMBtu in 2019, down 33 cents/MMBtu from 2018. The forecasted 2020 Henry Hub spot price is \$2.77/MMBtu.

- EIA forecasts that dry natural gas production will average 91.0 billion cubic feet per day (Bcf/d) in 2019, up 7.6 Bcf/d from 2018. EIA expects natural gas production will continue to grow in 2020 to an average of 92.5 Bcf/d.
- EIA estimates that natural gas inventories ended March at 1.2 trillion cubic feet (Tcf), which would be 17% lower than levels from a year earlier and 30% lower than the five-year (2014–18) average. EIA forecasts that natural gas storage injections will outpace the previous five-year average during the April-through-October injection season and that inventories will reach 3.7 Tcf at the end of October, which would be 13% higher than October 2018 levels but 1% lower than the five-year average.

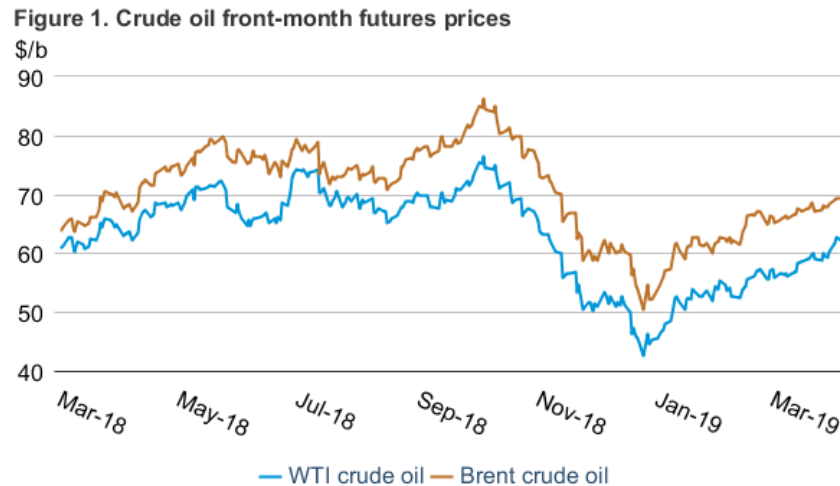
### *Electricity, coal, renewables, and emissions*

- EIA expects the average U.S. residential customer will use an average of 1,026 kilowatthours (kWh) of electricity per month during the summer cooling season that runs from June through August, 2019, about 5% less than the same period last year. EIA uses the [National Oceanic and Atmospheric Administration's](#) weather forecast, which indicates that temperatures will be cooler than last summer in all regions of the United States. The cooler forecast temperatures contribute to lower expected electricity use.
- EIA forecasts that U.S. residential electricity prices will average 13.4 cents/kWh during the summer cooling season, about 2% higher than last summer. The higher forecast prices primarily reflect higher actual generation fuel costs from 2018 that affect retail rates with a time lag, as well as rising electric transmission and distribution costs.
- EIA forecasts that all renewable fuels, including wind, solar, and hydroelectric generation, will produce 18% of U.S. electricity in 2019, and almost 20% in 2020. EIA expects that wind generation will surpass hydroelectric generation to become the leading source of renewable electricity in both years.
- EIA estimates that U.S. coal production decreased by 19 million short tons (MMst) (2%) in 2018, totaling 756 MMst. EIA expects that coal production will continue to fall in the forecast as both domestic consumption and exports, which reached [a five-year high in 2018](#), are forecast to decline. In the electric power sector, which accounts for more than 90% of U.S. coal consumption, more than 7 gigawatts of coal-fired generation is scheduled to retire by the end of 2020. EIA forecasts that coal production will total 684 MMst in 2019 (down by 9% from 2018) and 640 MMst in 2020 (down by 6% from 2019).
- After rising by 2.7% in 2018, EIA forecasts that U.S. energy-related carbon dioxide (CO<sub>2</sub>) emissions will decline by 1.6% in 2019 and by 1.0% in 2020. EIA expects emissions to fall in 2019 and in 2020 as forecasted temperatures return to near normal after a warm summer and cold winter in 2018, and because the share of electricity generated from natural gas and renewables is forecast to increase while the share generated from coal, which produces more CO<sub>2</sub> emissions, is forecast to decrease. Energy-related CO<sub>2</sub> emissions are sensitive to weather, economic growth, energy prices, and fuel mix.

# Petroleum and natural gas markets review

## Crude oil

**Prices:** The front-month futures price for Brent crude oil settled at \$69.40 per barrel (b) on April 4, an increase of \$4.33/b from March 1. The front-month futures price for West Texas Intermediate (WTI) crude oil for delivery at Cushing, Oklahoma, increased by \$6.30/b during the same period, settling at \$62.10/b on April 4 (**Figure 1**).



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

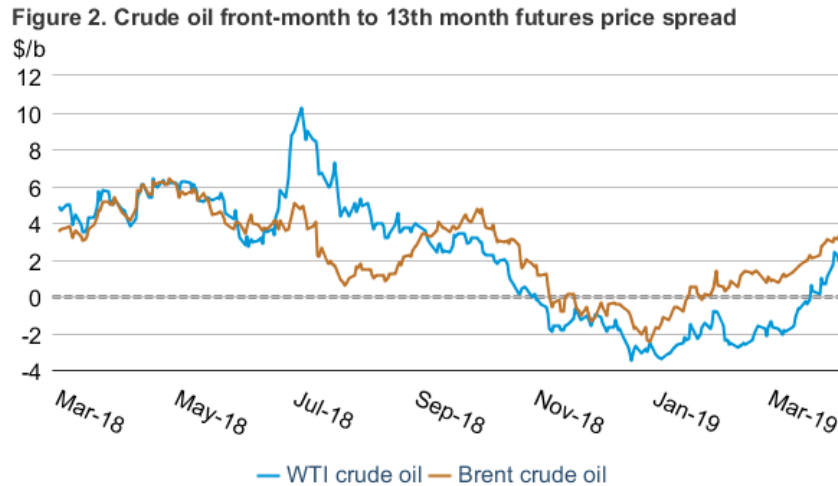
Crude oil prices increased for the third consecutive month in March and are trading near the middle of the range established over the previous year. Increasing crude oil supply disruptions and voluntary reductions in oil production from the Organization of the Petroleum Exporting Countries (OPEC) are among the recent price drivers in the crude oil market. Venezuela, in particular, has experienced several prolonged electric power failures throughout the country, which has directly resulted in reduced crude oil production and exports.


Economic indicators have recently sent mixed signals, increasing uncertainty regarding the future direction of oil prices. Recent manufacturing [Purchasing Managers' Indexes \(PMIs\) in several European](#) countries are showing continued contraction in their manufacturing sectors. In the United States, the [Treasury yield curve inverted](#) in March for the first time since 2007, a phenomenon that indicates a combination of tight monetary policy, investment risk aversion, and lower long-term economic growth expectations. However, manufacturing PMI surveys in the [United States](#) and [China](#) increased in March, and the [U.S. Federal Reserve](#) indicated it is unlikely to increase interest rates for the remainder of 2019, all factors that could signify a reversal of some of the negative economic indicators and support economic growth, and consequently crude oil prices.

EIA estimates that global liquid fuels inventories declined by 0.7 million barrels per day (b/d) in March 2019 and by 0.5 million b/d for the first quarter of 2019, which would be the first

quarterly stock draw since fourth-quarter 2017. High compliance among a number of OPEC and non-OPEC countries subject to voluntary oil production reductions has contributed to falling petroleum inventories in the Organization for Economic Cooperation and Development (OECD). Saudi Arabia, the largest oil producer in OPEC, produced 9.85 million b/d in March, down by almost 0.9 million b/d from October. OECD petroleum inventories are now lower than the five-year (2014–18) average, which is considered a key metric among market participants for assessing global oil balances.

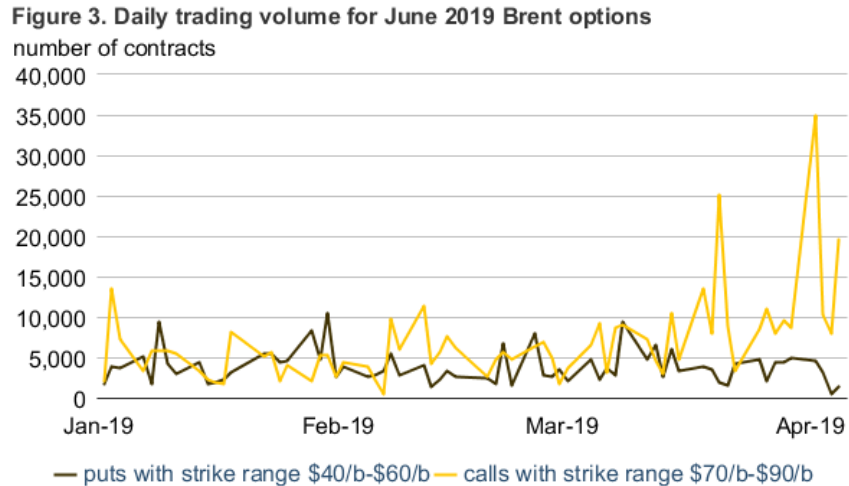
Withdrawals in global inventories are reflected in the increased backwardation in both Brent and WTI crude oil futures curves. Backwardation is the term used when near-term crude oil prices are higher than longer-dated ones. Both the Brent and WTI 1st–13th month spreads reached 6-month highs as of the first week of April, settling at \$3.24/b and \$1.92/b, respectively, on April 4 (**Figure 2**). EIA estimates that some of the largest global inventory withdrawals occurred in the United States and are likely contributing to the steepening of the WTI futures curve in particular. U.S. petroleum inventories **declined by more than 10 million barrels** per week three times in the first quarter of 2019—including two consecutive weeks in March—the most weekly declines of more than 10 million barrels for the first quarter of any year since 2007. A spill in the Houston Ship Channel at the end of March disrupted movement in the region and may have affected petroleum imports, exports, and inventory management in the final week of the month, but the large stock draws throughout the quarter largely reflect the fundamentals of an increasingly tight petroleum market.



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

**Options activity:** Recent trading activity in Brent crude oil options suggests that market participants increased their purchases of derivatives they use to manage the financial risk of continuing crude oil price increases. Trading volume for call options (derivatives that increase in value when crude oil prices increase) with strike prices between \$70/b and \$90/b on the June 2019 Brent crude oil contract increased by 68% in March compared with the daily average for January and February. Trading volume in these call options averaged 8,300 contracts per day in

March, with more than 25,000 contracts traded on March 20 and nearly 35,000 contracts traded on April 1 (**Figure 3**). In contrast, trading volume for Brent put options (derivatives that increase in value when crude oil prices decrease) with strike prices between \$40/b and \$60/b averaged less than 4,000 contracts per day in March, similar to the January and February average.

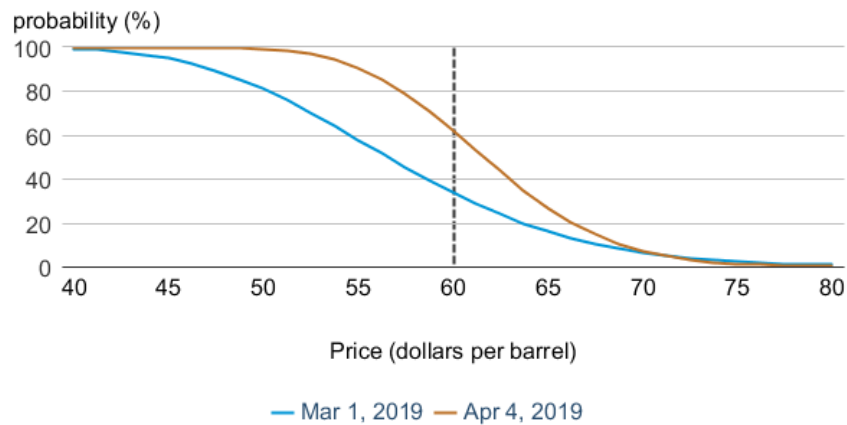


 Intercontinental Exchange, as compiled by Bloomberg L.P.

The recent divergence in call option trading volume versus put option trading volume indicates market participants sought to mitigate the risk of rising prices more than the risk of falling prices. The increase in market participants seeking upside price protection came amid significant inventory withdrawals in February and March and high levels of unplanned supply disruptions. As a result, market participants may be trading call options if inventory levels are insufficiently available at or near current prices. An important factor to consider, however, is that put options have generally been more expensive than call options recently, which could be a contributing factor for the lower trading volume on put options.

With respect to the June 2019 WTI futures contract, the probability that WTI prices will expire higher than \$60/b increased from the beginning of March to the first week in April. On April 4, the market-derived probability of the June 2019 WTI futures contract expiring higher than \$60/b was 62%, an increase of 29 percentage points from March 1 when the probability was almost 34% (**Figure 4**). Because Brent prices are higher than WTI prices, the probability of Brent futures contracts expiring higher than the same dollar thresholds is higher.

**Figure 4. Probability of the June 2019 WTI contract expiring higher than price levels**

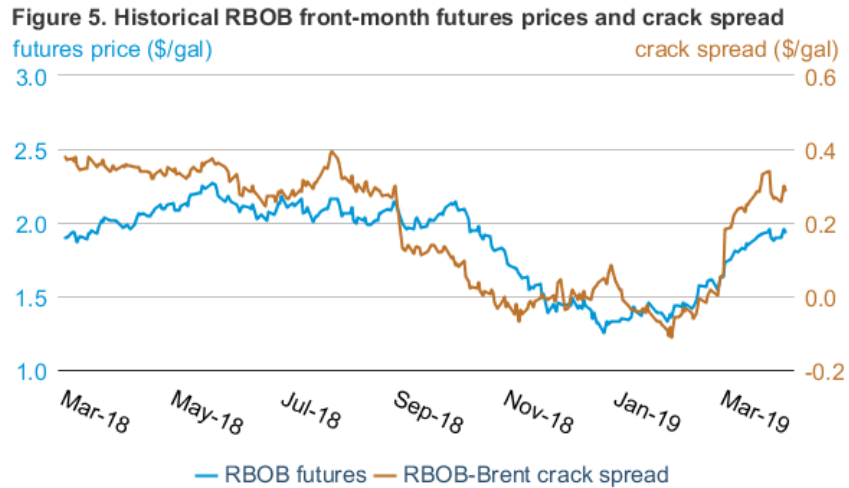


 U.S. Energy Information Administration, CME Group

## Petroleum products

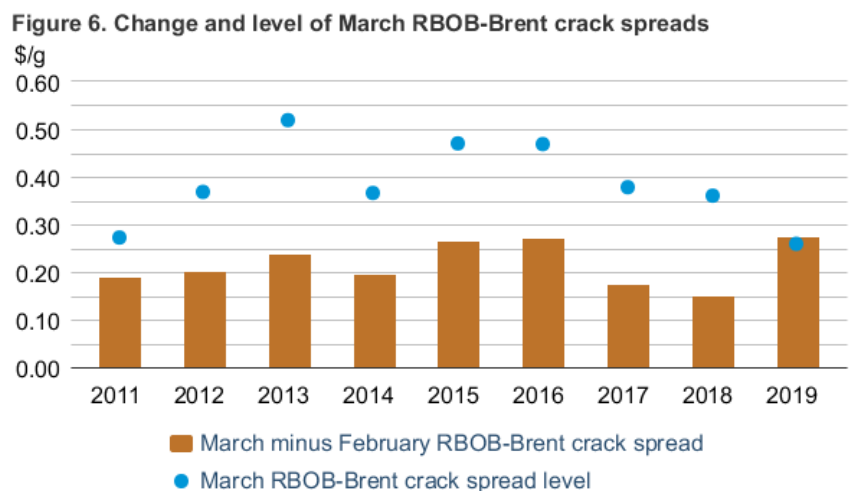
**Gasoline prices:** The front-month futures price of reformulated blendstock for oxygenate blending (RBOB, the petroleum component of gasoline used in many parts of the country) at New York Harbor settled at \$1.94 per gallon (gal) on April 4, 2019, an increase of 21 cents/gal since March 1, 2019 (**Figure 5**). The RBOB–Brent crack spread (the difference between the price of RBOB and the price of Brent crude oil) increased by 11 cents/gal to settle at 29 cents/gal during the same period.

RBOB prices and crack spreads increased from unusually low levels in February, but gasoline inventories remain near the five-year (2014–18) average. EIA estimates that U.S. gasoline consumption (measured as [product supplied](#)) was 9 million barrels per day (b/d) for the first quarter of 2019, about equal to the first-quarter 2018 level. In addition, EIA estimates finished gasoline exports for the four weeks ending March 29 averaged 725,000 b/d, about 226,000 b/d less than in March 2018, according to that month’s [Petroleum Supply Monthly](#). Lower gasoline prices in European and Asian markets, low international demand, and sufficient global gasoline supply may have contributed to reduced U.S. gasoline exports.



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

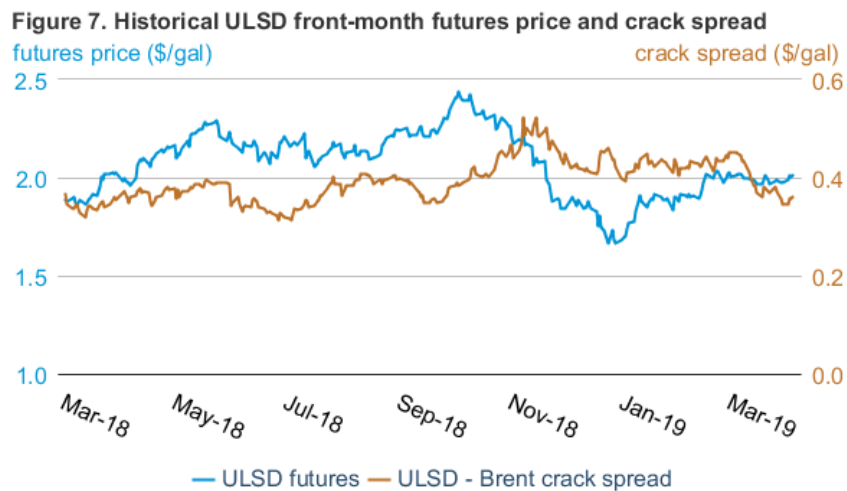
The RBOB–Brent crack spread typically increases from February to March, as the more expensive April RBOB contract for delivery of summer grade gasoline becomes the front month contract in March. In 2019, the RBOB–Brent crack spread increased by 27 cents/gal from February to March, higher than the five-year average increase of 21 cents/gal (Figure 6). Despite the large increase from February to March, the level of the March RBOB–Brent crack spread did not reach the five-year average of 41 cents/gal and, in fact, was the lowest March crack spread since 2008. EIA estimates that total gasoline inventories ended March at 236.1 million barrels, about 640,000 barrels more than the five-year average, a factor that could be contributing to crack spreads remaining lower than the five-year average.



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

**Ultra-low sulfur diesel prices:** The ultra-low sulfur diesel (ULSD) front-month futures price remained relatively steady, increasing by 1 cent from March 1 to settle at \$2.01/gal on April 4. The ULSD–Brent crack spread (the difference between the price of ULSD and the price of Brent crude oil) decreased by 9 cents/gal during the same period, settling at 36 cents/gal (**Figure 7**).

The average March ULSD–Brent crack spread of 39 cents/gal was 6 cents/gal higher than the five-year average, continuing a trend of strong distillate refining margins. Crack spreads declined 11 cents/gal during the month, however. This decrease was the largest within-month decline since February 2012, indicating how high the crack spread was in early 2019.

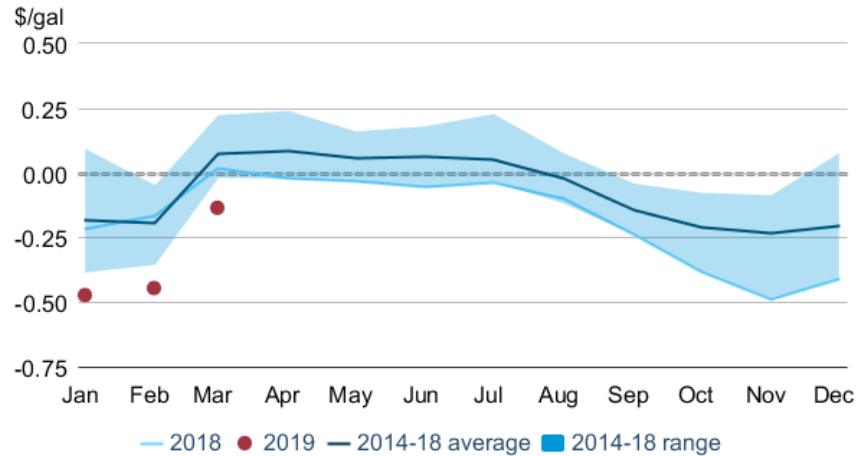


CME Group, as compiled by Bloomberg L.P., ULSD=ultra-low sulfur diesel

**Gasoline-to-distillate prices:** Although the RBOB–ULSD front-month price spread trended upward in March, which was in line with seasonal trends, it remained lower than the five-year range throughout the first quarter. The first quarter of 2019 had the lowest average first-quarter spread on record since RBOB began trading in late 2005. In March, RBOB sold at a 14-cent/gal average discount to ULSD, 21 cents less than the five-year average for the month. The average RBOB–ULSD front-month spread **has been negative** for 12 consecutive months (**Figure 8**). High gasoline inventories combined with factors specific to the distillate market may have contributed to gasoline futures prices being lower than distillate futures prices in March. Tonnage hauled by trucks, the largest users of diesel fuel in the United States, increased significantly in 2018 compared with 2017, and although truck tonnage growth has moderated in 2019, it has continued at relatively strong levels. Also, colder-than-normal weather lasted through March in parts of the United States, which likely led to higher heating oil consumption.



Figure 8. Monthly average RBOB-ULSD spread

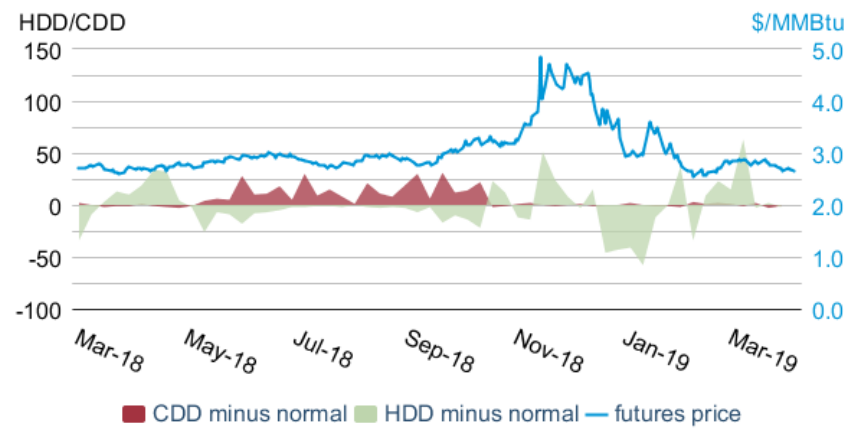


eia CME Group, as compiled by Bloomberg L.P.

## Natural Gas

**Prices:** The front-month natural gas futures contract for delivery at the Henry Hub settled at \$2.64/million British thermal units (MMBtu) on April 4, a decrease of 22 cents/MMBtu from March 1 (**Figure 9**). Temperatures were significantly colder than normal at the beginning of March but remained close to normal for the remainder of the month. For the month, U.S. population-weighted heating degree days (HDD) averaged 9% higher than normal.

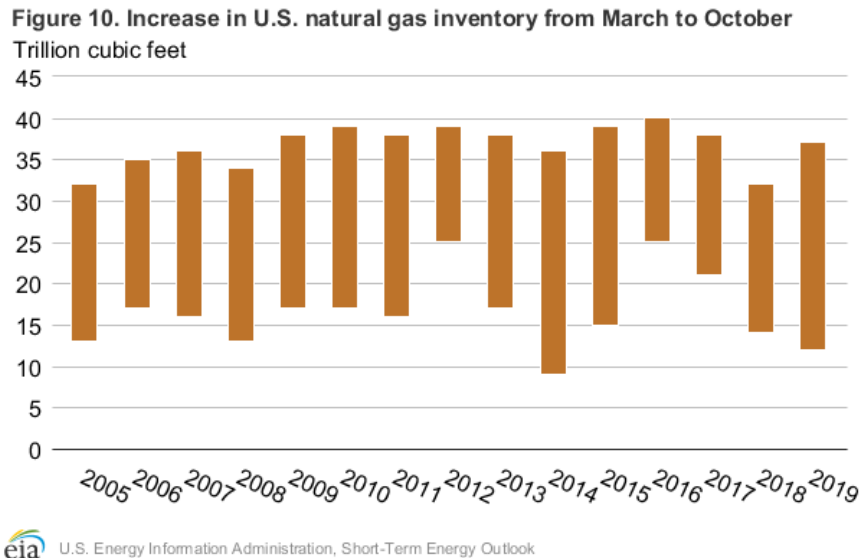
Figure 9. Natural gas front-month futures prices and actual minus historical average HDD and CDD



eia CME Group and National Oceanic and Atmospheric Administration, as compiled by Bloomberg L.P.

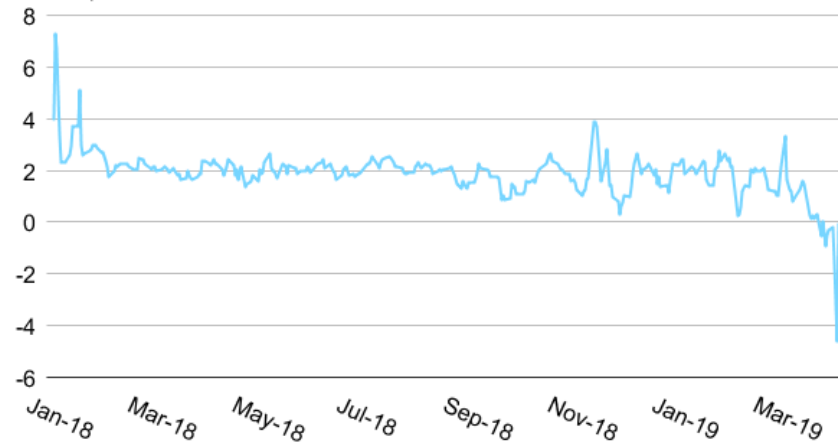
**U.S. natural gas inventory:** EIA estimates that working natural gas in underground storage declined to 1,161 billion cubic feet (Bcf) at the end of March (**Figure 10**), the lowest level since 2014. Inventory levels are generally lowest at the end of the winter season and before the natural gas storage injection season, which occurs from April to October. However, EIA forecasts that steadily rising natural gas production will contribute to inventory builds outpacing the five-

year average during the 2019 injection season, which will bring natural gas inventories to 3,673 Bcf at the end of October, 46 Bcf (1%) lower than the five-year (2014–18) average compared with inventory levels that were 492 Bcf (30%) lower than the five-year average at the end of March.



**Permian Basin spot prices:** Prices at the Waha Hub in West Texas, which is located near the Permian Basin, averaged \$0.73/MMBtu in March, \$2.22/MMBtu lower than the average Henry Hub spot price during the same period. [Multiple force majeure](#) have constrained pipeline capacity and reduced westbound flows out of the Permian, which has put downward pressure on prices. Prices at the Waha Hub turned negative during the last week of March, and they fell to a record low of -\$4.63/MMBtu on April 3 (**Figure 11**). Negative prices indicate that some producers are willing to pay someone to take their natural gas to avoid the costs or penalties of storing, shutting in, or flaring their natural gas production or to lose revenue by reducing their liquids production. EIA expects [additional natural gas pipeline capacity out of the Permian Basin to come online later in 2019](#), which should help to stabilize prices at the Waha Hub.

**Figure 11. Waha Hub spot price**  
dollars per million British thermal units

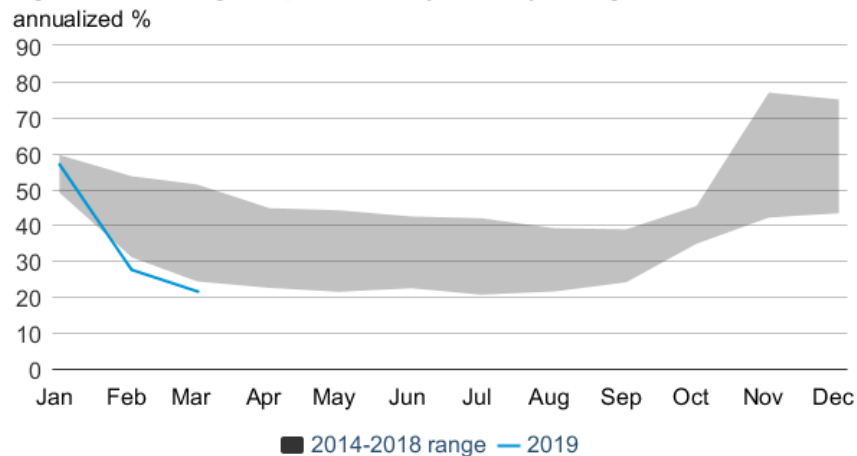


eia Bloomberg L.P.

**Natural gas implied volatility:** The implied volatility of front-month natural gas futures prices, which is calculated using futures and options data, has remained lower than the seasonal five-year range since February, setting the lowest seasonal levels ever recorded for the natural gas front-month contract. Implied volatility of natural gas futures prices had previously been at record highs during the winter months of November and December 2018 because of concerns about low storage levels. Natural gas implied volatility averaged 21.3% in March, lower than the five-year average of 37.7% (**Figure 12**).

Low implied volatility indicates lower expectations by market participants that prices will change significantly in the near future. Record natural gas production levels and growth may be reducing concerns about supply availability, reducing the need for increased storage. However, low inventory levels combined with increasing natural gas use for electric power generation—particularly during periods of higher-than-normal temperatures in the summer—and growth in both liquefied natural gas and pipeline exports could result in higher price volatility during the summer months.

**Figure 12. Natural gas implied volatility, monthly averages**



eia CME Group, as compiled by Bloomberg L.P.

## Notable forecast changes

- EIA forecasts Brent crude oil prices to average \$65 per barrel (b) in 2019, up \$2/b from last month's STEO forecast. Global oil market balances for all of 2019 are slightly tighter than in the March STEO, with forecast inventory builds averaging 0.1 million barrels per day (b/d), slightly less than previously forecast. Given the slightly tighter balances and recent crude oil spot prices increases, EIA now forecasts Brent prices to average \$69/b in the second quarter of 2019, which is \$5/b higher than in the March STEO. However, EIA expects global inventories to build by 0.4 million b/d next year, contributing to a Brent price forecast of \$62/b for 2020, which is unchanged from last month's STEO.
- EIA forecast U.S. lower 48 onshore crude oil production will average 10.5 million b/d in 2020, which is more than 0.2 million b/d above the 2020 forecast in the March STEO. The higher crude oil production is the result of both higher forecast prices in 2019 that have a lagged effect on production and of data updates that increased drilling levels in the Permian Basin. Additionally, EIA forecasts Gulf of Mexico offshore crude oil production will average 2.1 million b/d in 2020, which is almost 0.2 million b/d below the 2020 forecast in the March STEO. The lower forecast is the result of model adjustments that updated decline rate forecasts. The net effect of these changes is that forecast total U.S. crude oil production is 0.1 million b/d more than in the March STEO.
- EIA expects natural gas consumption to increase by 2.5 billion cubic feet per day (Bcf/d) (3.0%) in 2019, up from expected growth of 1.5 Bcf/d (1.8%) in the March STEO. The forecast largely reflects higher consumption in the first quarter of 2019, as a result of estimated heating degree days for March that were higher than previously forecast. The colder-than-expected temperatures in March raised consumption of natural gas for space heating use in the residential and commercial sectors. In addition, EIA slightly

raised its forecast growth of natural gas consumption in the industrial and electric power sectors for 2019.

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

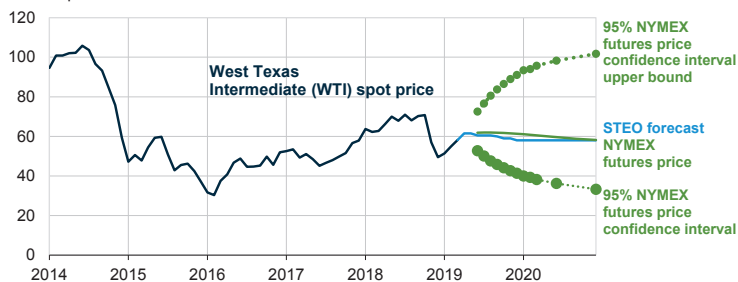
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# Short-Term Energy Outlook

## Chart Gallery for April 2019

**West Texas Intermediate (WTI) crude oil price and NYMEX confidence intervals**  
dollars per barrel

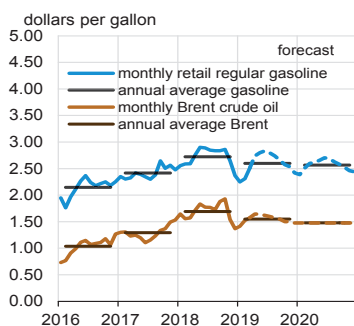


Note: Confidence interval derived from options market information for the five trading days ending Apr 4, 2019. Intervals not calculated for months with sparse trading in near-the-money options contracts.

Source: Short-Term Energy Outlook, April 2019, and CME Group

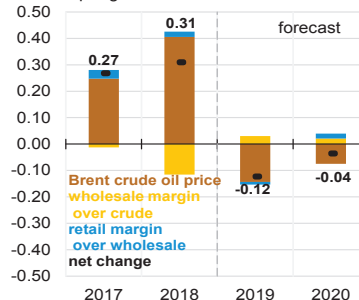


**U.S. gasoline and crude oil prices**

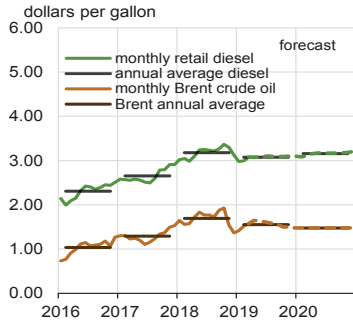


Source: Short-Term Energy Outlook, April 2019

**Components of annual gasoline price changes**  
dollars per gallon

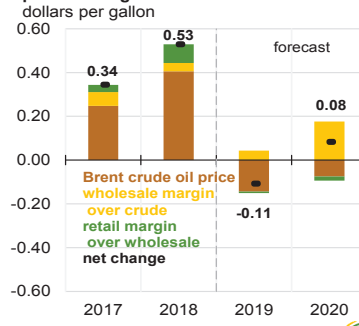


### U.S. diesel and crude oil prices



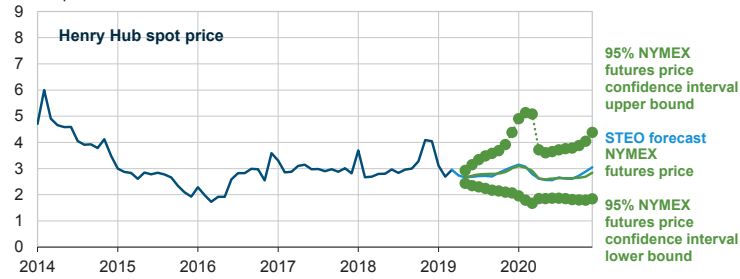
Source: Short-Term Energy Outlook, April 2019

### Components of annual diesel prices changes



### Henry Hub natural gas price and NYMEX confidence intervals

dollars per million Btu



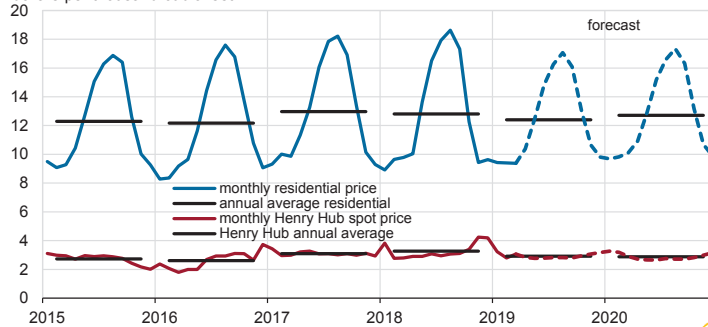
Note: Confidence interval derived from options market information for the five trading days ending Apr 4, 2019. Intervals not calculated for months with sparse trading in near-the-money options contracts.

Source: Short-Term Energy Outlook, April 2019, and CME Group



### U.S. natural gas prices

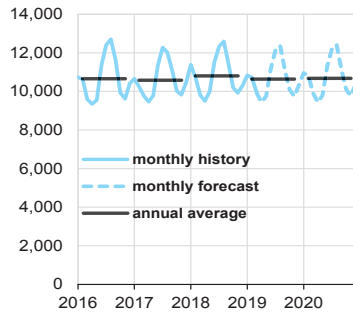
dollars per thousand cubic feet



Source: Short-Term Energy Outlook, April 2019, and Refinitiv

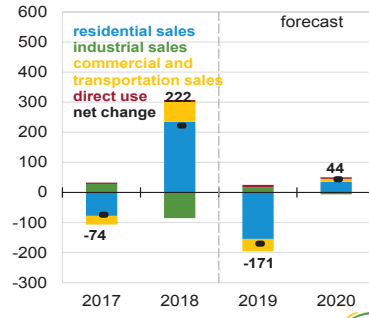


**U.S. electricity consumption**  
million kilowatthours per day

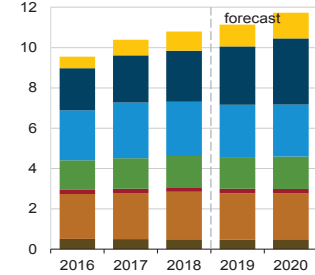


Source: Short-Term Energy Outlook, April 2019

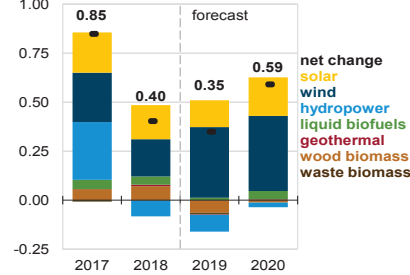
**Components of annual change**  
million kilowatthours per day



**U.S. renewable energy supply**  
quadrillion British thermal units



**Components of annual change**  
quadrillion British thermal units

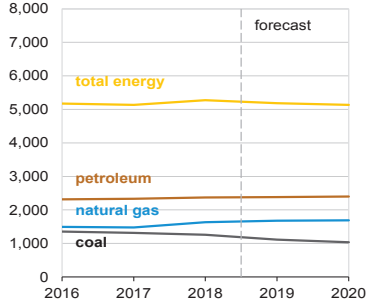


Note: Hydropower excludes pumped storage generation. Liquid biofuels include ethanol and biodiesel. Other biomass includes municipal waste from biogenic sources, landfill gas, and other non-wood waste.

Source: Short-Term Energy Outlook, April 2019

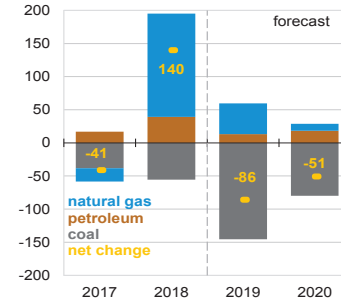


**U.S. annual carbon emissions by source**  
million metric tons



Source: Short-Term Energy Outlook, April 2019

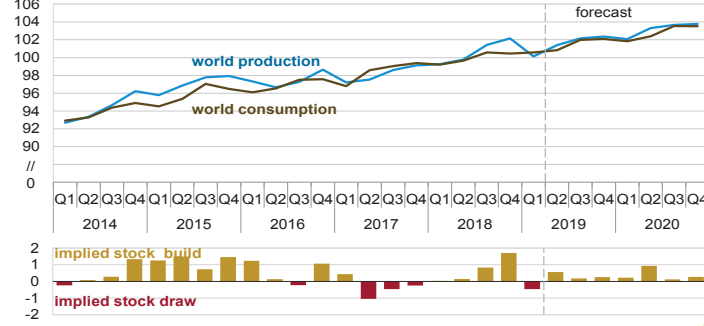
**Components of annual change**  
million metric tons





**World liquid fuels production and consumption balance**

million barrels per day

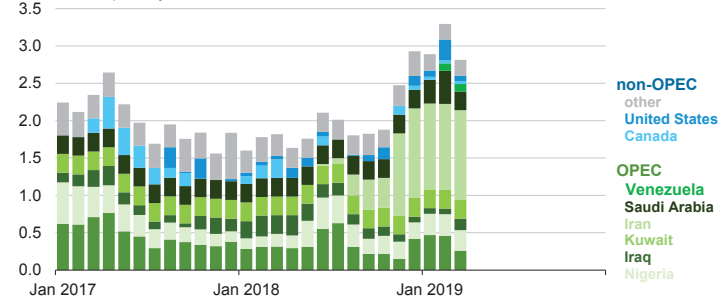


Source: Short-Term Energy Outlook, April 2019



**Estimated unplanned liquid fuels production outages**

million barrels per day

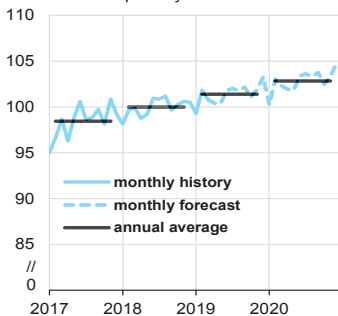


Source: Short-Term Energy Outlook, April 2019



**World liquid fuels consumption**

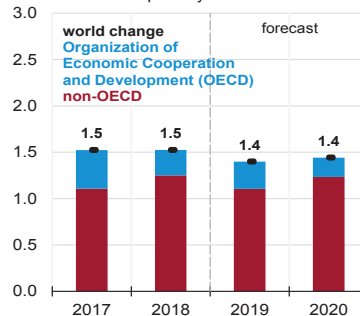
million barrels per day



Source: Short-Term Energy Outlook, April 2019

**Components of annual change**

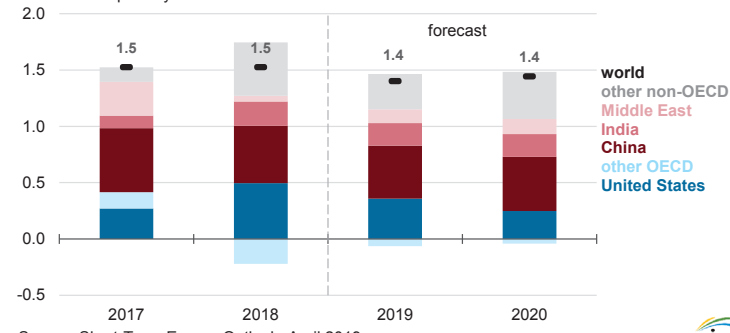
million barrels per day



Source: Short-Term Energy Outlook, April 2019



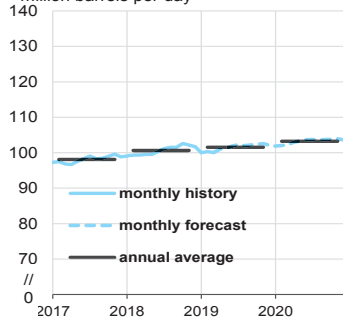
**Annual change in world liquid fuels consumption**  
million barrels per day



Source: Short-Term Energy Outlook, April 2019

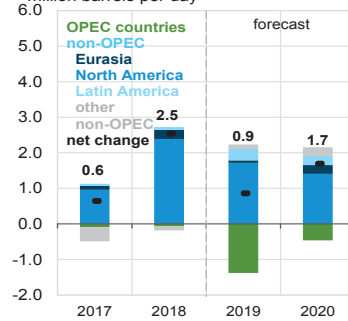


**World crude oil and liquid fuels production**  
million barrels per day

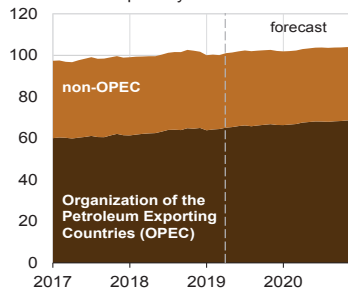


Source: Short-Term Energy Outlook, April 2019

**Components of annual change**  
million barrels per day

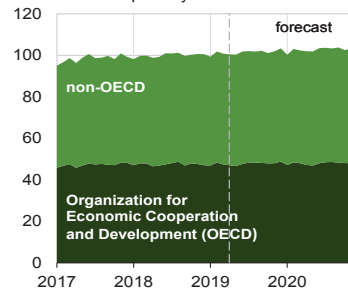


**World liquid fuels production**  
million barrels per day

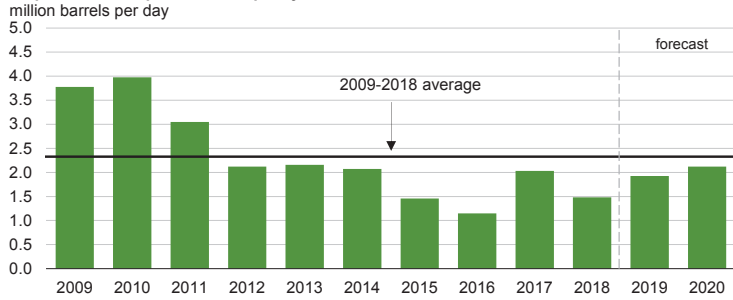


Source: Short-Term Energy Outlook, April 2019

**World liquid fuels consumption**  
million barrels per day



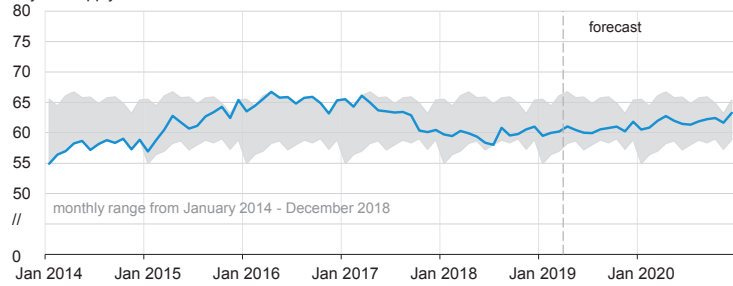
**Organization of the Petroleum Exporting Countries (OPEC)  
surplus crude oil production capacity**



Note: Black line represents 2009-2018 average (2.3 million barrels per day).  
Source: Short-Term Energy Outlook, April 2019



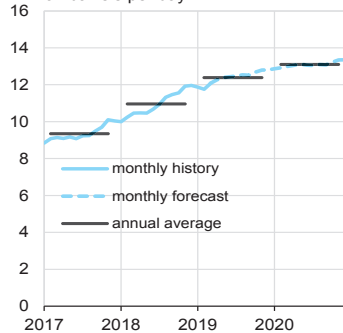
**Organization for Economic Cooperation and Development (OECD)  
commercial inventories of crude oil and other liquids**



Source: Short-Term Energy Outlook, April 2019

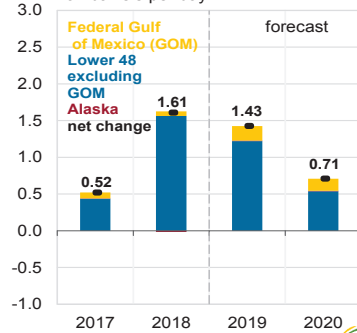


**U.S. crude oil production**

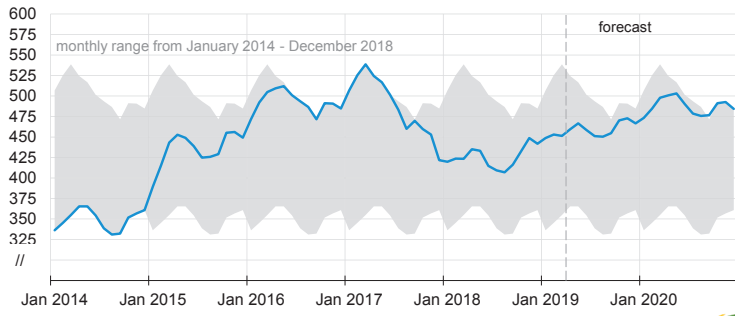


Source: Short-Term Energy Outlook, April 2019

**Components of annual change**



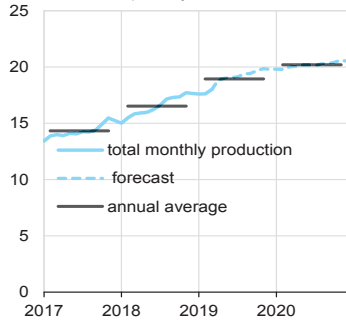
**U.S. commercial crude oil inventories**  
million barrels



Source: Short-Term Energy Outlook, April 2019

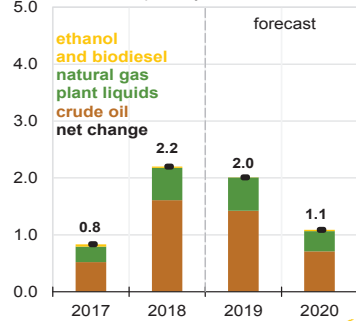


**U.S. crude oil and liquid fuels production**  
million barrels per day

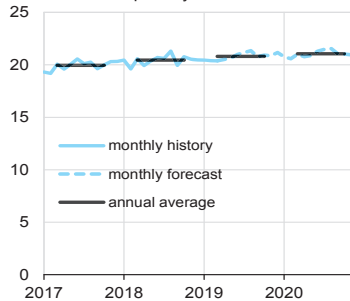


Source: Short-Term Energy Outlook, April 2019

**Components of annual change**  
million barrels per day

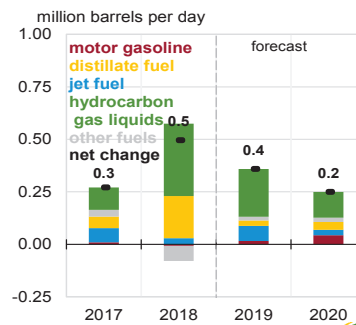


**U.S. liquid fuels product supplied (consumption)**  
million barrels per day

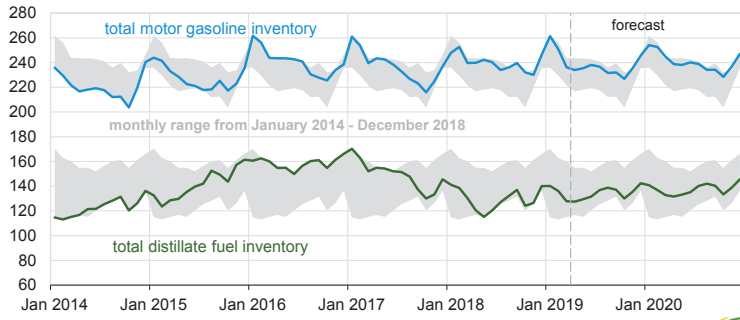


Source: Short-Term Energy Outlook, April 2019

**Components of annual change**  
million barrels per day



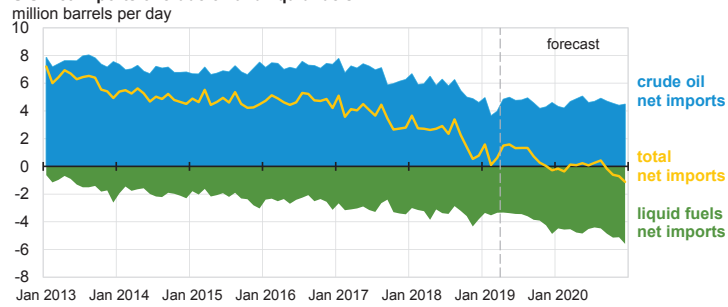
**U.S. gasoline and distillate inventories**  
million barrels



Source: Short-Term Energy Outlook, April 2019



**U.S. net imports of crude oil and liquid fuels**

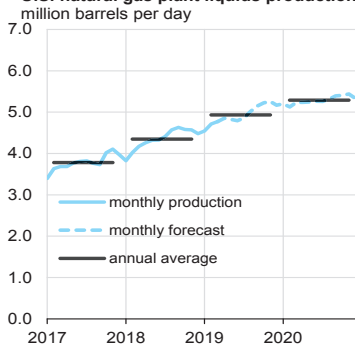


Note: Liquids fuels include: gasoline, distillate fuels, hydrocarbon gas liquids, jet fuel, residual fuel oil, unfinished oils, other hydrocarbons/oxygenates, and other oils.

Source: Short-Term Energy Outlook, April 2019

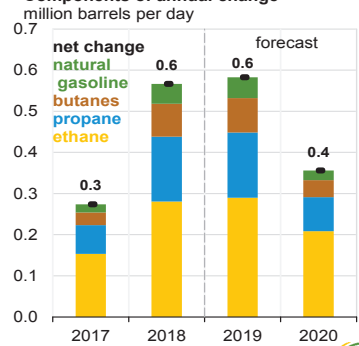


**U.S. natural gas plant liquids production**

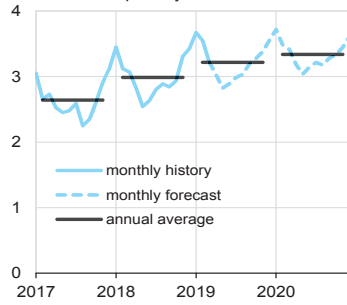


Source: Short-Term Energy Outlook, April 2019

**Components of annual change**

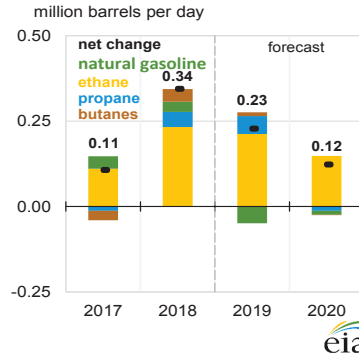


**U.S. hydrocarbon gas liquids product supplied (consumption)**  
million barrels per day

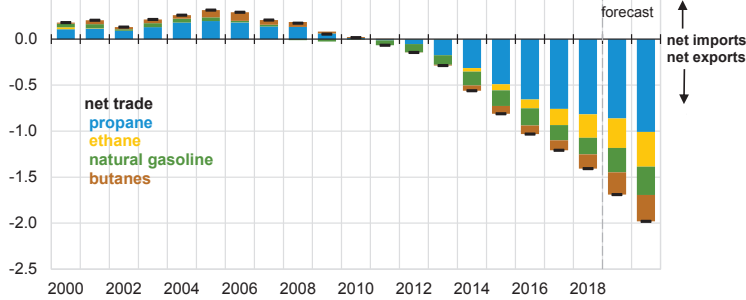


Source: Short-Term Energy Outlook, April 2019

**Components of annual change**



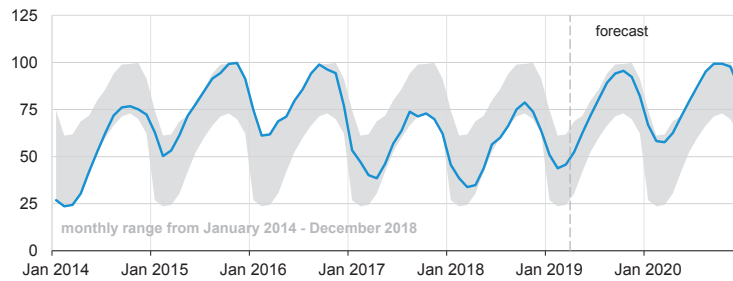
**U.S. net trade of hydrocarbon gas liquids (HGL)**  
million barrels per day



Source: Short-Term Energy Outlook, April 2019



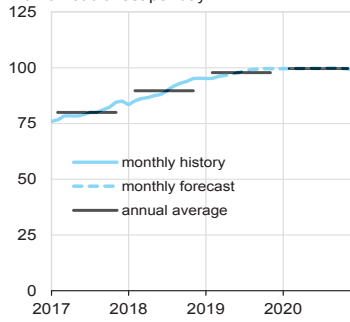
**U.S. commercial propane inventories**  
million barrels



Source: Short-Term Energy Outlook, April 2019

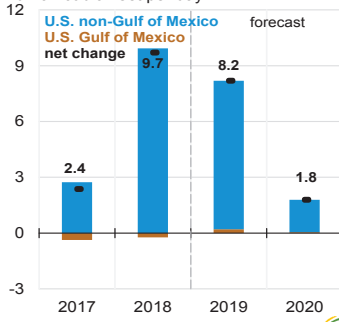


**U.S. marketed natural gas production**  
billion cubic feet per day

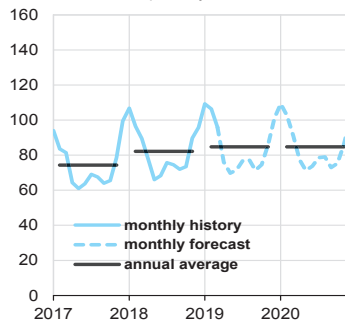


Source: Short-Term Energy Outlook, April 2019

**Components of annual change**  
billion cubic feet per day

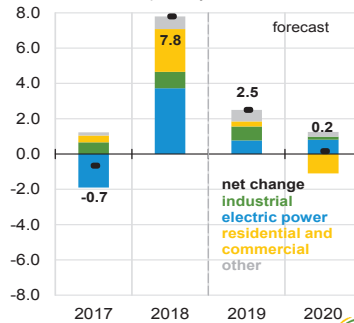


**U.S. natural gas consumption**  
billion cubic feet per day

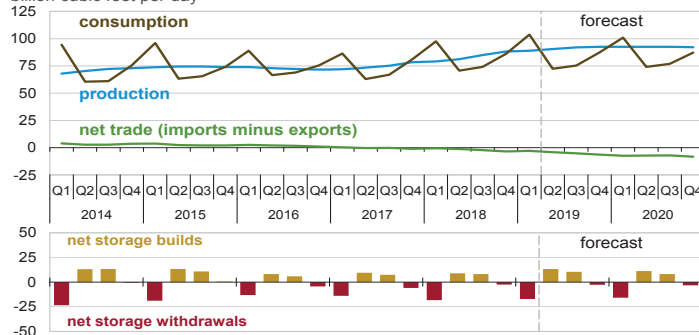


Source: Short-Term Energy Outlook, April 2019

**Components of annual change**  
billion cubic feet per day



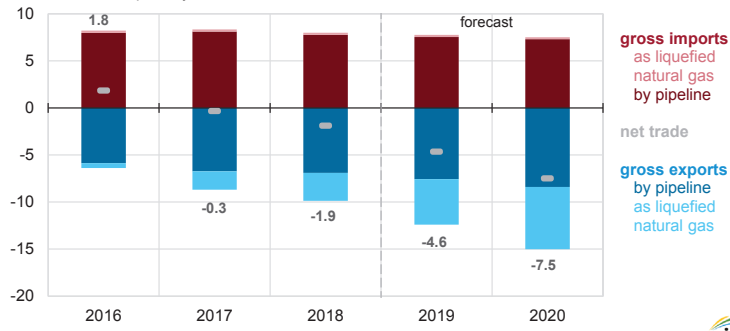
**U.S. natural gas production, consumption, and net imports**  
billion cubic feet per day



Source: Short-Term Energy Outlook, April 2019



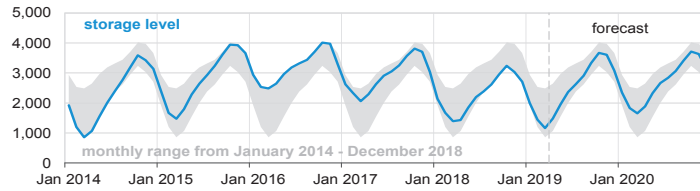
**Annual natural gas trade**  
billion cubic feet per day



Source: Short-Term Energy Outlook, April 2019



**U.S. working natural gas in storage**  
billion cubic feet



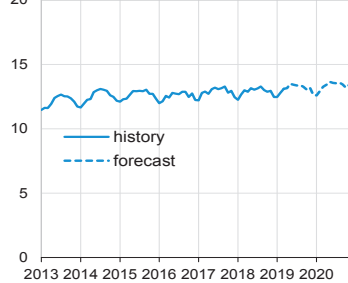
**Percent deviation from 2014 - 2018 average**



Source: Short-Term Energy Outlook, April 2019

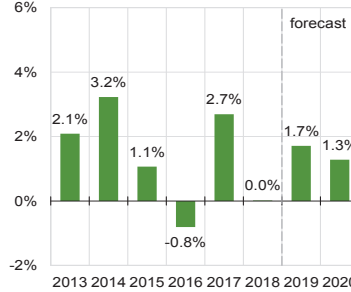


**U.S. monthly residential electricity price**  
cents per kilowatthour



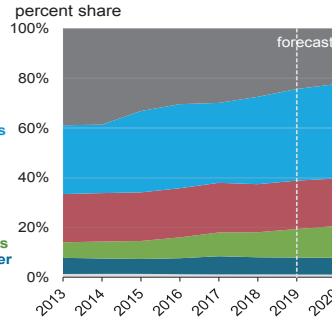
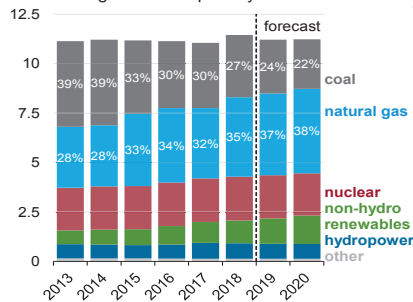
Source: Short-Term Energy Outlook, April 2019

**Annual growth in residential electricity prices**  
percent





**U.S. electricity generation by fuel, all sectors**  
million megawatthours per day

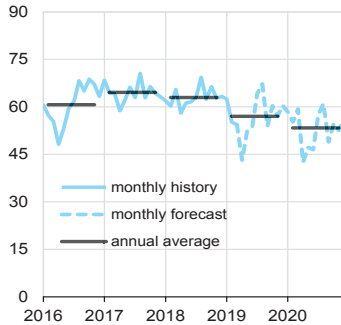


Note: Labels show percentage share of total generation provided by coal and natural gas.

Source: Short-Term Energy Outlook, April 2019

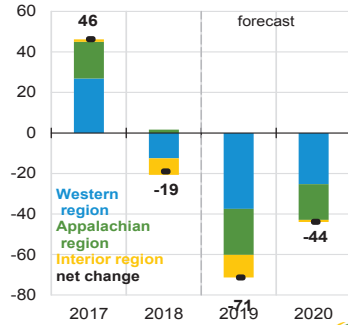


**U.S. coal production**  
million short tons

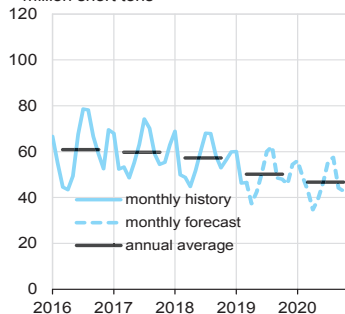


Source: Short-Term Energy Outlook, April 2019

**Components of annual change**  
million short tons

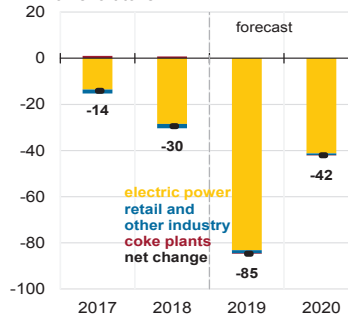


**U.S. coal consumption**  
million short tons

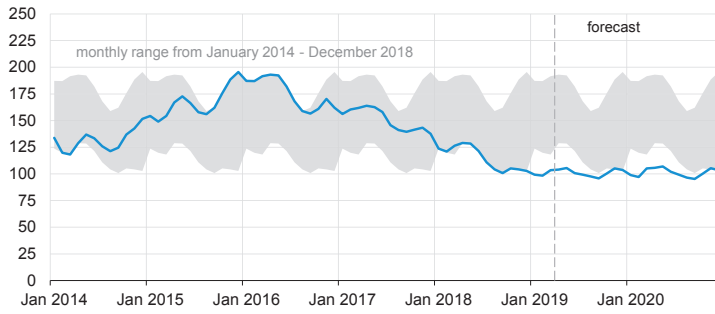


Source: Short-Term Energy Outlook, April 2019

**Components of annual change**  
million short tons



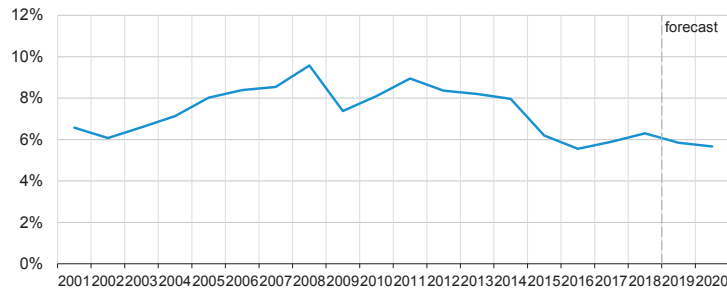
**U.S. electric power coal inventories**  
million short tons



Source: Short-Term Energy Outlook, February 2019



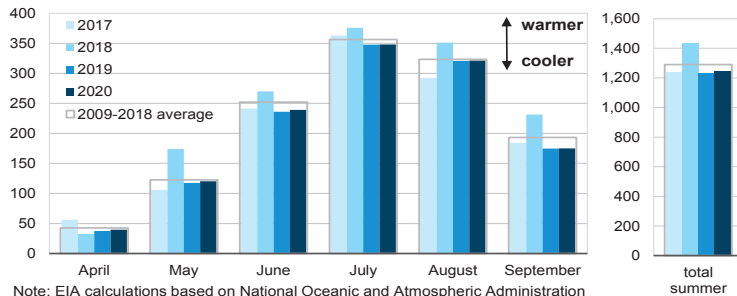
**U.S. annual energy expenditures**  
share of gross domestic product



Source: Short-Term Energy Outlook, April 2019



**U.S. summer cooling degree days**  
population-weighted

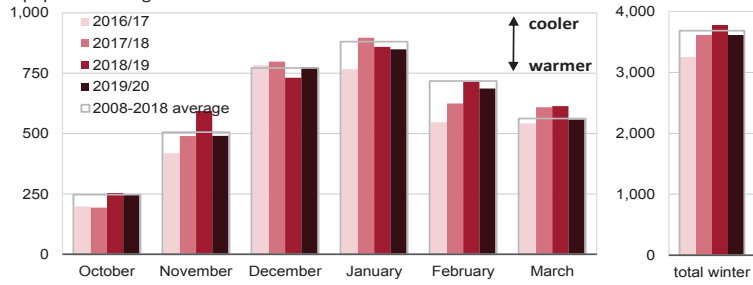


Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data. Projections reflect NOAA's 14-16 month outlook.

Source: Short-Term Energy Outlook, April 2019



**U.S. winter heating degree days**  
population-weighted

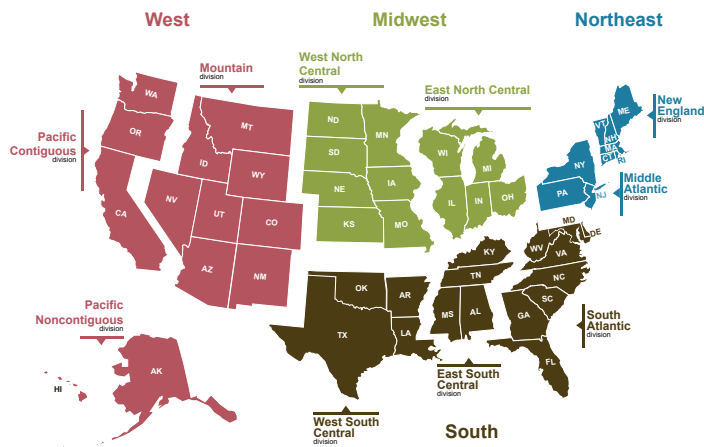


Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data. Projections reflect NOAA's 14-16 month outlook.

Source: Short-Term Energy Outlook, April 2019



**U.S. Census regions and divisions**



Source: U.S. Energy Information Administration, *Short-Term Energy Outlook*



**Table SF01. U.S. Motor Gasoline Summer Outlook**

U.S. Energy Information Administration | Short-Term Energy Outlook - April 2019

|  | 2018          |               |               | 2019          |               |               | Year-over-year Change<br>(percent) |              |              |
|--|---------------|---------------|---------------|---------------|---------------|---------------|------------------------------------|--------------|--------------|
|  | Q2            | Q3            | Season        | Q2            | Q3            | Season        | Q2                                 | Q3           | Season       |
| <b>Nominal Prices (dollars per gallon)</b>                   |               |               |               |               |               |               |                                    |              |              |
| WTI Crude Oil (Spot) <sup>a</sup>                            | <b>1.62</b>   | <b>1.66</b>   | <b>1.64</b>   | <i>1.46</i>   | <i>1.44</i>   | <i>1.45</i>   | <i>-10.1</i>                       | <i>-13.4</i> | <i>-11.8</i> |
| Brent Crude Oil Price (Spot)                                 | <b>1.77</b>   | <b>1.79</b>   | <b>1.78</b>   | <i>1.64</i>   | <i>1.57</i>   | <i>1.60</i>   | <i>-7.8</i>                        | <i>-12.0</i> | <i>-9.9</i>  |
| U.S. Refiner Average Crude Oil Cost                          | <b>1.60</b>   | <b>1.64</b>   | <b>1.62</b>   | <i>1.42</i>   | <i>1.40</i>   | <i>1.41</i>   | <i>-11.2</i>                       | <i>-14.9</i> | <i>-13.1</i> |
| Wholesale Gasoline Price <sup>b</sup>                        | <b>2.13</b>   | <b>2.13</b>   | <b>2.13</b>   | <i>2.06</i>   | <i>1.97</i>   | <i>2.01</i>   | <i>-3.4</i>                        | <i>-7.9</i>  | <i>-5.6</i>  |
| Wholesale Diesel Fuel Price <sup>b</sup>                     | <b>2.19</b>   | <b>2.22</b>   | <b>2.21</b>   | <i>2.08</i>   | <i>2.08</i>   | <i>2.08</i>   | <i>-5.1</i>                        | <i>-6.4</i>  | <i>-5.7</i>  |
| Regular Gasoline Retail Price <sup>c</sup>                   | <b>2.85</b>   | <b>2.84</b>   | <b>2.85</b>   | <i>2.79</i>   | <i>2.73</i>   | <i>2.76</i>   | <i>-2.1</i>                        | <i>-3.8</i>  | <i>-3.0</i>  |
| Diesel Fuel Retail Price <sup>c</sup>                        | <b>3.20</b>   | <b>3.24</b>   | <b>3.22</b>   | <i>3.08</i>   | <i>3.10</i>   | <i>3.09</i>   | <i>-3.6</i>                        | <i>-4.4</i>  | <i>-4.0</i>  |
| <b>Gasoline Consumption/Supply (million barrels per day)</b> |               |               |               |               |               |               |                                    |              |              |
| Total Consumption  | <b>9.512</b>  | <b>9.506</b>  | <b>9.509</b>  | <i>9.537</i>  | <i>9.538</i>  | <i>9.538</i>  | <i>0.3</i>                         | <i>0.3</i>   | <i>0.3</i>   |
| Total Refinery and Blender Net Supply <sup>d</sup>           | <b>8.506</b>  | <b>8.600</b>  | <b>8.553</b>  | <i>8.604</i>  | <i>8.661</i>  | <i>8.633</i>  | <i>1.2</i>                         | <i>0.7</i>   | <i>0.9</i>   |
| Fuel Ethanol Blending  | <b>0.944</b>  | <b>0.958</b>  | <b>0.951</b>  | <i>0.974</i>  | <i>0.966</i>  | <i>0.970</i>  | <i>3.2</i>                         | <i>0.8</i>   | <i>2.0</i>   |
| Total Stock Withdrawal <sup>e</sup>                          | <b>-0.008</b> | <b>0.007</b>  | <b>0.000</b>  | <i>-0.020</i> | <i>0.065</i>  | <i>0.022</i>  |                                    |              |              |
| Net Imports <sup>e</sup>                                     | <b>0.069</b>  | <b>-0.059</b> | <b>0.005</b>  | <i>-0.021</i> | <i>-0.153</i> | <i>-0.087</i> |                                    |              |              |
| Refinery Utilization (percent)                               | <b>94.1</b>   | <b>95.1</b>   | <b>94.6</b>   | <i>93.2</i>   | <i>94.3</i>   | <i>93.7</i>   |                                    |              |              |
| <b>Total Gasoline Stocks (million barrels)</b>               |               |               |               |               |               |               |                                    |              |              |
| Beginning  | <b>239.6</b>  | <b>240.3</b>  | <b>239.6</b>  | <i>236.1</i>  | <i>238.0</i>  | <i>236.1</i>  |                                    |              |              |
| Ending   | <b>240.3</b>  | <b>239.7</b>  | <b>239.7</b>  | <i>238.0</i>  | <i>232.0</i>  | <i>232.0</i>  |                                    |              |              |
| <b>Economic Indicators (annualized billion 2009 dollars)</b> |               |               |               |               |               |               |                                    |              |              |
| Real GDP   | <b>18,512</b> | <b>18,665</b> | <b>18,588</b> | <i>18,967</i> | <i>19,084</i> | <i>19,025</i> | <i>2.5</i>                         | <i>2.2</i>   | <i>2.4</i>   |
| Real Income  | <b>14,282</b> | <b>14,375</b> | <b>14,328</b> | <i>14,684</i> | <i>14,765</i> | <i>14,725</i> | <i>2.8</i>                         | <i>2.7</i>   | <i>2.8</i>   |

<sup>a</sup> Spot Price of West Texas Intermediate (WTI) crude oil.

<sup>b</sup> Price product sold by refiners to resellers.

<sup>c</sup> Average retail price including taxes.

<sup>d</sup> Finished gasoline net production minus gasoline blend components net inputs minus fuel ethanol blending and supply adjustment.

<sup>e</sup> Total stock withdrawal and net imports includes both finished gasoline and gasoline blend components.

GDP = gross domestic product.

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

Sources: Historical data: latest data available from: EIA, *Petroleum Supply Monthly*, DOE/EIA-0109; Monthly Energy Review, DOE/EIA-0035; U.S. Department of Commerce, Bureau of Economic Analysis (GDP and income); Thomson Reuters (WTI and Brent crude oil spot prices). Macroeconomic projections are based on IHS Markit Macroeconomic Forecast Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - April 2019

|                           | 2014  | 2015  | 2016  | 2017  | 2018  | Forecast<br>2019 | Change<br>from 2018 |
|---------------------------|-------|-------|-------|-------|-------|------------------|---------------------|
| <b>United States</b>      |       |       |       |       |       |                  |                     |
| Usage (kWh)               | 3,038 | 3,165 | 3,327 | 3,126 | 3,247 | 3,079            | -5.2%               |
| Price (cents/kWh)         | 13.04 | 12.92 | 12.77 | 13.14 | 13.16 | 13.39            | 1.8%                |
| Expenditures              | \$396 | \$409 | \$425 | \$411 | \$427 | \$412            | -3.5%               |
| <b>New England</b>        |       |       |       |       |       |                  |                     |
| Usage (kWh)               | 1,930 | 1,982 | 2,108 | 1,986 | 2,115 | 1,991            | -5.9%               |
| Price (cents/kWh)         | 17.63 | 18.65 | 18.34 | 19.25 | 20.14 | 20.94            | 4.0%                |
| Expenditures              | \$340 | \$370 | \$386 | \$382 | \$426 | \$417            | -2.1%               |
| <b>Middle Atlantic</b>    |       |       |       |       |       |                  |                     |
| Usage (kWh)               | 2,234 | 2,376 | 2,549 | 2,328 | 2,445 | 2,332            | -4.7%               |
| Price (cents/kWh)         | 16.90 | 16.37 | 15.90 | 16.39 | 16.38 | 16.30            | -0.5%               |
| Expenditures              | \$378 | \$389 | \$405 | \$382 | \$400 | \$380            | -5.1%               |
| <b>East North Central</b> |       |       |       |       |       |                  |                     |
| Usage (kWh)               | 2,505 | 2,565 | 2,902 | 2,585 | 2,797 | 2,639            | -5.6%               |
| Price (cents/kWh)         | 13.24 | 13.27 | 13.08 | 13.43 | 13.22 | 13.66            | 3.3%                |
| Expenditures              | \$332 | \$340 | \$380 | \$347 | \$370 | \$360            | -2.6%               |
| <b>West North Central</b> |       |       |       |       |       |                  |                     |
| Usage (kWh)               | 3,041 | 3,075 | 3,302 | 3,039 | 3,235 | 3,039            | -6.0%               |
| Price (cents/kWh)         | 12.42 | 12.65 | 12.85 | 13.41 | 13.32 | 13.88            | 4.2%                |
| Expenditures              | \$378 | \$389 | \$424 | \$408 | \$431 | \$422            | -2.1%               |
| <b>South Atlantic</b>     |       |       |       |       |       |                  |                     |
| Usage (kWh)               | 3,778 | 3,999 | 4,147 | 3,852 | 3,868 | 3,787            | -2.1%               |
| Price (cents/kWh)         | 12.09 | 12.04 | 11.79 | 12.09 | 11.86 | 11.93            | 0.6%                |
| Expenditures              | \$457 | \$482 | \$489 | \$466 | \$459 | \$452            | -1.5%               |
| <b>East South Central</b> |       |       |       |       |       |                  |                     |
| Usage (kWh)               | 4,034 | 4,279 | 4,413 | 4,038 | 4,322 | 4,067            | -5.9%               |
| Price (cents/kWh)         | 11.09 | 10.91 | 10.93 | 11.36 | 11.20 | 11.61            | 3.7%                |
| Expenditures              | \$447 | \$467 | \$482 | \$459 | \$484 | \$472            | -2.4%               |
| <b>West South Central</b> |       |       |       |       |       |                  |                     |
| Usage (kWh)               | 4,256 | 4,538 | 4,605 | 4,362 | 4,643 | 4,242            | -8.6%               |
| Price (cents/kWh)         | 11.46 | 11.03 | 10.58 | 10.80 | 10.93 | 11.09            | 1.5%                |
| Expenditures              | \$488 | \$501 | \$487 | \$471 | \$508 | \$471            | -7.3%               |
| <b>Mountain</b>           |       |       |       |       |       |                  |                     |
| Usage (kWh)               | 3,230 | 3,298 | 3,437 | 3,384 | 3,371 | 3,206            | -4.9%               |
| Price (cents/kWh)         | 12.32 | 12.33 | 12.04 | 12.24 | 12.27 | 12.48            | 1.7%                |
| Expenditures              | \$398 | \$407 | \$414 | \$414 | \$414 | \$400            | -3.3%               |
| <b>Pacific</b>            |       |       |       |       |       |                  |                     |
| Usage (kWh)               | 2,090 | 2,051 | 2,097 | 2,193 | 2,191 | 2,054            | -6.3%               |
| Price (cents/kWh)         | 15.17 | 15.33 | 16.00 | 16.35 | 17.07 | 17.40            | 1.9%                |
| Expenditures              | \$317 | \$314 | \$336 | \$359 | \$374 | \$357            | -4.5%               |

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

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

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

U.S. Energy Information Administration | Short-Term Energy Outlook - April 2019

|  | 2018   |        |        |        | 2019   |        |        |        | 2020   |        |        |        | Year   |        |        |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|  | Q1     | Q2     | Q3     | Q4     | Q1     | Q2     | Q3     | Q4     | Q1     | Q2     | Q3     | Q4     | 2018   | 2019   | 2020   |
| <b>Energy Supply</b>   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Crude Oil Production (a)<br>(million barrels per day) .....                    | 10.23  | 10.54  | 11.24  | 11.81  | 11.91  | 12.36  | 12.51  | 12.76  | 12.93  | 13.08  | 13.07  | 13.30  | 10.96  | 12.39  | 13.10  |
| Dry Natural Gas Production<br>(billion cubic feet per day) .....               | 79.13  | 81.17  | 84.96  | 88.20  | 88.93  | 90.42  | 92.06  | 92.55  | 92.51  | 92.58  | 92.58  | 92.21  | 83.39  | 91.00  | 92.47  |
| Coal Production<br>(million short tons) .....                                  | 188    | 181    | 195    | 192    | 172    | 149    | 185    | 178    | 173    | 136    | 167    | 164    | 756    | 684    | 640    |
| <b>Energy Consumption</b>  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Liquid Fuels<br>(million barrels per day) .....                                | 20.24  | 20.33  | 20.63  | 20.60  | 20.41  | 20.72  | 21.11  | 20.99  | 20.79  | 20.99  | 21.38  | 21.08  | 20.45  | 20.81  | 21.06  |
| Natural Gas<br>(billion cubic feet per day) .....                              | 97.61  | 70.71  | 74.09  | 86.25  | 103.67 | 72.44  | 75.30  | 87.31  | 100.90 | 74.07  | 76.90  |        | 82.11  | 84.61  | 84.76  |
| Coal (b)<br>(million short tons) .....   | 168    | 157    | 194    | 169    | 153    | 131    | 171    | 148    | 148    | 120    | 158    | 134    | 687    | 603    | 560    |
| Electricity<br>(billion kilowatt hours per day) .....                          | 10.62  | 10.33  | 12.14  | 10.14  | 10.49  | 10.12  | 11.88  | 10.06  | 10.55  | 10.17  | 11.93  | 10.08  | 10.81  | 10.64  | 10.68  |
| Renewables (c)<br>(quadrillion Btu) .....                                      | 2.92   | 3.10   | 2.72   | 2.74   | 2.88   | 3.17   | 2.85   | 2.96   | 3.03   | 3.30   | 3.01   | 3.10   | 11.48  | 11.87  | 12.44  |
| Total Energy Consumption (d)<br>(quadrillion Btu) .....                        | 26.41  | 24.05  | 25.16  | 25.64  | 26.33  | 23.56  | 24.82  | 25.35  | 26.50  | 23.70  | 24.91  | 25.22  | 101.26 | 100.06 | 100.33 |
| <b>Energy Prices</b>   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Crude Oil West Texas Intermediate Spot<br>(dollars per barrel) .....           | 62.90  | 68.07  | 69.69  | 59.59  | 54.82  | 61.19  | 60.34  | 58.67  | 58.00  | 58.00  | 58.00  | 58.00  | 65.06  | 58.80  | 58.00  |
| Natural Gas Henry Hub Spot<br>(dollars per million Btu) .....                  | 3.02   | 2.85   | 2.93   | 3.80   | 2.92   | 2.70   | 2.71   | 2.95   | 3.00   | 2.58   | 2.63   | 2.89   | 3.15   | 2.82   | 2.77   |
| Coal<br>(dollars per million Btu) .....  | 2.06   | 2.06   | 2.06   | 2.08   | 2.11   | 2.13   | 2.11   | 2.10   | 2.12   | 2.13   | 2.11   | 2.11   | 2.06   | 2.11   | 2.11   |
| <b>Macroeconomic</b>   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Real Gross Domestic Product<br>(billion chained 2012 dollars - SAAR) .....     | 18,324 | 18,512 | 18,665 | 18,785 | 18,842 | 18,967 | 19,084 | 19,201 | 19,305 | 19,397 | 19,478 | 19,557 | 18,571 | 19,024 | 19,434 |
| Percent change from prior year .....   | 2.6    | 2.9    | 3.0    | 3.1    | 2.8    | 2.5    | 2.2    | 2.2    | 2.5    | 2.3    | 2.1    | 1.9    | 2.9    | 2.4    | 2.2    |
| GDP Implicit Price Deflator<br>(Index, 2012=100) .....                         | 109.3  | 110.2  | 110.7  | 111.2  | 111.7  | 112.2  | 112.7  | 113.4  | 114.1  | 114.8  | 115.4  | 116.1  | 110.3  | 112.5  | 115.1  |
| Percent change from prior year .....   | 2.0    | 2.4    | 2.3    | 2.2    | 2.2    | 1.8    | 1.9    | 2.0    | 2.1    | 2.3    | 2.3    | 2.4    | 2.2    | 2.0    | 2.3    |
| Real Disposable Personal Income<br>(billion chained 2012 dollars - SAAR) ..... | 14,220 | 14,282 | 14,375 | 14,524 | 14,602 | 14,684 | 14,765 | 14,850 | 14,930 | 15,027 | 15,113 | 15,189 | 14,350 | 14,725 | 15,065 |
| Percent change from prior year .....   | 2.8    | 2.7    | 2.8    | 3.3    | 2.7    | 2.8    | 2.7    | 2.2    | 2.2    | 2.3    | 2.4    | 2.3    | 2.9    | 2.6    | 2.3    |
| Manufacturing Production Index<br>(Index, 2012=100) .....                      | 104.1  | 104.8  | 105.9  | 106.4  | 106.3  | 107.0  | 108.0  | 108.8  | 109.4  | 109.7  | 110.1  | 110.5  | 105.3  | 107.5  | 109.9  |
| Percent change from prior year .....   | 2.1    | 2.0    | 3.6    | 2.7    | 2.1    | 2.1    | 1.9    | 2.3    | 2.9    | 2.5    | 2.0    | 1.6    | 2.6    | 2.1    | 2.2    |
| <b>Weather</b>   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| U.S. Heating Degree-Days .....   | 2,130  | 523    | 48     | 1,577  | 2,188  | 478    | 74     | 1,511  | 2,093  | 484    | 74     | 1,510  | 4,278  | 4,251  | 4,160  |
| U.S. Cooling Degree-Days .....   | 52     | 476    | 958    | 98     | 47     | 391    | 843    | 90     | 43     | 399    | 845    | 90     | 1,585  | 1,371  | 1,377  |

- = 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 - April 2019

|  | 2018         |              |              |              | 2019         |              |              |              | 2020         |              |              |              | Year         |              |              |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|  | Q1           | Q2           | Q3           | Q4           | Q1           | Q2           | Q3           | Q4           | Q1           | Q2           | Q3           | Q4           | 2018         | 2019         | 2020         |
| <b>Crude Oil</b> (dollars per barrel)                        |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| West Texas Intermediate Spot Average .....                   | <b>62.90</b> | <b>68.07</b> | <b>69.69</b> | <b>59.59</b> | <b>54.82</b> | <i>61.19</i> | <i>60.34</i> | <i>58.67</i> | <i>58.00</i> | <i>58.00</i> | <i>58.00</i> | <i>58.00</i> | <b>65.06</b> | <i>58.80</i> | <i>58.00</i> |
| Brent Spot Average .....                                     | <b>66.84</b> | <b>74.53</b> | <b>75.02</b> | <b>68.29</b> | <b>63.13</b> | <i>68.69</i> | <i>66.03</i> | <i>62.67</i> | <i>62.00</i> | <i>62.00</i> | <i>62.00</i> | <i>62.00</i> | <b>71.19</b> | <i>65.15</i> | <i>62.00</i> |
| U.S. Imported Average .....                                  | <b>58.08</b> | <b>64.67</b> | <b>66.20</b> | <b>55.33</b> | <b>54.00</b> | <i>61.21</i> | <i>58.36</i> | <i>54.36</i> | <i>52.56</i> | <i>52.56</i> | <i>52.56</i> | <i>52.56</i> | <b>61.35</b> | <i>57.16</i> | <i>52.56</i> |
| U.S. Refiner Average Acquisition Cost .....                  | <b>61.89</b> | <b>67.29</b> | <b>69.03</b> | <b>59.39</b> | <b>55.64</b> | <i>59.73</i> | <i>58.71</i> | <i>56.48</i> | <i>55.36</i> | <i>55.36</i> | <i>55.36</i> | <i>55.36</i> | <b>64.45</b> | <i>57.68</i> | <i>55.36</i> |
| <b>U.S. Liquid Fuels</b> (cents per gallon)                  |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| <b>Refiner Prices for Resale</b>                             |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| Gasoline .....   | <b>186</b>   | <b>213</b>   | <b>213</b>   | <b>178</b>   | <b>169</b>   | <i>206</i>   | <i>197</i>   | <i>173</i>   | <i>178</i>   | <i>191</i>   | <i>185</i>   | <i>170</i>   | <b>198</b>   | <i>187</i>   | <i>181</i>   |
| Diesel Fuel .....  | <b>199</b>   | <b>219</b>   | <b>222</b>   | <b>212</b>   | <b>190</b>   | <i>208</i>   | <i>208</i>   | <i>206</i>   | <i>210</i>   | <i>215</i>   | <i>215</i>   | <i>214</i>   | <b>213</b>   | <i>203</i>   | <i>213</i>   |
| Heating Oil .....  | <b>193</b>   | <b>205</b>   | <b>214</b>   | <b>201</b>   | <b>189</b>   | <i>197</i>   | <i>199</i>   | <i>199</i>   | <i>205</i>   | <i>204</i>   | <i>205</i>   | <i>207</i>   | <b>200</b>   | <i>195</i>   | <i>205</i>   |
| <b>Refiner Prices to End Users</b>                           |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| Jet Fuel .....   | <b>197</b>   | <b>217</b>   | <b>220</b>   | <b>212</b>   | <b>189</b>   | <i>204</i>   | <i>206</i>   | <i>203</i>   | <i>207</i>   | <i>211</i>   | <i>211</i>   | <i>210</i>   | <b>212</b>   | <i>201</i>   | <i>210</i>   |
| No. 6 Residual Fuel Oil (a) .....                            | <b>149</b>   | <b>162</b>   | <b>176</b>   | <b>175</b>   | <b>144</b>   | <i>145</i>   | <i>145</i>   | <i>127</i>   | <i>113</i>   | <i>110</i>   | <i>111</i>   | <i>111</i>   | <b>166</b>   | <i>140</i>   | <i>111</i>   |
| <b>Retail Prices Including Taxes</b>                         |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| Gasoline Regular Grade (b) .....                             | <b>258</b>   | <b>285</b>   | <b>284</b>   | <b>262</b>   | <b>236</b>   | <i>279</i>   | <i>273</i>   | <i>251</i>   | <i>250</i>   | <i>266</i>   | <i>263</i>   | <i>248</i>   | <b>273</b>   | <i>260</i>   | <i>257</i>   |
| Gasoline All Grades (b) .....                                | <b>270</b>   | <b>294</b>   | <b>292</b>   | <b>271</b>   | <b>245</b>   | <i>289</i>   | <i>284</i>   | <i>263</i>   | <i>262</i>   | <i>278</i>   | <i>275</i>   | <i>260</i>   | <b>282</b>   | <i>271</i>   | <i>269</i>   |
| On-highway Diesel Fuel .....                                 | <b>302</b>   | <b>320</b>   | <b>324</b>   | <b>327</b>   | <b>302</b>   | <i>308</i>   | <i>310</i>   | <i>310</i>   | <i>311</i>   | <i>317</i>   | <i>317</i>   | <i>319</i>   | <b>318</b>   | <i>308</i>   | <i>316</i>   |
| Heating Oil .....  | <b>287</b>   | <b>298</b>   | <b>325</b>   | <b>316</b>   | <b>299</b>   | <i>292</i>   | <i>289</i>   | <i>295</i>   | <i>304</i>   | <i>296</i>   | <i>295</i>   | <i>303</i>   | <b>301</b>   | <i>296</i>   | <i>302</i>   |
| <b>Natural Gas</b>   |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| Henry Hub Spot (dollars per thousand cubic feet) .....       | <b>3.13</b>  | <b>2.96</b>  | <b>3.04</b>  | <b>3.94</b>  | <b>3.02</b>  | <i>2.80</i>  | <i>2.81</i>  | <i>3.06</i>  | <i>3.12</i>  | <i>2.67</i>  | <i>2.73</i>  | <i>2.99</i>  | <b>3.27</b>  | <i>2.92</i>  | <i>2.88</i>  |
| Henry Hub Spot (dollars per million Btu) .....               | <b>3.02</b>  | <b>2.85</b>  | <b>2.93</b>  | <b>3.80</b>  | <b>2.92</b>  | <i>2.70</i>  | <i>2.71</i>  | <i>2.95</i>  | <i>3.00</i>  | <i>2.58</i>  | <i>2.63</i>  | <i>2.89</i>  | <b>3.15</b>  | <i>2.82</i>  | <i>2.77</i>  |
| <b>U.S. Retail Prices</b> (dollars per thousand cubic feet)  |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| Industrial Sector .....                                      | <b>4.44</b>  | <b>3.83</b>  | <b>3.73</b>  | <b>4.71</b>  | <b>4.42</b>  | <i>3.79</i>  | <i>3.70</i>  | <i>4.18</i>  | <i>4.51</i>  | <i>3.67</i>  | <i>3.61</i>  | <i>4.10</i>  | <b>4.20</b>  | <i>4.04</i>  | <i>4.00</i>  |
| Commercial Sector .....                                      | <b>7.64</b>  | <b>8.08</b>  | <b>8.77</b>  | <b>7.61</b>  | <b>7.75</b>  | <i>8.11</i>  | <i>8.45</i>  | <i>7.73</i>  | <i>7.72</i>  | <i>8.10</i>  | <i>8.42</i>  | <i>7.67</i>  | <b>7.82</b>  | <i>7.87</i>  | <i>7.84</i>  |
| Residential Sector .....                                     | <b>9.37</b>  | <b>11.93</b> | <b>17.93</b> | <b>9.97</b>  | <b>9.41</b>  | <i>11.74</i> | <i>16.45</i> | <i>10.63</i> | <i>9.85</i>  | <i>12.23</i> | <i>16.72</i> | <i>10.69</i> | <b>10.48</b> | <i>10.55</i> | <i>10.91</i> |
| <b>U.S. Electricity</b>                                      |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| <b>Power Generation Fuel Costs</b> (dollars per million Btu) |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| Coal .....   | <b>2.06</b>  | <b>2.06</b>  | <b>2.06</b>  | <b>2.08</b>  | <b>2.11</b>  | <i>2.13</i>  | <i>2.11</i>  | <i>2.10</i>  | <i>2.12</i>  | <i>2.13</i>  | <i>2.11</i>  | <i>2.11</i>  | <b>2.06</b>  | <i>2.11</i>  | <i>2.11</i>  |
| Natural Gas .....  | <b>3.96</b>  | <b>3.09</b>  | <b>3.23</b>  | <b>4.05</b>  | <b>3.37</b>  | <i>2.79</i>  | <i>2.77</i>  | <i>3.28</i>  | <i>3.49</i>  | <i>2.69</i>  | <i>2.63</i>  | <i>3.17</i>  | <b>3.54</b>  | <i>3.02</i>  | <i>2.95</i>  |
| Residual Fuel Oil (c) .....                                  | <b>11.47</b> | <b>13.02</b> | <b>14.02</b> | <b>14.49</b> | <b>11.60</b> | <i>13.49</i> | <i>12.88</i> | <i>12.11</i> | <i>12.21</i> | <i>12.91</i> | <i>12.21</i> | <i>11.98</i> | <b>12.95</b> | <i>12.50</i> | <i>12.31</i> |
| Distillate Fuel Oil .....                                    | <b>15.77</b> | <b>16.61</b> | <b>16.82</b> | <b>16.01</b> | <b>14.77</b> | <i>16.04</i> | <i>16.11</i> | <i>16.05</i> | <i>16.27</i> | <i>16.67</i> | <i>16.58</i> | <i>16.66</i> | <b>16.13</b> | <i>15.71</i> | <i>16.53</i> |
| <b>Retail Prices</b> (cents per kilowatthour)                |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| Industrial Sector .....                                      | <b>6.81</b>  | <b>6.87</b>  | <b>7.22</b>  | <b>6.82</b>  | <b>6.61</b>  | <i>6.85</i>  | <i>7.20</i>  | <i>6.77</i>  | <i>6.68</i>  | <i>6.89</i>  | <i>7.24</i>  | <i>6.82</i>  | <b>6.93</b>  | <i>6.87</i>  | <i>6.92</i>  |
| Commercial Sector .....                                      | <b>10.54</b> | <b>10.60</b> | <b>10.89</b> | <b>10.55</b> | <b>10.47</b> | <i>10.73</i> | <i>10.95</i> | <i>10.58</i> | <i>10.49</i> | <i>10.76</i> | <i>11.02</i> | <i>10.67</i> | <b>10.66</b> | <i>10.69</i> | <i>10.74</i> |
| Residential Sector .....                                     | <b>12.59</b> | <b>13.03</b> | <b>13.15</b> | <b>12.75</b> | <b>12.77</b> | <i>13.37</i> | <i>13.34</i> | <i>12.94</i> | <i>12.89</i> | <i>13.55</i> | <i>13.53</i> | <i>13.12</i> | <b>12.89</b> | <i>13.11</i> | <i>13.28</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 - April 2019

|  | 2018  |       |        |        | 2019   |        |        |        | 2020   |        |        |        | Year   |        |        |
|--|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|  | Q1    | Q2    | Q3     | Q4     | Q1     | Q2     | Q3     | Q4     | Q1     | Q2     | Q3     | Q4     | 2018   | 2019   | 2020   |
| <b>Supply (million barrels per day) (a)</b>  |       |       |        |        |        |        |        |        |        |        |        |        |        |        |        |
| OECD .....   | 29.13 | 29.31 | 30.46  | 31.16  | 30.70  | 31.52  | 31.88  | 32.62  | 32.96  | 33.29  | 33.33  | 33.95  | 30.02  | 31.68  | 33.38  |
| U.S. (50 States) .....   | 16.77 | 17.39 | 18.40  | 18.96  | 19.06  | 19.76  | 20.08  | 20.60  | 20.73  | 21.06  | 21.12  | 21.44  | 17.89  | 19.88  | 21.09  |
| Canada .....   | 5.32  | 5.10  | 5.33   | 5.32   | 4.96   | 5.06   | 5.18   | 5.19   | 5.32   | 5.32   | 5.36   | 5.42   | 5.27   | 5.10   | 5.36   |
| Mexico .....   | 2.17  | 2.13  | 2.09   | 2.02   | 1.96   | 2.03   | 2.01   | 1.99   | 1.97   | 1.95   | 1.93   | 1.91   | 2.10   | 2.00   | 1.94   |
| Other OECD .....   | 4.88  | 4.69  | 4.64   | 4.87   | 4.72   | 4.67   | 4.61   | 4.84   | 4.93   | 4.96   | 4.91   | 5.19   | 4.77   | 4.71   | 5.00   |
| Non-OECD .....   | 70.12 | 70.47 | 70.95  | 71.00  | 69.43  | 69.88  | 70.29  | 69.74  | 69.11  | 70.03  | 70.34  | 69.83  | 70.64  | 69.84  | 69.83  |
| OPEC .....   | 37.46 | 37.07 | 37.35  | 37.32  | 35.92  | 35.91  | 36.09  | 35.76  | 35.43  | 35.45  | 35.58  | 35.37  | 37.30  | 35.92  | 35.46  |
| Crude Oil Portion .....  | 32.10 | 31.78 | 32.02  | 31.95  | 30.44  | 30.50  | 30.72  | 30.44  | 30.18  | 30.26  | 30.43  | 30.20  | 31.96  | 30.53  | 30.27  |
| Other Liquids (b) .....  | 5.37  | 5.29  | 5.33   | 5.36   | 5.48   | 5.42   | 5.36   | 5.32   | 5.25   | 5.19   | 5.15   | 5.17   | 5.34   | 5.40   | 5.19   |
| Eurasia .....  | 14.42 | 14.45 | 14.63  | 14.88  | 14.84  | 14.53  | 14.58  | 14.72  | 14.82  | 14.90  | 14.92  | 14.99  | 14.60  | 14.67  | 14.91  |
| China .....  | 4.79  | 4.84  | 4.78   | 4.86   | 4.86   | 4.84   | 4.84   | 4.88   | 4.83   | 4.86   | 4.86   | 4.91   | 4.82   | 4.86   | 4.87   |
| Other Non-OECD .....   | 13.44 | 14.12 | 14.19  | 13.94  | 13.81  | 14.60  | 14.77  | 14.37  | 14.03  | 14.81  | 14.98  | 14.56  | 13.93  | 14.39  | 14.60  |
| Total World Supply .....   | 99.25 | 99.79 | 101.41 | 102.16 | 100.13 | 101.40 | 102.17 | 102.36 | 102.06 | 103.32 | 103.67 | 103.78 | 100.66 | 101.52 | 103.21 |
| Non-OPEC Supply .....  | 61.79 | 62.71 | 64.06  | 64.85  | 64.21  | 65.48  | 66.08  | 66.59  | 66.64  | 67.86  | 68.09  | 68.41  | 63.36  | 65.60  | 67.75  |
| <b>Consumption (million barrels per day) (c)</b>   |       |       |        |        |        |        |        |        |        |        |        |        |        |        |        |
| OECD .....   | 47.61 | 46.97 | 47.91  | 47.53  | 47.55  | 47.13  | 48.23  | 48.28  | 47.85  | 47.36  | 48.48  | 48.34  | 47.50  | 47.80  | 48.01  |
| U.S. (50 States) .....   | 20.24 | 20.33 | 20.63  | 20.60  | 20.41  | 20.72  | 21.11  | 20.99  | 20.79  | 20.99  | 21.38  | 21.08  | 20.45  | 20.81  | 21.06  |
| U.S. Territories .....   | 0.10  | 0.08  | 0.09   | 0.11   | 0.12   | 0.11   | 0.12   | 0.13   | 0.12   | 0.11   | 0.12   | 0.13   | 0.10   | 0.12   | 0.12   |
| Canada .....   | 2.32  | 2.34  | 2.56   | 2.49   | 2.42   | 2.37   | 2.48   | 2.45   | 2.43   | 2.37   | 2.47   | 2.45   | 2.43   | 2.43   | 2.43   |
| Europe .....   | 14.08 | 14.21 | 14.67  | 14.13  | 13.97  | 14.19  | 14.69  | 14.39  | 14.02  | 14.24  | 14.75  | 14.44  | 14.27  | 14.31  | 14.36  |
| Japan .....  | 4.27  | 3.43  | 3.53   | 3.89   | 4.12   | 3.37   | 3.44   | 3.76   | 3.98   | 3.26   | 3.34   | 3.67   | 3.78   | 3.67   | 3.56   |
| Other OECD .....   | 6.60  | 6.57  | 6.42   | 6.31   | 6.51   | 6.37   | 6.40   | 6.55   | 6.52   | 6.39   | 6.42   | 6.57   | 6.47   | 6.46   | 6.48   |
| Non-OECD .....   | 51.61 | 52.68 | 52.68  | 52.93  | 53.04  | 53.71  | 53.75  | 53.82  | 53.98  | 55.03  | 55.07  | 55.18  | 52.48  | 53.58  | 54.82  |
| Eurasia .....  | 4.78  | 4.83  | 5.11   | 4.98   | 4.80   | 4.87   | 5.24   | 5.09   | 4.90   | 4.97   | 5.35   | 5.19   | 4.93   | 5.00   | 5.10   |
| Europe .....   | 0.75  | 0.74  | 0.76   | 0.76   | 0.75   | 0.75   | 0.77   | 0.77   | 0.76   | 0.76   | 0.78   | 0.78   | 0.75   | 0.76   | 0.77   |
| China .....  | 13.80 | 14.00 | 13.73  | 13.95  | 14.28  | 14.47  | 14.20  | 14.41  | 14.76  | 14.95  | 14.67  | 14.90  | 13.87  | 14.34  | 14.82  |
| Other Asia .....   | 13.54 | 13.78 | 13.38  | 13.73  | 13.99  | 14.12  | 13.71  | 14.03  | 14.33  | 14.50  | 14.07  | 14.41  | 13.61  | 13.96  | 14.33  |
| Other Non-OECD .....   | 18.74 | 19.32 | 19.69  | 19.50  | 19.22  | 19.50  | 19.84  | 19.51  | 19.23  | 19.85  | 20.20  | 19.90  | 19.32  | 19.52  | 19.80  |
| Total World Consumption .....  | 99.22 | 99.65 | 100.58 | 100.46 | 100.59 | 100.84 | 101.99 | 102.10 | 101.84 | 102.39 | 103.55 | 103.51 | 99.98  | 101.38 | 102.83 |
| <b>Total Crude Oil and Other Liquids Inventory Net Withdrawals (million barrels per day)</b> |       |       |        |        |        |        |        |        |        |        |        |        |        |        |        |
| U.S. (50 States) .....   | 0.36  | -0.06 | -0.70  | 0.22   | 0.33   | -0.69  | -0.32  | 0.23   | 0.00   | -0.38  | -0.13  | 0.30   | -0.05  | -0.11  | -0.05  |
| Other OECD .....   | -0.02 | 0.11  | 0.20   | -0.09  | 0.05   | 0.04   | 0.05   | -0.17  | -0.07  | -0.18  | 0.00   | -0.19  | 0.05   | -0.01  | -0.11  |
| Other Stock Draws and Balance .....  | -0.37 | -0.19 | -0.33  | -1.83  | 0.09   | 0.09   | 0.09   | -0.33  | -0.15  | -0.37  | 0.01   | -0.38  | -0.68  | -0.02  | -0.22  |
| Total Stock Draw .....   | -0.03 | -0.14 | -0.83  | -1.70  | 0.46   | -0.56  | -0.18  | -0.26  | -0.23  | -0.93  | -0.12  | -0.27  | -0.68  | -0.14  | -0.39  |
| <b>End-of-period Commercial Crude Oil and Other Liquids Inventories (million barrels)</b>    |       |       |        |        |        |        |        |        |        |        |        |        |        |        |        |
| U.S. Commercial Inventory .....  | 1,196 | 1,207 | 1,272  | 1,262  | 1,233  | 1,301  | 1,330  | 1,312  | 1,316  | 1,354  | 1,367  | 1,342  | 1,262  | 1,312  | 1,342  |
| OECD Commercial Inventory .....  | 2,806 | 2,806 | 2,856  | 2,862  | 2,829  | 2,893  | 2,918  | 2,915  | 2,925  | 2,979  | 2,992  | 2,985  | 2,862  | 2,915  | 2,985  |

- = 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, Congo (Brazzaville), Ecuador, Equatorial Guinea, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, 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 *Retroroleum 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 - April 2019

|  | 2018         |              |              |              | 2019         |              |              |              | 2020         |              |              |              | Year         |              |              |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|  | Q1           | Q2           | Q3           | Q4           | Q1           | Q2           | Q3           | Q4           | Q1           | Q2           | Q3           | Q4           | 2018         | 2019         | 2020         |
| <b>North America</b> .....                         | <b>24.25</b> | <b>24.63</b> | <b>25.82</b> | <b>26.29</b> | <i>25.98</i> | <i>26.85</i> | <i>27.27</i> | <i>27.77</i> | <i>28.02</i> | <i>28.32</i> | <i>28.42</i> | <i>28.76</i> | <b>25.26</b> | <i>26.97</i> | <i>28.38</i> |
| Canada .....                                       | <b>5.32</b>  | <b>5.10</b>  | <b>5.33</b>  | <b>5.32</b>  | <i>4.96</i>  | <i>5.06</i>  | <i>5.18</i>  | <i>5.19</i>  | <i>5.32</i>  | <i>5.32</i>  | <i>5.36</i>  | <i>5.42</i>  | <b>5.27</b>  | <i>5.10</i>  | <i>5.36</i>  |
| Mexico .....                                       | <b>2.17</b>  | <b>2.13</b>  | <b>2.09</b>  | <b>2.02</b>  | <i>1.96</i>  | <i>2.03</i>  | <i>2.01</i>  | <i>1.99</i>  | <i>1.97</i>  | <i>1.95</i>  | <i>1.93</i>  | <i>1.91</i>  | <b>2.10</b>  | <i>2.00</i>  | <i>1.94</i>  |
| United States .....                                | <b>16.77</b> | <b>17.39</b> | <b>18.40</b> | <b>18.96</b> | <i>19.06</i> | <i>19.76</i> | <i>20.08</i> | <i>20.60</i> | <i>20.73</i> | <i>21.06</i> | <i>21.12</i> | <i>21.44</i> | <b>17.89</b> | <i>19.88</i> | <i>21.09</i> |
| <b>Central and South America</b> .....             | <b>4.89</b>  | <b>5.64</b>  | <b>5.72</b>  | <b>5.41</b>  | <i>5.13</i>  | <i>5.93</i>  | <i>6.14</i>  | <i>5.75</i>  | <i>5.39</i>  | <i>6.20</i>  | <i>6.40</i>  | <i>6.00</i>  | <b>5.42</b>  | <i>5.74</i>  | <i>6.00</i>  |
| Argentina .....                                    | <b>0.67</b>  | <b>0.69</b>  | <b>0.68</b>  | <b>0.70</b>  | <i>0.66</i>  | <i>0.68</i>  | <i>0.67</i>  | <i>0.67</i>  | <i>0.67</i>  | <i>0.69</i>  | <i>0.69</i>  | <i>0.69</i>  | <b>0.68</b>  | <i>0.67</i>  | <i>0.68</i>  |
| Brazil .....                                       | <b>2.95</b>  | <b>3.64</b>  | <b>3.75</b>  | <b>3.39</b>  | <i>3.15</i>  | <i>3.95</i>  | <i>4.19</i>  | <i>3.77</i>  | <i>3.41</i>  | <i>4.22</i>  | <i>4.44</i>  | <i>4.01</i>  | <b>3.43</b>  | <i>3.77</i>  | <i>4.02</i>  |
| Colombia .....                                     | <b>0.86</b>  | <b>0.89</b>  | <b>0.89</b>  | <b>0.91</b>  | <i>0.91</i>  | <i>0.89</i>  | <i>0.89</i>  | <i>0.90</i>  | <i>0.90</i>  | <i>0.88</i>  | <i>0.88</i>  | <i>0.90</i>  | <b>0.89</b>  | <i>0.90</i>  | <i>0.89</i>  |
| Other Central and S. America .....                 | <b>0.41</b>  | <b>0.42</b>  | <b>0.40</b>  | <b>0.41</b>  | <i>0.41</i>  | <i>0.41</i>  | <i>0.39</i>  | <i>0.40</i>  | <i>0.40</i>  | <i>0.41</i>  | <i>0.39</i>  | <i>0.40</i>  | <b>0.41</b>  | <i>0.40</i>  | <i>0.40</i>  |
| <b>Europe</b> .....                                | <b>4.37</b>  | <b>4.20</b>  | <b>4.12</b>  | <b>4.32</b>  | <i>4.27</i>  | <i>4.18</i>  | <i>4.10</i>  | <i>4.31</i>  | <i>4.38</i>  | <i>4.39</i>  | <i>4.33</i>  | <i>4.61</i>  | <b>4.25</b>  | <i>4.22</i>  | <i>4.43</i>  |
| Norway .....                                       | <b>1.97</b>  | <b>1.80</b>  | <b>1.81</b>  | <b>1.87</b>  | <i>1.79</i>  | <i>1.72</i>  | <i>1.73</i>  | <i>1.77</i>  | <i>1.83</i>  | <i>1.85</i>  | <i>1.92</i>  | <i>2.10</i>  | <b>1.86</b>  | <i>1.75</i>  | <i>1.92</i>  |
| United Kingdom .....                               | <b>1.16</b>  | <b>1.17</b>  | <b>1.10</b>  | <b>1.22</b>  | <i>1.27</i>  | <i>1.27</i>  | <i>1.18</i>  | <i>1.32</i>  | <i>1.33</i>  | <i>1.33</i>  | <i>1.21</i>  | <i>1.30</i>  | <b>1.16</b>  | <i>1.26</i>  | <i>1.29</i>  |
| <b>Eurasia</b> .....                               | <b>14.42</b> | <b>14.45</b> | <b>14.63</b> | <b>14.88</b> | <i>14.84</i> | <i>14.53</i> | <i>14.58</i> | <i>14.72</i> | <i>14.82</i> | <i>14.90</i> | <i>14.92</i> | <i>14.99</i> | <b>14.60</b> | <i>14.67</i> | <i>14.91</i> |
| Azerbaijan .....                                   | <b>0.82</b>  | <b>0.81</b>  | <b>0.79</b>  | <b>0.79</b>  | <i>0.81</i>  | <i>0.81</i>  | <i>0.80</i>  | <i>0.80</i>  | <i>0.79</i>  | <i>0.78</i>  | <i>0.77</i>  | <i>0.77</i>  | <b>0.80</b>  | <i>0.80</i>  | <i>0.78</i>  |
| Kazakhstan .....                                   | <b>1.98</b>  | <b>1.96</b>  | <b>1.90</b>  | <b>2.00</b>  | <i>2.04</i>  | <i>1.87</i>  | <i>1.94</i>  | <i>2.08</i>  | <i>2.10</i>  | <i>2.03</i>  | <i>2.03</i>  | <i>2.08</i>  | <b>1.96</b>  | <i>1.98</i>  | <i>2.06</i>  |
| Russia .....                                       | <b>11.20</b> | <b>11.24</b> | <b>11.50</b> | <b>11.66</b> | <i>11.57</i> | <i>11.44</i> | <i>11.43</i> | <i>11.43</i> | <i>11.54</i> | <i>11.70</i> | <i>11.73</i> | <i>11.75</i> | <b>11.40</b> | <i>11.47</i> | <i>11.68</i> |
| Turkmenistan .....                                 | <b>0.27</b>  | <b>0.28</b>  | <b>0.28</b>  | <b>0.28</b>  | <i>0.26</i>  | <i>0.26</i>  | <i>0.26</i>  | <i>0.26</i>  | <i>0.24</i>  | <i>0.24</i>  | <i>0.24</i>  | <i>0.24</i>  | <b>0.28</b>  | <i>0.26</i>  | <i>0.24</i>  |
| Other Eurasia .....                                | <b>0.16</b>  | <b>0.15</b>  | <b>0.15</b>  | <b>0.15</b>  | <i>0.16</i>  | <i>0.16</i>  | <i>0.16</i>  | <i>0.16</i>  | <i>0.15</i>  | <i>0.15</i>  | <i>0.15</i>  | <i>0.15</i>  | <b>0.15</b>  | <i>0.16</i>  | <i>0.15</i>  |
| <b>Middle East</b> .....                           | <b>3.02</b>  | <b>3.03</b>  | <b>3.04</b>  | <b>3.05</b>  | <i>3.13</i>  | <i>3.13</i>  | <i>3.13</i>  | <i>3.13</i>  | <i>3.18</i>  | <i>3.19</i>  | <i>3.19</i>  | <i>3.19</i>  | <b>3.04</b>  | <i>3.13</i>  | <i>3.19</i>  |
| Oman .....   | <b>0.98</b>  | <b>0.98</b>  | <b>0.99</b>  | <b>1.01</b>  | <i>0.99</i>  | <i>0.99</i>  | <i>1.00</i>  | <i>1.00</i>  | <i>1.00</i>  | <i>1.01</i>  | <i>1.01</i>  | <i>1.01</i>  | <b>0.99</b>  | <i>1.00</i>  | <i>1.01</i>  |
| Qatar .....  | <b>1.94</b>  | <b>1.94</b>  | <b>1.95</b>  | <b>1.94</b>  | <i>2.00</i>  | <i>2.00</i>  | <i>2.00</i>  | <i>2.00</i>  | <i>2.06</i>  | <i>2.06</i>  | <i>2.06</i>  | <i>2.06</i>  | <b>1.94</b>  | <i>2.00</i>  | <i>2.06</i>  |
| <b>Asia and Oceania</b> .....                      | <b>9.31</b>  | <b>9.26</b>  | <b>9.19</b>  | <b>9.34</b>  | <i>9.33</i>  | <i>9.31</i>  | <i>9.31</i>  | <i>9.35</i>  | <i>9.34</i>  | <i>9.36</i>  | <i>9.33</i>  | <i>9.35</i>  | <b>9.27</b>  | <i>9.33</i>  | <i>9.34</i>  |
| Australia .....                                    | <b>0.36</b>  | <b>0.34</b>  | <b>0.37</b>  | <b>0.40</b>  | <i>0.41</i>  | <i>0.43</i>  | <i>0.46</i>  | <i>0.48</i>  | <i>0.50</i>  | <i>0.52</i>  | <i>0.53</i>  | <i>0.53</i>  | <b>0.37</b>  | <i>0.45</i>  | <i>0.52</i>  |
| China .....  | <b>4.79</b>  | <b>4.84</b>  | <b>4.78</b>  | <b>4.86</b>  | <i>4.86</i>  | <i>4.84</i>  | <i>4.84</i>  | <i>4.88</i>  | <i>4.83</i>  | <i>4.86</i>  | <i>4.86</i>  | <i>4.91</i>  | <b>4.82</b>  | <i>4.86</i>  | <i>4.87</i>  |
| India .....  | <b>1.03</b>  | <b>1.02</b>  | <b>1.01</b>  | <b>1.00</b>  | <i>0.98</i>  | <i>0.98</i>  | <i>0.97</i>  | <i>0.97</i>  | <i>0.99</i>  | <i>1.00</i>  | <i>0.99</i>  | <i>0.99</i>  | <b>1.01</b>  | <i>0.98</i>  | <i>0.99</i>  |
| Indonesia .....                                    | <b>0.90</b>  | <b>0.90</b>  | <b>0.88</b>  | <b>0.89</b>  | <i>0.88</i>  | <i>0.87</i>  | <i>0.86</i>  | <i>0.85</i>  | <i>0.83</i>  | <i>0.82</i>  | <i>0.81</i>  | <i>0.79</i>  | <b>0.89</b>  | <i>0.86</i>  | <i>0.81</i>  |
| Malaysia .....                                     | <b>0.77</b>  | <b>0.75</b>  | <b>0.73</b>  | <b>0.75</b>  | <i>0.74</i>  | <i>0.73</i>  | <i>0.72</i>  | <i>0.71</i>  | <i>0.72</i>  | <i>0.70</i>  | <i>0.69</i>  | <i>0.68</i>  | <b>0.75</b>  | <i>0.73</i>  | <i>0.70</i>  |
| Vietnam .....                                      | <b>0.27</b>  | <b>0.25</b>  | <b>0.25</b>  | <b>0.25</b>  | <i>0.24</i>  | <i>0.24</i>  | <i>0.24</i>  | <i>0.25</i>  | <i>0.24</i>  | <i>0.24</i>  | <i>0.24</i>  | <i>0.24</i>  | <b>0.25</b>  | <i>0.24</i>  | <i>0.24</i>  |
| <b>Africa</b> .....                                | <b>1.52</b>  | <b>1.51</b>  | <b>1.54</b>  | <b>1.55</b>  | <i>1.53</i>  | <i>1.54</i>  | <i>1.54</i>  | <i>1.55</i>  | <i>1.51</i>  | <i>1.51</i>  | <i>1.51</i>  | <i>1.51</i>  | <b>1.53</b>  | <i>1.54</i>  | <i>1.51</i>  |
| Egypt .....  | <b>0.67</b>  | <b>0.66</b>  | <b>0.67</b>  | <b>0.67</b>  | <i>0.62</i>  | <i>0.62</i>  | <i>0.62</i>  | <i>0.62</i>  | <i>0.59</i>  | <i>0.59</i>  | <i>0.59</i>  | <i>0.59</i>  | <b>0.67</b>  | <i>0.62</i>  | <i>0.59</i>  |
| South Sudan .....                                  | <b>0.12</b>  | <b>0.12</b>  | <b>0.12</b>  | <b>0.14</b>  | <i>0.17</i>  | <i>0.18</i>  | <i>0.18</i>  | <i>0.18</i>  | <i>0.18</i>  | <i>0.18</i>  | <i>0.18</i>  | <i>0.18</i>  | <b>0.13</b>  | <i>0.18</i>  | <i>0.18</i>  |
| <b>Total non-OPEC liquids</b> .....                | <b>61.79</b> | <b>62.71</b> | <b>64.06</b> | <b>64.85</b> | <i>64.21</i> | <i>65.48</i> | <i>66.08</i> | <i>66.59</i> | <i>66.64</i> | <i>67.86</i> | <i>68.09</i> | <i>68.41</i> | <b>63.36</b> | <i>65.60</i> | <i>67.75</i> |
| <b>OPEC non-crude liquids</b> .....                | <b>5.37</b>  | <b>5.29</b>  | <b>5.33</b>  | <b>5.36</b>  | <i>5.48</i>  | <i>5.42</i>  | <i>5.36</i>  | <i>5.32</i>  | <i>5.25</i>  | <i>5.19</i>  | <i>5.15</i>  | <i>5.17</i>  | <b>5.34</b>  | <i>5.40</i>  | <i>5.19</i>  |
| <b>Non-OPEC + OPEC non-crude</b> .....             | <b>67.16</b> | <b>68.01</b> | <b>69.39</b> | <b>70.21</b> | <i>69.69</i> | <i>70.90</i> | <i>71.44</i> | <i>71.92</i> | <i>71.88</i> | <i>73.06</i> | <i>73.24</i> | <i>73.58</i> | <b>68.70</b> | <i>70.99</i> | <i>72.94</i> |
| <b>Unplanned non-OPEC Production Outages</b> ..... | <b>0.53</b>  | <b>0.40</b>  | <b>0.30</b>  | <b>0.44</b>  | <i>0.39</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>   | <i>n/a</i>   | <b>0.42</b>  | <i>n/a</i>   | <i>n/a</i>   |

- = no data available

OPEC = Organization of the Petroleum Exporting Countries: Algeria, Angola, Congo (Brazzaville), Ecuador, Equatorial Guinea, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, 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 - April 2019

|  | 2018         |              |              |              | 2019         |              |              |              | 2020         |              |              |              | Year         |              |              |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|  | Q1           | Q2           | Q3           | Q4           | Q1           | Q2           | Q3           | Q4           | Q1           | Q2           | Q3           | Q4           | 2018         | 2019         | 2020         |
| <b>Crude Oil</b>                               |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| Algeria .....                                  | 1.02         | 1.02         | 1.03         | 1.00         | <i>0.98</i>  | -            | -            | -            | -            | -            | -            | -            | 1.02         | -            | -            |
| Angola .....                                   | 1.59         | 1.56         | 1.56         | 1.57         | 1.49         | -            | -            | -            | -            | -            | -            | -            | 1.57         | -            | -            |
| Congo (Brazzaville) .....                      | 0.34         | 0.35         | 0.33         | 0.32         | 0.33         | -            | -            | -            | -            | -            | -            | -            | 0.34         | -            | -            |
| Ecuador .....                                  | 0.51         | 0.52         | 0.52         | 0.52         | 0.53         | -            | -            | -            | -            | -            | -            | -            | 0.52         | -            | -            |
| Equatorial Guinea .....                        | 0.14         | 0.13         | 0.14         | 0.12         | 0.11         | -            | -            | -            | -            | -            | -            | -            | 0.13         | -            | -            |
| Gabon .....                                    | 0.20         | 0.20         | 0.19         | 0.19         | 0.20         | -            | -            | -            | -            | -            | -            | -            | 0.20         | -            | -            |
| Iran .....                                     | 3.83         | 3.80         | 3.55         | 2.90         | 2.63         | -            | -            | -            | -            | -            | -            | -            | 3.52         | -            | -            |
| Iraq .....                                     | 4.46         | 4.50         | 4.66         | 4.77         | 4.78         | -            | -            | -            | -            | -            | -            | -            | 4.60         | -            | -            |
| Kuwait .....                                   | 2.71         | 2.71         | 2.80         | 2.80         | 2.74         | -            | -            | -            | -            | -            | -            | -            | 2.76         | -            | -            |
| Libya .....                                    | 1.00         | 0.92         | 0.91         | 1.04         | 0.91         | -            | -            | -            | -            | -            | -            | -            | 0.96         | -            | -            |
| Nigeria .....                                  | 1.72         | 1.53         | 1.55         | 1.61         | 1.58         | -            | -            | -            | -            | -            | -            | -            | 1.60         | -            | -            |
| Saudi Arabia .....                             | 10.10        | 10.20        | 10.47        | 10.74        | 10.00        | -            | -            | -            | -            | -            | -            | -            | 10.38        | -            | -            |
| United Arab Emirates .....                     | 2.88         | 2.86         | 2.94         | 3.11         | 3.12         | -            | -            | -            | -            | -            | -            | -            | 2.95         | -            | -            |
| Venezuela .....                                | 1.60         | 1.49         | 1.36         | 1.27         | 1.05         | -            | -            | -            | -            | -            | -            | -            | 1.43         | -            | -            |
| OPEC Total .....                               | 32.10        | 31.78        | 32.02        | 31.95        | 30.44        | 30.50        | 30.72        | 30.44        | 30.18        | 30.26        | 30.43        | 30.20        | 31.96        | 30.53        | 30.27        |
| <b>Other Liquids (a) .....</b>                 | <b>5.37</b>  | <b>5.29</b>  | <b>5.33</b>  | <b>5.36</b>  | <b>5.48</b>  | <b>5.42</b>  | <b>5.36</b>  | <b>5.32</b>  | <b>5.25</b>  | <b>5.19</b>  | <b>5.15</b>  | <b>5.17</b>  | <b>5.34</b>  | <b>5.40</b>  | <b>5.19</b>  |
| <b>Total OPEC Supply .....</b>                 | <b>37.46</b> | <b>37.07</b> | <b>37.35</b> | <b>37.32</b> | <b>35.92</b> | <b>35.91</b> | <b>36.09</b> | <b>35.76</b> | <b>35.43</b> | <b>35.45</b> | <b>35.58</b> | <b>35.37</b> | <b>37.30</b> | <b>35.92</b> | <b>35.46</b> |
| <b>Crude Oil Production Capacity</b>           |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| Africa .....                                   | 6.00         | 5.70         | 5.72         | 5.85         | 5.60         | 5.93         | 5.96         | 6.01         | 6.06         | 6.09         | 6.14         | 6.18         | 5.82         | 5.88         | 6.12         |
| Middle East .....                              | 25.84        | 25.85        | 25.76        | 25.29        | 25.31        | 25.30        | 25.30        | 25.30        | 25.32        | 25.36        | 25.37        | 25.38        | 25.68        | 25.30        | 25.36        |
| South America .....                            | 2.11         | 2.01         | 1.89         | 1.79         | 1.58         | 1.30         | 1.16         | 1.07         | 1.00         | 0.94         | 0.89         | 0.84         | 1.95         | 1.27         | 0.91         |
| OPEC Total .....                               | 33.95        | 33.56        | 33.36        | 32.93        | 32.49        | 32.53        | 32.42        | 32.37        | 32.38        | 32.39        | 32.40        | 32.40        | 33.45        | 32.45        | 32.39        |
| <b>Surplus Crude Oil Production Capacity</b>   |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| Africa .....                                   | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         |
| Middle East .....                              | 1.86         | 1.78         | 1.34         | 0.97         | 2.05         | 2.03         | 1.70         | 1.93         | 2.20         | 2.13         | 1.96         | 2.20         | 1.48         | 1.93         | 2.12         |
| South America .....                            | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         |
| OPEC Total .....                               | 1.86         | 1.78         | 1.34         | 0.97         | 2.05         | 2.03         | 1.70         | 1.93         | 2.20         | 2.13         | 1.96         | 2.20         | 1.48         | 1.93         | 2.12         |
| <b>Unplanned OPEC Production Outages .....</b> | <b>1.21</b>  | <b>1.43</b>  | <b>1.59</b>  | <b>1.99</b>  | <b>2.60</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>1.56</b>  | <i>n/a</i>   | <i>n/a</i>   |

- = no data available

OPEC = Organization of the Petroleum Exporting Countries: Algeria, Angola, Congo (Brazzaville), Equatorial Guinea, Gabon, Libya, and Nigeria (Africa); Ecuador and Venezuela (South America); Iran, Iraq, Kuwait, 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 - April 2019

|  | 2018          |               |               |               | 2019          |               |               |               | 2020          |               |               |               | 2018          | 2019          | 2020          |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|  | Q1            | Q2            | Q3            | Q4            | Q1            | Q2            | Q3            | Q4            | Q1            | Q2            | Q3            | Q4            |               |               |               |
| <b>North America</b> .....                           | <b>24.56</b>  | <b>24.71</b>  | <b>25.17</b>  | <b>24.98</b>  | <i>24.78</i>  | <i>25.07</i>  | <i>25.56</i>  | <i>25.44</i>  | <i>25.17</i>  | <i>25.35</i>  | <i>25.84</i>  | <i>25.53</i>  | <b>24.86</b>  | <i>25.22</i>  | <i>25.48</i>  |
| Canada .....   | <b>2.32</b>   | <b>2.34</b>   | <b>2.56</b>   | <b>2.49</b>   | <i>2.42</i>   | <i>2.37</i>   | <i>2.48</i>   | <i>2.45</i>   | <i>2.43</i>   | <i>2.37</i>   | <i>2.47</i>   | <i>2.45</i>   | <b>2.43</b>   | <i>2.43</i>   | <i>2.43</i>   |
| Mexico .....   | <b>1.99</b>   | <b>2.02</b>   | <b>1.97</b>   | <b>1.88</b>   | <i>1.94</i>   | <i>1.96</i>   | <i>1.96</i>   | <i>1.99</i>   | <i>1.95</i>   | <i>1.98</i>   | <i>1.98</i>   | <i>1.99</i>   | <b>1.97</b>   | <i>1.96</i>   | <i>1.97</i>   |
| United States .....                                  | <b>20.24</b>  | <b>20.33</b>  | <b>20.63</b>  | <b>20.60</b>  | <i>20.41</i>  | <i>20.72</i>  | <i>21.11</i>  | <i>20.99</i>  | <i>20.79</i>  | <i>20.99</i>  | <i>21.38</i>  | <i>21.08</i>  | <b>20.45</b>  | <i>20.81</i>  | <i>21.06</i>  |
| <b>Central and South America</b> .....               | <b>6.72</b>   | <b>6.76</b>   | <b>6.94</b>   | <b>6.95</b>   | <i>6.74</i>   | <i>6.81</i>   | <i>6.93</i>   | <i>6.92</i>   | <i>6.71</i>   | <i>6.85</i>   | <i>6.98</i>   | <i>7.00</i>   | <b>6.84</b>   | <i>6.85</i>   | <i>6.89</i>   |
| Brazil .....   | <b>2.98</b>   | <b>2.95</b>   | <b>3.11</b>   | <b>3.11</b>   | <i>3.04</i>   | <i>3.05</i>   | <i>3.13</i>   | <i>3.12</i>   | <i>3.03</i>   | <i>3.10</i>   | <i>3.19</i>   | <i>3.19</i>   | <b>3.04</b>   | <i>3.09</i>   | <i>3.13</i>   |
| <b>Europe</b> .....                                  | <b>14.83</b>  | <b>14.95</b>  | <b>15.42</b>  | <b>14.89</b>  | <i>14.73</i>  | <i>14.94</i>  | <i>15.46</i>  | <i>15.17</i>  | <i>14.78</i>  | <i>15.00</i>  | <i>15.53</i>  | <i>15.23</i>  | <b>15.03</b>  | <i>15.08</i>  | <i>15.14</i>  |
| <b>Eurasia</b> .....                                 | <b>4.78</b>   | <b>4.83</b>   | <b>5.11</b>   | <b>4.98</b>   | <i>4.80</i>   | <i>4.87</i>   | <i>5.24</i>   | <i>5.09</i>   | <i>4.90</i>   | <i>4.97</i>   | <i>5.35</i>   | <i>5.19</i>   | <b>4.93</b>   | <i>5.00</i>   | <i>5.10</i>   |
| Russia .....   | <b>3.63</b>   | <b>3.70</b>   | <b>3.91</b>   | <b>3.78</b>   | <i>3.64</i>   | <i>3.73</i>   | <i>4.04</i>   | <i>3.88</i>   | <i>3.72</i>   | <i>3.82</i>   | <i>4.13</i>   | <i>3.98</i>   | <b>3.75</b>   | <i>3.82</i>   | <i>3.91</i>   |
| <b>Middle East</b> .....                             | <b>8.24</b>   | <b>8.79</b>   | <b>9.07</b>   | <b>8.68</b>   | <i>8.64</i>   | <i>8.83</i>   | <i>9.15</i>   | <i>8.64</i>   | <i>8.57</i>   | <i>9.03</i>   | <i>9.36</i>   | <i>8.85</i>   | <b>8.70</b>   | <i>8.82</i>   | <i>8.95</i>   |
| <b>Asia and Oceania</b> .....                        | <b>35.65</b>  | <b>35.17</b>  | <b>34.53</b>  | <b>35.44</b>  | <i>36.38</i>  | <i>35.80</i>  | <i>35.19</i>  | <i>36.21</i>  | <i>37.07</i>  | <i>36.54</i>  | <i>35.93</i>  | <i>36.98</i>  | <b>35.19</b>  | <i>35.89</i>  | <i>36.63</i>  |
| China .....  | <b>13.80</b>  | <b>14.00</b>  | <b>13.73</b>  | <b>13.95</b>  | <i>14.28</i>  | <i>14.47</i>  | <i>14.20</i>  | <i>14.41</i>  | <i>14.76</i>  | <i>14.95</i>  | <i>14.67</i>  | <i>14.90</i>  | <b>13.87</b>  | <i>14.34</i>  | <i>14.82</i>  |
| Japan .....  | <b>4.27</b>   | <b>3.43</b>   | <b>3.53</b>   | <b>3.89</b>   | <i>4.12</i>   | <i>3.37</i>   | <i>3.44</i>   | <i>3.76</i>   | <i>3.98</i>   | <i>3.26</i>   | <i>3.34</i>   | <i>3.67</i>   | <b>3.78</b>   | <i>3.67</i>   | <i>3.56</i>   |
| India .....  | <b>4.73</b>   | <b>4.89</b>   | <b>4.57</b>   | <b>4.89</b>   | <i>5.04</i>   | <i>5.07</i>   | <i>4.74</i>   | <i>5.03</i>   | <i>5.22</i>   | <i>5.29</i>   | <i>4.94</i>   | <i>5.25</i>   | <b>4.77</b>   | <i>4.97</i>   | <i>5.17</i>   |
| <b>Africa</b> .....                                  | <b>4.43</b>   | <b>4.44</b>   | <b>4.34</b>   | <b>4.54</b>   | <i>4.51</i>   | <i>4.52</i>   | <i>4.44</i>   | <i>4.63</i>   | <i>4.64</i>   | <i>4.64</i>   | <i>4.56</i>   | <i>4.75</i>   | <b>4.44</b>   | <i>4.52</i>   | <i>4.64</i>   |
| <b>Total OECD Liquid Fuels Consumption</b> .....     | <b>47.61</b>  | <b>46.97</b>  | <b>47.91</b>  | <b>47.53</b>  | <i>47.55</i>  | <i>47.13</i>  | <i>48.23</i>  | <i>48.28</i>  | <i>47.85</i>  | <i>47.36</i>  | <i>48.48</i>  | <i>48.34</i>  | <b>47.50</b>  | <i>47.80</i>  | <i>48.01</i>  |
| <b>Total non-OECD Liquid Fuels Consumption</b> ..... | <b>51.61</b>  | <b>52.68</b>  | <b>52.68</b>  | <b>52.93</b>  | <i>53.04</i>  | <i>53.71</i>  | <i>53.75</i>  | <i>53.82</i>  | <i>53.98</i>  | <i>55.03</i>  | <i>55.07</i>  | <i>55.18</i>  | <b>52.48</b>  | <i>53.58</i>  | <i>54.82</i>  |
| <b>Total World Liquid Fuels Consumption</b> .....    | <b>99.22</b>  | <b>99.65</b>  | <b>100.58</b> | <b>100.46</b> | <i>100.59</i> | <i>100.84</i> | <i>101.99</i> | <i>102.10</i> | <i>101.84</i> | <i>102.39</i> | <i>103.55</i> | <i>103.51</i> | <b>99.98</b>  | <i>101.38</i> | <i>102.83</i> |
| <b>Oil-weighted Real Gross Domestic Product (a)</b>  |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| World Index, 2015 Q1 = 100 .....                     | <b>109.2</b>  | <b>109.9</b>  | <b>110.5</b>  | <b>111.3</b>  | <i>112.0</i>  | <i>112.6</i>  | <i>113.3</i>  | <i>113.9</i>  | <i>114.4</i>  | <i>116.1</i>  | <i>116.9</i>  | <i>117.9</i>  | <b>110.2</b>  | <i>112.9</i>  | <i>116.3</i>  |
| Percent change from prior year .....                 | <b>3.3</b>    | <b>3.2</b>    | <b>3.0</b>    | <b>2.9</b>    | <i>2.6</i>    | <i>2.4</i>    | <i>2.5</i>    | <i>2.3</i>    | <i>2.1</i>    | <i>3.1</i>    | <i>3.2</i>    | <i>3.5</i>    | <b>3.1</b>    | <i>2.4</i>    | <i>3.0</i>    |
| OECD Index, 2015 Q1 = 100 .....                      | <b>106.5</b>  | <b>107.1</b>  | <b>107.5</b>  | <b>108.1</b>  | <i>108.7</i>  | <i>109.1</i>  | <i>109.6</i>  | <i>110.1</i>  | <i>109.8</i>  | <i>111.4</i>  | <i>111.8</i>  | <i>112.3</i>  | <b>107.3</b>  | <i>109.4</i>  | <i>111.3</i>  |
| Percent change from prior year .....                 | <b>2.5</b>    | <b>2.5</b>    | <b>2.3</b>    | <b>2.2</b>    | <i>2.1</i>    | <i>1.9</i>    | <i>1.9</i>    | <i>1.8</i>    | <i>1.0</i>    | <i>2.1</i>    | <i>2.0</i>    | <i>2.0</i>    | <b>2.4</b>    | <i>1.9</i>    | <i>1.8</i>    |
| Non-OECD Index, 2015 Q1 = 100 .....                  | <b>111.7</b>  | <b>112.6</b>  | <b>113.4</b>  | <b>114.4</b>  | <i>115.2</i>  | <i>115.9</i>  | <i>116.8</i>  | <i>117.6</i>  | <i>118.8</i>  | <i>120.7</i>  | <i>121.8</i>  | <i>123.3</i>  | <b>113.0</b>  | <i>116.4</i>  | <i>121.1</i>  |
| Percent change from prior year .....                 | <b>4.0</b>    | <b>3.9</b>    | <b>3.6</b>    | <b>3.6</b>    | <i>3.1</i>    | <i>2.9</i>    | <i>3.0</i>    | <i>2.8</i>    | <i>3.2</i>    | <i>4.1</i>    | <i>4.3</i>    | <i>4.8</i>    | <b>3.8</b>    | <i>2.9</i>    | <i>4.1</i>    |
| <b>Real U.S. Dollar Exchange Rate (a)</b>            |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| Index, 2015 Q1 = 100 .....                           | <b>100.75</b> | <b>102.76</b> | <b>105.54</b> | <b>106.34</b> | <i>105.56</i> | <i>105.14</i> | <i>104.34</i> | <i>103.65</i> | <i>103.00</i> | <i>102.57</i> | <i>101.97</i> | <i>101.47</i> | <b>103.85</b> | <i>104.67</i> | <i>102.25</i> |
| Percent change from prior year .....                 | <b>-4.0</b>   | <b>-0.7</b>   | <b>3.4</b>    | <b>3.8</b>    | <i>4.8</i>    | <i>2.3</i>    | <i>-1.1</i>   | <i>-2.5</i>   | <i>-2.4</i>   | <i>-2.5</i>   | <i>-2.3</i>   | <i>-2.1</i>   | <b>0.6</b>    | <i>0.8</i>    | <i>-2.3</i>   |

- = no data available

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

(a) Weighted geometric mean of real indices for various countries with weights equal to each country's share of world oil consumption in the base period. Exchange rate is measured in foreign currency per U.S. dollar. 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 - April 2019

|  | 2018         |              |              |              | 2019         |              |              |              | 2020         |              |              |              | Year         |              |              |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|  | Q1           | Q2           | Q3           | Q4           | Q1           | Q2           | Q3           | Q4           | Q1           | Q2           | Q3           | Q4           | 2018         | 2019         | 2020         |
| <b>Supply (million barrels per day)</b>                    |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| <b>Crude Oil Supply</b>                                    |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| Domestic Production (a) .....                              | 10.23        | 10.54        | 11.24        | 11.81        | 11.91        | 12.36        | 12.51        | 12.76        | 12.93        | 13.08        | 13.07        | 13.30        | 10.96        | 12.39        | 13.10        |
| Alaska .....   | 0.51         | 0.48         | 0.43         | 0.49         | 0.51         | 0.49         | 0.45         | 0.49         | 0.52         | 0.50         | 0.46         | 0.49         | 0.48         | 0.49         | 0.49         |
| Federal Gulf of Mexico (b) .....                           | 1.67         | 1.58         | 1.85         | 1.86         | 1.88         | 2.01         | 1.88         | 1.97         | 2.10         | 2.13         | 2.03         | 2.16         | 1.74         | 1.94         | 2.10         |
| Lower 48 States (excl GOM) .....                           | 8.05         | 8.47         | 8.96         | 9.46         | 9.52         | 9.86         | 10.18        | 10.29        | 10.31        | 10.45        | 10.58        | 10.65        | 8.74         | 9.96         | 10.50        |
| Crude Oil Net Imports (c) .....                            | 6.18         | 6.19         | 5.84         | 4.82         | 4.20         | 4.85         | 4.76         | 4.35         | 4.39         | 4.84         | 4.75         | 4.47         | 5.75         | 4.54         | 4.61         |
| SPR Net Withdrawals .....                                  | -0.03        | 0.06         | 0.00         | 0.12         | 0.00         | 0.05         | 0.00         | 0.04         | 0.04         | 0.04         | 0.01         | 0.03         | 0.04         | 0.02         | 0.03         |
| Commercial Inventory Net Withdrawals .....                 | -0.02        | 0.09         | -0.01        | -0.28        | -0.11        | -0.08        | 0.04         | -0.13        | -0.34        | 0.08         | 0.15         | -0.08        | -0.06        | -0.07        | -0.05        |
| Crude Oil Adjustment (d) .....                             | 0.05         | 0.26         | 0.25         | 0.52         | 0.24         | 0.19         | 0.21         | 0.15         | 0.19         | 0.19         | 0.21         | 0.15         | 0.27         | 0.20         | 0.19         |
| <b>Total Crude Oil Input to Refineries .....</b>           | <b>16.41</b> | <b>17.14</b> | <b>17.32</b> | <b>16.99</b> | <i>16.24</i> | <i>17.37</i> | <i>17.52</i> | <i>17.17</i> | <i>17.20</i> | <i>18.23</i> | <i>18.20</i> | <i>17.88</i> | <b>16.97</b> | <i>17.08</i> | <i>17.88</i> |
| <b>Other Supply</b>  |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| Refinery Processing Gain .....                             | 1.11         | 1.12         | 1.17         | 1.16         | 1.09         | 1.12         | 1.14         | 1.19         | 1.20         | 1.25         | 1.27         | 1.27         | 1.14         | 1.14         | 1.25         |
| Natural Gas Plant Liquids Production .....                 | 4.01         | 4.30         | 4.54         | 4.54         | 4.68         | 4.82         | 5.00         | 5.22         | 5.19         | 5.25         | 5.32         | 5.39         | 4.35         | 4.93         | 5.29         |
| Renewables and Oxygenate Production (e) .....              | 1.21         | 1.22         | 1.25         | 1.22         | 1.17         | 1.22         | 1.20         | 1.21         | 1.19         | 1.24         | 1.23         | 1.23         | 1.23         | 1.20         | 1.22         |
| Fuel Ethanol Production .....                              | 1.05         | 1.04         | 1.06         | 1.04         | 1.01         | 1.05         | 1.04         | 1.04         | 1.04         | 1.05         | 1.05         | 1.05         | 1.05         | 1.04         | 1.05         |
| Petroleum Products Adjustment (f) .....                    | 0.21         | 0.21         | 0.21         | 0.22         | 0.21         | 0.22         | 0.22         | 0.23         | 0.22         | 0.24         | 0.24         | 0.24         | 0.21         | 0.22         | 0.24         |
| Product Net Imports (c) .....                              | -3.13        | -3.44        | -3.17        | -3.91        | -3.40        | -3.38        | -3.63        | -4.34        | -4.52        | -4.71        | -4.58        | -5.29        | -3.41        | -3.69        | -4.78        |
| Hydrocarbon Gas Liquids .....                              | -1.22        | -1.53        | -1.49        | -1.38        | -1.40        | -1.67        | -1.73        | -1.96        | -1.95        | -1.95        | -1.93        | -2.09        | -1.41        | -1.69        | -1.98        |
| Unfinished Oils .....                                      | 0.39         | 0.32         | 0.35         | 0.28         | 0.34         | 0.40         | 0.43         | 0.36         | 0.50         | 0.61         | 0.61         | 0.53         | 0.33         | 0.38         | 0.56         |
| Other HC/Oxygenates .....                                  | -0.18        | -0.15        | -0.13        | -0.15        | -0.14        | -0.12        | -0.12        | -0.10        | -0.13        | -0.12        | -0.12        | -0.12        | -0.15        | -0.12        | -0.12        |
| Motor Gasoline Blend Comp. ....                            | 0.50         | 0.78         | 0.66         | 0.37         | 0.38         | 0.71         | 0.49         | 0.46         | 0.44         | 0.66         | 0.49         | 0.45         | 0.58         | 0.51         | 0.51         |
| Finished Motor Gasoline .....                              | -0.94        | -0.71        | -0.72        | -1.00        | -0.84        | -0.73        | -0.64        | -0.98        | -1.06        | -0.94        | -0.79        | -1.21        | -0.84        | -0.80        | -1.00        |
| Jet Fuel .....   | -0.10        | -0.10        | -0.06        | -0.13        | -0.05        | 0.00         | -0.04        | -0.03        | -0.03        | -0.08        | -0.09        | -0.08        | -0.10        | -0.03        | -0.07        |
| Distillate Fuel Oil .....                                  | -0.87        | -1.30        | -1.14        | -1.19        | -0.97        | -1.24        | -1.34        | -1.29        | -1.48        | -1.95        | -1.90        | -1.81        | -1.13        | -1.21        | -1.78        |
| Residual Fuel Oil .....                                    | -0.10        | -0.14        | -0.10        | -0.09        | -0.08        | -0.06        | -0.06        | -0.08        | -0.07        | -0.12        | -0.08        | -0.11        | -0.11        | -0.07        | -0.10        |
| Other Oils (g) .....                                       | -0.62        | -0.61        | -0.53        | -0.61        | -0.66        | -0.66        | -0.63        | -0.73        | -0.74        | -0.82        | -0.78        | -0.84        | -0.59        | -0.67        | -0.79        |
| Product Inventory Net Withdrawals .....                    | 0.41         | -0.21        | -0.69        | 0.38         | 0.43         | -0.67        | -0.36        | 0.32         | 0.30         | -0.50        | -0.29        | 0.35         | -0.03        | -0.07        | -0.03        |
| <b>Total Supply .....</b>                                  | <b>20.23</b> | <b>20.33</b> | <b>20.63</b> | <b>20.60</b> | <i>20.41</i> | <i>20.72</i> | <i>21.11</i> | <i>20.99</i> | <i>20.79</i> | <i>20.99</i> | <i>21.38</i> | <i>21.08</i> | <b>20.45</b> | <i>20.81</i> | <i>21.06</i> |
| <b>Consumption (million barrels per day)</b>               |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| Hydrocarbon Gas Liquids .....                              | 3.22         | 2.67         | 2.85         | 3.22         | 3.48         | 2.91         | 3.07         | 3.40         | 3.54         | 3.12         | 3.22         | 3.46         | 2.99         | 3.21         | 3.34         |
| Unfinished Oils .....                                      | 0.13         | -0.04        | -0.10        | 0.00         | -0.01        | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         |
| Motor Gasoline .....                                       | 9.01         | 9.51         | 9.51         | 9.25         | 9.00         | 9.54         | 9.54         | 9.26         | 9.04         | 9.59         | 9.63         | 9.26         | 9.32         | 9.34         | 9.38         |
| Fuel Ethanol blended into Motor Gasoline .....             | 0.91         | 0.94         | 0.96         | 0.94         | 0.90         | 0.97         | 0.97         | 0.95         | 0.91         | 0.98         | 0.98         | 0.95         | 0.94         | 0.95         | 0.95         |
| Jet Fuel .....   | 1.64         | 1.73         | 1.78         | 1.70         | 1.70         | 1.79         | 1.84         | 1.80         | 1.74         | 1.81         | 1.86         | 1.83         | 1.71         | 1.78         | 1.81         |
| Distillate Fuel Oil .....                                  | 4.18         | 4.13         | 4.05         | 4.18         | 4.19         | 4.11         | 4.11         | 4.23         | 4.26         | 4.13         | 4.16         | 4.24         | 4.13         | 4.16         | 4.20         |
| Residual Fuel Oil .....                                    | 0.28         | 0.32         | 0.34         | 0.34         | 0.25         | 0.33         | 0.35         | 0.31         | 0.31         | 0.30         | 0.32         | 0.28         | 0.32         | 0.31         | 0.30         |
| Other Oils (g) .....                                       | 1.78         | 2.01         | 2.22         | 1.91         | 1.80         | 2.04         | 2.21         | 1.99         | 1.90         | 2.05         | 2.20         | 2.00         | 1.98         | 2.01         | 2.04         |
| <b>Total Consumption .....</b>                             | <b>20.24</b> | <b>20.33</b> | <b>20.63</b> | <b>20.60</b> | <i>20.41</i> | <i>20.72</i> | <i>21.11</i> | <i>20.99</i> | <i>20.79</i> | <i>20.99</i> | <i>21.38</i> | <i>21.08</i> | <b>20.45</b> | <i>20.81</i> | <i>21.06</i> |
| <b>Total Petroleum and Other Liquids Net Imports .....</b> | <b>3.05</b>  | <b>2.75</b>  | <b>2.67</b>  | <b>0.91</b>  | <i>0.79</i>  | <i>1.47</i>  | <i>1.13</i>  | <i>0.01</i>  | <i>-0.13</i> | <i>0.13</i>  | <i>0.18</i>  | <i>-0.81</i> | <b>2.34</b>  | <i>0.85</i>  | <i>-0.16</i> |
| <b>End-of-period Inventories (million barrels)</b>         |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| <b>Commercial Inventory</b>                                |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| Crude Oil (excluding SPR) .....                            | 423.4        | 414.8        | 416.1        | 441.8        | 451.4        | 458.5        | 454.7        | 466.5        | 497.8        | 490.2        | 476.6        | 484.2        | 441.8        | 466.5        | 484.2        |
| Hydrocarbon Gas Liquids .....                              | 139.3        | 180.8        | 224.8        | 188.5        | 158.5        | 212.9        | 253.1        | 209.5        | 172.7        | 222.1        | 259.8        | 215.6        | 188.5        | 209.5        | 215.6        |
| Unfinished Oils .....                                      | 98.3         | 92.6         | 92.0         | 85.9         | 92.9         | 90.3         | 88.2         | 81.6         | 92.1         | 91.5         | 88.4         | 82.0         | 85.9         | 81.6         | 82.0         |
| Other HC/Oxygenates .....                                  | 30.5         | 28.8         | 30.5         | 31.4         | 33.3         | 32.3         | 31.5         | 32.2         | 33.9         | 32.9         | 32.2         | 32.8         | 31.4         | 32.2         | 32.8         |
| <b>Total Motor Gasoline .....</b>                          | <b>239.6</b> | <b>240.3</b> | <b>239.7</b> | <b>246.3</b> | <i>236.1</i> | <i>238.0</i> | <i>232.0</i> | <i>245.6</i> | <i>244.7</i> | <i>240.1</i> | <i>234.3</i> | <i>247.1</i> | <b>246.3</b> | <i>245.6</i> | <i>247.1</i> |
| Finished Motor Gasoline .....                              | 23.1         | 24.7         | 24.8         | 25.7         | 22.0         | 23.9         | 24.6         | 25.3         | 25.0         | 23.8         | 24.7         | 25.0         | 25.7         | 25.3         | 25.0         |
| Motor Gasoline Blend Comp. ....                            | 216.5        | 215.6        | 214.9        | 220.5        | 214.1        | 214.1        | 207.4        | 220.3        | 219.7        | 216.3        | 209.6        | 222.2        | 220.5        | 220.3        | 222.2        |
| Jet Fuel .....   | 40.4         | 40.8         | 46.9         | 41.6         | 40.3         | 41.9         | 43.7         | 41.7         | 41.7         | 43.2         | 44.6         | 42.6         | 41.6         | 41.7         | 42.6         |
| Distillate Fuel Oil .....                                  | 130.4        | 120.4        | 137.1        | 140.0        | 127.8        | 131.6        | 137.2        | 142.3        | 132.8        | 135.2        | 140.4        | 145.5        | 140.0        | 142.3        | 145.5        |
| Residual Fuel Oil .....                                    | 35.0         | 30.0         | 28.6         | 28.3         | 29.6         | 33.9         | 34.4         | 35.5         | 37.8         | 37.8         | 36.0         | 35.7         | 28.3         | 35.5         | 35.7         |
| Other Oils (g) .....                                       | 59.3         | 58.8         | 56.1         | 58.7         | 63.3         | 61.4         | 55.2         | 57.1         | 62.3         | 60.7         | 54.7         | 56.7         | 58.7         | 57.1         | 56.7         |
| <b>Total Commercial Inventory .....</b>                    | <b>1,196</b> | <b>1,207</b> | <b>1,272</b> | <b>1,262</b> | <i>1,233</i> | <i>1,301</i> | <i>1,330</i> | <i>1,312</i> | <i>1,316</i> | <i>1,354</i> | <i>1,367</i> | <i>1,342</i> | <b>1,262</b> | <i>1,312</i> | <i>1,342</i> |
| Crude Oil in SPR .....                                     | 665          | 660          | 660          | 649          | 649          | 645          | 645          | 641          | 638          | 634          | 633          | 630          | 649          | 641          | 630          |

- = 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 - April 2019

|   | 2018  |       |       |       | 2019  |       |       |       | 2020  |       |       |       | Year  |       |       |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|   | Q1    | Q2    | Q3    | Q4    | Q1    | Q2    | Q3    | Q4    | Q1    | Q2    | Q3    | Q4    | 2018  | 2019  | 2020  |
| <b>HGL Production</b>                                     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| <b>Natural Gas Processing Plants</b>                      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Ethane .....  | 1.59  | 1.70  | 1.76  | 1.77  | 1.90  | 1.93  | 1.99  | 2.16  | 2.18  | 2.17  | 2.19  | 2.27  | 1.71  | 2.00  | 2.20  |
| Propane .....   | 1.29  | 1.37  | 1.44  | 1.47  | 1.48  | 1.53  | 1.58  | 1.62  | 1.61  | 1.63  | 1.65  | 1.65  | 1.39  | 1.55  | 1.64  |
| Butanes .....   | 0.69  | 0.74  | 0.78  | 0.79  | 0.79  | 0.82  | 0.85  | 0.87  | 0.85  | 0.87  | 0.88  | 0.88  | 0.75  | 0.83  | 0.87  |
| Natural Gasoline (Pentanes Plus) .....                    | 0.44  | 0.50  | 0.55  | 0.51  | 0.51  | 0.55  | 0.58  | 0.57  | 0.54  | 0.58  | 0.60  | 0.58  | 0.50  | 0.55  | 0.58  |
| <b>Refinery and Blender Net Production</b>                |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Ethane/Ethylene .....                                     | 0.01  | 0.01  | 0.01  | 0.01  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.01  | 0.00  | 0.00  |
| Propane .....   | 0.30  | 0.31  | 0.31  | 0.29  | 0.29  | 0.30  | 0.29  | 0.30  | 0.29  | 0.31  | 0.30  | 0.31  | 0.30  | 0.29  | 0.30  |
| Propylene (refinery-grade) .....                          | 0.28  | 0.29  | 0.29  | 0.31  | 0.28  | 0.29  | 0.28  | 0.29  | 0.28  | 0.29  | 0.29  | 0.29  | 0.29  | 0.28  | 0.29  |
| Butanes/Butylenes .....                                   | -0.11 | 0.24  | 0.19  | -0.20 | -0.09 | 0.26  | 0.19  | -0.20 | -0.08 | 0.26  | 0.19  | -0.20 | 0.03  | 0.04  | 0.04  |
| <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 .....  | -0.22 | -0.29 | -0.26 | -0.25 | -0.32 | -0.31 | -0.31 | -0.34 | -0.37 | -0.37 | -0.37 | -0.40 | -0.26 | -0.32 | -0.38 |
| Propane/Propylene .....                                   | -0.72 | -0.81 | -0.87 | -0.86 | -0.68 | -0.84 | -0.86 | -1.07 | -0.98 | -0.98 | -0.96 | -1.12 | -0.82 | -0.86 | -1.01 |
| Butanes/Butylenes .....                                   | -0.10 | -0.20 | -0.19 | -0.13 | -0.19 | -0.26 | -0.26 | -0.26 | -0.30 | -0.30 | -0.28 | -0.27 | -0.15 | -0.24 | -0.29 |
| Natural Gasoline (Pentanes Plus) .....                    | -0.18 | -0.23 | -0.17 | -0.14 | -0.20 | -0.26 | -0.30 | -0.29 | -0.30 | -0.30 | -0.32 | -0.31 | -0.18 | -0.26 | -0.31 |
| <b>HGL Refinery and Blender Net Inputs</b>                |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Butanes/Butylenes .....                                   | 0.45  | 0.30  | 0.32  | 0.55  | 0.44  | 0.31  | 0.33  | 0.51  | 0.42  | 0.31  | 0.34  | 0.52  | 0.41  | 0.40  | 0.40  |
| Natural Gasoline (Pentanes Plus) .....                    | 0.15  | 0.16  | 0.18  | 0.17  | 0.16  | 0.18  | 0.18  | 0.18  | 0.16  | 0.17  | 0.18  | 0.17  | 0.17  | 0.18  | 0.17  |
| <b>HGL Consumption</b>                                    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Ethane/Ethylene .....                                     | 1.44  | 1.45  | 1.51  | 1.50  | 1.60  | 1.60  | 1.70  | 1.84  | 1.80  | 1.79  | 1.85  | 1.90  | 1.47  | 1.69  | 1.83  |
| Propane .....   | 1.16  | 0.60  | 0.65  | 1.01  | 1.26  | 0.68  | 0.75  | 0.96  | 1.16  | 0.69  | 0.76  | 0.96  | 0.86  | 0.91  | 0.89  |
| Propylene (refinery-grade) .....                          | 0.32  | 0.31  | 0.31  | 0.29  | 0.30  | 0.31  | 0.30  | 0.29  | 0.31  | 0.32  | 0.31  | 0.30  | 0.30  | 0.30  | 0.31  |
| Butanes/Butylenes .....                                   | 0.20  | 0.21  | 0.21  | 0.25  | 0.19  | 0.26  | 0.25  | 0.22  | 0.19  | 0.26  | 0.25  | 0.22  | 0.22  | 0.23  | 0.23  |
| Natural Gasoline (Pentanes Plus) .....                    | 0.10  | 0.09  | 0.16  | 0.18  | 0.13  | 0.06  | 0.06  | 0.08  | 0.08  | 0.06  | 0.07  | 0.08  | 0.13  | 0.08  | 0.07  |
| <b>HGL Inventories (million barrels)</b>                  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Ethane .....  | 51.41 | 47.90 | 46.07 | 50.15 | 47.92 | 50.97 | 49.11 | 48.67 | 47.13 | 50.28 | 48.38 | 47.94 | 48.87 | 49.17 | 48.43 |
| Propane .....   | 33.83 | 56.51 | 75.16 | 63.67 | 45.78 | 71.92 | 94.16 | 82.11 | 57.60 | 79.53 | 99.36 | 87.22 | 63.67 | 82.11 | 87.22 |
| Propylene (refinery-grade) .....                          | 3.82  | 3.64  | 3.86  | 6.93  | 7.38  | 7.34  | 7.32  | 8.44  | 8.41  | 7.95  | 8.02  | 8.82  | 6.93  | 8.44  | 8.82  |
| Butanes/Butylenes .....                                   | 32.02 | 55.37 | 78.52 | 47.44 | 36.53 | 60.20 | 78.64 | 48.01 | 36.22 | 59.89 | 78.33 | 47.71 | 47.44 | 48.01 | 47.71 |
| Natural Gasoline (Pentanes Plus) .....                    | 19.36 | 18.59 | 20.34 | 20.84 | 19.96 | 22.38 | 23.93 | 23.77 | 22.33 | 24.42 | 25.74 | 25.46 | 20.84 | 23.77 | 25.46 |
| <b>Refinery and Blender Net Inputs</b>                    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Crude Oil .....   | 16.41 | 17.14 | 17.32 | 16.99 | 16.24 | 17.37 | 17.52 | 17.17 | 17.20 | 18.23 | 18.20 | 17.88 | 16.97 | 17.08 | 17.88 |
| Hydrocarbon Gas Liquids .....                             | 0.61  | 0.47  | 0.50  | 0.72  | 0.60  | 0.48  | 0.51  | 0.69  | 0.58  | 0.48  | 0.52  | 0.70  | 0.57  | 0.57  | 0.57  |
| Other Hydrocarbons/Oxygenates .....                       | 1.16  | 1.23  | 1.22  | 1.20  | 1.18  | 1.26  | 1.24  | 1.25  | 1.22  | 1.30  | 1.27  | 1.26  | 1.20  | 1.23  | 1.26  |
| Unfinished Oils .....                                     | 0.12  | 0.42  | 0.45  | 0.34  | 0.26  | 0.42  | 0.46  | 0.43  | 0.39  | 0.62  | 0.65  | 0.60  | 0.33  | 0.39  | 0.56  |
| Motor Gasoline Blend Components .....                     | 0.34  | 0.70  | 0.58  | 0.26  | 0.52  | 0.85  | 0.66  | 0.49  | 0.57  | 0.84  | 0.66  | 0.49  | 0.47  | 0.63  | 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 .....               | 18.63 | 19.96 | 20.08 | 19.51 | 18.80 | 20.39 | 20.40 | 20.04 | 19.96 | 21.47 | 21.30 | 20.91 | 19.55 | 19.91 | 20.91 |
| <b>Refinery Processing Gain</b>                           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| .....   | 1.11  | 1.12  | 1.17  | 1.16  | 1.09  | 1.12  | 1.14  | 1.19  | 1.20  | 1.25  | 1.27  | 1.27  | 1.14  | 1.14  | 1.25  |
| <b>Refinery and Blender Net Production</b>                |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Hydrocarbon Gas Liquids .....                             | 0.48  | 0.84  | 0.80  | 0.41  | 0.49  | 0.86  | 0.76  | 0.39  | 0.50  | 0.87  | 0.78  | 0.40  | 0.63  | 0.62  | 0.64  |
| Finished Motor Gasoline .....                             | 9.79  | 10.14 | 10.11 | 10.19 | 9.85  | 10.40 | 10.27 | 10.40 | 10.19 | 10.63 | 10.50 | 10.61 | 10.06 | 10.23 | 10.48 |
| Jet Fuel .....  | 1.72  | 1.83  | 1.90  | 1.77  | 1.74  | 1.81  | 1.89  | 1.81  | 1.77  | 1.91  | 1.96  | 1.88  | 1.81  | 1.81  | 1.88  |
| Distillate Fuel .....                                     | 4.81  | 5.25  | 5.29  | 5.32  | 4.97  | 5.33  | 5.44  | 5.50  | 5.59  | 6.04  | 6.04  | 6.04  | 5.17  | 5.31  | 5.93  |
| Residual Fuel .....                                       | 0.44  | 0.40  | 0.42  | 0.43  | 0.35  | 0.43  | 0.41  | 0.40  | 0.41  | 0.42  | 0.38  | 0.39  | 0.42  | 0.40  | 0.40  |
| Other Oils (a) .....                                      | 2.49  | 2.61  | 2.72  | 2.55  | 2.51  | 2.68  | 2.77  | 2.74  | 2.70  | 2.85  | 2.91  | 2.87  | 2.59  | 2.68  | 2.83  |
| Total Refinery and Blender Net Production .....           | 19.74 | 21.08 | 21.25 | 20.67 | 19.89 | 21.52 | 21.54 | 21.23 | 21.16 | 22.72 | 22.57 | 22.19 | 20.69 | 21.05 | 22.16 |
| <b>Refinery Distillation Inputs</b>                       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| .....   | 16.76 | 17.50 | 17.69 | 17.33 | 16.52 | 17.48 | 17.70 | 17.34 | 17.20 | 18.11 | 18.17 | 17.86 | 17.32 | 17.26 | 17.84 |
| <b>Refinery Operable Distillation Capacity</b>            |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| .....   | 18.57 | 18.60 | 18.60 | 18.60 | 18.76 | 18.76 | 18.77 | 18.78 | 18.78 | 18.78 | 18.78 | 18.81 | 18.59 | 18.77 | 18.79 |
| <b>Refinery Distillation Utilization Factor</b>           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| .....   | 0.90  | 0.94  | 0.95  | 0.93  | 0.88  | 0.93  | 0.94  | 0.92  | 0.92  | 0.96  | 0.97  | 0.95  | 0.93  | 0.92  | 0.95  |

- = 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 - April 2019

|   | 2018         |              |              |              | 2019         |              |              |              | 2020         |              |              |              | Year         |              |              |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|   | Q1           | Q2           | Q3           | Q4           | Q1           | Q2           | Q3           | Q4           | Q1           | Q2           | Q3           | Q4           | 2018         | 2019         | 2020         |
| <b>Prices (cents per gallon)</b>                            |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| <b>Refiner Wholesale Price .....</b>                        | <b>186</b>   | <b>213</b>   | <b>213</b>   | <b>178</b>   | <b>169</b>   | <i>206</i>   | <i>197</i>   | <i>173</i>   | <i>178</i>   | <i>191</i>   | <i>185</i>   | <i>170</i>   | <b>198</b>   | <i>187</i>   | <i>181</i>   |
| <b>Gasoline Regular Grade Retail Prices Including Taxes</b> |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| PADD 1 .....  | <b>255</b>   | <b>279</b>   | <b>278</b>   | <b>257</b>   | <b>233</b>   | <i>273</i>   | <i>268</i>   | <i>251</i>   | <i>247</i>   | <i>259</i>   | <i>257</i>   | <i>247</i>   | <b>268</b>   | <i>257</i>   | <i>253</i>   |
| PADD 2 .....  | <b>246</b>   | <b>274</b>   | <b>276</b>   | <b>245</b>   | <b>222</b>   | <i>271</i>   | <i>265</i>   | <i>242</i>   | <i>243</i>   | <i>257</i>   | <i>255</i>   | <i>240</i>   | <b>261</b>   | <i>251</i>   | <i>249</i>   |
| PADD 3 .....  | <b>230</b>   | <b>261</b>   | <b>258</b>   | <b>231</b>   | <b>207</b>   | <i>255</i>   | <i>246</i>   | <i>224</i>   | <i>227</i>   | <i>241</i>   | <i>235</i>   | <i>220</i>   | <b>245</b>   | <i>234</i>   | <i>231</i>   |
| PADD 4 .....  | <b>247</b>   | <b>288</b>   | <b>297</b>   | <b>281</b>   | <b>226</b>   | <i>268</i>   | <i>276</i>   | <i>251</i>   | <i>236</i>   | <i>259</i>   | <i>266</i>   | <i>247</i>   | <b>279</b>   | <i>256</i>   | <i>252</i>   |
| PADD 5 .....  | <b>312</b>   | <b>342</b>   | <b>335</b>   | <b>333</b>   | <b>297</b>   | <i>330</i>   | <i>323</i>   | <i>292</i>   | <i>291</i>   | <i>320</i>   | <i>314</i>   | <i>288</i>   | <b>330</b>   | <i>311</i>   | <i>304</i>   |
| U.S. Average .....  | <b>258</b>   | <b>285</b>   | <b>284</b>   | <b>262</b>   | <b>236</b>   | <i>279</i>   | <i>273</i>   | <i>251</i>   | <i>250</i>   | <i>266</i>   | <i>263</i>   | <i>248</i>   | <b>273</b>   | <i>260</i>   | <i>257</i>   |
| <b>Gasoline All Grades Including Taxes</b>                  | <b>270</b>   | <b>294</b>   | <b>292</b>   | <b>271</b>   | <b>245</b>   | <i>289</i>   | <i>284</i>   | <i>263</i>   | <i>262</i>   | <i>278</i>   | <i>275</i>   | <i>260</i>   | <b>282</b>   | <i>271</i>   | <i>269</i>   |
| <b>End-of-period Inventories (million barrels)</b>          |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| <b>Total Gasoline Inventories</b>                           |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| PADD 1 .....  | <b>58.4</b>  | <b>66.5</b>  | <b>70.2</b>  | <b>62.9</b>  | <b>63.5</b>  | <i>66.8</i>  | <i>64.1</i>  | <i>68.0</i>  | <i>67.3</i>  | <i>68.1</i>  | <i>65.4</i>  | <i>69.0</i>  | <b>62.9</b>  | <i>68.0</i>  | <i>69.0</i>  |
| PADD 2 .....  | <b>57.3</b>  | <b>53.5</b>  | <b>53.1</b>  | <b>56.1</b>  | <b>53.6</b>  | <i>52.8</i>  | <i>51.6</i>  | <i>53.7</i>  | <i>56.4</i>  | <i>53.6</i>  | <i>52.3</i>  | <i>54.3</i>  | <b>56.1</b>  | <i>53.7</i>  | <i>54.3</i>  |
| PADD 3 .....  | <b>84.2</b>  | <b>82.3</b>  | <b>80.5</b>  | <b>90.6</b>  | <b>81.3</b>  | <i>82.0</i>  | <i>80.7</i>  | <i>84.7</i>  | <i>83.4</i>  | <i>82.3</i>  | <i>80.9</i>  | <i>84.8</i>  | <b>90.6</b>  | <i>84.7</i>  | <i>84.8</i>  |
| PADD 4 .....  | <b>7.7</b>   | <b>7.3</b>   | <b>7.0</b>   | <b>7.3</b>   | <b>7.0</b>   | <i>7.5</i>   | <i>7.0</i>   | <i>7.5</i>   | <i>7.3</i>   | <i>7.3</i>   | <i>6.8</i>   | <i>7.2</i>   | <b>7.3</b>   | <i>7.5</i>   | <i>7.2</i>   |
| PADD 5 .....  | <b>32.0</b>  | <b>30.7</b>  | <b>28.8</b>  | <b>29.4</b>  | <b>30.8</b>  | <i>28.9</i>  | <i>28.7</i>  | <i>31.8</i>  | <i>30.4</i>  | <i>28.8</i>  | <i>28.9</i>  | <i>31.8</i>  | <b>29.4</b>  | <i>31.8</i>  | <i>31.8</i>  |
| U.S. Total .....  | <b>239.6</b> | <b>240.3</b> | <b>239.7</b> | <b>246.3</b> | <b>236.1</b> | <i>238.0</i> | <i>232.0</i> | <i>245.6</i> | <i>244.7</i> | <i>240.1</i> | <i>234.3</i> | <i>247.1</i> | <b>246.3</b> | <i>245.6</i> | <i>247.1</i> |
| <b>Finished Gasoline Inventories</b>                        |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| U.S. Total .....  | <b>23.1</b>  | <b>24.7</b>  | <b>24.8</b>  | <b>25.7</b>  | <b>22.0</b>  | <i>23.9</i>  | <i>24.6</i>  | <i>25.3</i>  | <i>25.0</i>  | <i>23.8</i>  | <i>24.7</i>  | <i>25.0</i>  | <b>25.7</b>  | <i>25.3</i>  | <i>25.0</i>  |
| <b>Gasoline Blending Components Inventories</b>             |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| U.S. Total .....  | <b>216.5</b> | <b>215.6</b> | <b>214.9</b> | <b>220.5</b> | <b>214.1</b> | <i>214.1</i> | <i>207.4</i> | <i>220.3</i> | <i>219.7</i> | <i>216.3</i> | <i>209.6</i> | <i>222.2</i> | <b>220.5</b> | <i>220.3</i> | <i>222.2</i> |

- = no data available

Prices are not adjusted for inflation.

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

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

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

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

*Petroleum Supply Monthly*, DOE/EIA-0109; *Petroleum Supply Annual*, DOE/EIA-0340/2; and *Weekly Petroleum Status Report*, DOE/EIA-0208.

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

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

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

U.S. Energy Information Administration | Short-Term Energy Outlook - April 2019

|   | 2018         |              |              |              | 2019          |               |               |              | 2020          |               |              |              | Year         |              |              |
|---|--------------|--------------|--------------|--------------|---------------|---------------|---------------|--------------|---------------|---------------|--------------|--------------|--------------|--------------|--------------|
|   | Q1           | Q2           | Q3           | Q4           | Q1            | Q2            | Q3            | Q4           | Q1            | Q2            | Q3           | Q4           | 2018         | 2019         | 2020         |
| <b>Supply (billion cubic feet per day)</b>            |              |              |              |              |               |               |               |              |               |               |              |              |              |              |              |
| Total Marketed Production .....                       | <b>84.93</b> | <b>87.39</b> | <b>91.50</b> | <b>94.77</b> | <b>95.53</b>  | <i>97.18</i>  | <i>98.99</i>  | <i>99.57</i> | <i>99.59</i>  | <i>99.71</i>  | <i>99.77</i> | <i>99.42</i> | <b>89.68</b> | <i>97.83</i> | <i>99.62</i> |
| Alaska .....  | <b>1.00</b>  | <b>0.92</b>  | <b>0.86</b>  | <b>0.96</b>  | <b>1.01</b>   | <i>0.86</i>   | <i>0.78</i>   | <i>0.95</i>  | <i>1.01</i>   | <i>0.87</i>   | <i>0.79</i>  | <i>0.95</i>  | <b>0.94</b>  | <i>0.90</i>  | <i>0.91</i>  |
| Federal GOM (a) .....                                 | <b>2.57</b>  | <b>2.48</b>  | <b>2.86</b>  | <b>2.77</b>  | <b>2.90</b>   | <i>2.91</i>   | <i>2.83</i>   | <i>2.86</i>  | <i>2.91</i>   | <i>2.93</i>   | <i>2.89</i>  | <i>2.95</i>  | <b>2.67</b>  | <i>2.88</i>  | <i>2.92</i>  |
| Lower 48 States (excl GOM) .....                      | <b>81.37</b> | <b>83.98</b> | <b>87.79</b> | <b>91.04</b> | <b>91.62</b>  | <i>93.41</i>  | <i>95.37</i>  | <i>95.77</i> | <i>95.67</i>  | <i>95.91</i>  | <i>96.09</i> | <i>95.52</i> | <b>86.08</b> | <i>94.06</i> | <i>95.80</i> |
| Total Dry Gas Production .....                        | <b>79.13</b> | <b>81.17</b> | <b>84.96</b> | <b>88.20</b> | <b>88.93</b>  | <i>90.42</i>  | <i>92.06</i>  | <i>92.55</i> | <i>92.51</i>  | <i>92.58</i>  | <i>92.58</i> | <i>92.21</i> | <b>83.39</b> | <i>91.00</i> | <i>92.47</i> |
| LNG Gross Imports .....                               | <b>0.33</b>  | <b>0.10</b>  | <b>0.15</b>  | <b>0.26</b>  | <b>0.35</b>   | <i>0.17</i>   | <i>0.17</i>   | <i>0.21</i>  | <i>0.32</i>   | <i>0.18</i>   | <i>0.18</i>  | <i>0.20</i>  | <b>0.21</b>  | <i>0.22</i>  | <i>0.22</i>  |
| LNG Gross Exports .....                               | <b>2.64</b>  | <b>2.79</b>  | <b>2.95</b>  | <b>3.48</b>  | <b>3.92</b>   | <i>4.10</i>   | <i>5.19</i>   | <i>6.12</i>  | <i>6.69</i>   | <i>6.13</i>   | <i>6.47</i>  | <i>7.23</i>  | <b>2.97</b>  | <i>4.84</i>  | <i>6.63</i>  |
| Pipeline Gross Imports .....                          | <b>8.76</b>  | <b>7.63</b>  | <b>7.50</b>  | <b>7.22</b>  | <b>8.53</b>   | <i>7.16</i>   | <i>6.94</i>   | <i>7.53</i>  | <i>8.36</i>   | <i>6.86</i>   | <i>6.96</i>  | <i>7.05</i>  | <b>7.77</b>  | <i>7.53</i>  | <i>7.31</i>  |
| Pipeline Gross Exports .....                          | <b>7.02</b>  | <b>6.15</b>  | <b>7.03</b>  | <b>7.43</b>  | <b>7.85</b>   | <i>7.30</i>   | <i>7.17</i>   | <i>7.92</i>  | <i>9.44</i>   | <i>8.13</i>   | <i>7.73</i>  | <i>8.26</i>  | <b>6.91</b>  | <i>7.56</i>  | <i>8.39</i>  |
| Supplemental Gaseous Fuels .....                      | <b>0.21</b>  | <b>0.17</b>  | <b>0.19</b>  | <b>0.18</b>  | <b>0.18</b>   | <i>0.20</i>   | <i>0.20</i>   | <i>0.20</i>  | <i>0.20</i>   | <i>0.20</i>   | <i>0.20</i>  | <i>0.20</i>  | <b>0.19</b>  | <i>0.19</i>  | <i>0.20</i>  |
| Net Inventory Withdrawals .....                       | <b>18.31</b> | <b>-8.85</b> | <b>-8.23</b> | <b>2.58</b>  | <b>17.15</b>  | <i>-13.24</i> | <i>-10.50</i> | <i>2.68</i>  | <i>15.75</i>  | <i>-11.17</i> | <i>-8.07</i> | <i>3.17</i>  | <b>0.88</b>  | <i>-1.04</i> | <i>-0.09</i> |
| Total Supply .....                                    | <b>97.09</b> | <b>71.27</b> | <b>74.59</b> | <b>87.53</b> | <b>103.36</b> | <i>73.31</i>  | <i>76.50</i>  | <i>89.13</i> | <i>101.01</i> | <i>74.39</i>  | <i>77.66</i> | <i>87.34</i> | <b>82.57</b> | <i>85.51</i> | <i>85.09</i> |
| Balancing Item (b) .....                              | <b>0.52</b>  | <b>-0.57</b> | <b>-0.50</b> | <b>-1.28</b> | <b>0.30</b>   | <i>-0.87</i>  | <i>-1.20</i>  | <i>-1.82</i> | <i>-0.11</i>  | <i>-0.32</i>  | <i>-0.75</i> | <i>-0.11</i> | <b>-0.46</b> | <i>-0.90</i> | <i>-0.33</i> |
| Total Primary Supply .....                            | <b>97.61</b> | <b>70.71</b> | <b>74.09</b> | <b>86.25</b> | <b>103.67</b> | <i>72.44</i>  | <i>75.30</i>  | <i>87.31</i> | <i>100.90</i> | <i>74.07</i>  | <i>76.90</i> | <i>87.22</i> | <b>82.11</b> | <i>84.61</i> | <i>84.76</i> |
| <b>Consumption (billion cubic feet per day)</b>       |              |              |              |              |               |               |               |              |               |               |              |              |              |              |              |
| Residential .....                                     | <b>25.77</b> | <b>7.98</b>  | <b>3.45</b>  | <b>17.61</b> | <b>27.76</b>  | <i>7.74</i>   | <i>3.53</i>   | <i>16.74</i> | <i>25.75</i>  | <i>7.73</i>   | <i>3.56</i>  | <i>15.96</i> | <b>13.65</b> | <i>13.88</i> | <i>13.23</i> |
| Commercial .....                                      | <b>15.36</b> | <b>6.61</b>  | <b>4.58</b>  | <b>11.69</b> | <b>16.15</b>  | <i>6.54</i>   | <i>4.73</i>   | <i>11.06</i> | <i>14.99</i>  | <i>6.41</i>   | <i>4.69</i>  | <i>10.53</i> | <b>9.54</b>  | <i>9.59</i>  | <i>9.14</i>  |
| Industrial .....                                      | <b>24.30</b> | <b>21.82</b> | <b>21.30</b> | <b>23.42</b> | <b>25.02</b>  | <i>22.38</i>  | <i>21.75</i>  | <i>24.84</i> | <i>25.26</i>  | <i>22.61</i>  | <i>21.86</i> | <i>24.91</i> | <b>22.70</b> | <i>23.49</i> | <i>23.66</i> |
| Electric Power (c) .....                              | <b>24.91</b> | <b>27.62</b> | <b>37.78</b> | <b>26.04</b> | <b>26.73</b>  | <i>28.42</i>  | <i>37.66</i>  | <i>26.63</i> | <i>26.48</i>  | <i>29.58</i>  | <i>38.96</i> | <i>27.68</i> | <b>29.11</b> | <i>29.88</i> | <i>30.69</i> |
| Lease and Plant Fuel .....                            | <b>4.55</b>  | <b>4.68</b>  | <b>4.90</b>  | <b>5.08</b>  | <b>5.12</b>   | <i>5.21</i>   | <i>5.30</i>   | <i>5.34</i>  | <i>5.34</i>   | <i>5.34</i>   | <i>5.35</i>  | <i>5.33</i>  | <b>4.81</b>  | <i>5.24</i>  | <i>5.34</i>  |
| Pipeline and Distribution Use .....                   | <b>2.60</b>  | <b>1.88</b>  | <b>1.97</b>  | <b>2.30</b>  | <b>2.76</b>   | <i>2.02</i>   | <i>2.19</i>   | <i>2.57</i>  | <i>2.95</i>   | <i>2.25</i>   | <i>2.35</i>  | <i>2.68</i>  | <b>2.19</b>  | <i>2.38</i>  | <i>2.56</i>  |
| Vehicle Use .....                                     | <b>0.12</b>  | <b>0.12</b>  | <b>0.12</b>  | <b>0.12</b>  | <b>0.13</b>   | <i>0.13</i>   | <i>0.13</i>   | <i>0.13</i>  | <i>0.14</i>   | <i>0.14</i>   | <i>0.14</i>  | <i>0.14</i>  | <b>0.12</b>  | <i>0.13</i>  | <i>0.14</i>  |
| Total Consumption .....                               | <b>97.61</b> | <b>70.71</b> | <b>74.09</b> | <b>86.25</b> | <b>103.67</b> | <i>72.44</i>  | <i>75.30</i>  | <i>87.31</i> | <i>100.90</i> | <i>74.07</i>  | <i>76.90</i> | <i>87.22</i> | <b>82.11</b> | <i>84.61</i> | <i>84.76</i> |
| <b>End-of-period Inventories (billion cubic feet)</b> |              |              |              |              |               |               |               |              |               |               |              |              |              |              |              |
| Working Gas Inventory .....                           | <b>1,391</b> | <b>2,196</b> | <b>2,951</b> | <b>2,709</b> | <b>1,161</b>  | <i>2,366</i>  | <i>3,332</i>  | <i>3,085</i> | <i>1,652</i>  | <i>2,668</i>  | <i>3,410</i> | <i>3,119</i> | <b>2,709</b> | <i>3,085</i> | <i>3,119</i> |
| East Region (d) .....                                 | <b>229</b>   | <b>465</b>   | <b>778</b>   | <b>659</b>   | <b>208</b>    | <i>579</i>    | <i>902</i>    | <i>804</i>   | <i>316</i>    | <i>619</i>    | <i>876</i>   | <i>792</i>   | <b>659</b>   | <i>804</i>   | <i>792</i>   |
| Midwest Region (d) .....                              | <b>261</b>   | <b>459</b>   | <b>846</b>   | <b>777</b>   | <b>239</b>    | <i>553</i>    | <i>952</i>    | <i>817</i>   | <i>289</i>    | <i>562</i>    | <i>890</i>   | <i>771</i>   | <b>777</b>   | <i>817</i>   | <i>771</i>   |
| South Central Region (d) .....                        | <b>614</b>   | <b>846</b>   | <b>846</b>   | <b>880</b>   | <b>506</b>    | <i>900</i>    | <i>1,041</i>  | <i>1,064</i> | <i>754</i>    | <i>1,037</i>  | <i>1,121</i> | <i>1,104</i> | <b>880</b>   | <i>1,064</i> | <i>1,104</i> |
| Mountain Region (d) .....                             | <b>87</b>    | <b>140</b>   | <b>179</b>   | <b>141</b>   | <b>64</b>     | <i>112</i>    | <i>164</i>    | <i>141</i>   | <i>102</i>    | <i>148</i>    | <i>190</i>   | <i>156</i>   | <b>141</b>   | <i>141</i>   | <i>156</i>   |
| Pacific Region (d) .....                              | <b>169</b>   | <b>253</b>   | <b>263</b>   | <b>214</b>   | <b>114</b>    | <i>192</i>    | <i>241</i>    | <i>228</i>   | <i>161</i>    | <i>271</i>    | <i>302</i>   | <i>265</i>   | <b>214</b>   | <i>228</i>   | <i>265</i>   |
| Alaska .....  | <b>31</b>    | <b>33</b>    | <b>38</b>    | <b>37</b>    | <b>31</b>     | <i>31</i>     | <i>31</i>     | <i>31</i>    | <i>31</i>     | <i>31</i>     | <i>31</i>    | <i>31</i>    | <b>37</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 - April 2019

|                            | 2018         |              |              |              | 2019         |              |              |              | 2020         |              |              |              | Year         |              |              |
|----------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                            | Q1           | Q2           | Q3           | Q4           | Q1           | Q2           | Q3           | Q4           | Q1           | Q2           | Q3           | Q4           | 2018         | 2019         | 2020         |
| <b>Wholesale/Spot</b>      |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| Henry Hub Spot Price ..... | <b>3.13</b>  | <b>2.96</b>  | <b>3.04</b>  | <b>3.94</b>  | <b>3.02</b>  | <i>2.80</i>  | <i>2.81</i>  | <i>3.06</i>  | <i>3.12</i>  | <i>2.67</i>  | <i>2.73</i>  | <i>2.99</i>  | <b>3.27</b>  | <i>2.92</i>  | <i>2.88</i>  |
| <b>Residential Retail</b>  |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| New England .....          | <b>14.38</b> | <b>16.60</b> | <b>19.08</b> | <b>14.42</b> | <b>13.91</b> | <i>13.90</i> | <i>17.00</i> | <i>13.53</i> | <i>13.09</i> | <i>13.88</i> | <i>16.95</i> | <i>13.41</i> | <b>15.00</b> | <i>13.99</i> | <i>13.56</i> |
| Middle Atlantic .....      | <b>10.17</b> | <b>11.92</b> | <b>18.30</b> | <b>11.39</b> | <b>10.48</b> | <i>11.77</i> | <i>16.52</i> | <i>11.42</i> | <i>10.54</i> | <i>12.32</i> | <i>16.65</i> | <i>11.22</i> | <b>11.30</b> | <i>11.29</i> | <i>11.43</i> |
| E. N. Central .....        | <b>7.20</b>  | <b>9.77</b>  | <b>18.40</b> | <b>8.02</b>  | <b>7.38</b>  | <i>10.45</i> | <i>16.33</i> | <i>8.75</i>  | <i>7.93</i>  | <i>10.69</i> | <i>16.35</i> | <i>8.68</i>  | <b>8.42</b>  | <i>8.69</i>  | <i>9.08</i>  |
| W. N. Central .....        | <b>8.15</b>  | <b>10.48</b> | <b>18.55</b> | <b>9.06</b>  | <b>8.23</b>  | <i>11.12</i> | <i>17.26</i> | <i>9.42</i>  | <i>8.54</i>  | <i>11.27</i> | <i>16.99</i> | <i>9.31</i>  | <b>9.29</b>  | <i>9.41</i>  | <i>9.68</i>  |
| S. Atlantic .....          | <b>11.07</b> | <b>15.63</b> | <b>24.90</b> | <b>12.47</b> | <b>11.59</b> | <i>16.08</i> | <i>22.39</i> | <i>13.20</i> | <i>11.76</i> | <i>16.56</i> | <i>22.50</i> | <i>13.03</i> | <b>12.98</b> | <i>13.50</i> | <i>13.58</i> |
| E. S. Central .....        | <b>9.61</b>  | <b>12.70</b> | <b>21.52</b> | <b>10.58</b> | <b>9.84</b>  | <i>13.98</i> | <i>20.29</i> | <i>12.98</i> | <i>10.75</i> | <i>15.33</i> | <i>21.42</i> | <i>13.67</i> | <b>10.90</b> | <i>11.77</i> | <i>12.81</i> |
| W. S. Central .....        | <b>9.27</b>  | <b>14.25</b> | <b>22.03</b> | <b>10.19</b> | <b>8.26</b>  | <i>13.26</i> | <i>19.95</i> | <i>12.06</i> | <i>9.06</i>  | <i>14.56</i> | <i>20.64</i> | <i>12.34</i> | <b>10.98</b> | <i>11.19</i> | <i>11.71</i> |
| Mountain .....             | <b>8.22</b>  | <b>10.38</b> | <b>14.03</b> | <b>7.69</b>  | <b>7.59</b>  | <i>9.15</i>  | <i>13.15</i> | <i>8.71</i>  | <i>8.64</i>  | <i>9.96</i>  | <i>13.59</i> | <i>8.96</i>  | <b>8.74</b>  | <i>8.59</i>  | <i>9.36</i>  |
| Pacific .....              | <b>11.62</b> | <b>12.02</b> | <b>12.88</b> | <b>11.75</b> | <b>12.42</b> | <i>12.18</i> | <i>12.33</i> | <i>11.25</i> | <i>12.40</i> | <i>12.64</i> | <i>12.94</i> | <i>11.85</i> | <b>11.87</b> | <i>12.00</i> | <i>12.34</i> |
| U.S. Average .....         | <b>9.37</b>  | <b>11.93</b> | <b>17.93</b> | <b>9.97</b>  | <b>9.41</b>  | <i>11.74</i> | <i>16.45</i> | <i>10.63</i> | <i>9.85</i>  | <i>12.23</i> | <i>16.72</i> | <i>10.69</i> | <b>10.48</b> | <i>10.55</i> | <i>10.91</i> |
| <b>Commercial Retail</b>   |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| New England .....          | <b>11.05</b> | <b>11.73</b> | <b>10.85</b> | <b>10.56</b> | <b>10.67</b> | <i>10.32</i> | <i>9.92</i>  | <i>9.49</i>  | <i>9.54</i>  | <i>9.44</i>  | <i>9.32</i>  | <i>9.33</i>  | <b>10.99</b> | <i>10.20</i> | <i>9.44</i>  |
| Middle Atlantic .....      | <b>8.13</b>  | <b>7.67</b>  | <b>7.47</b>  | <b>7.86</b>  | <b>8.62</b>  | <i>7.93</i>  | <i>7.12</i>  | <i>7.66</i>  | <i>7.84</i>  | <i>7.63</i>  | <i>6.98</i>  | <i>7.52</i>  | <b>7.89</b>  | <i>8.05</i>  | <i>7.60</i>  |
| E. N. Central .....        | <b>6.19</b>  | <b>6.95</b>  | <b>9.01</b>  | <b>6.54</b>  | <b>6.37</b>  | <i>7.52</i>  | <i>8.82</i>  | <i>6.85</i>  | <i>6.62</i>  | <i>7.54</i>  | <i>8.78</i>  | <i>6.77</i>  | <b>6.62</b>  | <i>6.87</i>  | <i>6.97</i>  |
| W. N. Central .....        | <b>6.96</b>  | <b>7.30</b>  | <b>8.91</b>  | <b>7.11</b>  | <b>7.10</b>  | <i>7.65</i>  | <i>8.72</i>  | <i>7.18</i>  | <i>7.39</i>  | <i>7.64</i>  | <i>8.61</i>  | <i>7.09</i>  | <b>7.20</b>  | <i>7.32</i>  | <i>7.43</i>  |
| S. Atlantic .....          | <b>8.29</b>  | <b>9.35</b>  | <b>9.73</b>  | <b>8.70</b>  | <b>8.87</b>  | <i>9.32</i>  | <i>9.79</i>  | <i>9.08</i>  | <i>9.06</i>  | <i>9.79</i>  | <i>9.99</i>  | <i>8.98</i>  | <b>8.75</b>  | <i>9.12</i>  | <i>9.27</i>  |
| E. S. Central .....        | <b>8.62</b>  | <b>9.32</b>  | <b>10.51</b> | <b>8.84</b>  | <b>8.79</b>  | <i>9.59</i>  | <i>9.95</i>  | <i>8.84</i>  | <i>8.44</i>  | <i>9.31</i>  | <i>9.69</i>  | <i>8.63</i>  | <b>8.98</b>  | <i>9.06</i>  | <i>8.77</i>  |
| W. S. Central .....        | <b>7.21</b>  | <b>7.90</b>  | <b>8.55</b>  | <b>6.99</b>  | <b>6.71</b>  | <i>7.45</i>  | <i>8.05</i>  | <i>7.46</i>  | <i>7.15</i>  | <i>7.45</i>  | <i>7.92</i>  | <i>7.33</i>  | <b>7.44</b>  | <i>7.25</i>  | <i>7.37</i>  |
| Mountain .....             | <b>6.99</b>  | <b>7.48</b>  | <b>7.92</b>  | <b>6.24</b>  | <b>6.37</b>  | <i>6.75</i>  | <i>7.78</i>  | <i>6.90</i>  | <i>7.20</i>  | <i>7.45</i>  | <i>8.14</i>  | <i>7.06</i>  | <b>6.91</b>  | <i>6.74</i>  | <i>7.30</i>  |
| Pacific .....              | <b>8.90</b>  | <b>8.58</b>  | <b>9.11</b>  | <b>8.68</b>  | <b>8.92</b>  | <i>8.57</i>  | <i>8.65</i>  | <i>8.32</i>  | <i>8.59</i>  | <i>8.62</i>  | <i>8.84</i>  | <i>8.52</i>  | <b>8.80</b>  | <i>8.63</i>  | <i>8.61</i>  |
| U.S. Average .....         | <b>7.64</b>  | <b>8.08</b>  | <b>8.77</b>  | <b>7.61</b>  | <b>7.75</b>  | <i>8.11</i>  | <i>8.45</i>  | <i>7.73</i>  | <i>7.72</i>  | <i>8.10</i>  | <i>8.42</i>  | <i>7.67</i>  | <b>7.82</b>  | <i>7.87</i>  | <i>7.84</i>  |
| <b>Industrial Retail</b>   |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| New England .....          | <b>8.95</b>  | <b>8.62</b>  | <b>6.49</b>  | <b>7.91</b>  | <b>8.57</b>  | <i>7.42</i>  | <i>6.90</i>  | <i>8.09</i>  | <i>8.68</i>  | <i>7.85</i>  | <i>7.07</i>  | <i>7.99</i>  | <b>8.17</b>  | <i>7.89</i>  | <i>8.04</i>  |
| Middle Atlantic .....      | <b>8.33</b>  | <b>8.07</b>  | <b>7.73</b>  | <b>7.84</b>  | <b>8.58</b>  | <i>7.43</i>  | <i>7.24</i>  | <i>7.47</i>  | <i>7.88</i>  | <i>7.18</i>  | <i>7.11</i>  | <i>7.36</i>  | <b>8.09</b>  | <i>7.92</i>  | <i>7.54</i>  |
| E. N. Central .....        | <b>5.69</b>  | <b>5.02</b>  | <b>5.20</b>  | <b>5.74</b>  | <b>5.82</b>  | <i>5.74</i>  | <i>5.67</i>  | <i>5.63</i>  | <i>6.21</i>  | <i>5.71</i>  | <i>5.53</i>  | <i>5.57</i>  | <b>5.53</b>  | <i>5.73</i>  | <i>5.85</i>  |
| W. N. Central .....        | <b>5.05</b>  | <b>4.23</b>  | <b>4.21</b>  | <b>5.05</b>  | <b>5.22</b>  | <i>4.44</i>  | <i>4.32</i>  | <i>4.97</i>  | <i>5.44</i>  | <i>4.42</i>  | <i>4.17</i>  | <i>4.90</i>  | <b>4.69</b>  | <i>4.79</i>  | <i>4.80</i>  |
| S. Atlantic .....          | <b>5.34</b>  | <b>4.67</b>  | <b>4.68</b>  | <b>5.42</b>  | <b>5.34</b>  | <i>4.64</i>  | <i>4.64</i>  | <i>5.12</i>  | <i>5.46</i>  | <i>4.66</i>  | <i>4.57</i>  | <i>5.01</i>  | <b>5.06</b>  | <i>4.96</i>  | <i>4.96</i>  |
| E. S. Central .....        | <b>4.93</b>  | <b>4.21</b>  | <b>4.14</b>  | <b>4.90</b>  | <b>4.80</b>  | <i>4.18</i>  | <i>4.18</i>  | <i>4.75</i>  | <i>4.97</i>  | <i>4.31</i>  | <i>4.22</i>  | <i>4.73</i>  | <b>4.59</b>  | <i>4.50</i>  | <i>4.59</i>  |
| W. S. Central .....        | <b>3.32</b>  | <b>3.09</b>  | <b>3.12</b>  | <b>4.02</b>  | <b>3.27</b>  | <i>3.06</i>  | <i>3.07</i>  | <i>3.26</i>  | <i>3.34</i>  | <i>2.82</i>  | <i>2.94</i>  | <i>3.15</i>  | <b>3.38</b>  | <i>3.16</i>  | <i>3.07</i>  |
| Mountain .....             | <b>5.43</b>  | <b>5.36</b>  | <b>4.72</b>  | <b>4.79</b>  | <b>5.39</b>  | <i>5.40</i>  | <i>5.80</i>  | <i>5.91</i>  | <i>6.05</i>  | <i>5.59</i>  | <i>5.68</i>  | <i>5.68</i>  | <b>5.09</b>  | <i>5.62</i>  | <i>5.78</i>  |
| Pacific .....              | <b>6.97</b>  | <b>6.03</b>  | <b>6.72</b>  | <b>6.65</b>  | <b>7.10</b>  | <i>6.19</i>  | <i>6.19</i>  | <i>6.30</i>  | <i>6.87</i>  | <i>6.26</i>  | <i>6.32</i>  | <i>6.42</i>  | <b>6.61</b>  | <i>6.46</i>  | <i>6.49</i>  |
| U.S. Average .....         | <b>4.44</b>  | <b>3.83</b>  | <b>3.73</b>  | <b>4.71</b>  | <b>4.42</b>  | <i>3.79</i>  | <i>3.70</i>  | <i>4.18</i>  | <i>4.51</i>  | <i>3.67</i>  | <i>3.61</i>  | <i>4.10</i>  | <b>4.20</b>  | <i>4.04</i>  | <i>4.00</i>  |

- = no data available

Prices are not adjusted for inflation.

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

Regions refer to U.S. Census divisions.

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

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

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

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

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



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

U.S. Energy Information Administration | Short-Term Energy Outlook - April 2019

|   | 2018  |       |       |       | 2019  |       |       |       | 2020  |       |       |       | Year  |       |       |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|   | Q1    | Q2    | Q3    | Q4    | Q1    | Q2    | Q3    | Q4    | Q1    | Q2    | Q3    | Q4    | 2018  | 2019  | 2020  |
| <b>Supply (million short tons)</b>                    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Production .....                                      | 187.6 | 180.8 | 194.7 | 192.4 | 172.0 | 148.9 | 185.3 | 177.8 | 172.9 | 136.1 | 167.4 | 163.7 | 755.5 | 684.1 | 640.1 |
| Appalachia .....                                      | 50.0  | 51.6  | 49.0  | 49.5  | 47.9  | 37.6  | 46.5  | 45.4  | 42.4  | 37.3  | 40.6  | 39.4  | 200.1 | 177.4 | 159.7 |
| Interior .....  | 34.0  | 34.6  | 34.7  | 33.9  | 31.3  | 27.9  | 33.7  | 33.1  | 33.2  | 25.8  | 32.5  | 33.4  | 137.1 | 125.9 | 124.9 |
| Western .....   | 103.7 | 94.6  | 111.0 | 109.0 | 92.8  | 83.5  | 105.2 | 99.3  | 97.3  | 73.0  | 94.2  | 90.9  | 418.3 | 380.8 | 355.5 |
| Primary Inventory Withdrawals .....                   | -2.8  | 2.3   | 1.1   | -0.6  | 1.0   | 0.5   | 0.7   | -1.9  | -0.1  | 0.9   | 2.4   | -2.8  | 0.0   | 0.3   | 0.4   |
| Imports .....   | 1.4   | 1.5   | 1.4   | 1.6   | 1.5   | 1.4   | 1.6   | 1.5   | 1.2   | 1.3   | 1.5   | 1.4   | 6.0   | 6.0   | 5.4   |
| Exports .....   | 27.2  | 30.9  | 29.1  | 28.5  | 29.4  | 25.0  | 23.8  | 23.7  | 27.1  | 23.1  | 22.5  | 22.1  | 115.6 | 101.9 | 94.8  |
| Metallurgical Coal .....                              | 14.9  | 16.9  | 14.5  | 15.2  | 14.2  | 12.7  | 13.0  | 12.8  | 14.0  | 12.3  | 12.5  | 12.3  | 61.5  | 52.6  | 51.1  |
| Steam Coal .....                                      | 12.3  | 13.9  | 14.5  | 13.3  | 15.2  | 12.3  | 10.9  | 10.9  | 13.1  | 10.8  | 10.0  | 9.9   | 54.1  | 49.3  | 43.7  |
| Total Primary Supply .....                            | 159.0 | 153.7 | 168.1 | 165.0 | 145.2 | 125.8 | 163.8 | 153.7 | 147.0 | 115.2 | 148.8 | 140.2 | 645.9 | 588.5 | 551.1 |
| Secondary Inventory Withdrawals .....                 | 11.8  | 4.9   | 20.4  | -2.2  | -0.4  | 2.3   | 4.8   | -7.9  | -1.2  | 2.9   | 6.5   | -8.1  | 34.8  | -1.1  | 0.1   |
| Waste Coal (a) .....                                  | 2.8   | 2.3   | 2.6   | 2.5   | 2.3   | 2.3   | 2.3   | 2.3   | 2.3   | 2.3   | 2.3   | 2.3   | 10.2  | 9.3   | 9.2   |
| Total Supply .....                                    | 173.6 | 160.9 | 191.2 | 165.2 | 147.1 | 130.5 | 171.0 | 148.1 | 148.0 | 120.4 | 157.6 | 134.4 | 690.9 | 596.7 | 560.4 |
| <b>Consumption (million short tons)</b>               |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Coke Plants .....                                     | 4.2   | 4.6   | 4.8   | 4.7   | 3.9   | 4.3   | 4.6   | 5.4   | 3.8   | 4.3   | 4.5   | 5.3   | 18.3  | 18.1  | 18.0  |
| Electric Power Sector (b) .....                       | 154.8 | 144.2 | 181.6 | 155.9 | 140.9 | 118.5 | 158.8 | 135.0 | 136.2 | 108.6 | 145.7 | 121.5 | 636.5 | 553.3 | 512.1 |
| Retail and Other Industry .....                       | 8.5   | 7.9   | 7.7   | 8.4   | 8.1   | 7.7   | 7.6   | 7.7   | 8.0   | 7.5   | 7.4   | 7.5   | 32.5  | 31.1  | 30.4  |
| Residential and Commercial .....                      | 0.4   | 0.2   | 0.2   | 0.2   | 0.2   | 0.1   | 0.2   | 0.2   | 0.2   | 0.1   | 0.2   | 0.2   | 1.0   | 0.7   | 0.7   |
| Other Industrial .....                                | 8.1   | 7.7   | 7.5   | 8.2   | 7.9   | 7.5   | 7.4   | 7.5   | 7.8   | 7.4   | 7.2   | 7.3   | 31.5  | 30.4  | 29.7  |
| Total Consumption .....                               | 167.5 | 156.7 | 194.1 | 169.1 | 152.9 | 130.5 | 171.0 | 148.1 | 148.0 | 120.4 | 157.6 | 134.4 | 687.3 | 602.5 | 560.4 |
| Discrepancy (c) .....                                 | 6.0   | 4.2   | -2.9  | -3.8  | -5.8  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 3.5   | -5.8  | 0.0   |
| <b>End-of-period Inventories (million short tons)</b> |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Primary Inventories (d) .....                         | 26.8  | 24.5  | 23.4  | 24.0  | 22.9  | 22.5  | 21.7  | 23.7  | 23.8  | 22.8  | 20.5  | 23.3  | 24.0  | 23.7  | 23.3  |
| Secondary Inventories .....                           | 131.2 | 126.3 | 105.9 | 108.1 | 108.6 | 106.2 | 101.4 | 109.3 | 110.5 | 107.6 | 101.0 | 109.1 | 108.1 | 109.3 | 109.1 |
| Electric Power Sector .....                           | 126.5 | 121.5 | 100.8 | 102.8 | 103.4 | 100.7 | 95.7  | 103.7 | 105.2 | 102.0 | 95.3  | 103.6 | 102.8 | 103.7 | 103.6 |
| Retail and General Industry .....                     | 2.9   | 2.9   | 3.0   | 3.3   | 3.6   | 3.5   | 3.6   | 3.4   | 3.7   | 3.6   | 3.7   | 3.5   | 3.3   | 3.4   | 3.5   |
| Coke Plants .....                                     | 1.5   | 1.6   | 1.8   | 1.8   | 1.3   | 1.8   | 1.9   | 1.9   | 1.4   | 1.8   | 1.9   | 1.9   | 1.8   | 1.9   | 1.9   |
| <b>Coal Market Indicators</b>                         |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Coal Miner Productivity                               |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| (Tons per hour) .....                                 | 6.10  | 6.10  | 6.10  | 6.10  | 6.02  | 6.02  | 6.02  | 6.02  | 6.01  | 6.01  | 6.01  | 6.01  | 6.10  | 6.02  | 6.01  |
| Total Raw Steel Production                            |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| (Million short tons per day) .....                    | 0.251 | 0.253 | 0.263 | 0.270 | 0.273 | 0.280 | 0.274 | 0.248 | 0.290 | 0.291 | 0.268 | 0.231 | 0.259 | 0.269 | 0.270 |
| Cost of Coal to Electric Utilities                    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| (Dollars per million Btu) .....                       | 2.06  | 2.06  | 2.06  | 2.08  | 2.11  | 2.13  | 2.11  | 2.10  | 2.12  | 2.13  | 2.11  | 2.11  | 2.06  | 2.11  | 2.11  |

- = 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 - April 2019

|   | 2018         |              |              |              | 2019         |              |              |              | 2020         |              |              |              | Year          |               |               |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|
|   | Q1           | Q2           | Q3           | Q4           | Q1           | Q2           | Q3           | Q4           | Q1           | Q2           | Q3           | Q4           | 2018          | 2019          | 2020          |
| <b>Electricity Supply (billion kilowatthours per day)</b>                   |              |              |              |              |              |              |              |              |              |              |              |              |               |               |               |
| Electricity Generation .....  | <b>11.13</b> | <b>11.14</b> | <b>12.80</b> | <b>10.71</b> | <b>11.01</b> | <i>10.78</i> | <i>12.45</i> | <i>10.60</i> | <i>10.98</i> | <i>10.84</i> | <i>12.49</i> | <i>10.62</i> | <b>11.45</b>  | <i>11.22</i>  | <i>11.23</i>  |
| Electric Power Sector (a) .....   | <b>10.69</b> | <b>10.71</b> | <b>12.35</b> | <b>10.27</b> | <b>10.56</b> | <i>10.34</i> | <i>12.00</i> | <i>10.17</i> | <i>10.53</i> | <i>10.40</i> | <i>12.03</i> | <i>10.17</i> | <b>11.01</b>  | <i>10.77</i>  | <i>10.78</i>  |
| Comm. and Indus. Sectors (b) .....  | <b>0.43</b>  | <b>0.43</b>  | <b>0.45</b>  | <b>0.44</b>  | <b>0.45</b>  | <i>0.44</i>  | <i>0.45</i>  | <i>0.44</i>  | <i>0.45</i>  | <i>0.45</i>  | <i>0.46</i>  | <i>0.45</i>  | <b>0.44</b>   | <i>0.45</i>   | <i>0.45</i>   |
| Net Imports .....   | <b>0.13</b>  | <b>0.12</b>  | <b>0.14</b>  | <b>0.09</b>  | <b>0.13</b>  | <i>0.14</i>  | <i>0.17</i>  | <i>0.13</i>  | <i>0.14</i>  | <i>0.15</i>  | <i>0.17</i>  | <i>0.13</i>  | <b>0.12</b>   | <i>0.14</i>   | <i>0.15</i>   |
| Total Supply .....  | <b>11.26</b> | <b>11.26</b> | <b>12.93</b> | <b>10.80</b> | <b>11.14</b> | <i>10.92</i> | <i>12.61</i> | <i>10.73</i> | <i>11.13</i> | <i>10.99</i> | <i>12.66</i> | <i>10.75</i> | <b>11.57</b>  | <i>11.36</i>  | <i>11.39</i>  |
| Losses and Unaccounted for (c) .....  | <b>0.64</b>  | <b>0.93</b>  | <b>0.80</b>  | <b>0.66</b>  | <b>0.65</b>  | <i>0.80</i>  | <i>0.73</i>  | <i>0.67</i>  | <i>0.58</i>  | <i>0.83</i>  | <i>0.73</i>  | <i>0.67</i>  | <b>0.76</b>   | <i>0.72</i>   | <i>0.70</i>   |
| <b>Electricity Consumption (billion kilowatthours per day unless noted)</b> |              |              |              |              |              |              |              |              |              |              |              |              |               |               |               |
| Retail Sales .....  | <b>10.23</b> | <b>9.95</b>  | <b>11.73</b> | <b>9.75</b>  | <b>10.08</b> | <i>9.72</i>  | <i>11.47</i> | <i>9.66</i>  | <i>10.14</i> | <i>9.77</i>  | <i>11.51</i> | <i>9.68</i>  | <b>10.42</b>  | <i>10.24</i>  | <i>10.28</i>  |
| Residential Sector .....  | <b>4.10</b>  | <b>3.60</b>  | <b>4.72</b>  | <b>3.62</b>  | <b>3.96</b>  | <i>3.42</i>  | <i>4.52</i>  | <i>3.53</i>  | <i>3.99</i>  | <i>3.45</i>  | <i>4.56</i>  | <i>3.56</i>  | <b>4.01</b>   | <i>3.86</i>   | <i>3.89</i>   |
| Commercial Sector .....   | <b>3.61</b>  | <b>3.70</b>  | <b>4.21</b>  | <b>3.57</b>  | <b>3.58</b>  | <i>3.65</i>  | <i>4.14</i>  | <i>3.56</i>  | <i>3.59</i>  | <i>3.66</i>  | <i>4.15</i>  | <i>3.56</i>  | <b>3.77</b>   | <i>3.73</i>   | <i>3.74</i>   |
| Industrial Sector .....   | <b>2.50</b>  | <b>2.62</b>  | <b>2.78</b>  | <b>2.55</b>  | <b>2.52</b>  | <i>2.64</i>  | <i>2.80</i>  | <i>2.56</i>  | <i>2.54</i>  | <i>2.63</i>  | <i>2.78</i>  | <i>2.54</i>  | <b>2.61</b>   | <i>2.63</i>   | <i>2.62</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>0.39</b>  | <b>0.38</b>  | <b>0.41</b>  | <b>0.39</b>  | <b>0.40</b>  | <i>0.40</i>  | <i>0.41</i>  | <i>0.39</i>  | <i>0.41</i>  | <i>0.40</i>  | <i>0.41</i>  | <i>0.40</i>  | <b>0.39</b>   | <i>0.40</i>   | <i>0.41</i>   |
| Total Consumption .....   | <b>10.62</b> | <b>10.33</b> | <b>12.14</b> | <b>10.14</b> | <b>10.49</b> | <i>10.12</i> | <i>11.88</i> | <i>10.06</i> | <i>10.55</i> | <i>10.17</i> | <i>11.93</i> | <i>10.08</i> | <b>10.81</b>  | <i>10.64</i>  | <i>10.68</i>  |
| Average residential electricity usage per customer (kWh) .....              | <b>2,754</b> | <b>2,446</b> | <b>3,240</b> | <b>2,481</b> | <b>2,631</b> | <i>2,295</i> | <i>3,065</i> | <i>2,396</i> | <i>2,650</i> | <i>2,291</i> | <i>3,061</i> | <i>2,389</i> | <b>10,920</b> | <i>10,387</i> | <i>10,391</i> |
| <b>Prices</b>   |              |              |              |              |              |              |              |              |              |              |              |              |               |               |               |
| <b>Power Generation Fuel Costs (dollars per million Btu)</b>                |              |              |              |              |              |              |              |              |              |              |              |              |               |               |               |
| Coal .....  | <b>2.06</b>  | <b>2.06</b>  | <b>2.06</b>  | <b>2.08</b>  | <b>2.11</b>  | <i>2.13</i>  | <i>2.11</i>  | <i>2.10</i>  | <i>2.12</i>  | <i>2.13</i>  | <i>2.11</i>  | <i>2.11</i>  | <b>2.06</b>   | <i>2.11</i>   | <i>2.11</i>   |
| Natural Gas .....   | <b>3.96</b>  | <b>3.09</b>  | <b>3.23</b>  | <b>4.05</b>  | <b>3.37</b>  | <i>2.79</i>  | <i>2.77</i>  | <i>3.28</i>  | <i>3.49</i>  | <i>2.69</i>  | <i>2.63</i>  | <i>3.17</i>  | <b>3.54</b>   | <i>3.02</i>   | <i>2.95</i>   |
| Residual Fuel Oil .....   | <b>11.47</b> | <b>13.02</b> | <b>14.02</b> | <b>14.49</b> | <b>11.60</b> | <i>13.49</i> | <i>12.88</i> | <i>12.11</i> | <i>12.21</i> | <i>12.91</i> | <i>12.21</i> | <i>11.98</i> | <b>12.95</b>  | <i>12.50</i>  | <i>12.31</i>  |
| Distillate Fuel Oil .....   | <b>15.77</b> | <b>16.61</b> | <b>16.82</b> | <b>16.01</b> | <b>14.77</b> | <i>16.04</i> | <i>16.11</i> | <i>16.05</i> | <i>16.27</i> | <i>16.67</i> | <i>16.58</i> | <i>16.66</i> | <b>16.13</b>  | <i>15.71</i>  | <i>16.53</i>  |
| <b>Retail Prices (cents per kilowatthour)</b>                               |              |              |              |              |              |              |              |              |              |              |              |              |               |               |               |
| Residential Sector .....  | <b>12.59</b> | <b>13.03</b> | <b>13.15</b> | <b>12.75</b> | <b>12.77</b> | <i>13.37</i> | <i>13.34</i> | <i>12.94</i> | <i>12.89</i> | <i>13.55</i> | <i>13.53</i> | <i>13.12</i> | <b>12.89</b>  | <i>13.11</i>  | <i>13.28</i>  |
| Commercial Sector .....   | <b>10.54</b> | <b>10.60</b> | <b>10.89</b> | <b>10.55</b> | <b>10.47</b> | <i>10.73</i> | <i>10.95</i> | <i>10.58</i> | <i>10.49</i> | <i>10.76</i> | <i>11.02</i> | <i>10.67</i> | <b>10.66</b>  | <i>10.69</i>  | <i>10.74</i>  |
| Industrial Sector .....   | <b>6.81</b>  | <b>6.87</b>  | <b>7.22</b>  | <b>6.82</b>  | <b>6.61</b>  | <i>6.85</i>  | <i>7.20</i>  | <i>6.77</i>  | <i>6.68</i>  | <i>6.89</i>  | <i>7.24</i>  | <i>6.82</i>  | <b>6.93</b>   | <i>6.87</i>   | <i>6.92</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 - April 2019

|                              | 2018   |       |        |       | 2019   |       |        |       | 2020   |       |        |       | Year   |        |        |
|------------------------------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|--------|--------|
|                              | Q1     | Q2    | Q3     | Q4    | Q1     | Q2    | Q3     | Q4    | Q1     | Q2    | Q3     | Q4    | 2018   | 2019   | 2020   |
| <b>Residential Sector</b>    |        |       |        |       |        |       |        |       |        |       |        |       |        |        |        |
| New England .....            | 140    | 111   | 153    | 120   | 137    | 111   | 141    | 118   | 138    | 112   | 142    | 119   | 131    | 127    | 127    |
| Middle Atlantic .....        | 394    | 323   | 453    | 338   | 388    | 314   | 419    | 331   | 388    | 315   | 419    | 331   | 377    | 363    | 363    |
| E. N. Central .....          | 552    | 480   | 603    | 482   | 547    | 443   | 571    | 472   | 541    | 445   | 574    | 474   | 530    | 508    | 509    |
| W. N. Central .....          | 327    | 274   | 318    | 272   | 327    | 244   | 313    | 266   | 317    | 247   | 317    | 269   | 297    | 287    | 288    |
| S. Atlantic .....            | 1,040  | 920   | 1,184  | 939   | 967    | 880   | 1,148  | 899   | 1,000  | 885   | 1,159  | 907   | 1,021  | 974    | 988    |
| E. S. Central .....          | 368    | 301   | 396    | 307   | 329    | 276   | 379    | 290   | 348    | 278   | 382    | 292   | 343    | 319    | 325    |
| W. S. Central .....          | 608    | 582   | 803    | 534   | 557    | 543   | 773    | 526   | 564    | 556   | 788    | 534   | 632    | 600    | 611    |
| Mountain .....               | 239    | 263   | 360    | 235   | 250    | 257   | 350    | 237   | 249    | 261   | 354    | 240   | 274    | 274    | 276    |
| Pacific contiguous .....     | 422    | 339   | 439    | 376   | 440    | 339   | 412    | 380   | 433    | 341   | 414    | 382   | 394    | 393    | 393    |
| AK and HI .....              | 14     | 12    | 13     | 13    | 14     | 12    | 12     | 13    | 14     | 12    | 12     | 13    | 13     | 13     | 13     |
| Total .....                  | 4,103  | 3,604 | 4,722  | 3,616 | 3,957  | 3,419 | 4,519  | 3,532 | 3,993  | 3,451 | 4,562  | 3,560 | 4,012  | 3,858  | 3,892  |
| <b>Commercial Sector</b>     |        |       |        |       |        |       |        |       |        |       |        |       |        |        |        |
| New England .....            | 141    | 136   | 159    | 136   | 140    | 135   | 153    | 134   | 137    | 131   | 148    | 128   | 143    | 140    | 136    |
| Middle Atlantic .....        | 431    | 412   | 479    | 410   | 429    | 406   | 460    | 404   | 425    | 403   | 457    | 402   | 433    | 425    | 422    |
| E. N. Central .....          | 499    | 501   | 556    | 484   | 498    | 487   | 545    | 483   | 496    | 489   | 545    | 482   | 510    | 503    | 503    |
| W. N. Central .....          | 282    | 282   | 307    | 272   | 285    | 273   | 309    | 273   | 284    | 276   | 311    | 274   | 286    | 285    | 286    |
| S. Atlantic .....            | 811    | 862   | 975    | 819   | 809    | 851   | 958    | 808   | 809    | 852   | 959    | 809   | 867    | 857    | 857    |
| E. S. Central .....          | 242    | 253   | 296    | 240   | 235    | 245   | 290    | 237   | 238    | 247   | 291    | 237   | 258    | 252    | 253    |
| W. S. Central .....          | 501    | 549   | 637    | 517   | 488    | 541   | 637    | 524   | 497    | 555   | 650    | 534   | 551    | 548    | 559    |
| Mountain .....               | 248    | 269   | 309    | 252   | 251    | 267   | 307    | 255   | 254    | 270   | 309    | 257   | 270    | 270    | 272    |
| Pacific contiguous .....     | 434    | 424   | 472    | 423   | 433    | 426   | 463    | 424   | 434    | 427   | 463    | 424   | 439    | 436    | 437    |
| AK and HI .....              | 16     | 15    | 16     | 16    | 16     | 15    | 16     | 15    | 16     | 15    | 16     | 15    | 16     | 15     | 15     |
| Total .....                  | 3,606  | 3,704 | 4,206  | 3,567 | 3,582  | 3,646 | 4,137  | 3,557 | 3,589  | 3,664 | 4,149  | 3,562 | 3,772  | 3,732  | 3,742  |
| <b>Industrial Sector</b>     |        |       |        |       |        |       |        |       |        |       |        |       |        |        |        |
| New England .....            | 42     | 43    | 47     | 44    | 42     | 43    | 46     | 43    | 41     | 42    | 45     | 42    | 44     | 43     | 43     |
| Middle Atlantic .....        | 196    | 194   | 214    | 195   | 198    | 196   | 215    | 196   | 200    | 196   | 214    | 195   | 200    | 202    | 201    |
| E. N. Central .....          | 499    | 517   | 530    | 493   | 504    | 520   | 532    | 492   | 505    | 516   | 525    | 485   | 510    | 512    | 508    |
| W. N. Central .....          | 232    | 242   | 257    | 239   | 239    | 248   | 263    | 244   | 245    | 251   | 265    | 245   | 242    | 248    | 251    |
| S. Atlantic .....            | 366    | 388   | 404    | 370   | 366    | 384   | 399    | 365   | 362    | 376   | 389    | 354   | 382    | 379    | 370    |
| E. S. Central .....          | 257    | 261   | 286    | 261   | 258    | 260   | 285    | 259   | 255    | 255   | 278    | 252   | 266    | 265    | 260    |
| W. S. Central .....          | 467    | 500   | 520    | 486   | 474    | 508   | 531    | 493   | 485    | 515   | 537    | 498   | 493    | 502    | 509    |
| Mountain .....               | 209    | 229   | 251    | 219   | 210    | 232   | 257    | 224   | 214    | 234   | 258    | 224   | 227    | 231    | 232    |
| Pacific contiguous .....     | 216    | 231   | 258    | 226   | 216    | 232   | 258    | 226   | 217    | 233   | 259    | 227   | 233    | 233    | 234    |
| AK and HI .....              | 13     | 13    | 14     | 14    | 13     | 13    | 14     | 14    | 13     | 13    | 14     | 14    | 13     | 13     | 13     |
| Total .....                  | 2,498  | 2,618 | 2,781  | 2,545 | 2,521  | 2,636 | 2,799  | 2,556 | 2,537  | 2,631 | 2,784  | 2,536 | 2,611  | 2,629  | 2,622  |
| <b>Total All Sectors (a)</b> |        |       |        |       |        |       |        |       |        |       |        |       |        |        |        |
| New England .....            | 325    | 292   | 361    | 301   | 320    | 290   | 341    | 296   | 317    | 286   | 336    | 291   | 320    | 312    | 308    |
| Middle Atlantic .....        | 1,033  | 939   | 1,157  | 954   | 1,026  | 926   | 1,105  | 941   | 1,025  | 923   | 1,101  | 937   | 1,021  | 1,000  | 996    |
| E. N. Central .....          | 1,552  | 1,500 | 1,691  | 1,461 | 1,550  | 1,452 | 1,650  | 1,449 | 1,545  | 1,452 | 1,645  | 1,442 | 1,551  | 1,525  | 1,521  |
| W. N. Central .....          | 841    | 798   | 882    | 782   | 852    | 765   | 885    | 782   | 846    | 775   | 893    | 788   | 826    | 821    | 825    |
| S. Atlantic .....            | 2,220  | 2,173 | 2,567  | 2,131 | 2,147  | 2,118 | 2,508  | 2,075 | 2,175  | 2,116 | 2,511  | 2,073 | 2,273  | 2,213  | 2,219  |
| E. S. Central .....          | 867    | 815   | 979    | 808   | 822    | 781   | 954    | 786   | 842    | 780   | 951    | 781   | 867    | 836    | 839    |
| W. S. Central .....          | 1,577  | 1,632 | 1,961  | 1,537 | 1,519  | 1,592 | 1,942  | 1,544 | 1,546  | 1,627 | 1,976  | 1,566 | 1,677  | 1,650  | 1,679  |
| Mountain .....               | 697    | 762   | 920    | 706   | 712    | 756   | 913    | 717   | 717    | 764   | 922    | 722   | 772    | 775    | 782    |
| Pacific contiguous .....     | 1,075  | 996   | 1,172  | 1,028 | 1,091  | 1,000 | 1,136  | 1,032 | 1,086  | 1,003 | 1,139  | 1,035 | 1,068  | 1,065  | 1,066  |
| AK and HI .....              | 42     | 41    | 42     | 42    | 42     | 40    | 42     | 42    | 42     | 40    | 42     | 42    | 42     | 42     | 42     |
| Total .....                  | 10,229 | 9,947 | 11,731 | 9,749 | 10,082 | 9,721 | 11,475 | 9,665 | 10,141 | 9,766 | 11,514 | 9,678 | 10,416 | 10,238 | 10,277 |

- = 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 - April 2019

|                           | 2018         |              |              |              | 2019         |              |              |              | 2020         |              |              |              | Year         |              |              |
|---------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                           | Q1           | Q2           | Q3           | Q4           | Q1           | Q2           | Q3           | Q4           | Q1           | Q2           | Q3           | Q4           | 2018         | 2019         | 2020         |
| <b>Residential Sector</b> |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| New England .....         | <b>20.56</b> | <b>20.57</b> | <b>20.39</b> | <b>20.64</b> | <b>21.34</b> | <i>21.31</i> | <i>21.25</i> | <i>21.27</i> | <i>21.81</i> | <i>21.67</i> | <i>21.61</i> | <i>21.73</i> | <b>20.53</b> | <i>21.29</i> | <i>21.70</i> |
| Middle Atlantic .....     | <b>15.62</b> | <b>16.21</b> | <b>16.34</b> | <b>15.80</b> | <b>15.19</b> | <i>16.14</i> | <i>16.27</i> | <i>15.62</i> | <i>15.14</i> | <i>16.19</i> | <i>16.43</i> | <i>15.79</i> | <b>16.00</b> | <i>15.81</i> | <i>15.89</i> |
| E. N. Central .....       | <b>12.94</b> | <b>13.48</b> | <b>13.09</b> | <b>13.19</b> | <b>13.12</b> | <i>13.96</i> | <i>13.52</i> | <i>13.54</i> | <i>13.47</i> | <i>14.29</i> | <i>13.85</i> | <i>13.87</i> | <b>13.16</b> | <i>13.51</i> | <i>13.85</i> |
| W. N. Central .....       | <b>10.90</b> | <b>12.63</b> | <b>13.10</b> | <b>11.39</b> | <b>11.03</b> | <i>13.29</i> | <i>13.56</i> | <i>11.78</i> | <i>11.46</i> | <i>13.71</i> | <i>13.98</i> | <i>12.14</i> | <b>12.00</b> | <i>12.38</i> | <i>12.80</i> |
| S. Atlantic .....         | <b>11.66</b> | <b>11.90</b> | <b>11.82</b> | <b>11.62</b> | <b>11.69</b> | <i>12.00</i> | <i>11.93</i> | <i>11.72</i> | <i>11.67</i> | <i>12.04</i> | <i>11.97</i> | <i>11.78</i> | <b>11.75</b> | <i>11.84</i> | <i>11.87</i> |
| E. S. Central .....       | <b>10.86</b> | <b>11.40</b> | <b>11.16</b> | <b>11.17</b> | <b>11.24</b> | <i>11.88</i> | <i>11.55</i> | <i>11.53</i> | <i>11.29</i> | <i>12.02</i> | <i>11.69</i> | <i>11.75</i> | <b>11.14</b> | <i>11.54</i> | <i>11.67</i> |
| W. S. Central .....       | <b>10.52</b> | <b>11.01</b> | <b>10.97</b> | <b>10.83</b> | <b>10.82</b> | <i>11.22</i> | <i>11.04</i> | <i>10.77</i> | <i>10.70</i> | <i>11.14</i> | <i>11.03</i> | <i>10.80</i> | <b>10.85</b> | <i>10.97</i> | <i>10.93</i> |
| Mountain .....            | <b>11.58</b> | <b>12.24</b> | <b>12.26</b> | <b>11.76</b> | <b>11.60</b> | <i>12.43</i> | <i>12.47</i> | <i>11.98</i> | <i>11.84</i> | <i>12.68</i> | <i>12.74</i> | <i>12.22</i> | <b>12.00</b> | <i>12.16</i> | <i>12.41</i> |
| Pacific .....             | <b>14.88</b> | <b>15.27</b> | <b>17.07</b> | <b>14.77</b> | <b>15.03</b> | <i>15.82</i> | <i>17.40</i> | <i>15.06</i> | <i>15.48</i> | <i>16.59</i> | <i>17.96</i> | <i>15.38</i> | <b>15.55</b> | <i>15.83</i> | <i>16.35</i> |
| U.S. Average .....        | <b>12.59</b> | <b>13.03</b> | <b>13.15</b> | <b>12.75</b> | <b>12.77</b> | <i>13.37</i> | <i>13.34</i> | <i>12.94</i> | <i>12.89</i> | <i>13.55</i> | <i>13.53</i> | <i>13.12</i> | <b>12.89</b> | <i>13.11</i> | <i>13.28</i> |
| <b>Commercial Sector</b>  |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| New England .....         | <b>16.59</b> | <b>15.92</b> | <b>16.19</b> | <b>16.44</b> | <b>16.83</b> | <i>16.19</i> | <i>16.51</i> | <i>16.68</i> | <i>17.02</i> | <i>16.36</i> | <i>16.73</i> | <i>16.97</i> | <b>16.28</b> | <i>16.55</i> | <i>16.77</i> |
| Middle Atlantic .....     | <b>12.10</b> | <b>12.22</b> | <b>13.17</b> | <b>12.08</b> | <b>11.46</b> | <i>12.01</i> | <i>12.84</i> | <i>11.75</i> | <i>11.24</i> | <i>11.86</i> | <i>12.77</i> | <i>11.70</i> | <b>12.42</b> | <i>12.04</i> | <i>11.91</i> |
| E. N. Central .....       | <b>10.10</b> | <b>10.15</b> | <b>10.08</b> | <b>10.10</b> | <b>10.14</b> | <i>10.32</i> | <i>10.20</i> | <i>10.16</i> | <i>10.22</i> | <i>10.42</i> | <i>10.32</i> | <i>10.30</i> | <b>10.11</b> | <i>10.21</i> | <i>10.32</i> |
| W. N. Central .....       | <b>9.18</b>  | <b>10.03</b> | <b>10.38</b> | <b>9.23</b>  | <b>9.06</b>  | <i>10.28</i> | <i>10.61</i> | <i>9.45</i>  | <i>9.34</i>  | <i>10.59</i> | <i>10.96</i> | <i>9.75</i>  | <b>9.73</b>  | <i>9.87</i>  | <i>10.18</i> |
| S. Atlantic .....         | <b>9.61</b>  | <b>9.30</b>  | <b>9.18</b>  | <b>9.41</b>  | <b>9.50</b>  | <i>9.36</i>  | <i>9.22</i>  | <i>9.39</i>  | <i>9.42</i>  | <i>9.30</i>  | <i>9.19</i>  | <i>9.39</i>  | <b>9.36</b>  | <i>9.36</i>  | <i>9.32</i>  |
| E. S. Central .....       | <b>10.51</b> | <b>10.48</b> | <b>10.34</b> | <b>10.54</b> | <b>10.85</b> | <i>10.97</i> | <i>10.73</i> | <i>10.84</i> | <i>10.99</i> | <i>11.08</i> | <i>10.87</i> | <i>11.05</i> | <b>10.46</b> | <i>10.84</i> | <i>10.99</i> |
| W. S. Central .....       | <b>8.37</b>  | <b>8.17</b>  | <b>8.12</b>  | <b>7.94</b>  | <b>8.09</b>  | <i>8.04</i>  | <i>7.97</i>  | <i>7.75</i>  | <i>7.95</i>  | <i>7.94</i>  | <i>7.91</i>  | <i>7.70</i>  | <b>8.15</b>  | <i>7.96</i>  | <i>7.87</i>  |
| Mountain .....            | <b>9.27</b>  | <b>9.88</b>  | <b>10.01</b> | <b>9.36</b>  | <b>9.24</b>  | <i>9.96</i>  | <i>10.08</i> | <i>9.41</i>  | <i>9.33</i>  | <i>10.07</i> | <i>10.22</i> | <i>9.55</i>  | <b>9.66</b>  | <i>9.70</i>  | <i>9.82</i>  |
| Pacific .....             | <b>12.91</b> | <b>14.02</b> | <b>15.81</b> | <b>14.10</b> | <b>13.23</b> | <i>14.50</i> | <i>16.26</i> | <i>14.49</i> | <i>13.54</i> | <i>14.80</i> | <i>16.63</i> | <i>14.86</i> | <b>14.25</b> | <i>14.66</i> | <i>14.99</i> |
| U.S. Average .....        | <b>10.54</b> | <b>10.60</b> | <b>10.89</b> | <b>10.55</b> | <b>10.47</b> | <i>10.73</i> | <i>10.95</i> | <i>10.58</i> | <i>10.49</i> | <i>10.76</i> | <i>11.02</i> | <i>10.67</i> | <b>10.66</b> | <i>10.69</i> | <i>10.74</i> |
| <b>Industrial Sector</b>  |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| New England .....         | <b>13.46</b> | <b>12.60</b> | <b>12.83</b> | <b>12.98</b> | <b>13.22</b> | <i>12.45</i> | <i>12.66</i> | <i>12.80</i> | <i>13.27</i> | <i>12.45</i> | <i>12.65</i> | <i>12.81</i> | <b>12.96</b> | <i>12.78</i> | <i>12.79</i> |
| Middle Atlantic .....     | <b>7.26</b>  | <b>6.82</b>  | <b>6.86</b>  | <b>6.79</b>  | <b>6.67</b>  | <i>6.56</i>  | <i>6.62</i>  | <i>6.53</i>  | <i>6.62</i>  | <i>6.45</i>  | <i>6.50</i>  | <i>6.42</i>  | <b>6.93</b>  | <i>6.59</i>  | <i>6.50</i>  |
| E. N. Central .....       | <b>7.10</b>  | <b>6.96</b>  | <b>6.99</b>  | <b>7.01</b>  | <b>6.90</b>  | <i>6.95</i>  | <i>6.98</i>  | <i>6.99</i>  | <i>6.98</i>  | <i>7.00</i>  | <i>7.03</i>  | <i>7.05</i>  | <b>7.01</b>  | <i>6.96</i>  | <i>7.02</i>  |
| W. N. Central .....       | <b>7.04</b>  | <b>7.38</b>  | <b>7.99</b>  | <b>6.93</b>  | <b>7.09</b>  | <i>7.57</i>  | <i>8.20</i>  | <i>7.11</i>  | <i>7.29</i>  | <i>7.79</i>  | <i>8.44</i>  | <i>7.32</i>  | <b>7.35</b>  | <i>7.51</i>  | <i>7.73</i>  |
| S. Atlantic .....         | <b>6.54</b>  | <b>6.40</b>  | <b>6.60</b>  | <b>6.39</b>  | <b>6.16</b>  | <i>6.33</i>  | <i>6.51</i>  | <i>6.28</i>  | <i>6.17</i>  | <i>6.30</i>  | <i>6.46</i>  | <i>6.24</i>  | <b>6.48</b>  | <i>6.33</i>  | <i>6.30</i>  |
| E. S. Central .....       | <b>5.74</b>  | <b>5.92</b>  | <b>5.87</b>  | <b>5.88</b>  | <b>5.66</b>  | <i>5.88</i>  | <i>5.82</i>  | <i>5.81</i>  | <i>5.69</i>  | <i>5.89</i>  | <i>5.82</i>  | <i>5.82</i>  | <b>5.86</b>  | <i>5.79</i>  | <i>5.81</i>  |
| W. S. Central .....       | <b>5.42</b>  | <b>5.41</b>  | <b>5.65</b>  | <b>5.27</b>  | <b>5.21</b>  | <i>5.34</i>  | <i>5.54</i>  | <i>5.14</i>  | <i>5.22</i>  | <i>5.30</i>  | <i>5.50</i>  | <i>5.11</i>  | <b>5.44</b>  | <i>5.31</i>  | <i>5.29</i>  |
| Mountain .....            | <b>6.10</b>  | <b>6.48</b>  | <b>6.93</b>  | <b>6.05</b>  | <b>5.99</b>  | <i>6.45</i>  | <i>6.92</i>  | <i>6.04</i>  | <i>6.05</i>  | <i>6.48</i>  | <i>6.94</i>  | <i>6.06</i>  | <b>6.41</b>  | <i>6.38</i>  | <i>6.41</i>  |
| Pacific .....             | <b>8.63</b>  | <b>9.52</b>  | <b>11.17</b> | <b>9.89</b>  | <b>8.61</b>  | <i>9.68</i>  | <i>11.39</i> | <i>10.09</i> | <i>8.85</i>  | <i>9.93</i>  | <i>11.68</i> | <i>10.35</i> | <b>9.87</b>  | <i>10.01</i> | <i>10.27</i> |
| U.S. Average .....        | <b>6.81</b>  | <b>6.87</b>  | <b>7.22</b>  | <b>6.82</b>  | <b>6.61</b>  | <i>6.85</i>  | <i>7.20</i>  | <i>6.77</i>  | <i>6.68</i>  | <i>6.89</i>  | <i>7.24</i>  | <i>6.82</i>  | <b>6.93</b>  | <i>6.87</i>  | <i>6.92</i>  |
| <b>All Sectors (a)</b>    |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| New England .....         | <b>17.86</b> | <b>17.16</b> | <b>17.49</b> | <b>17.58</b> | <b>18.26</b> | <i>17.56</i> | <i>17.92</i> | <i>17.92</i> | <i>18.58</i> | <i>17.82</i> | <i>18.21</i> | <i>18.27</i> | <b>17.53</b> | <i>17.92</i> | <i>18.23</i> |
| Middle Atlantic .....     | <b>12.50</b> | <b>12.47</b> | <b>13.23</b> | <b>12.30</b> | <b>11.94</b> | <i>12.26</i> | <i>12.92</i> | <i>12.02</i> | <i>11.82</i> | <i>12.19</i> | <i>12.94</i> | <i>12.04</i> | <b>12.65</b> | <i>12.31</i> | <i>12.27</i> |
| E. N. Central .....       | <b>10.14</b> | <b>10.11</b> | <b>10.18</b> | <b>10.07</b> | <b>10.13</b> | <i>10.22</i> | <i>10.31</i> | <i>10.18</i> | <i>10.30</i> | <i>10.39</i> | <i>10.50</i> | <i>10.38</i> | <b>10.13</b> | <i>10.21</i> | <i>10.39</i> |
| W. N. Central .....       | <b>9.26</b>  | <b>10.12</b> | <b>10.66</b> | <b>9.27</b>  | <b>9.26</b>  | <i>10.36</i> | <i>10.94</i> | <i>9.51</i>  | <i>9.54</i>  | <i>10.68</i> | <i>11.29</i> | <i>9.81</i>  | <b>9.85</b>  | <i>10.03</i> | <i>10.34</i> |
| S. Atlantic .....         | <b>10.06</b> | <b>9.88</b>  | <b>9.99</b>  | <b>9.86</b>  | <b>9.91</b>  | <i>9.91</i>  | <i>10.03</i> | <i>9.85</i>  | <i>9.91</i>  | <i>9.91</i>  | <i>10.05</i> | <i>9.90</i>  | <b>9.95</b>  | <i>9.93</i>  | <i>9.95</i>  |
| E. S. Central .....       | <b>9.25</b>  | <b>9.36</b>  | <b>9.36</b>  | <b>9.27</b>  | <b>9.37</b>  | <i>9.60</i>  | <i>9.59</i>  | <i>9.44</i>  | <i>9.50</i>  | <i>9.71</i>  | <i>9.72</i>  | <i>9.62</i>  | <b>9.31</b>  | <i>9.50</i>  | <i>9.64</i>  |
| W. S. Central .....       | <b>8.33</b>  | <b>8.34</b>  | <b>8.63</b>  | <b>8.10</b>  | <b>8.19</b>  | <i>8.26</i>  | <i>8.53</i>  | <i>7.94</i>  | <i>8.10</i>  | <i>8.20</i>  | <i>8.50</i>  | <i>7.93</i>  | <b>8.37</b>  | <i>8.25</i>  | <i>8.20</i>  |
| Mountain .....            | <b>9.12</b>  | <b>9.68</b>  | <b>10.05</b> | <b>9.13</b>  | <b>9.12</b>  | <i>9.72</i>  | <i>10.11</i> | <i>9.21</i>  | <i>9.22</i>  | <i>9.86</i>  | <i>10.27</i> | <i>9.35</i>  | <b>9.54</b>  | <i>9.58</i>  | <i>9.72</i>  |
| Pacific .....             | <b>12.81</b> | <b>13.39</b> | <b>15.25</b> | <b>13.40</b> | <b>13.03</b> | <i>13.82</i> | <i>15.55</i> | <i>13.72</i> | <i>13.36</i> | <i>14.26</i> | <i>15.97</i> | <i>14.05</i> | <b>13.76</b> | <i>14.06</i> | <i>14.44</i> |
| U.S. Average .....        | <b>10.45</b> | <b>10.50</b> | <b>10.93</b> | <b>10.39</b> | <b>10.41</b> | <i>10.60</i> | <i>10.98</i> | <i>10.43</i> | <i>10.48</i> | <i>10.70</i> | <i>11.10</i> | <i>10.56</i> | <b>10.58</b> | <i>10.62</i> | <i>10.73</i> |

- = 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 - April 2019

|                                    | 2018   |        |        |        | 2019   |        |        |        | 2020   |        |        |        | Year   |        |        |
|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                                    | Q1     | Q2     | Q3     | Q4     | Q1     | Q2     | Q3     | Q4     | Q1     | Q2     | Q3     | Q4     | 2018   | 2019   | 2020   |
| <b>United States</b>               |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Coal .....                         | 3,127  | 2,859  | 3,559  | 3,014  | 2,827  | 2,349  | 3,105  | 2,623  | 2,705  | 2,146  | 2,837  | 2,346  | 3,141  | 2,726  | 2,509  |
| Natural Gas .....                  | 3,455  | 3,806  | 5,135  | 3,677  | 3,762  | 3,918  | 5,095  | 3,738  | 3,745  | 4,102  | 5,306  | 3,913  | 4,022  | 4,131  | 4,268  |
| Petroleum (a) .....                | 102    | 53     | 62     | 53     | 62     | 55     | 64     | 56     | 67     | 55     | 62     | 55     | 67     | 59     | 60     |
| Other Gases .....                  | 34     | 32     | 36     | 31     | 34     | 32     | 36     | 31     | 35     | 33     | 36     | 31     | 33     | 34     | 34     |
| Nuclear .....                      | 2,294  | 2,155  | 2,277  | 2,120  | 2,261  | 2,111  | 2,258  | 2,110  | 2,229  | 2,070  | 2,203  | 2,076  | 2,211  | 2,185  | 2,144  |
| Renewable Energy Sources:          | 2,093  | 2,212  | 1,718  | 1,794  | 2,042  | 2,293  | 1,875  | 2,025  | 2,179  | 2,414  | 2,023  | 2,178  | 1,953  | 2,058  | 2,198  |
| Conventional Hydropower .....      | 856    | 944    | 697    | 703    | 780    | 907    | 722    | 682    | 753    | 869    | 742    | 689    | 799    | 772    | 763    |
| Wind .....                         | 869    | 822    | 582    | 744    | 885    | 923    | 683    | 952    | 1,025  | 1,040  | 761    | 1,061  | 753    | 860    | 971    |
| Wood Biomass .....                 | 119    | 112    | 115    | 108    | 116    | 115    | 123    | 116    | 118    | 115    | 123    | 116    | 113    | 117    | 118    |
| Waste Biomass .....                | 61     | 58     | 57     | 58     | 57     | 57     | 58     | 57     | 57     | 57     | 58     | 58     | 59     | 57     | 58     |
| Geothermal .....                   | 46     | 44     | 46     | 47     | 46     | 45     | 45     | 45     | 45     | 45     | 45     | 47     | 46     | 45     | 45     |
| Solar .....                        | 141    | 232    | 222    | 134    | 158    | 247    | 245    | 172    | 181    | 288    | 295    | 207    | 182    | 206    | 243    |
| Pumped Storage Hydropower .....    | -15    | -13    | -22    | -15    | -10    | -12    | -17    | -14    | -14    | -12    | -18    | -14    | -16    | -13    | -15    |
| Other Nonrenewable Fuels (b) ..... | 36     | 35     | 32     | 36     | 36     | 36     | 36     | 36     | 35     | 36     | 36     | 36     | 35     | 36     | 36     |
| Total Generation .....             | 11,127 | 11,141 | 12,796 | 10,710 | 11,013 | 10,783 | 12,450 | 10,605 | 10,981 | 10,844 | 12,486 | 10,621 | 11,446 | 11,215 | 11,235 |
| <b>Northeast Census Region</b>     |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Coal .....                         | 149    | 120    | 132    | 115    | 116    | 43     | 72     | 106    | 139    | 44     | 52     | 65     | 129    | 84     | 75     |
| Natural Gas .....                  | 500    | 527    | 783    | 562    | 608    | 629    | 789    | 601    | 610    | 664    | 832    | 642    | 594    | 657    | 688    |
| Petroleum (a) .....                | 32     | 3      | 3      | 2      | 8      | 2      | 4      | 4      | 9      | 2      | 4      | 5      | 10     | 4      | 5      |
| Other Gases .....                  | 2      | 1      | 2      | 2      | 2      | 1      | 2      | 2      | 2      | 1      | 2      | 2      | 2      | 2      | 2      |
| Nuclear .....                      | 552    | 507    | 525    | 497    | 535    | 478    | 503    | 457    | 483    | 438    | 463    | 437    | 520    | 493    | 455    |
| Hydropower (c) .....               | 108    | 114    | 106    | 121    | 120    | 119    | 107    | 106    | 107    | 106    | 102    | 103    | 112    | 113    | 104    |
| Other Renewables (d) .....         | 80     | 76     | 71     | 72     | 81     | 77     | 70     | 84     | 87     | 79     | 72     | 87     | 75     | 78     | 81     |
| Other Nonrenewable Fuels (b) ..... | 11     | 10     | 11     | 11     | 11     | 11     | 12     | 12     | 11     | 11     | 12     | 12     | 11     | 11     | 11     |
| Total Generation .....             | 1,435  | 1,359  | 1,634  | 1,381  | 1,482  | 1,361  | 1,559  | 1,370  | 1,447  | 1,347  | 1,539  | 1,351  | 1,452  | 1,443  | 1,421  |
| <b>South Census Region</b>         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Coal .....                         | 1,262  | 1,260  | 1,529  | 1,213  | 1,066  | 992    | 1,330  | 1,039  | 999    | 886    | 1,218  | 899    | 1,316  | 1,107  | 1,001  |
| Natural Gas .....                  | 2,049  | 2,345  | 2,932  | 2,081  | 2,115  | 2,391  | 2,929  | 2,110  | 2,153  | 2,487  | 3,025  | 2,219  | 2,353  | 2,388  | 2,472  |
| Petroleum (a) .....                | 39     | 21     | 26     | 20     | 23     | 24     | 27     | 22     | 28     | 24     | 27     | 22     | 26     | 24     | 25     |
| Other Gases .....                  | 13     | 12     | 14     | 12     | 13     | 12     | 13     | 12     | 13     | 12     | 13     | 12     | 13     | 13     | 12     |
| Nuclear .....                      | 1,008  | 952    | 1,010  | 936    | 996    | 956    | 1,027  | 968    | 1,023  | 960    | 1,031  | 971    | 976    | 987    | 996    |
| Hydropower (c) .....               | 114    | 127    | 112    | 165    | 151    | 133    | 113    | 143    | 132    | 118    | 107    | 139    | 130    | 135    | 124    |
| Other Renewables (d) .....         | 451    | 494    | 375    | 402    | 474    | 524    | 435    | 493    | 537    | 599    | 500    | 553    | 430    | 481    | 547    |
| Other Nonrenewable Fuels (b) ..... | 16     | 16     | 11     | 15     | 16     | 15     | 15     | 15     | 15     | 15     | 14     | 15     | 15     | 15     | 15     |
| Total Generation .....             | 4,952  | 5,227  | 6,008  | 4,844  | 4,854  | 5,047  | 5,890  | 4,801  | 4,899  | 5,101  | 5,935  | 4,829  | 5,260  | 5,150  | 5,192  |
| <b>Midwest Census Region</b>       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Coal .....                         | 1,303  | 1,140  | 1,386  | 1,188  | 1,215  | 983    | 1,245  | 1,023  | 1,116  | 909    | 1,172  | 963    | 1,255  | 1,116  | 1,040  |
| Natural Gas .....                  | 403    | 441    | 549    | 389    | 425    | 404    | 570    | 396    | 424    | 441    | 620    | 411    | 446    | 449    | 474    |
| Petroleum (a) .....                | 10     | 7      | 9      | 8      | 9      | 9      | 10     | 8      | 10     | 9      | 10     | 7      | 8      | 9      | 9      |
| Other Gases .....                  | 13     | 12     | 14     | 12     | 14     | 12     | 14     | 12     | 14     | 13     | 15     | 12     | 13     | 13     | 13     |
| Nuclear .....                      | 571    | 539    | 569    | 535    | 563    | 521    | 559    | 527    | 556    | 515    | 540    | 509    | 553    | 542    | 530    |
| Hydropower (c) .....               | 57     | 58     | 36     | 40     | 56     | 62     | 38     | 35     | 49     | 55     | 36     | 34     | 48     | 48     | 43     |
| Other Renewables (d) .....         | 367    | 303    | 234    | 320    | 384    | 376    | 276    | 446    | 470    | 439    | 320    | 510    | 306    | 370    | 435    |
| Other Nonrenewable Fuels (b) ..... | 4      | 3      | 4      | 4      | 4      | 4      | 4      | 4      | 4      | 4      | 4      | 4      | 4      | 4      | 4      |
| Total Generation .....             | 2,727  | 2,505  | 2,802  | 2,495  | 2,669  | 2,370  | 2,716  | 2,449  | 2,643  | 2,385  | 2,717  | 2,450  | 2,632  | 2,551  | 2,549  |
| <b>West Census Region</b>          |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Coal .....                         | 413    | 339    | 512    | 497    | 430    | 331    | 457    | 456    | 451    | 308    | 395    | 419    | 441    | 419    | 393    |
| Natural Gas .....                  | 503    | 493    | 870    | 644    | 613    | 492    | 807    | 631    | 557    | 510    | 829    | 641    | 629    | 636    | 635    |
| Petroleum (a) .....                | 21     | 21     | 24     | 24     | 22     | 21     | 23     | 22     | 21     | 20     | 21     | 21     | 23     | 22     | 21     |
| Other Gases .....                  | 7      | 7      | 7      | 6      | 6      | 7      | 7      | 6      | 6      | 7      | 7      | 6      | 6      | 6      | 6      |
| Nuclear .....                      | 164    | 158    | 173    | 152    | 168    | 156    | 168    | 158    | 167    | 157    | 169    | 159    | 162    | 163    | 163    |
| Hydropower (c) .....               | 562    | 632    | 420    | 363    | 441    | 582    | 446    | 384    | 452    | 577    | 478    | 399    | 493    | 463    | 476    |
| Other Renewables (d) .....         | 338    | 395    | 340    | 297    | 322    | 409    | 371    | 321    | 332    | 428    | 389    | 340    | 343    | 356    | 372    |
| Other Nonrenewable Fuels (b) ..... | 6      | 6      | 6      | 6      | 5      | 6      | 6      | 6      | 5      | 6      | 6      | 6      | 6      | 6      | 6      |
| Total Generation .....             | 2,013  | 2,050  | 2,352  | 1,990  | 2,009  | 2,004  | 2,285  | 1,984  | 1,991  | 2,011  | 2,294  | 1,991  | 2,102  | 2,071  | 2,072  |

(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 - April 2019

|  | 2018   |        |        |        | 2019   |        |        |        | 2020   |        |        |        | Year   |        |        |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|  | Q1     | Q2     | Q3     | Q4     | Q1     | Q2     | Q3     | Q4     | Q1     | Q2     | Q3     | Q4     | 2018   | 2019   | 2020   |
| <b>Fuel Consumption for Electricity Generation, All Sectors</b>          |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| <b>United States</b>   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Coal (thousand st/d) .....   | 1,717  | 1,583  | 1,972  | 1,693  | 1,562  | 1,298  | 1,721  | 1,462  | 1,491  | 1,189  | 1,578  | 1,315  | 1,742  | 1,511  | 1,393  |
| Natural Gas (million cf/d) .....   | 25,476 | 28,253 | 38,432 | 26,691 | 27,372 | 29,143 | 38,350 | 27,315 | 27,194 | 30,331 | 39,683 | 28,405 | 29,740 | 30,566 | 31,418 |
| Petroleum (thousand b/d) .....   | 180    | 96     | 111    | 94     | 112    | 100    | 114    | 101    | 121    | 100    | 113    | 100    | 120    | 107    | 108    |
| Residual Fuel Oil .....  | 51     | 27     | 31     | 26     | 29     | 25     | 29     | 26     | 30     | 23     | 27     | 26     | 33     | 27     | 26     |
| Distillate Fuel Oil .....  | 71     | 26     | 22     | 24     | 28     | 23     | 24     | 27     | 32     | 24     | 24     | 26     | 36     | 25     | 27     |
| Petroleum Coke (a) .....   | 48     | 40     | 54     | 40     | 49     | 49     | 58     | 45     | 54     | 49     | 58     | 44     | 45     | 50     | 51     |
| Other Petroleum Liquids (b) ....   | 9      | 4      | 5      | 5      | 6      | 3      | 4      | 4      | 5      | 3      | 4      | 4      | 6      | 4      | 4      |
| <b>Northeast Census Region</b>   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Coal (thousand st/d) .....   | 77     | 63     | 69     | 60     | 60     | 23     | 39     | 55     | 73     | 23     | 28     | 35     | 67     | 44     | 39     |
| Natural Gas (million cf/d) .....   | 3,815  | 3,894  | 5,824  | 4,051  | 4,464  | 4,701  | 6,005  | 4,430  | 4,524  | 4,951  | 6,317  | 4,718  | 4,400  | 4,903  | 5,129  |
| Petroleum (thousand b/d) .....   | 53     | 6      | 6      | 4      | 13     | 4      | 7      | 6      | 15     | 4      | 7      | 8      | 17     | 8      | 9      |
| <b>South Census Region</b>   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Coal (thousand st/d) .....   | 659    | 670    | 821    | 658    | 566    | 526    | 708    | 558    | 524    | 471    | 651    | 486    | 702    | 590    | 533    |
| Natural Gas (million cf/d) .....   | 14,737 | 17,259 | 21,766 | 15,053 | 15,164 | 17,653 | 21,817 | 15,269 | 15,378 | 18,220 | 22,358 | 15,938 | 17,217 | 17,488 | 17,980 |
| Petroleum (thousand b/d) .....   | 72     | 39     | 48     | 37     | 43     | 44     | 51     | 41     | 52     | 45     | 51     | 41     | 49     | 45     | 47     |
| <b>Midwest Census Region</b>   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Coal (thousand st/d) .....   | 743    | 654    | 793    | 693    | 691    | 561    | 712    | 585    | 634    | 518    | 671    | 551    | 721    | 637    | 594    |
| Natural Gas (million cf/d) .....   | 3,135  | 3,415  | 4,307  | 2,910  | 3,181  | 3,079  | 4,459  | 2,954  | 3,159  | 3,335  | 4,810  | 3,040  | 3,443  | 3,420  | 3,588  |
| Petroleum (thousand b/d) .....   | 19     | 15     | 17     | 14     | 18     | 17     | 20     | 16     | 18     | 17     | 20     | 15     | 16     | 18     | 18     |
| <b>West Census Region</b>  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Coal (thousand st/d) .....   | 239    | 195    | 290    | 281    | 245    | 189    | 262    | 264    | 261    | 177    | 228    | 244    | 252    | 240    | 228    |
| Natural Gas (million cf/d) .....   | 3,789  | 3,685  | 6,535  | 4,678  | 4,563  | 3,710  | 6,069  | 4,662  | 4,133  | 3,825  | 6,199  | 4,709  | 4,679  | 4,755  | 4,721  |
| Petroleum (thousand b/d) .....   | 36     | 36     | 40     | 39     | 37     | 34     | 38     | 37     | 35     | 33     | 36     | 36     | 38     | 37     | 35     |
| <b>End-of-period U.S. Fuel Inventories Held by Electric Power Sector</b> |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Coal (million short tons) .....  | 126.5  | 121.5  | 100.8  | 102.8  | 103.4  | 100.7  | 95.7   | 103.7  | 105.2  | 102.0  | 95.3   | 103.6  | 102.8  | 103.7  | 103.6  |
| Residual Fuel Oil (mmb) .....  | 10.1   | 9.9    | 8.4    | 8.6    | 9.0    | 9.6    | 9.9    | 10.6   | 10.6   | 10.5   | 10.4   | 10.8   | 8.6    | 10.6   | 10.8   |
| Distillate Fuel Oil (mmb) .....  | 15.1   | 14.9   | 14.4   | 14.9   | 15.1   | 15.1   | 15.2   | 15.6   | 15.7   | 15.6   | 15.5   | 15.8   | 14.9   | 15.6   | 15.8   |
| Petroleum Coke (mmb) .....   | 3.6    | 2.9    | 2.9    | 2.7    | 2.7    | 2.7    | 2.8    | 2.8    | 2.9    | 3.0    | 3.0    | 3.1    | 2.7    | 2.8    | 3.1    |

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

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

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

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

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

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

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

**Table 8a. U.S. Renewable Energy Consumption (Quadrillion Btu)**  
 U.S. Energy Information Administration | Short-Term Energy Outlook - April 2019

|  | 2018         |              |              |              | 2019         |              |              |              | 2020         |              |              |              | Year          |               |               |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|
|  | Q1           | Q2           | Q3           | Q4           | Q1           | Q2           | Q3           | Q4           | Q1           | Q2           | Q3           | Q4           | 2018          | 2019          | 2020          |
| <b>Electric Power Sector</b>             |              |              |              |              |              |              |              |              |              |              |              |              |               |               |               |
| Geothermal .....                         | <b>0.038</b> | <b>0.037</b> | <b>0.039</b> | <b>0.039</b> | <b>0.038</b> | <i>0.037</i> | <i>0.038</i> | <i>0.038</i> | <i>0.038</i> | <i>0.037</i> | <i>0.038</i> | <i>0.040</i> | <b>0.154</b>  | <i>0.151</i>  | <i>0.153</i>  |
| Hydroelectric Power (a) .....            | <b>0.706</b> | <b>0.787</b> | <b>0.587</b> | <b>0.592</b> | <b>0.644</b> | <i>0.758</i> | <i>0.610</i> | <i>0.575</i> | <i>0.629</i> | <i>0.726</i> | <i>0.626</i> | <i>0.581</i> | <b>2.673</b>  | <i>2.587</i>  | <i>2.563</i>  |
| Solar (b) .....                          | <b>0.116</b> | <b>0.193</b> | <b>0.186</b> | <b>0.113</b> | <b>0.130</b> | <i>0.205</i> | <i>0.206</i> | <i>0.144</i> | <i>0.150</i> | <i>0.239</i> | <i>0.248</i> | <i>0.173</i> | <b>0.608</b>  | <i>0.685</i>  | <i>0.810</i>  |
| Waste Biomass (c) .....                  | <b>0.073</b> | <b>0.070</b> | <b>0.067</b> | <b>0.069</b> | <b>0.066</b> | <i>0.067</i> | <i>0.069</i> | <i>0.068</i> | <i>0.067</i> | <i>0.068</i> | <i>0.070</i> | <i>0.069</i> | <b>0.280</b>  | <i>0.271</i>  | <i>0.273</i>  |
| Wood Biomass .....                       | <b>0.057</b> | <b>0.052</b> | <b>0.055</b> | <b>0.051</b> | <b>0.058</b> | <i>0.056</i> | <i>0.068</i> | <i>0.062</i> | <i>0.061</i> | <i>0.057</i> | <i>0.068</i> | <i>0.062</i> | <b>0.215</b>  | <i>0.244</i>  | <i>0.248</i>  |
| Wind .....                               | <b>0.722</b> | <b>0.689</b> | <b>0.494</b> | <b>0.631</b> | <b>0.735</b> | <i>0.774</i> | <i>0.579</i> | <i>0.808</i> | <i>0.860</i> | <i>0.873</i> | <i>0.646</i> | <i>0.900</i> | <b>2.536</b>  | <i>2.896</i>  | <i>3.279</i>  |
| Subtotal .....                           | <b>1.712</b> | <b>1.830</b> | <b>1.428</b> | <b>1.495</b> | <b>1.670</b> | <i>1.898</i> | <i>1.570</i> | <i>1.696</i> | <i>1.805</i> | <i>2.000</i> | <i>1.696</i> | <i>1.825</i> | <b>6.465</b>  | <i>6.834</i>  | <i>7.326</i>  |
| <b>Industrial Sector</b>                 |              |              |              |              |              |              |              |              |              |              |              |              |               |               |               |
| Biofuel Losses and Co-products (d) ..... | <b>0.202</b> | <b>0.204</b> | <b>0.211</b> | <b>0.206</b> | <b>0.199</b> | <i>0.205</i> | <i>0.205</i> | <i>0.206</i> | <i>0.203</i> | <i>0.206</i> | <i>0.208</i> | <i>0.207</i> | <b>0.823</b>  | <i>0.816</i>  | <i>0.824</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>0.003</b> | <b>0.003</b> | <b>0.003</b> | <b>0.003</b> | <i>0.003</i> | <i>0.003</i> | <i>0.003</i> | <i>0.003</i> | <i>0.003</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>0.008</b> | <b>0.005</b> | <b>0.006</b> | <i>0.008</i> | <i>0.009</i> | <i>0.006</i> | <i>0.007</i> | <i>0.010</i> | <i>0.010</i> | <i>0.007</i> | <b>0.025</b>  | <i>0.029</i>  | <i>0.033</i>  |
| Waste Biomass (c) .....                  | <b>0.044</b> | <b>0.041</b> | <b>0.039</b> | <b>0.044</b> | <b>0.043</b> | <i>0.041</i> | <i>0.041</i> | <i>0.043</i> | <i>0.043</i> | <i>0.042</i> | <i>0.041</i> | <i>0.043</i> | <b>0.168</b>  | <i>0.168</i>  | <i>0.168</i>  |
| Wood Biomass .....                       | <b>0.382</b> | <b>0.382</b> | <b>0.389</b> | <b>0.388</b> | <b>0.366</b> | <i>0.350</i> | <i>0.359</i> | <i>0.360</i> | <i>0.348</i> | <i>0.345</i> | <i>0.356</i> | <i>0.358</i> | <b>1.540</b>  | <i>1.435</i>  | <i>1.408</i>  |
| Subtotal .....                           | <b>0.637</b> | <b>0.635</b> | <b>0.648</b> | <b>0.648</b> | <b>0.616</b> | <i>0.606</i> | <i>0.614</i> | <i>0.619</i> | <i>0.603</i> | <i>0.602</i> | <i>0.614</i> | <i>0.617</i> | <b>2.567</b>  | <i>2.454</i>  | <i>2.436</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>0.021</i>  | <i>0.021</i>  |
| Solar (b) .....                          | <b>0.019</b> | <b>0.029</b> | <b>0.029</b> | <b>0.020</b> | <b>0.023</b> | <i>0.034</i> | <i>0.035</i> | <i>0.025</i> | <i>0.029</i> | <i>0.041</i> | <i>0.042</i> | <i>0.030</i> | <b>0.096</b>  | <i>0.116</i>  | <i>0.142</i>  |
| Waste Biomass (c) .....                  | <b>0.011</b> | <b>0.011</b> | <b>0.010</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>0.011</i> | <i>0.011</i> | <b>0.044</b>  | <i>0.044</i>  | <i>0.044</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>0.022</i> | <i>0.021</i> | <i>0.021</i> | <i>0.021</i> | <i>0.022</i> | <i>0.021</i> | <b>0.084</b>  | <i>0.084</i>  | <i>0.084</i>  |
| Subtotal .....                           | <b>0.063</b> | <b>0.072</b> | <b>0.072</b> | <b>0.064</b> | <b>0.067</b> | <i>0.078</i> | <i>0.079</i> | <i>0.069</i> | <i>0.073</i> | <i>0.085</i> | <i>0.087</i> | <i>0.074</i> | <b>0.271</b>  | <i>0.293</i>  | <i>0.319</i>  |
| <b>Residential Sector</b>                |              |              |              |              |              |              |              |              |              |              |              |              |               |               |               |
| Geothermal .....                         | <b>0.010</b> | <b>0.010</b> | <b>0.010</b> | <b>0.010</b> | <b>0.010</b> | <i>0.010</i> | <i>0.010</i> | <i>0.010</i> | <i>0.010</i> | <i>0.010</i> | <i>0.010</i> | <i>0.010</i> | <b>0.040</b>  | <i>0.040</i>  | <i>0.040</i>  |
| Solar (e) .....                          | <b>0.043</b> | <b>0.066</b> | <b>0.066</b> | <b>0.046</b> | <b>0.050</b> | <i>0.077</i> | <i>0.078</i> | <i>0.054</i> | <i>0.058</i> | <i>0.088</i> | <i>0.089</i> | <i>0.062</i> | <b>0.221</b>  | <i>0.258</i>  | <i>0.296</i>  |
| Wood Biomass .....                       | <b>0.128</b> | <b>0.129</b> | <b>0.130</b> | <b>0.130</b> | <b>0.131</b> | <i>0.132</i> | <i>0.134</i> | <i>0.134</i> | <i>0.135</i> | <i>0.135</i> | <i>0.135</i> | <i>0.135</i> | <b>0.517</b>  | <i>0.530</i>  | <i>0.540</i>  |
| Subtotal .....                           | <b>0.180</b> | <b>0.205</b> | <b>0.207</b> | <b>0.186</b> | <b>0.190</b> | <i>0.219</i> | <i>0.221</i> | <i>0.197</i> | <i>0.203</i> | <i>0.233</i> | <i>0.234</i> | <i>0.207</i> | <b>0.778</b>  | <i>0.827</i>  | <i>0.877</i>  |
| <b>Transportation Sector</b>             |              |              |              |              |              |              |              |              |              |              |              |              |               |               |               |
| Biomass-based Diesel (f) .....           | <b>0.054</b> | <b>0.068</b> | <b>0.071</b> | <b>0.063</b> | <b>0.060</b> | <i>0.077</i> | <i>0.072</i> | <i>0.085</i> | <i>0.072</i> | <i>0.085</i> | <i>0.078</i> | <i>0.082</i> | <b>0.256</b>  | <i>0.295</i>  | <i>0.317</i>  |
| Ethanol (f) .....                        | <b>0.273</b> | <b>0.287</b> | <b>0.294</b> | <b>0.289</b> | <b>0.273</b> | <i>0.296</i> | <i>0.296</i> | <i>0.291</i> | <i>0.277</i> | <i>0.297</i> | <i>0.300</i> | <i>0.291</i> | <b>1.142</b>  | <i>1.156</i>  | <i>1.164</i>  |
| Subtotal .....                           | <b>0.327</b> | <b>0.355</b> | <b>0.365</b> | <b>0.351</b> | <b>0.333</b> | <i>0.373</i> | <i>0.369</i> | <i>0.376</i> | <i>0.349</i> | <i>0.382</i> | <i>0.377</i> | <i>0.373</i> | <b>1.398</b>  | <i>1.451</i>  | <i>1.481</i>  |
| <b>All Sectors Total</b>                 |              |              |              |              |              |              |              |              |              |              |              |              |               |               |               |
| Biomass-based Diesel (f) .....           | <b>0.054</b> | <b>0.068</b> | <b>0.071</b> | <b>0.063</b> | <b>0.060</b> | <i>0.077</i> | <i>0.072</i> | <i>0.085</i> | <i>0.072</i> | <i>0.085</i> | <i>0.078</i> | <i>0.082</i> | <b>0.256</b>  | <i>0.295</i>  | <i>0.317</i>  |
| Biofuel Losses and Co-products (d) ..... | <b>0.202</b> | <b>0.204</b> | <b>0.211</b> | <b>0.206</b> | <b>0.199</b> | <i>0.205</i> | <i>0.205</i> | <i>0.206</i> | <i>0.203</i> | <i>0.206</i> | <i>0.208</i> | <i>0.207</i> | <b>0.823</b>  | <i>0.816</i>  | <i>0.824</i>  |
| Ethanol (f) .....                        | <b>0.283</b> | <b>0.297</b> | <b>0.305</b> | <b>0.300</b> | <b>0.281</b> | <i>0.307</i> | <i>0.308</i> | <i>0.302</i> | <i>0.287</i> | <i>0.308</i> | <i>0.311</i> | <i>0.302</i> | <b>1.185</b>  | <i>1.197</i>  | <i>1.208</i>  |
| Geothermal .....                         | <b>0.054</b> | <b>0.053</b> | <b>0.055</b> | <b>0.055</b> | <b>0.054</b> | <i>0.053</i> | <i>0.054</i> | <i>0.055</i> | <i>0.054</i> | <i>0.054</i> | <i>0.054</i> | <i>0.056</i> | <b>0.218</b>  | <i>0.216</i>  | <i>0.218</i>  |
| Hydroelectric Power (a) .....            | <b>0.710</b> | <b>0.791</b> | <b>0.590</b> | <b>0.596</b> | <b>0.647</b> | <i>0.762</i> | <i>0.613</i> | <i>0.579</i> | <i>0.633</i> | <i>0.730</i> | <i>0.630</i> | <i>0.585</i> | <b>2.688</b>  | <i>2.602</i>  | <i>2.578</i>  |
| Solar (b)(e) .....                       | <b>0.183</b> | <b>0.294</b> | <b>0.288</b> | <b>0.183</b> | <b>0.205</b> | <i>0.324</i> | <i>0.327</i> | <i>0.229</i> | <i>0.243</i> | <i>0.378</i> | <i>0.389</i> | <i>0.273</i> | <b>0.949</b>  | <i>1.085</i>  | <i>1.282</i>  |
| Waste Biomass (c) .....                  | <b>0.128</b> | <b>0.122</b> | <b>0.117</b> | <b>0.125</b> | <b>0.120</b> | <i>0.120</i> | <i>0.121</i> | <i>0.123</i> | <i>0.121</i> | <i>0.121</i> | <i>0.122</i> | <i>0.123</i> | <b>0.492</b>  | <i>0.483</i>  | <i>0.486</i>  |
| Wood Biomass .....                       | <b>0.587</b> | <b>0.584</b> | <b>0.596</b> | <b>0.590</b> | <b>0.575</b> | <i>0.559</i> | <i>0.582</i> | <i>0.576</i> | <i>0.565</i> | <i>0.558</i> | <i>0.581</i> | <i>0.576</i> | <b>2.357</b>  | <i>2.292</i>  | <i>2.280</i>  |
| Wind .....                               | <b>0.722</b> | <b>0.689</b> | <b>0.494</b> | <b>0.631</b> | <b>0.735</b> | <i>0.774</i> | <i>0.579</i> | <i>0.808</i> | <i>0.860</i> | <i>0.873</i> | <i>0.646</i> | <i>0.900</i> | <b>2.536</b>  | <i>2.896</i>  | <i>3.279</i>  |
| <b>Total Consumption</b> .....           | <b>2.919</b> | <b>3.096</b> | <b>2.720</b> | <b>2.744</b> | <b>2.883</b> | <i>3.174</i> | <i>2.853</i> | <i>2.956</i> | <i>3.032</i> | <i>3.302</i> | <i>3.008</i> | <i>3.096</i> | <b>11.480</b> | <i>11.866</i> | <i>12.438</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 - April 2019

|   | 2018   |        |        |        | 2019   |        |         |         | 2020    |         |         |         | Year   |         |         |
|---|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|--------|---------|---------|
|   | Q1     | Q2     | Q3     | Q4     | Q1     | Q2     | Q3      | Q4      | Q1      | Q2      | Q3      | Q4      | 2018   | 2019    | 2020    |
| <b>Renewable Energy Electric Generating Capacity (megawatts, end of period)</b> |        |        |        |        |        |        |         |         |         |         |         |         |        |         |         |
| <b>Electric Power Sector (a)</b>  |        |        |        |        |        |        |         |         |         |         |         |         |        |         |         |
| Biomass .....   | 7,249  | 7,222  | 7,214  | 7,156  | 7,158  | 7,295  | 7,295   | 7,322   | 7,322   | 7,324   | 7,324   | 7,367   | 7,156  | 7,322   | 7,367   |
| Waste .....   | 4,199  | 4,171  | 4,164  | 4,160  | 4,162  | 4,141  | 4,141   | 4,168   | 4,168   | 4,170   | 4,170   | 4,171   | 4,160  | 4,168   | 4,171   |
| Wood .....  | 3,051  | 3,051  | 3,051  | 2,996  | 2,996  | 3,154  | 3,154   | 3,154   | 3,154   | 3,154   | 3,154   | 3,196   | 2,996  | 3,154   | 3,196   |
| Conventional Hydroelectric .....  | 79,538 | 79,506 | 79,515 | 79,636 | 79,646 | 79,679 | 79,582  | 79,601  | 79,689  | 79,707  | 79,829  | 79,887  | 79,636 | 79,601  | 79,887  |
| Geothermal .....  | 2,475  | 2,475  | 2,475  | 2,478  | 2,485  | 2,485  | 2,485   | 2,485   | 2,485   | 2,485   | 2,575   | 2,600   | 2,478  | 2,485   | 2,600   |
| Large-Scale Solar (b) .....   | 28,017 | 28,870 | 29,384 | 31,597 | 32,656 | 33,560 | 34,107  | 36,700  | 37,524  | 40,625  | 40,955  | 43,819  | 31,597 | 36,700  | 43,819  |
| Wind .....  | 88,657 | 88,781 | 89,790 | 94,238 | 96,872 | 98,701 | 100,546 | 106,336 | 107,824 | 108,574 | 109,408 | 115,735 | 94,238 | 106,336 | 115,735 |
| <b>Other Sectors (c)</b>  |        |        |        |        |        |        |         |         |         |         |         |         |        |         |         |
| Biomass .....   | 6,655  | 6,643  | 6,639  | 6,638  | 6,638  | 6,651  | 6,653   | 6,667   | 6,667   | 6,667   | 6,667   | 6,667   | 6,638  | 6,667   | 6,667   |
| Waste .....   | 876    | 875    | 871    | 871    | 871    | 871    | 873     | 887     | 887     | 887     | 887     | 887     | 871    | 887     | 887     |
| Wood .....  | 5,779  | 5,768  | 5,768  | 5,768  | 5,768  | 5,781  | 5,781   | 5,781   | 5,781   | 5,781   | 5,781   | 5,781   | 5,768  | 5,781   | 5,781   |
| Conventional Hydroelectric .....  | 284    | 284    | 284    | 284    | 290    | 290    | 290     | 290     | 290     | 289     | 289     | 289     | 284    | 290     | 289     |
| Large-Scale Solar (b) .....   | 352    | 358    | 366    | 371    | 373    | 379    | 379     | 379     | 379     | 382     | 382     | 382     | 371    | 379     | 382     |
| Small-Scale Solar (d) .....   | 17,048 | 17,887 | 18,712 | 19,521 | 20,545 | 21,450 | 22,409  | 23,420  | 24,488  | 25,612  | 26,802  | 28,058  | 19,521 | 23,420  | 28,058  |
| Residential Sector .....  | 10,155 | 10,660 | 11,179 | 11,664 | 12,324 | 12,842 | 13,394  | 13,979  | 14,602  | 15,259  | 15,961  | 16,705  | 11,664 | 13,979  | 16,705  |
| Commercial Sector .....   | 5,501  | 5,778  | 6,026  | 6,286  | 6,599  | 6,925  | 7,268   | 7,628   | 8,007   | 8,404   | 8,822   | 9,261   | 6,286  | 7,628   | 9,261   |
| Industrial Sector .....   | 1,391  | 1,449  | 1,507  | 1,571  | 1,621  | 1,683  | 1,747   | 1,812   | 1,879   | 1,948   | 2,019   | 2,092   | 1,571  | 1,812   | 2,092   |
| Wind .....  | 113    | 110    | 116    | 116    | 116    | 116    | 116     | 116     | 116     | 116     | 116     | 116     | 116    | 116     | 116     |
| <b>Renewable Electricity Generation (thousand megawatthours per day)</b>        |        |        |        |        |        |        |         |         |         |         |         |         |        |         |         |
| <b>Electric Power Sector (a)</b>  |        |        |        |        |        |        |         |         |         |         |         |         |        |         |         |
| Biomass .....   | 92     | 85     | 86     | 82     | 87     | 86     | 94      | 89      | 89      | 87      | 95      | 90      | 86     | 89      | 90      |
| Waste .....   | 52     | 49     | 48     | 49     | 48     | 48     | 49      | 49      | 48      | 49      | 49      | 49      | 50     | 48      | 49      |
| Wood .....  | 40     | 35     | 37     | 33     | 40     | 38     | 45      | 41      | 41      | 38      | 45      | 41      | 37     | 41      | 41      |
| Conventional Hydroelectric .....  | 852    | 939    | 692    | 698    | 775    | 903    | 718     | 678     | 749     | 864     | 738     | 684     | 795    | 768     | 758     |
| Geothermal .....  | 46     | 44     | 46     | 46     | 46     | 45     | 45      | 45      | 45      | 45      | 45      | 47      | 46     | 45      | 45      |
| Large-Scale Solar (b) .....   | 140    | 230    | 219    | 133    | 156    | 244    | 242     | 169     | 178     | 285     | 292     | 204     | 180    | 203     | 240     |
| Wind .....  | 868    | 821    | 581    | 743    | 884    | 922    | 682     | 951     | 1,024   | 1,039   | 760     | 1,060   | 752    | 860     | 970     |
| <b>Other Sectors (c)</b>  |        |        |        |        |        |        |         |         |         |         |         |         |        |         |         |
| Biomass .....   | 87     | 86     | 86     | 84     | 86     | 86     | 86      | 84      | 86      | 86      | 86      | 84      | 86     | 85      | 85      |
| Waste .....   | 78     | 77     | 77     | 75     | 77     | 77     | 77      | 75      | 77      | 77      | 77      | 75      | 77     | 77      | 77      |
| Wood .....  | 9      | 9      | 8      | 9      | 9      | 9      | 8       | 9       | 9       | 9       | 8       | 9       | 9      | 9       | 9       |
| Conventional Hydroelectric .....  | 5      | 5      | 4      | 5      | 4      | 5      | 4       | 5       | 4       | 5       | 4       | 5       | 5      | 4       | 4       |
| Large-Scale Solar (b) .....   | 1      | 3      | 3      | 1      | 2      | 3      | 3       | 3       | 3       | 3       | 3       | 3       | 2      | 2       | 3       |
| Small-Scale Solar (d) .....   | 64     | 97     | 96     | 66     | 78     | 116    | 117     | 82      | 93      | 139     | 140     | 98      | 81     | 98      | 117     |
| Residential Sector .....  | 37     | 57     | 56     | 38     | 45     | 69     | 69      | 48      | 54      | 81      | 82      | 57      | 47     | 58      | 69      |
| Commercial Sector .....   | 22     | 32     | 32     | 22     | 26     | 38     | 38      | 27      | 32      | 46      | 46      | 32      | 27     | 32      | 39      |
| Industrial Sector .....   | 6      | 8      | 9      | 6      | 7      | 10     | 10      | 7       | 8       | 11      | 12      | 8       | 7      | 8       | 10      |
| Wind .....  | 1      | 1      | 1      | 1      | 1      | 1      | 1       | 1       | 1       | 1       | 1       | 1       | 1      | 1       | 1       |

-- = no data available

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

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

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

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

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

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

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

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



**Table 9a. U.S. Macroeconomic Indicators and CO2 Emissions**  
 U.S. Energy Information Administration | Short-Term Energy Outlook - April 2019

|   | 2018          |               |               |               | 2019          |               |               |               | 2020          |               |               |               | Year          |               |               |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|   | Q1            | Q2            | Q3            | Q4            | Q1            | Q2            | Q3            | Q4            | Q1            | Q2            | Q3            | Q4            | 2018          | 2019          | 2020          |
| <b>Macroeconomic</b>  |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| Real Gross Domestic Product                                 |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| (billion chained 2012 dollars - SAAR) .....                 | <b>18,324</b> | <b>18,512</b> | <b>18,665</b> | <b>18,785</b> | <b>18,842</b> | <i>18,967</i> | <i>19,084</i> | <i>19,201</i> | <i>19,305</i> | <i>19,397</i> | <i>19,478</i> | <i>19,557</i> | <b>18,571</b> | <i>19,024</i> | <i>19,434</i> |
| Real Personal Consumption Expend.                           |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| (billion chained 2012 dollars - SAAR) .....                 | <b>12,723</b> | <b>12,842</b> | <b>12,953</b> | <b>13,044</b> | <b>13,086</b> | <i>13,169</i> | <i>13,259</i> | <i>13,348</i> | <i>13,436</i> | <i>13,512</i> | <i>13,594</i> | <i>13,672</i> | <b>12,891</b> | <i>13,216</i> | <i>13,554</i> |
| Real Private Fixed Investment                               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| (billion chained 2012 dollars - SAAR) .....                 | <b>3,271</b>  | <b>3,322</b>  | <b>3,332</b>  | <b>3,364</b>  | <b>3,372</b>  | <i>3,404</i>  | <i>3,430</i>  | <i>3,461</i>  | <i>3,486</i>  | <i>3,503</i>  | <i>3,524</i>  | <i>3,544</i>  | <b>3,322</b>  | <i>3,417</i>  | <i>3,514</i>  |
| Business Inventory Change                                   |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| (billion chained 2012 dollars - SAAR) .....                 | <b>36</b>     | <b>-10</b>    | <b>93</b>     | <b>108</b>    | <b>79</b>     | <i>68</i>     | <i>71</i>     | <i>75</i>     | <i>79</i>     | <i>77</i>     | <i>69</i>     | <i>62</i>     | <b>57</b>     | <i>73</i>     | <i>72</i>     |
| Real Government Expenditures                                |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| (billion chained 2012 dollars - SAAR) .....                 | <b>3,152</b>  | <b>3,172</b>  | <b>3,192</b>  | <b>3,195</b>  | <b>3,216</b>  | <i>3,241</i>  | <i>3,247</i>  | <i>3,253</i>  | <i>3,260</i>  | <i>3,276</i>  | <i>3,275</i>  | <i>3,276</i>  | <b>3,178</b>  | <i>3,239</i>  | <i>3,272</i>  |
| Real Exports of Goods & Services                            |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| (billion chained 2012 dollars - SAAR) .....                 | <b>2,518</b>  | <b>2,574</b>  | <b>2,542</b>  | <b>2,552</b>  | <b>2,578</b>  | <i>2,607</i>  | <i>2,649</i>  | <i>2,689</i>  | <i>2,727</i>  | <i>2,760</i>  | <i>2,794</i>  | <i>2,825</i>  | <b>2,547</b>  | <i>2,631</i>  | <i>2,776</i>  |
| Real Imports of Goods & Services                            |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| (billion chained 2012 dollars - SAAR) .....                 | <b>3,420</b>  | <b>3,415</b>  | <b>3,492</b>  | <b>3,515</b>  | <b>3,538</b>  | <i>3,574</i>  | <i>3,627</i>  | <i>3,682</i>  | <i>3,744</i>  | <i>3,798</i>  | <i>3,849</i>  | <i>3,899</i>  | <b>3,461</b>  | <i>3,605</i>  | <i>3,823</i>  |
| Real Disposable Personal Income                             |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| (billion chained 2012 dollars - SAAR) .....                 | <b>14,220</b> | <b>14,282</b> | <b>14,375</b> | <b>14,524</b> | <b>14,602</b> | <i>14,684</i> | <i>14,765</i> | <i>14,850</i> | <i>14,930</i> | <i>15,027</i> | <i>15,113</i> | <i>15,189</i> | <b>14,350</b> | <i>14,725</i> | <i>15,065</i> |
| Non-Farm Employment   |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| (millions) .....  | <b>148.0</b>  | <b>148.7</b>  | <b>149.4</b>  | <b>150.1</b>  | <b>150.7</b>  | <i>151.3</i>  | <i>151.9</i>  | <i>152.4</i>  | <i>152.8</i>  | <i>153.3</i>  | <i>153.3</i>  | <i>153.4</i>  | <b>149.1</b>  | <i>151.6</i>  | <i>153.2</i>  |
| Civilian Unemployment Rate                                  |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| (percent) .....   | <b>4.1</b>    | <b>3.9</b>    | <b>3.8</b>    | <b>3.8</b>    | <b>3.9</b>    | <i>3.6</i>    | <i>3.5</i>    | <i>3.5</i>    | <i>3.5</i>    | <i>3.5</i>    | <i>3.6</i>    | <i>3.7</i>    | <b>3.9</b>    | <i>3.6</i>    | <i>3.6</i>    |
| Housing Starts  |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| (millions - SAAR) .....                                     | <b>1.32</b>   | <b>1.26</b>   | <b>1.23</b>   | <b>1.15</b>   | <b>1.20</b>   | <i>1.22</i>   | <i>1.23</i>   | <i>1.25</i>   | <i>1.25</i>   | <i>1.27</i>   | <i>1.27</i>   | <i>1.28</i>   | <b>1.24</b>   | <i>1.22</i>   | <i>1.27</i>   |
| <b>Industrial Production Indices (Index, 2012=100)</b>      |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| Total Industrial Production .....                           | <b>105.9</b>  | <b>107.3</b>  | <b>108.6</b>  | <b>109.7</b>  | <b>109.7</b>  | <i>110.3</i>  | <i>111.0</i>  | <i>111.7</i>  | <i>112.2</i>  | <i>112.4</i>  | <i>112.8</i>  | <i>113.2</i>  | <b>107.9</b>  | <i>110.7</i>  | <i>112.6</i>  |
| Manufacturing .....   | <b>104.1</b>  | <b>104.8</b>  | <b>105.9</b>  | <b>106.4</b>  | <b>106.3</b>  | <i>107.0</i>  | <i>108.0</i>  | <i>108.8</i>  | <i>109.4</i>  | <i>109.7</i>  | <i>110.1</i>  | <i>110.5</i>  | <b>105.3</b>  | <i>107.5</i>  | <i>109.9</i>  |
| Food .....  | <b>114.1</b>  | <b>114.8</b>  | <b>115.7</b>  | <b>113.5</b>  | <b>114.9</b>  | <i>114.7</i>  | <i>115.4</i>  | <i>116.0</i>  | <i>116.5</i>  | <i>117.3</i>  | <i>117.8</i>  | <i>118.4</i>  | <b>114.5</b>  | <i>115.2</i>  | <i>117.5</i>  |
| Paper .....   | <b>96.0</b>   | <b>96.1</b>   | <b>96.2</b>   | <b>96.1</b>   | <b>95.6</b>   | <i>95.4</i>   | <i>95.3</i>   | <i>95.1</i>   | <i>94.8</i>   | <i>94.5</i>   | <i>94.3</i>   | <i>94.1</i>   | <b>96.1</b>   | <i>95.4</i>   | <i>94.4</i>   |
| Petroleum and Coal Products .....                           | <b>106.6</b>  | <b>107.5</b>  | <b>107.7</b>  | <b>107.2</b>  | <b>108.6</b>  | <i>109.7</i>  | <i>109.9</i>  | <i>110.0</i>  | <i>110.3</i>  | <i>110.5</i>  | <i>110.6</i>  | <i>110.7</i>  | <b>107.2</b>  | <i>109.6</i>  | <i>110.5</i>  |
| Chemicals .....   | <b>96.7</b>   | <b>98.9</b>   | <b>100.1</b>  | <b>100.6</b>  | <b>100.5</b>  | <i>102.3</i>  | <i>103.2</i>  | <i>104.1</i>  | <i>104.8</i>  | <i>105.4</i>  | <i>106.1</i>  | <i>106.7</i>  | <b>99.1</b>   | <i>102.5</i>  | <i>105.7</i>  |
| Nonmetallic Mineral Products .....                          | <b>119.2</b>  | <b>120.8</b>  | <b>119.4</b>  | <b>119.8</b>  | <b>120.2</b>  | <i>119.2</i>  | <i>119.3</i>  | <i>119.4</i>  | <i>119.8</i>  | <i>120.1</i>  | <i>120.4</i>  | <i>120.7</i>  | <b>119.8</b>  | <i>119.5</i>  | <i>120.3</i>  |
| Primary Metals .....  | <b>96.1</b>   | <b>96.4</b>   | <b>96.7</b>   | <b>100.6</b>  | <b>99.8</b>   | <i>104.5</i>  | <i>105.7</i>  | <i>105.7</i>  | <i>104.8</i>  | <i>103.1</i>  | <i>100.9</i>  | <i>98.4</i>   | <b>97.5</b>   | <i>103.9</i>  | <i>101.8</i>  |
| Coal-weighted Manufacturing (a) .....                       | <b>103.5</b>  | <b>104.8</b>  | <b>105.2</b>  | <b>105.9</b>  | <b>106.0</b>  | <i>107.8</i>  | <i>108.5</i>  | <i>108.8</i>  | <i>108.8</i>  | <i>108.5</i>  | <i>108.2</i>  | <i>107.7</i>  | <b>104.9</b>  | <i>107.8</i>  | <i>108.3</i>  |
| Distillate-weighted Manufacturing (a) .....                 | <b>111.1</b>  | <b>111.7</b>  | <b>111.9</b>  | <b>111.7</b>  | <b>112.0</b>  | <i>112.3</i>  | <i>112.7</i>  | <i>113.0</i>  | <i>113.2</i>  | <i>113.3</i>  | <i>113.4</i>  | <i>113.4</i>  | <b>111.6</b>  | <i>112.5</i>  | <i>113.3</i>  |
| Electricity-weighted Manufacturing (a) .....                | <b>104.1</b>  | <b>105.2</b>  | <b>106.1</b>  | <b>106.7</b>  | <b>106.8</b>  | <i>108.3</i>  | <i>109.2</i>  | <i>109.6</i>  | <i>109.8</i>  | <i>109.7</i>  | <i>109.6</i>  | <i>109.5</i>  | <b>105.5</b>  | <i>108.5</i>  | <i>109.7</i>  |
| Natural Gas-weighted Manufacturing (a) ...                  | <b>103.8</b>  | <b>105.6</b>  | <b>106.5</b>  | <b>106.8</b>  | <b>106.9</b>  | <i>108.9</i>  | <i>109.7</i>  | <i>110.3</i>  | <i>110.6</i>  | <i>110.7</i>  | <i>110.9</i>  | <i>111.0</i>  | <b>105.7</b>  | <i>109.0</i>  | <i>110.8</i>  |
| <b>Price Indexes</b>  |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| Consumer Price Index (all urban consumers)                  |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| (index, 1982-1984=1.00) .....                               | <b>2.49</b>   | <b>2.51</b>   | <b>2.52</b>   | <b>2.53</b>   | <b>2.53</b>   | <i>2.55</i>   | <i>2.56</i>   | <i>2.58</i>   | <i>2.59</i>   | <i>2.61</i>   | <i>2.62</i>   | <i>2.63</i>   | <b>2.51</b>   | <i>2.56</i>   | <i>2.61</i>   |
| Producer Price Index: All Commodities                       |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| (index, 1982=1.00) .....                                    | <b>2.00</b>   | <b>2.01</b>   | <b>2.03</b>   | <b>2.04</b>   | <b>2.02</b>   | <i>2.02</i>   | <i>2.02</i>   | <i>2.03</i>   | <i>2.03</i>   | <i>2.03</i>   | <i>2.03</i>   | <i>2.04</i>   | <b>2.02</b>   | <i>2.02</i>   | <i>2.03</i>   |
| Producer Price Index: Petroleum                             |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| (index, 1982=1.00) .....                                    | <b>1.98</b>   | <b>2.22</b>   | <b>2.26</b>   | <b>2.10</b>   | <b>1.84</b>   | <i>2.07</i>   | <i>2.04</i>   | <i>1.89</i>   | <i>1.86</i>   | <i>1.93</i>   | <i>1.91</i>   | <i>1.84</i>   | <b>2.14</b>   | <i>1.96</i>   | <i>1.88</i>   |
| GDP Implicit Price Deflator                                 |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| (index, 2012=100) .....                                     | <b>109.3</b>  | <b>110.2</b>  | <b>110.7</b>  | <b>111.2</b>  | <b>111.7</b>  | <i>112.2</i>  | <i>112.7</i>  | <i>113.4</i>  | <i>114.1</i>  | <i>114.8</i>  | <i>115.4</i>  | <i>116.1</i>  | <b>110.3</b>  | <i>112.5</i>  | <i>115.1</i>  |
| <b>Miscellaneous</b>  |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| Vehicle Miles Traveled (b)                                  |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| (million miles/day) .....                                   | <b>8,232</b>  | <b>9,225</b>  | <b>9,080</b>  | <b>8,795</b>  | <b>8,394</b>  | <i>9,333</i>  | <i>9,205</i>  | <i>8,926</i>  | <i>8,487</i>  | <i>9,490</i>  | <i>9,358</i>  | <i>9,026</i>  | <b>8,835</b>  | <i>8,967</i>  | <i>9,091</i>  |
| Air Travel Capacity   |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| (Available ton-miles/day, thousands) .....                  | <b>603</b>    | <b>664</b>    | <b>667</b>    | <b>661</b>    | <b>626</b>    | <i>661</i>    | <i>668</i>    | <i>644</i>    | <i>623</i>    | <i>656</i>    | <i>665</i>    | <i>643</i>    | <b>649</b>    | <i>650</i>    | <i>647</i>    |
| Aircraft Utilization  |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| (Revenue ton-miles/day, thousands) .....                    | <b>368</b>    | <b>414</b>    | <b>418</b>    | <b>394</b>    | <b>383</b>    | <i>422</i>    | <i>426</i>    | <i>404</i>    | <i>384</i>    | <i>419</i>    | <i>425</i>    | <i>405</i>    | <b>398</b>    | <i>409</i>    | <i>409</i>    |
| Airline Ticket Price Index                                  |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| (index, 1982-1984=100) .....                                | <b>262.8</b>  | <b>277.9</b>  | <b>259.7</b>  | <b>259.3</b>  | <b>259.7</b>  | <i>304.6</i>  | <i>307.5</i>  | <i>327.9</i>  | <i>331.2</i>  | <i>347.3</i>  | <i>331.3</i>  | <i>345.1</i>  | <b>264.9</b>  | <i>300.0</i>  | <i>338.7</i>  |
| Raw Steel Production  |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| (million short tons per day) .....                          | <b>0.251</b>  | <b>0.253</b>  | <b>0.263</b>  | <b>0.270</b>  | <b>0.273</b>  | <i>0.280</i>  | <i>0.274</i>  | <i>0.248</i>  | <i>0.290</i>  | <i>0.291</i>  | <i>0.268</i>  | <i>0.231</i>  | <b>0.259</b>  | <i>0.269</i>  | <i>0.270</i>  |
| <b>Carbon Dioxide (CO2) Emissions (million metric tons)</b> |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| Petroleum .....   | <b>578</b>    | <b>591</b>    | <b>601</b>    | <b>599</b>    | <b>578</b>    | <i>594</i>    | <i>608</i>    | <i>602</i>    | <i>590</i>    | <i>596</i>    | <i>612</i>    | <i>603</i>    | <b>2,369</b>  | <i>2,382</i>  | <i>2,400</i>  |
| Natural Gas .....   | <b>478</b>    | <b>349</b>    | <b>370</b>    | <b>432</b>    | <b>505</b>    | <i>358</i>    | <i>376</i>    | <i>437</i>    | <i>500</i>    | <i>366</i>    | <i>384</i>    | <i>437</i>    | <b>1,630</b>  | <i>1,677</i>  | <i>1,687</i>  |
| Coal .....  | <b>307</b>    | <b>287</b>    | <b>355</b>    | <b>312</b>    | <b>284</b>    | <i>240</i>    | <i>314</i>    | <i>276</i>    | <i>273</i>    | <i>222</i>    | <i>290</i>    | <i>251</i>    | <b>1,260</b>  | <i>1,115</i>  | <i>1,035</i>  |
| Total Energy (c) .....                                      | <b>1,366</b>  | <b>1,231</b>  | <b>1,329</b>  | <b>1,345</b>  | <b>1,371</b>  | <i>1,195</i>  | <i>1,301</i>  | <i>1,318</i>  | <i>1,365</i>  | <i>1,187</i>  | <i>1,289</i>  | <i>1,293</i>  | <b>5,271</b>  | <i>5,185</i>  | <i>5,134</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 - April 2019

|  | 2018   |        |        |        | 2019   |        |        |        | 2020   |        |        |        | Year   |        |        |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|  | Q1     | Q2     | Q3     | Q4     | Q1     | Q2     | Q3     | Q4     | Q1     | Q2     | Q3     | Q4     | 2018   | 2019   | 2020   |
| <b>Real Gross State Product (Billion \$2009)</b>               |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| New England .....  | 971    | 980    | 988    | 993    | 995    | 1,001  | 1,005  | 1,011  | 1,016  | 1,020  | 1,024  | 1,028  | 983    | 1,003  | 1,022  |
| Middle Atlantic .....  | 2,735  | 2,759  | 2,780  | 2,798  | 2,804  | 2,818  | 2,832  | 2,846  | 2,858  | 2,871  | 2,881  | 2,890  | 2,768  | 2,825  | 2,875  |
| E. N. Central .....  | 2,480  | 2,504  | 2,522  | 2,536  | 2,540  | 2,553  | 2,566  | 2,579  | 2,589  | 2,594  | 2,600  | 2,605  | 2,511  | 2,559  | 2,597  |
| W. N. Central .....  | 1,145  | 1,159  | 1,168  | 1,173  | 1,175  | 1,182  | 1,188  | 1,194  | 1,199  | 1,203  | 1,208  | 1,212  | 1,161  | 1,185  | 1,206  |
| S. Atlantic .....  | 3,263  | 3,295  | 3,321  | 3,343  | 3,355  | 3,381  | 3,404  | 3,425  | 3,446  | 3,465  | 3,482  | 3,500  | 3,306  | 3,391  | 3,473  |
| E. S. Central .....  | 815    | 823    | 829    | 833    | 835    | 840    | 845    | 850    | 853    | 857    | 859    | 862    | 825    | 842    | 858    |
| W. S. Central .....  | 2,214  | 2,246  | 2,265  | 2,283  | 2,292  | 2,308  | 2,323  | 2,342  | 2,360  | 2,375  | 2,389  | 2,401  | 2,252  | 2,316  | 2,381  |
| Mountain .....   | 1,197  | 1,210  | 1,222  | 1,231  | 1,236  | 1,247  | 1,256  | 1,266  | 1,274  | 1,282  | 1,290  | 1,297  | 1,215  | 1,251  | 1,286  |
| Pacific .....  | 3,536  | 3,569  | 3,603  | 3,628  | 3,643  | 3,673  | 3,700  | 3,725  | 3,746  | 3,764  | 3,781  | 3,797  | 3,584  | 3,685  | 3,772  |
| <b>Industrial Output, Manufacturing (Index, Year 2012=100)</b> |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| New England .....  | 98.1   | 98.5   | 99.2   | 98.5   | 98.3   | 98.8   | 99.5   | 100.0  | 100.5  | 100.6  | 101.0  | 101.3  | 98.6   | 99.2   | 100.8  |
| Middle Atlantic .....  | 98.0   | 98.3   | 99.1   | 99.0   | 98.8   | 99.3   | 100.1  | 100.8  | 101.3  | 101.5  | 101.8  | 102.1  | 98.6   | 99.7   | 101.7  |
| E. N. Central .....  | 106.9  | 107.5  | 108.6  | 108.4  | 108.2  | 108.8  | 109.9  | 110.8  | 111.3  | 111.2  | 111.3  | 111.5  | 107.8  | 109.4  | 111.3  |
| W. N. Central .....  | 103.6  | 104.2  | 105.6  | 106.2  | 106.0  | 106.6  | 107.6  | 108.6  | 109.2  | 109.5  | 110.0  | 110.5  | 104.9  | 107.2  | 109.8  |
| S. Atlantic .....  | 108.1  | 108.9  | 110.1  | 110.6  | 110.5  | 111.2  | 112.1  | 112.9  | 113.5  | 113.7  | 114.1  | 114.6  | 109.4  | 111.7  | 114.0  |
| E. S. Central .....  | 109.1  | 109.5  | 110.6  | 110.9  | 110.9  | 111.7  | 112.8  | 113.7  | 114.3  | 114.5  | 114.8  | 115.1  | 110.0  | 112.3  | 114.7  |
| W. S. Central .....  | 98.0   | 99.0   | 100.4  | 101.6  | 101.7  | 102.6  | 103.6  | 104.5  | 105.3  | 105.7  | 106.2  | 106.7  | 99.7   | 103.1  | 106.0  |
| Mountain .....   | 111.4  | 112.7  | 114.6  | 115.8  | 115.9  | 116.8  | 117.9  | 118.9  | 119.7  | 120.2  | 120.8  | 121.4  | 113.6  | 117.4  | 120.5  |
| Pacific .....  | 103.8  | 104.4  | 105.1  | 106.2  | 106.2  | 106.9  | 107.8  | 108.6  | 109.3  | 109.6  | 110.1  | 110.6  | 104.9  | 107.4  | 109.9  |
| <b>Real Personal Income (Billion \$2009)</b>                   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| New England .....  | 858    | 856    | 863    | 868    | 872    | 876    | 880    | 885    | 889    | 894    | 898    | 901    | 861    | 878    | 896    |
| Middle Atlantic .....  | 2,217  | 2,227  | 2,240  | 2,254  | 2,264  | 2,273  | 2,283  | 2,293  | 2,303  | 2,314  | 2,324  | 2,332  | 2,234  | 2,278  | 2,318  |
| E. N. Central .....  | 2,342  | 2,342  | 2,356  | 2,377  | 2,390  | 2,401  | 2,412  | 2,425  | 2,436  | 2,448  | 2,458  | 2,466  | 2,354  | 2,407  | 2,452  |
| W. N. Central .....  | 1,082  | 1,091  | 1,096  | 1,110  | 1,116  | 1,123  | 1,129  | 1,136  | 1,143  | 1,150  | 1,156  | 1,162  | 1,095  | 1,126  | 1,153  |
| S. Atlantic .....  | 3,080  | 3,088  | 3,110  | 3,139  | 3,159  | 3,179  | 3,201  | 3,224  | 3,245  | 3,270  | 3,292  | 3,313  | 3,104  | 3,191  | 3,280  |
| E. S. Central .....  | 861    | 864    | 869    | 876    | 882    | 887    | 890    | 895    | 900    | 905    | 909    | 912    | 868    | 889    | 906    |
| W. S. Central .....  | 1,876  | 1,885  | 1,898  | 1,917  | 1,930  | 1,942  | 1,953  | 1,965  | 1,979  | 1,993  | 2,006  | 2,017  | 1,894  | 1,948  | 1,999  |
| Mountain .....   | 1,102  | 1,105  | 1,115  | 1,126  | 1,134  | 1,141  | 1,149  | 1,157  | 1,166  | 1,175  | 1,184  | 1,192  | 1,112  | 1,145  | 1,179  |
| Pacific .....  | 2,670  | 2,689  | 2,711  | 2,740  | 2,750  | 2,765  | 2,782  | 2,800  | 2,815  | 2,833  | 2,851  | 2,866  | 2,703  | 2,774  | 2,841  |
| <b>Households (Thousands)</b>                                  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| New England .....  | 5,914  | 5,926  | 5,944  | 5,955  | 5,965  | 5,975  | 5,986  | 5,996  | 6,006  | 6,018  | 6,025  | 6,033  | 5,955  | 5,996  | 6,033  |
| Middle Atlantic .....  | 16,210 | 16,249 | 16,300 | 16,330 | 16,355 | 16,375 | 16,401 | 16,428 | 16,454 | 16,483 | 16,502 | 16,522 | 16,330 | 16,428 | 16,522 |
| E. N. Central .....  | 19,003 | 19,037 | 19,090 | 19,120 | 19,148 | 19,175 | 19,206 | 19,240 | 19,271 | 19,314 | 19,345 | 19,376 | 19,120 | 19,240 | 19,376 |
| W. N. Central .....  | 8,604  | 8,627  | 8,658  | 8,680  | 8,700  | 8,721  | 8,743  | 8,766  | 8,788  | 8,811  | 8,831  | 8,850  | 8,680  | 8,766  | 8,850  |
| S. Atlantic .....  | 25,469 | 25,561 | 25,679 | 25,770 | 25,861 | 25,952 | 26,045 | 26,139 | 26,233 | 26,333 | 26,418 | 26,503 | 25,770 | 26,139 | 26,503 |
| E. S. Central .....  | 7,626  | 7,641  | 7,665  | 7,682  | 7,699  | 7,717  | 7,736  | 7,755  | 7,773  | 7,793  | 7,810  | 7,827  | 7,682  | 7,755  | 7,827  |
| W. S. Central .....  | 14,686 | 14,731 | 14,793 | 14,843 | 14,891 | 14,941 | 14,994 | 15,048 | 15,103 | 15,161 | 15,213 | 15,264 | 14,843 | 15,048 | 15,264 |
| Mountain .....   | 9,244  | 9,292  | 9,349  | 9,393  | 9,437  | 9,478  | 9,521  | 9,562  | 9,604  | 9,647  | 9,686  | 9,724  | 9,393  | 9,562  | 9,724  |
| Pacific .....  | 18,859 | 18,903 | 18,966 | 19,009 | 19,054 | 19,101 | 19,153 | 19,207 | 19,261 | 19,319 | 19,368 | 19,418 | 19,009 | 19,207 | 19,418 |
| <b>Total Non-farm Employment (Millions)</b>                    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| New England .....  | 7.4    | 7.4    | 7.5    | 7.5    | 7.5    | 7.5    | 7.5    | 7.6    | 7.6    | 7.6    | 7.6    | 7.6    | 7.5    | 7.5    | 7.6    |
| Middle Atlantic .....  | 19.7   | 19.8   | 19.9   | 19.9   | 20.0   | 20.1   | 20.1   | 20.2   | 20.2   | 20.2   | 20.2   | 20.2   | 19.8   | 20.1   | 20.2   |
| E. N. Central .....  | 22.1   | 22.2   | 22.2   | 22.3   | 22.4   | 22.4   | 22.5   | 22.6   | 22.6   | 22.6   | 22.6   | 22.6   | 22.2   | 22.5   | 22.6   |
| W. N. Central .....  | 10.7   | 10.7   | 10.8   | 10.8   | 10.8   | 10.9   | 10.9   | 10.9   | 10.9   | 11.0   | 11.0   | 11.0   | 10.7   | 10.9   | 10.9   |
| S. Atlantic .....  | 28.5   | 28.6   | 28.7   | 28.9   | 29.0   | 29.2   | 29.3   | 29.4   | 29.5   | 29.7   | 29.7   | 29.7   | 28.7   | 29.2   | 29.7   |
| E. S. Central .....  | 8.1    | 8.2    | 8.2    | 8.2    | 8.3    | 8.3    | 8.3    | 8.4    | 8.4    | 8.4    | 8.4    | 8.4    | 8.2    | 8.3    | 8.4    |
| W. S. Central .....  | 17.3   | 17.4   | 17.5   | 17.6   | 17.7   | 17.7   | 17.8   | 17.9   | 18.0   | 18.1   | 18.1   | 18.1   | 17.4   | 17.8   | 18.1   |
| Mountain .....   | 10.7   | 10.8   | 10.9   | 10.9   | 11.0   | 11.1   | 11.1   | 11.2   | 11.2   | 11.3   | 11.3   | 11.4   | 10.8   | 11.1   | 11.3   |
| Pacific .....  | 23.3   | 23.4   | 23.5   | 23.6   | 23.8   | 23.9   | 24.0   | 24.1   | 24.1   | 24.2   | 24.2   | 24.2   | 23.5   | 23.9   | 24.2   |

- = no data available

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

Regions refer to U.S. Census divisions.

See "Census division" in EIA's Energy Glossary (<http://www.eia.doe.gov/glossary/index.html>) for a list of States in each region.**Historical data:** Latest data available from U.S. Department of Commerce, Bureau of Economic Analysis; Federal Reserve System, Statistical release G17.

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

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

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

U.S. Energy Information Administration | Short-Term Energy Outlook - April 2019

|   | 2018         |              |              |              | 2019         |            |              |              | 2020         |            |              |              | Year         |              |              |
|---|--------------|--------------|--------------|--------------|--------------|------------|--------------|--------------|--------------|------------|--------------|--------------|--------------|--------------|--------------|
|   | Q1           | Q2           | Q3           | Q4           | Q1           | Q2         | Q3           | Q4           | Q1           | Q2         | Q3           | Q4           | 2018         | 2019         | 2020         |
| <b>Heating Degree Days</b>                        |              |              |              |              |              |            |              |              |              |            |              |              |              |              |              |
| New England .....                                 | <b>3,060</b> | <b>913</b>   | <b>72</b>    | <b>2,310</b> | <b>3,222</b> | <i>794</i> | <i>127</i>   | <i>2,130</i> | <i>3,144</i> | <i>867</i> | <i>127</i>   | <i>2,130</i> | <b>6,355</b> | <i>6,273</i> | <i>6,269</i> |
| Middle Atlantic .....                             | <b>2,936</b> | <b>755</b>   | <b>37</b>    | <b>2,049</b> | <b>2,966</b> | <i>634</i> | <i>80</i>    | <i>1,954</i> | <i>2,907</i> | <i>691</i> | <i>80</i>    | <i>1,954</i> | <b>5,777</b> | <i>5,634</i> | <i>5,632</i> |
| E. N. Central .....                               | <b>3,211</b> | <b>826</b>   | <b>60</b>    | <b>2,335</b> | <b>3,299</b> | <i>733</i> | <i>127</i>   | <i>2,203</i> | <i>3,129</i> | <i>720</i> | <i>127</i>   | <i>2,203</i> | <b>6,431</b> | <i>6,362</i> | <i>6,179</i> |
| W. N. Central .....                               | <b>3,420</b> | <b>827</b>   | <b>121</b>   | <b>2,598</b> | <b>3,625</b> | <i>738</i> | <i>161</i>   | <i>2,382</i> | <i>3,208</i> | <i>695</i> | <i>162</i>   | <i>2,383</i> | <b>6,966</b> | <i>6,906</i> | <i>6,447</i> |
| South Atlantic .....                              | <b>1,443</b> | <b>220</b>   | <b>2</b>     | <b>967</b>   | <b>1,334</b> | <i>189</i> | <i>13</i>    | <i>964</i>   | <i>1,398</i> | <i>189</i> | <i>13</i>    | <i>962</i>   | <b>2,633</b> | <i>2,501</i> | <i>2,563</i> |
| E. S. Central .....                               | <b>1,816</b> | <b>325</b>   | <b>3</b>     | <b>1,338</b> | <b>1,705</b> | <i>258</i> | <i>21</i>    | <i>1,291</i> | <i>1,792</i> | <i>236</i> | <i>21</i>    | <i>1,291</i> | <b>3,482</b> | <i>3,274</i> | <i>3,341</i> |
| W. S. Central .....                               | <b>1,192</b> | <b>142</b>   | <b>3</b>     | <b>911</b>   | <b>1,195</b> | <i>94</i>  | <i>4</i>     | <i>809</i>   | <i>1,138</i> | <i>80</i>  | <i>4</i>     | <i>809</i>   | <b>2,248</b> | <i>2,103</i> | <i>2,032</i> |
| Mountain .....                                    | <b>2,120</b> | <b>599</b>   | <b>124</b>   | <b>1,954</b> | <b>2,398</b> | <i>716</i> | <i>147</i>   | <i>1,836</i> | <i>2,183</i> | <i>699</i> | <i>147</i>   | <i>1,835</i> | <b>4,797</b> | <i>5,098</i> | <i>4,865</i> |
| Pacific .....                                     | <b>1,444</b> | <b>541</b>   | <b>84</b>    | <b>1,100</b> | <b>1,630</b> | <i>559</i> | <i>84</i>    | <i>1,185</i> | <i>1,479</i> | <i>585</i> | <i>84</i>    | <i>1,186</i> | <b>3,169</b> | <i>3,459</i> | <i>3,334</i> |
| U.S. Average .....                                | <b>2,130</b> | <b>523</b>   | <b>48</b>    | <b>1,577</b> | <b>2,188</b> | <i>478</i> | <i>74</i>    | <i>1,511</i> | <i>2,093</i> | <i>484</i> | <i>74</i>    | <i>1,510</i> | <b>4,278</b> | <i>4,251</i> | <i>4,160</i> |
| <b>Heating Degree Days, Prior 10-year Average</b> |              |              |              |              |              |            |              |              |              |            |              |              |              |              |              |
| New England .....                                 | <b>3,172</b> | <b>817</b>   | <b>119</b>   | <b>2,121</b> | <b>3,166</b> | <i>821</i> | <i>111</i>   | <i>2,123</i> | <i>3,153</i> | <i>813</i> | <i>104</i>   | <i>2,113</i> | <b>6,229</b> | <i>6,221</i> | <i>6,184</i> |
| Middle Atlantic .....                             | <b>2,947</b> | <b>646</b>   | <b>81</b>    | <b>1,949</b> | <b>2,956</b> | <i>650</i> | <i>76</i>    | <i>1,941</i> | <i>2,946</i> | <i>644</i> | <i>71</i>    | <i>1,933</i> | <b>5,623</b> | <i>5,623</i> | <i>5,594</i> |
| E. N. Central .....                               | <b>3,209</b> | <b>692</b>   | <b>116</b>   | <b>2,210</b> | <b>3,196</b> | <i>697</i> | <i>112</i>   | <i>2,198</i> | <i>3,195</i> | <i>695</i> | <i>108</i>   | <i>2,190</i> | <b>6,228</b> | <i>6,203</i> | <i>6,188</i> |
| W. N. Central .....                               | <b>3,264</b> | <b>705</b>   | <b>144</b>   | <b>2,379</b> | <b>3,255</b> | <i>702</i> | <i>140</i>   | <i>2,380</i> | <i>3,285</i> | <i>699</i> | <i>137</i>   | <i>2,362</i> | <b>6,492</b> | <i>6,477</i> | <i>6,483</i> |
| South Atlantic .....                              | <b>1,476</b> | <b>177</b>   | <b>12</b>    | <b>974</b>   | <b>1,480</b> | <i>177</i> | <i>11</i>    | <i>964</i>   | <i>1,459</i> | <i>175</i> | <i>11</i>    | <i>956</i>   | <b>2,639</b> | <i>2,631</i> | <i>2,601</i> |
| E. S. Central .....                               | <b>1,868</b> | <b>217</b>   | <b>18</b>    | <b>1,301</b> | <b>1,862</b> | <i>222</i> | <i>17</i>    | <i>1,292</i> | <i>1,849</i> | <i>221</i> | <i>17</i>    | <i>1,279</i> | <b>3,404</b> | <i>3,392</i> | <i>3,366</i> |
| W. S. Central .....                               | <b>1,181</b> | <b>80</b>    | <b>4</b>     | <b>801</b>   | <b>1,183</b> | <i>85</i>  | <i>4</i>     | <i>807</i>   | <i>1,197</i> | <i>84</i>  | <i>3</i>     | <i>789</i>   | <b>2,066</b> | <i>2,079</i> | <i>2,074</i> |
| Mountain .....                                    | <b>2,194</b> | <b>737</b>   | <b>144</b>   | <b>1,841</b> | <b>2,164</b> | <i>714</i> | <i>139</i>   | <i>1,855</i> | <i>2,189</i> | <i>711</i> | <i>138</i>   | <i>1,830</i> | <b>4,916</b> | <i>4,872</i> | <i>4,868</i> |
| Pacific .....                                     | <b>1,465</b> | <b>592</b>   | <b>84</b>    | <b>1,182</b> | <b>1,444</b> | <i>582</i> | <i>83</i>    | <i>1,174</i> | <i>1,451</i> | <i>579</i> | <i>84</i>    | <i>1,161</i> | <b>3,322</b> | <i>3,283</i> | <i>3,275</i> |
| U.S. Average .....                                | <b>2,160</b> | <b>478</b>   | <b>71</b>    | <b>1,524</b> | <b>2,150</b> | <i>475</i> | <i>68</i>    | <i>1,518</i> | <i>2,147</i> | <i>472</i> | <i>66</i>    | <i>1,504</i> | <b>4,233</b> | <i>4,211</i> | <i>4,189</i> |
| <b>Cooling Degree Days</b>                        |              |              |              |              |              |            |              |              |              |            |              |              |              |              |              |
| New England .....                                 | <b>0</b>     | <b>78</b>    | <b>573</b>   | <b>0</b>     | <b>0</b>     | <i>94</i>  | <i>418</i>   | <i>2</i>     | <i>0</i>     | <i>81</i>  | <i>418</i>   | <i>2</i>     | <b>651</b>   | <i>514</i>   | <i>502</i>   |
| Middle Atlantic .....                             | <b>0</b>     | <b>175</b>   | <b>706</b>   | <b>4</b>     | <b>0</b>     | <i>162</i> | <i>538</i>   | <i>5</i>     | <i>0</i>     | <i>151</i> | <i>538</i>   | <i>5</i>     | <b>885</b>   | <i>705</i>   | <i>694</i>   |
| E. N. Central .....                               | <b>0</b>     | <b>332</b>   | <b>638</b>   | <b>4</b>     | <b>0</b>     | <i>210</i> | <i>523</i>   | <i>7</i>     | <i>0</i>     | <i>222</i> | <i>523</i>   | <i>7</i>     | <b>974</b>   | <i>740</i>   | <i>752</i>   |
| W. N. Central .....                               | <b>2</b>     | <b>440</b>   | <b>685</b>   | <b>6</b>     | <b>0</b>     | <i>247</i> | <i>653</i>   | <i>10</i>    | <i>3</i>     | <i>269</i> | <i>653</i>   | <i>10</i>    | <b>1,132</b> | <i>910</i>   | <i>936</i>   |
| South Atlantic .....                              | <b>137</b>   | <b>726</b>   | <b>1,268</b> | <b>281</b>   | <b>152</b>   | <i>650</i> | <i>1,148</i> | <i>224</i>   | <i>122</i>   | <i>650</i> | <i>1,149</i> | <i>225</i>   | <b>2,411</b> | <i>2,175</i> | <i>2,145</i> |
| E. S. Central .....                               | <b>37</b>    | <b>651</b>   | <b>1,163</b> | <b>82</b>    | <b>22</b>    | <i>496</i> | <i>1,029</i> | <i>65</i>    | <i>28</i>    | <i>528</i> | <i>1,029</i> | <i>65</i>    | <b>1,932</b> | <i>1,612</i> | <i>1,650</i> |
| W. S. Central .....                               | <b>126</b>   | <b>1,003</b> | <b>1,565</b> | <b>165</b>   | <b>87</b>    | <i>822</i> | <i>1,479</i> | <i>193</i>   | <i>90</i>    | <i>867</i> | <i>1,480</i> | <i>193</i>   | <b>2,859</b> | <i>2,581</i> | <i>2,629</i> |
| Mountain .....                                    | <b>21</b>    | <b>509</b>   | <b>1,002</b> | <b>51</b>    | <b>8</b>     | <i>412</i> | <i>921</i>   | <i>73</i>    | <i>18</i>    | <i>414</i> | <i>922</i>   | <i>73</i>    | <b>1,584</b> | <i>1,413</i> | <i>1,428</i> |
| Pacific .....                                     | <b>31</b>    | <b>181</b>   | <b>719</b>   | <b>72</b>    | <b>23</b>    | <i>171</i> | <i>592</i>   | <i>58</i>    | <i>27</i>    | <i>165</i> | <i>591</i>   | <i>58</i>    | <b>1,004</b> | <i>844</i>   | <i>842</i>   |
| U.S. Average .....                                | <b>52</b>    | <b>476</b>   | <b>958</b>   | <b>98</b>    | <b>47</b>    | <i>391</i> | <i>843</i>   | <i>90</i>    | <i>43</i>    | <i>399</i> | <i>845</i>   | <i>90</i>    | <b>1,585</b> | <i>1,371</i> | <i>1,377</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>79</i>  | <i>454</i>   | <i>1</i>     | <i>0</i>     | <i>85</i>  | <i>464</i>   | <i>1</i>     | <b>515</b>   | <i>534</i>   | <i>551</i>   |
| Middle Atlantic .....                             | <b>0</b>     | <b>166</b>   | <b>566</b>   | <b>5</b>     | <b>0</b>     | <i>165</i> | <i>589</i>   | <i>6</i>     | <i>0</i>     | <i>172</i> | <i>600</i>   | <i>6</i>     | <b>738</b>   | <i>760</i>   | <i>778</i>   |
| E. N. Central .....                               | <b>3</b>     | <b>228</b>   | <b>533</b>   | <b>7</b>     | <b>3</b>     | <i>242</i> | <i>548</i>   | <i>7</i>     | <i>3</i>     | <i>244</i> | <i>566</i>   | <i>8</i>     | <b>771</b>   | <i>800</i>   | <i>820</i>   |
| W. N. Central .....                               | <b>7</b>     | <b>277</b>   | <b>659</b>   | <b>11</b>    | <b>7</b>     | <i>298</i> | <i>668</i>   | <i>11</i>    | <i>7</i>     | <i>299</i> | <i>689</i>   | <i>12</i>    | <b>953</b>   | <i>985</i>   | <i>1,006</i> |
| South Atlantic .....                              | <b>119</b>   | <b>675</b>   | <b>1,161</b> | <b>227</b>   | <b>121</b>   | <i>684</i> | <i>1,180</i> | <i>239</i>   | <i>127</i>   | <i>685</i> | <i>1,187</i> | <i>239</i>   | <b>2,182</b> | <i>2,224</i> | <i>2,238</i> |
| E. S. Central .....                               | <b>34</b>    | <b>539</b>   | <b>1,031</b> | <b>63</b>    | <b>36</b>    | <i>554</i> | <i>1,049</i> | <i>67</i>    | <i>35</i>    | <i>551</i> | <i>1,064</i> | <i>70</i>    | <b>1,667</b> | <i>1,707</i> | <i>1,720</i> |
| W. S. Central .....                               | <b>100</b>   | <b>887</b>   | <b>1,532</b> | <b>204</b>   | <b>103</b>   | <i>897</i> | <i>1,552</i> | <i>205</i>   | <i>101</i>   | <i>892</i> | <i>1,554</i> | <i>210</i>   | <b>2,722</b> | <i>2,758</i> | <i>2,757</i> |
| Mountain .....                                    | <b>24</b>    | <b>426</b>   | <b>923</b>   | <b>84</b>    | <b>25</b>    | <i>438</i> | <i>933</i>   | <i>81</i>    | <i>24</i>    | <i>440</i> | <i>933</i>   | <i>83</i>    | <b>1,457</b> | <i>1,477</i> | <i>1,479</i> |
| Pacific .....                                     | <b>30</b>    | <b>185</b>   | <b>621</b>   | <b>78</b>    | <b>31</b>    | <i>185</i> | <i>631</i>   | <i>76</i>    | <i>31</i>    | <i>186</i> | <i>624</i>   | <i>77</i>    | <b>914</b>   | <i>923</i>   | <i>918</i>   |
| U.S. Average .....                                | <b>45</b>    | <b>408</b>   | <b>856</b>   | <b>94</b>    | <b>46</b>    | <i>417</i> | <i>873</i>   | <i>97</i>    | <i>47</i>    | <i>419</i> | <i>882</i>   | <i>98</i>    | <b>1,403</b> | <i>1,433</i> | <i>1,446</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>).

## Appendix to the April 2019 Short-Term Energy Outlook

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

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

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

**Table a1. Summary of Estimated Petroleum and Other Liquids Quantities**

|  | February<br>2019 | March<br>2019 | February 2019 –<br>March 2019<br>Average | February 2018 –<br>March 2018<br>Average | 2016 –<br>2018<br>Average |
|--|------------------|---------------|--|--|---------------------------|
| <b>Global Petroleum and Other Liquids (million barrels per day)</b>  |                  |               |  |  |                           |
| Global Petroleum and Other Liquids Production (a)  | 100.3            | 100.1         | 100.2                                    | 99.4                                     | 98.8                      |
| Global Petroleum and Other Liquids Consumption (b)   | 101.8            | 100.8         | 101.3                                    | 99.8                                     | 98.5                      |
| Biofuels Production (c)  | 2.0              | 2.2           | 2.1                                      | 2.1                                      | 2.5                       |
| Biofuels Consumption (c)   | 2.3              | 2.4           | 2.3                                      | 2.3                                      | 2.3                       |
| Iran Liquid Fuels Production   | 3.6              | 3.5           | 3.6                                      | 4.8                                      | 4.5                       |
| Iran Liquid Fuels Consumption  | 2.0              | 2.0           | 2.0                                      | 1.6                                      | 1.8                       |
| <b>Petroleum and Petroleum Products Produced and Consumed in Countries Other Than Iran (million barrels per day)</b> |                  |               |  |  |                           |
| Production (d)   | 94.7             | 94.4          | 94.5                                     | 92.5                                     | 91.8                      |
| Consumption (d)  | 97.6             | 96.4          | 97.0                                     | 95.9                                     | 94.4                      |
| Production minus Consumption   | -2.9             | -2.0          | -2.4                                     | -3.5                                     | -2.6                      |
| World Inventory Net Withdrawals Including Iran   | 1.5              | 0.7           | 1.1                                      | 0.4                                      | -0.3                      |
| Estimated OECD Inventory Level (e) (million barrels)   | 2,847            | 2,829         | 2,838                                    | 2,826                                    | 2,960                     |
| <b>Surplus Production Capacity (million barrels per day)</b>   |                  |               |  |  |                           |
| OPEC Surplus Crude Oil Production Capacity (f)   | 1.9              | 2.2           | 2.1                                      | 1.9                                      | 1.6                       |

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

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

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

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

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

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

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

Source: U.S. Energy Information Administration.

**Table a2. Crude Oil and Petroleum Product Price Data**

| Item   | February<br>2019 | March<br>2019 | February 2019 –<br>March 2019<br>Average | February 2018 –<br>March 2018<br>Average | 2016 – 2018<br>Average |
|--|------------------|---------------|--|--|------------------------|
| Brent Front Month Futures Price (\$ per barrel)          | 64.43            | 67.03         | 65.80                                    | 66.25                                    | 57.19                  |
| WTI Front Month Futures Price (\$ per barrel)            | 54.98            | 58.17         | 56.65                                    | 62.49                                    | 53.07                  |
| Dubai Front Month Futures Price (\$ per barrel)          | 64.62            | 66.95         | 65.84                                    | 63.26                                    | 55.04                  |
| Brent 1st - 13th Month Futures Spread (\$ per barrel)    | 0.92             | 1.79          | 1.38                                     | 4.04                                     | -0.56                  |
| WTI 1st - 13th Month Futures Spread (\$ per barrel)      | -2.13            | -0.64         | -1.35                                    | 4.81                                     | -0.92                  |
| RBOB Front Month Futures Price (\$ per gallon)           | 1.52             | 1.85          | 1.69                                     | 1.87                                     | 1.65                   |
| Heating Oil Front Month Futures Price (\$ per gallon)    | 1.96             | 1.99          | 1.98                                     | 1.94                                     | 1.71                   |
| RBOB - Brent Futures Crack Spread (\$ per gallon)        | -0.02            | 0.26          | 0.13                                     | 0.29                                     | 0.29                   |
| Heating Oil - Brent Futures Crack Spread (\$ per gallon) | 0.43             | 0.39          | 0.41                                     | 0.36                                     | 0.35                   |

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

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

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

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