



## Short-Term Energy Outlook (STEO)

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### Forecast highlights

#### *Global liquid fuels*

- Brent crude oil spot prices averaged \$59 per barrel (b) in January, up \$2/b from December 2018 but \$10/b lower than the average in January of last year. EIA forecasts Brent spot prices will average \$61/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 quarter of 2019 before the discount gradually falls to \$4/b in the fourth quarter of 2019 and through 2020.
- EIA estimates that U.S. crude oil production averaged 12.0 million barrels per day (b/d) in January, up 90,000 b/d from December. EIA forecasts U.S. crude oil production to average 12.4 million b/d in 2019 and 13.2 million b/d in 2020, with most of the growth coming from the Permian region of Texas and New Mexico.
- Global liquid fuels inventories grew by an estimated 0.5 million b/d in 2018, and EIA expects they will grow by 0.4 million b/d in 2019 and by 0.6 million b/d in 2020.
- U.S. crude oil and petroleum product net imports are estimated to have fallen from an average of 3.8 million b/d in 2017 to an average of 2.4 million b/d in 2018. EIA forecasts that net imports will continue to fall to an average of 0.9 million b/d in 2019 and to an average net export level of 0.3 million b/d in 2020. In the fourth quarter of 2020, EIA forecasts the United States will be a net exporter of crude oil and petroleum products by about 1.1 million b/d.

#### *Natural gas*

- The Henry Hub natural gas spot price averaged \$3.13/million British thermal units (MMBtu) in January, down 91 cents/MMBtu from December. Despite a cold snap in late January, average temperatures for the month were milder than normal in much of the country, which contributed to lower prices. EIA expects strong growth in U.S. natural gas production to put downward pressure on prices in 2019. EIA expects Henry Hub natural gas spot prices to average \$2.83/MMBtu in 2019, down 32 cents/MMBtu from the 2018 average. NYMEX futures and options contract values for May 2019 delivery traded during the five-day period ending February 7, 2019, suggest a range of \$2.15/MMBtu to \$3.30/MMBtu encompasses the market expectation for May 2019 Henry Hub natural gas prices at the 95% confidence level.

- EIA forecasts that dry natural gas production will average 90.2 billion cubic feet per day (Bcf/d) in 2019, up 6.9 Bcf/d from 2018. EIA expects natural gas production will continue to rise in 2020 to an average of 92.1 Bcf/d.

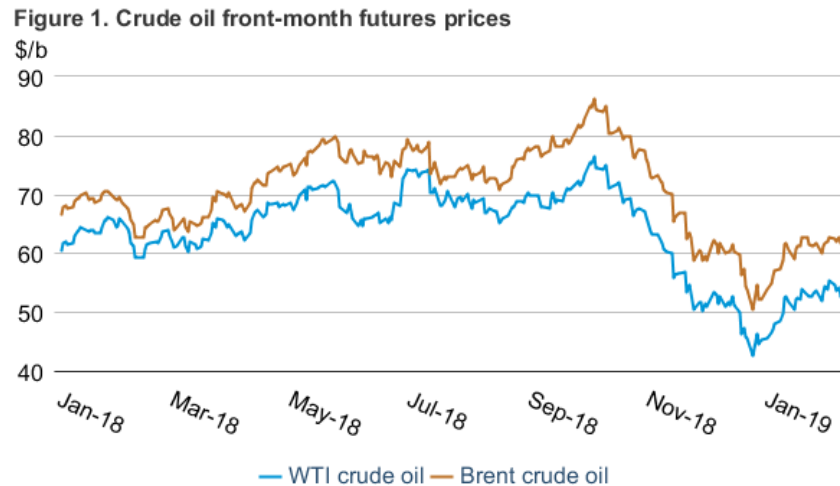
### *Electricity, coal, renewables, and emissions*

- EIA expects the share of U.S. total utility-scale electricity generation from natural gas-fired power plants to rise from 35% in 2018 to 36% in 2019 and to 37% in 2020. EIA forecasts that the electricity generation share from coal will average 26% in 2019 and 24% in 2020, down from 28% in 2018. The nuclear share of generation was 19% in 2018 and EIA forecasts that it will stay near that level in 2019 and in 2020. The generation share of hydropower is forecast to average slightly less than 7% of total generation in 2019 and 2020, similar to last year. Wind, solar, and other nonhydropower renewables together provided about 10% of electricity generation in 2018. EIA expects them to provide 11% in 2019 and 13% in 2020.
- EIA expects average U.S. solar generation will rise from 265,000 megawatt-hours per day (MWh/d) in 2018 to 301,000 MWh/d in 2019 (an increase of 14%) and to 358,000 MWh/d in 2020 (an increase of 19%). These forecasts of solar generation include large-scale facilities as well as small-scale distributed solar generators, primarily on residential and commercial buildings.
- In 2019, EIA expects wind's annual share of generation will exceed hydropower's share for the first time. EIA forecasts that wind generation will rise from 756,000 MWh/d in 2018 to 859,000 MWh/d in 2019 (a share of 8%). Wind generation is further projected to rise to 964,000 MWh/d (a share of 9%) by 2020.
- EIA estimates that U.S. coal production declined by 21 million short tons (MMst) (3%) in 2018, totaling 754 MMst. EIA expects further declines in coal production of 4% in 2019 and 6% in 2020 because of falling power sector consumption and declines in coal exports. Coal consumed for electricity generation declined by an estimated 4% (27 MMst) in 2018. EIA expects that lower electricity demand, lower natural gas prices, and further [retirements of coal-fired capacity](#) will reduce coal consumed for electricity generation by 8% in 2019 and by a further 6% in 2020. [Coal exports](#), which increased by 20% (19 MMst) in 2018, decline by 13% and 8% in 2019 and 2020, respectively, in the forecast.
- After rising by 2.8% in 2018, EIA forecasts that U.S. energy-related carbon dioxide (CO<sub>2</sub>) emissions will decline by 1.3% in 2019 and by 0.5% in 2020. The 2018 increase largely reflects increased weather-related natural gas consumption because of additional heating needs during a colder winter and for additional electric generation to support more cooling during a warmer summer than in 2017. EIA expects emissions to decline in 2019 and 2020 because of forecasted temperatures that will return to near normal. Energy-related CO<sub>2</sub> emissions are sensitive to changes in 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 \$61.63 per barrel (b) on February 7, an increase of \$6.72/b from January 2. The front-month futures price for West Texas Intermediate (WTI) crude oil for delivery at Cushing, Oklahoma, increased by \$6.10/b during the same period, settling at \$52.64/b on February 7 (**Figure 1**).

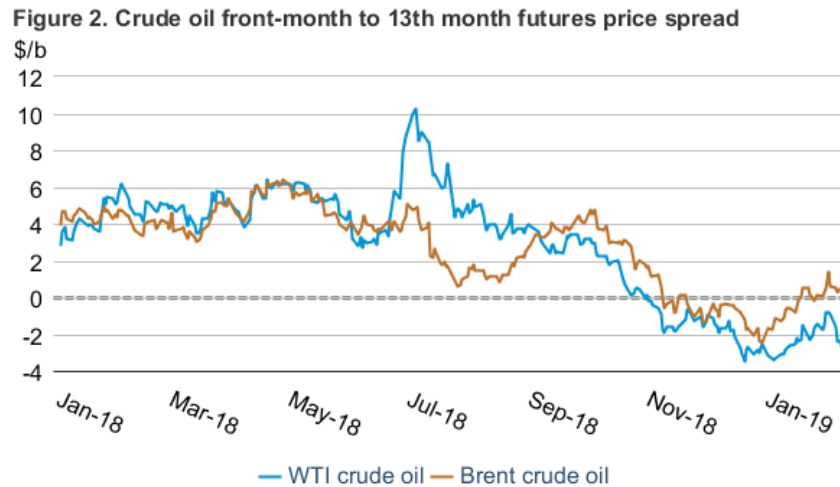


eia CME Group and Intercontinental Exchange, as compiled by Bloomberg L.P.

After two consecutive months of price declines, crude oil prices increased throughout January and into February as global oil supplies declined relatively quickly. The [agreement](#) among members of the Organization of the Petroleum Exporting Countries (OPEC) and several non-OPEC countries to reduce production by 1.2 million barrels per day (b/d) began in January. Saudi Arabia announced it was reducing production by more than it initially agreed, and unplanned supply outages have reduced production in Libya to about 0.8 million b/d, down from 1.2 million b/d in November. The province of Alberta also instituted its own production restraints, which EIA estimates contributed to a decline in Canada's supply of about 0.4 million b/d from December to January, adding further tightness to global oil supply. Although it did not cause any immediate loss to global oil availability, the United States [imposed sanctions](#) on Venezuela's state-owned oil company, PDVSA, in late January, which may disrupt regular trade flows and increase the risk for an oil supply outage.

The expectations for lower demand that contributed to falling prices in December may have ebbed slightly in January and provided some support to oil prices. The Bureau of Labor Statistics reported that [the United States added 304,000](#) jobs in January, which was larger than expected, and the Institute for Supply Management's (ISM) manufacturing Purchasing Managers' Index (PMI) increased to 56.6, signifying expansion in U.S. manufacturing activity.

STEO estimates that in February, total global petroleum inventories will fall by 1.3 million b/d, the largest drop since November 2017. Because of the increased short-term risks related to global crude oil supply, the Brent crude oil futures curve developed a slight backwardation (when near-term futures contracts are higher than longer dated ones) in January. The Brent and WTI 1st–13th futures contract price spread settled at 48 cents/b and  $-\$2.65/b$ , respectively, on February 7, an increase of  $\$2.21/b$  and 69 cents/b since January 2, respectively (**Figure 2**).

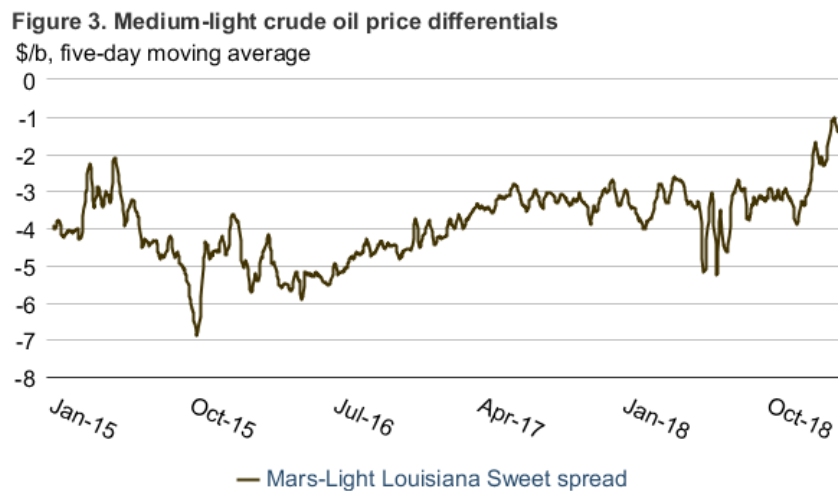


 CME Group and Intercontinental Exchange, as compiled by Bloomberg L.P.

Despite the forecast global oil inventory draws in February and lower forecast OPEC crude oil production in 2019 compared with the January STEO, EIA forecasts that U.S. crude oil production growth will offset decreases in OPEC production throughout the forecast. Even though recent economic data from the United States was positive, EIA (based on data from Oxford Economics) revised its forecast for global oil-weighted GDP growth down slightly from the January STEO. This revision, along with revisions to historical demand estimates that carried through to the forecast, contributed to a slight downward revision in the global oil consumption forecast. Given this forecast, EIA expects global petroleum stocks will build through 2019 and 2020 at a rate of 0.4 million b/d and 0.6 million b/d, respectively. Those builds are larger than forecast last month. As a result, EIA now forecasts Brent crude oil prices will average  $\$61/b$  in 2019 and  $\$62/b$  in 2020. The 2020 forecast is  $\$3/b$  lower than in the January STEO.

**Crude oil quality spreads:** The reductions in oil production from OPEC countries and Canada and the threat of disruptions in Venezuela are likely increasing the price of medium and heavy crude oils compared with light crude oils. These countries tend to produce [medium and heavy grades of crude oil with higher sulfur content](#), so a large share of the global oil supply reductions in January has been of this quality. The price of Mars—a medium, sour crude oil produced in the U.S. Gulf of Mexico—has increased compared with light, sweet crude oils. The five-day moving average of the Mars–Light Louisiana Sweet (LLS) crude oil price spread narrowed to nearly  $-\$1/b$  on January 29 and settled at  $-\$1.38/b$  on February 7 (**Figure 3**). Mars traded on average at  $\$3$ – $\$4/b$  lower than LLS throughout 2017–18. Typically, medium, sour crude oils like Mars sell at

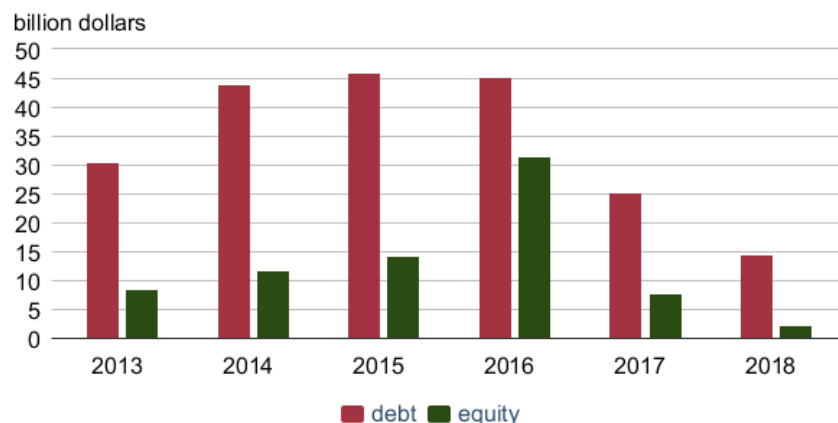
lower prices than light, sweet crude oils like LLS because they require more expensive refining equipment and operations to convert the oil into finished petroleum products.



eia Bloomberg L.P.

**U.S. oil company debt and equity issuance:** In 2018, publicly traded U.S. oil exploration and production companies issued the lowest amount of new funding since at least 2013, raising \$14 billion in debt and \$2 billion from public equity markets (**Figure 4**). Several factors likely contributed to reduced financing activity in 2018 compared with previous years. First, the relatively higher level of interest rates in 2018 contributed to a higher cost of issuing debt or equity for all companies, including oil companies. The U.S. Federal Funds rate averaged 1.8% in 2018, the [highest since 2008](#), and [energy sector bond yields](#) increased in the fourth quarter as crude oil prices declined. In addition to higher interest rates, oil companies may have needed less outside sources of capital than in previous years. Through third-quarter 2018, a group of 46 U.S. oil producers generated \$56 billion in cash flow from operating activities. The amount of cash flow from operations through the first three quarters of 2018 was higher than full-year amounts from 2015–17. As a result, full-year 2018 cash flow will likely be the highest annual total since 2014 for these companies. Collectively, they spent \$60 billion in capital expenditures and generated a net \$8 billion from asset sales. Because cash from operations plus asset sales exceeded capital expenditures, many companies may have had enough cash to fund their investing activities without the need to issue debt or equity.

**Figure 4. U.S. exploration and production company debt and equity issuance**

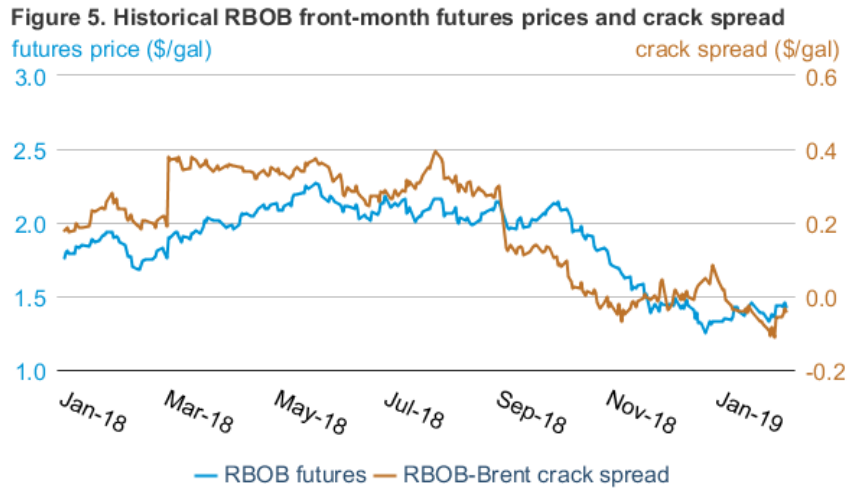


 U.S. Energy Information Administration, based on Evaluate Energy

## Petroleum products

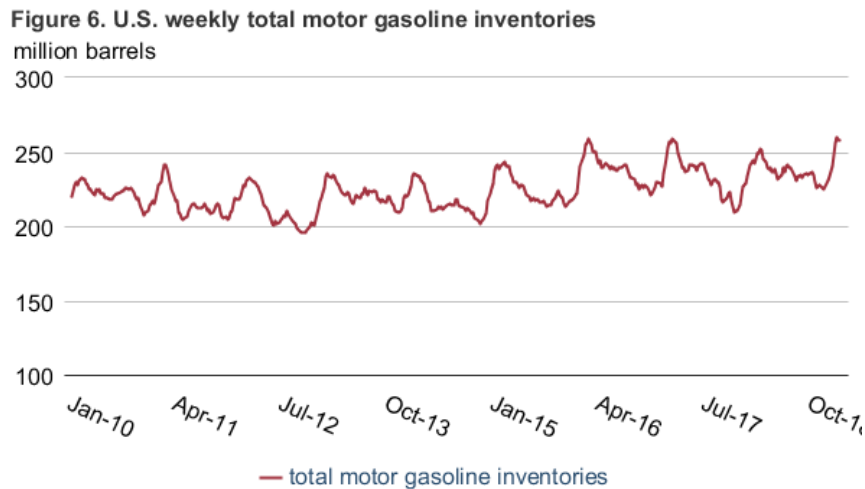
**Gasoline prices:** The front-month futures price of reformulated blendstock for oxygenate blending (RBOB, the petroleum component of gasoline used in many parts of the country) settled at \$1.43 per gallon (gal) on February 7 (**Figure 5**), an increase of 10 cents/gal from January 2. The RBOB–Brent crack spread (the difference between the price of RBOB and the price of Brent crude oil) decreased by 6 cents/gal to settle at -4 cents/gal during the same period.

From November through January, the RBOB–Brent crack spread was negative for 43 of the 62 trading days, a record amount of time the crack spread was negative for any three-month period since RBOB began trading in 2005. The low cracks spreads reflect relatively flat gasoline demand growth relative to strong supply globally, resulting in elevated inventory levels. Although gasoline crack spreads typically decline seasonally to the [lowest levels of the year](#) in the winter months, they tend to begin increasing in January. This year, however, the decline in the monthly average RBOB crack spread from December to January was the largest for that period since the RBOB contract began trading, falling by 7 cents/gal.



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

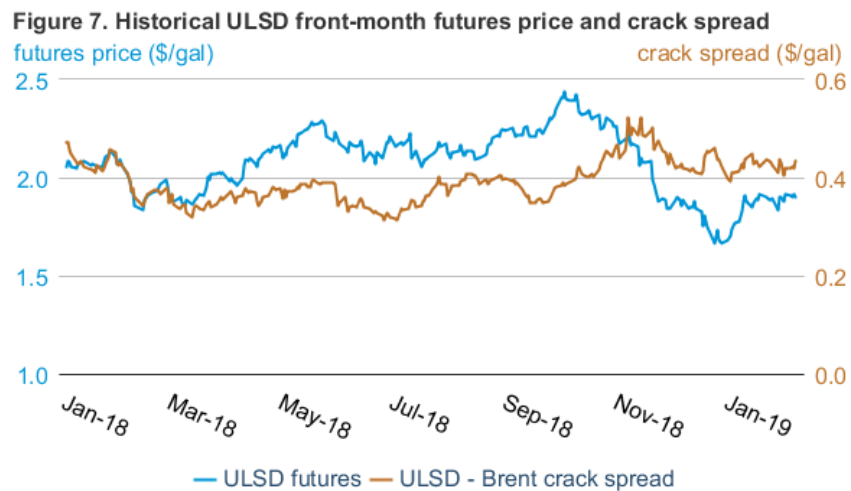
Gasoline inventories are high in every major storage hub globally and are likely contributing to low crack spreads. As of the first week of February, inventories were 15% and 24% higher than their five-year (2014–18) averages in Singapore and the Amsterdam, Rotterdam, and Antwerp (ARA) hubs, respectively. In the United States, gasoline inventories **reached an all-time high of nearly 260 million barrels** for the week ending January 18 (**Figure 6**), declining to 5% higher than the five-year average by February 1. Gasoline inventories and crack spreads could reverse in the coming months as refiners enter maintenance season and seasonal strength in gasoline consumption draws inventories.



eia U.S. Energy Information Administration, Weekly Petroleum Status Report

**Ultra-low sulfur diesel prices:** The ultra-low sulfur diesel (ULSD) front-month futures price for delivery in New York Harbor settled at \$1.90/gal on February 7 (**Figure 7**), an increase of 20 cents/gal from January 2. The ULSD–Brent crack spread (the difference between the price of

ULSD and the price of Brent crude oil) increased by 4 cents/gal to settle at 43 cents/gal during the same period.



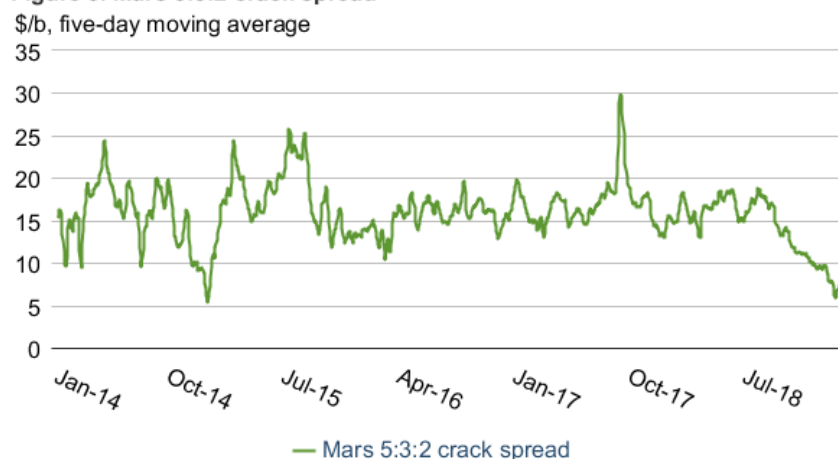
eia CME Group, as compiled by Bloomberg L.P., ULSD=ultra-low sulfur diesel

In contrast to gasoline inventories, distillate inventories remain comparatively low in global trading hubs, and low inventory levels are likely contributing to ULSD crack spreads remaining higher than the five-year average for January. In Singapore, ARA, and the United States, distillate inventories were 2%, 19%, and 4% lower than their five-year average levels, respectively, as of the first week of February. EIA estimates that U.S. distillate consumption was 4.3 million barrels per day (b/d) in January, 4% higher than the five-year average for the month.

**U.S. Gulf Coast refinery margins:** The recent increase in medium and heavy crude oil prices combined with low gasoline crack spreads is contributing to the lowest refinery margins for complex refiners in years. The five-day moving average of a 5:3:2 crack spread—refining three barrels of gasoline and two barrels of distillate from five barrels of Mars crude oil, which exemplifies a [complex](#) U.S. Gulf Coast refinery margin—reached \$5.89/b on January 29, the lowest price since December 2014 (**Figure 8**). The narrowing spreads of medium, sour crude oils with light, sweet crude oils—discussed in the crude oil section above—have increased the feedstock costs of some refiners, whereas negative gasoline crack spreads are also contributing to low refining margins. Comparatively high distillate crack spreads have supported total refinery margins. Individual refiners can, over time, adjust their feedstock slate and refinery output through operational changes in response to crude oil and petroleum product prices. Refining margins in the U.S. Gulf Coast are typically some of the highest in the world because they have [upgraded equipment](#) to refine lower-cost heavy crude oils into valuable refined products, among other factors.



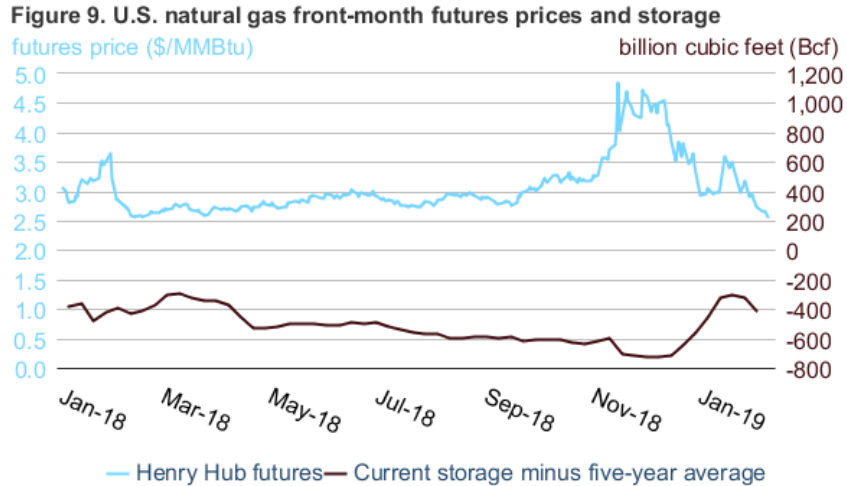
Figure 8. Mars 5:3:2 crack spread



eia Bloomberg L.P.

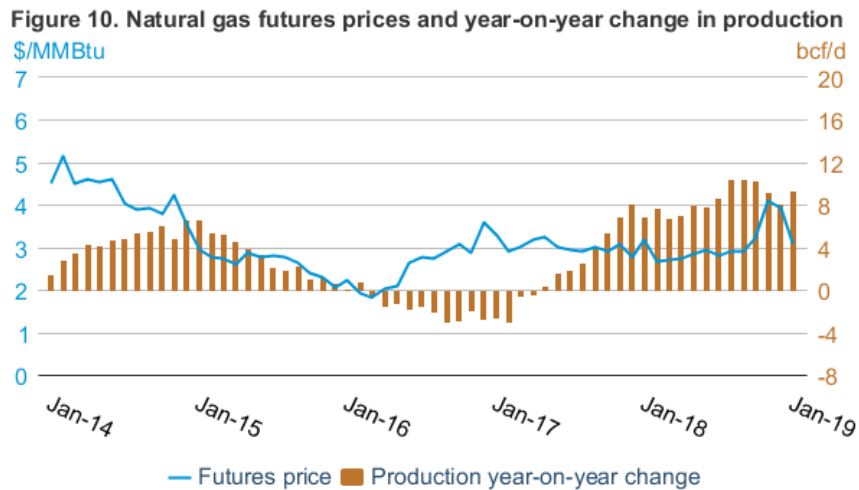
## Natural Gas

**Prices:** The front-month natural gas futures contract for delivery at the Henry Hub settled at \$2.55/million British thermal units (MMBtu) on February 7, a decrease of 41 cents/MMBtu from January 2 (**Figure 9**). Temperatures were much warmer than normal across the Lower 48 states for the first three weeks of January, resulting in lower-than-normal heating degree days (HDD) and withdrawals from natural gas storage. The natural gas inventory deficit to the five-year (2014–18) average narrowed from 560 billion cubic feet (Bcf) on December 28, 2018, to 305 Bcf on January 18, 2019. A polar vortex during the last few days of January in the Midwest and Northeast significantly increased HDD and natural gas demand in residential and commercial sectors. PointLogic Energy estimated that U.S. residential and commercial sector natural gas consumption on January 30 was the [second-highest amount](#) ever recorded. The colder weather prompted higher-than-normal withdrawals from natural gas underground storage at the end of January. This change contributed to a sharp, but relatively brief, increase in natural gas futures prices in the second half of January. By the first week of February, prices had returned to levels last seen in February 2018.



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

**U.S. natural gas production:** Total U.S. dry natural gas production reached an estimated 87 billion cubic feet per day (Bcf/d) in January, 9.4 Bcf/d higher than year-ago levels. Front-month natural gas futures prices during this period of production growth have not experienced a decline with increased production, as occurred in 2014 and 2015 (**Figure 10**), most likely because of lower-than-average inventory levels. Higher domestic and international demand helped to keep inventories well below the five-year average for the past year.



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

## Notable forecast changes

- EIA forecasts Brent and West Texas Intermediate crude oil spot prices will average \$62 per barrel (b) and \$58/b, respectively, in 2020, which are both \$3/b lower than in the January STEO. The lower price reflects the expectation of looser global oil market balances in 2020 compared with last month's outlook. Global oil supply was revised up for 2020, largely as a result of higher forecast crude oil production in the United States. At the same time, global oil demand for 2020 is slightly lower than previously forecast because of lower forecast global GDP growth.
- EIA forecasts U.S. crude oil production to average 12.4 million barrels per day (b/d) in 2019 and 13.2 million b/d in 2020, which are both more than 0.3 million b/d higher than in the January forecast. The forecast reflects an assumption of more productive wells both in the Permian Basin and in the Gulf of Mexico. The updated well productivity resulted from adjustments made because of incoming data during the month. In addition, EIA's assumptions of pipeline constraints in the Permian Basin do not moderate production growth in that area as much as previously forecast.
- For more information, see the [detailed table of STEO forecast changes](#).

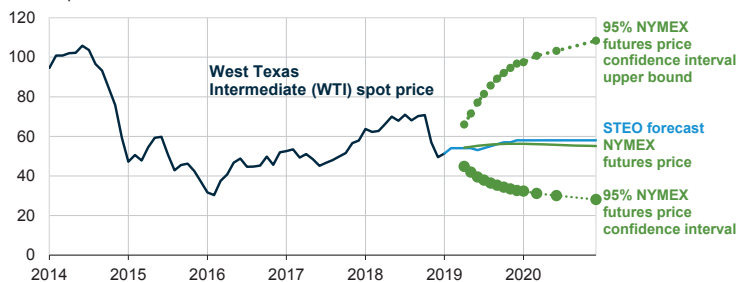
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# Short-Term Energy Outlook

## Chart Gallery for February 2019

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

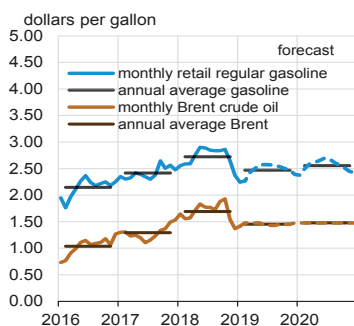


Note: Confidence interval derived from options market information for the five trading days ending Feb 7, 2019. Intervals not calculated for months with sparse trading in near-the-money options contracts.

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

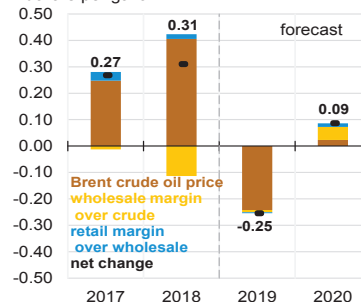


**U.S. gasoline and crude oil prices**

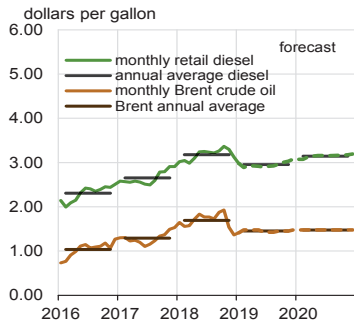


Source: Short-Term Energy Outlook, February 2019

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

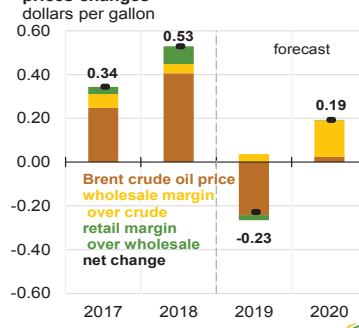


### U.S. diesel and crude oil prices



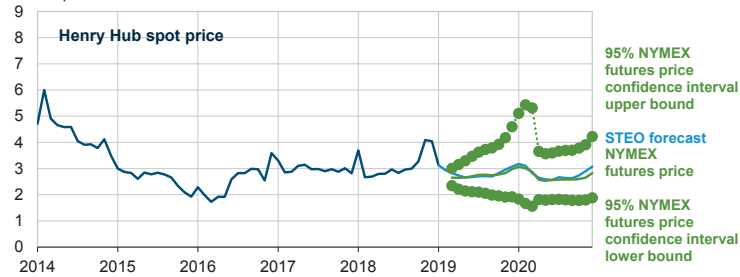
Source: Short-Term Energy Outlook, February 2019

### Components of annual diesel prices changes



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

dollars per million Btu



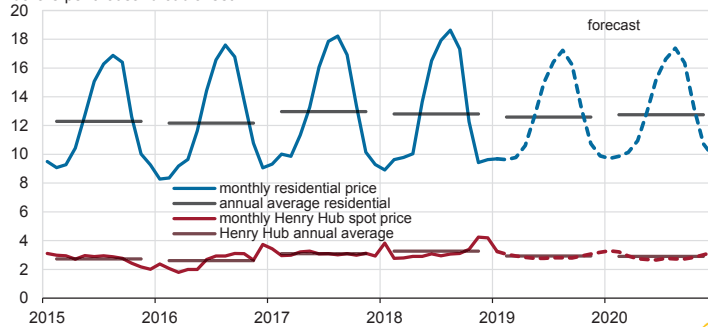
Note: Confidence interval derived from options market information for the five trading days ending Feb 7, 2019. Intervals not calculated for months with sparse trading in near-the-money options contracts.

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



### U.S. natural gas prices

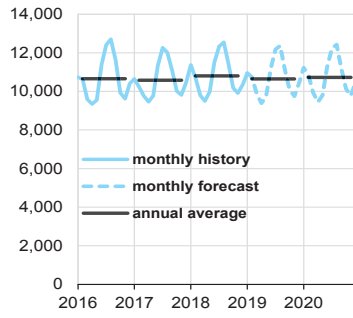
dollars per thousand cubic feet



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

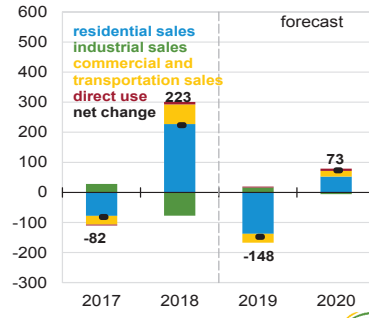


**U.S. electricity consumption**  
million kilowatthours per day

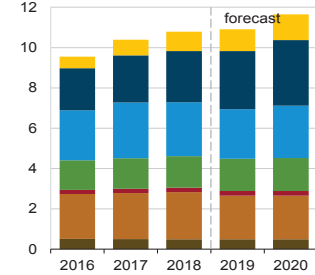


Source: Short-Term Energy Outlook, February 2019

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



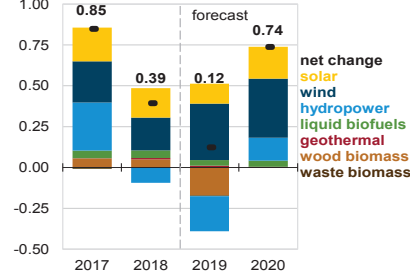
**U.S. renewable energy supply**  
quadrillion British thermal units



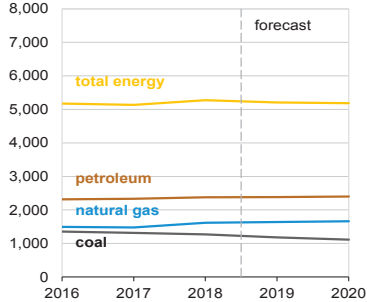
Note: Hydropower excludes pumped storage generation. Liquid biofuels include ethanol and biodiesel. Other biomass includes municipal waste from biogenic sources, landfill gas, and other non-wood waste.

Source: Short-Term Energy Outlook, February 2019

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

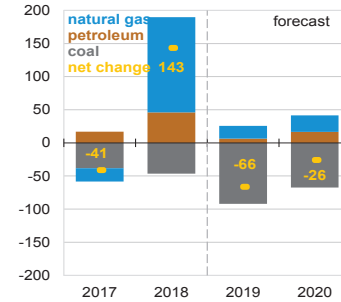


**U.S. annual carbon emissions by source**  
million metric tons



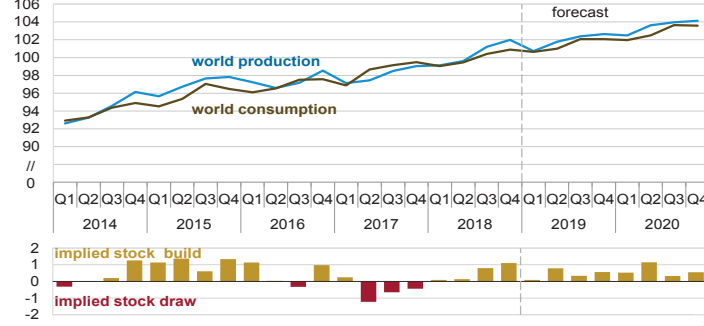
Source: Short-Term Energy Outlook, February 2019

**Components of annual change**  
million metric tons



**World liquid fuels production and consumption balance**

million barrels per day

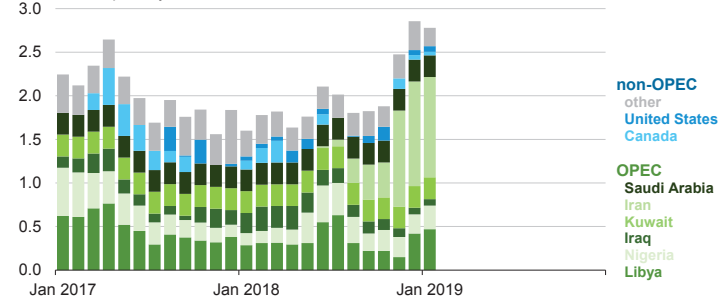


Source: Short-Term Energy Outlook, February 2019



**Estimated unplanned liquid fuels production outages**

million barrels per day

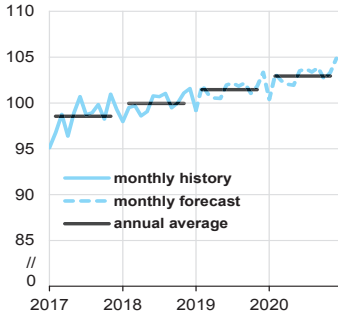


Source: Short-Term Energy Outlook, February 2019



**World liquid fuels consumption**

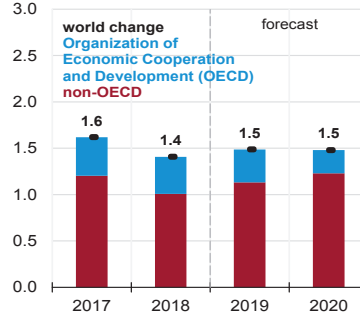
million barrels per day



Source: Short-Term Energy Outlook, February 2019

**Components of annual change**

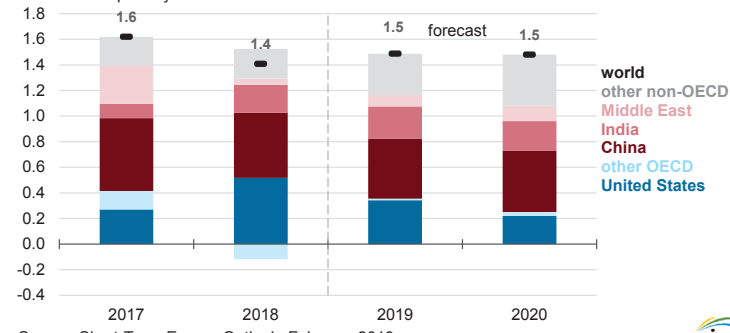
million barrels per day



Source: Short-Term Energy Outlook, February 2019



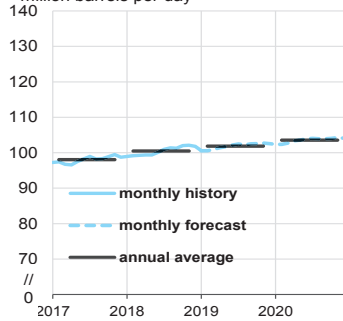
**Annual change in world liquid fuels consumption**  
million barrels per day



Source: Short-Term Energy Outlook, February 2019

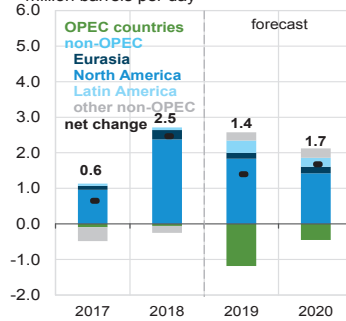


**World crude oil and liquid fuels production**  
million barrels per day

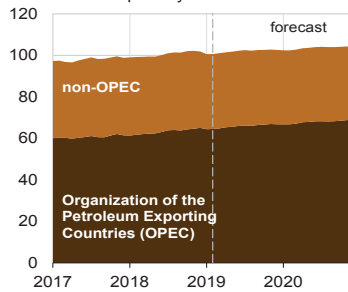


Source: Short-Term Energy Outlook, February 2019

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

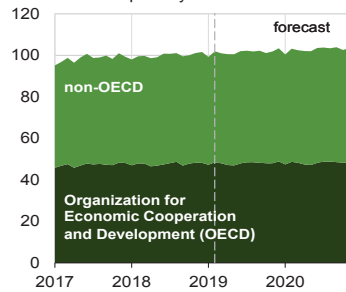


**World liquid fuels production**  
million barrels per day



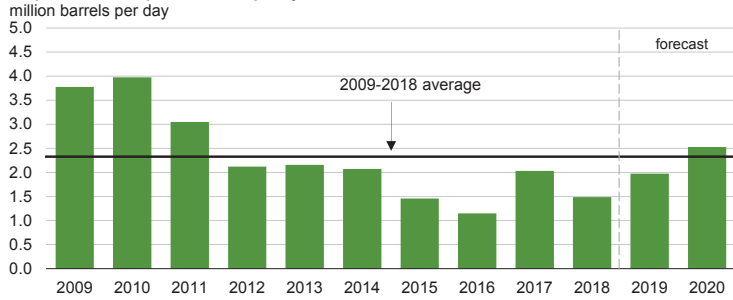
Source: Short-Term Energy Outlook, February 2019

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





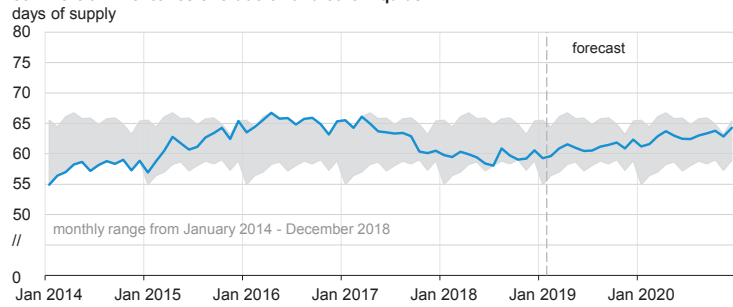
**Organization of the Petroleum Exporting Countries (OPEC)  
surplus crude oil production capacity**



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



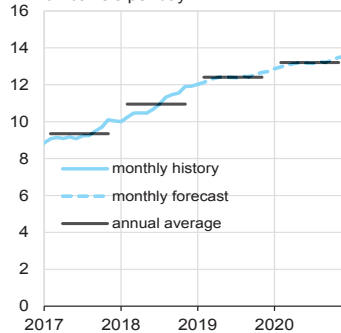
**Organization for Economic Cooperation and Development (OECD)  
commercial inventories of crude oil and other liquids**



Source: Short-Term Energy Outlook, February 2019

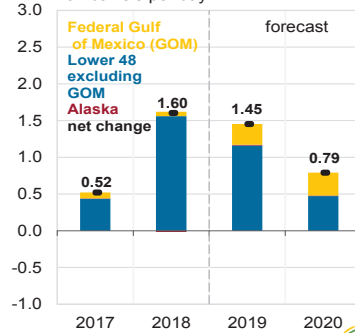


**U.S. crude oil production**

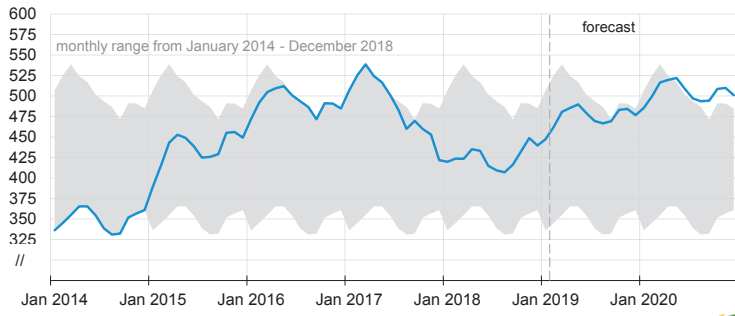


Source: Short-Term Energy Outlook, February 2019

**Components of annual change**



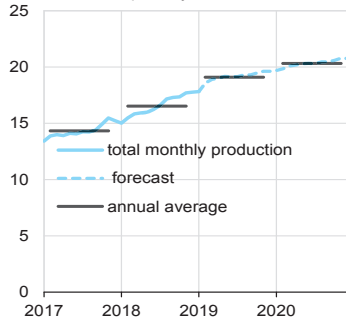
**U.S. commercial crude oil inventories**  
million barrels



Source: Short-Term Energy Outlook, February 2019

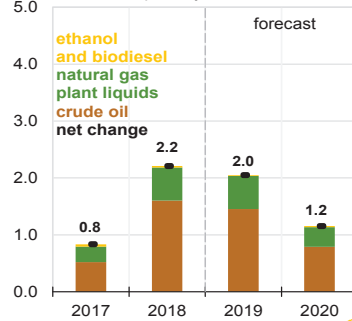


**U.S. crude oil and liquid fuels production**  
million barrels per day

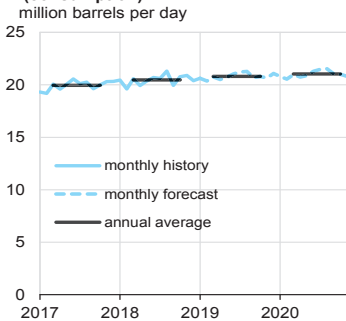


Source: Short-Term Energy Outlook, February 2019

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

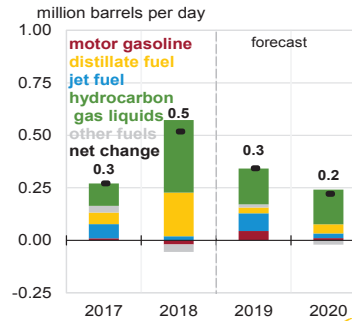


**U.S. liquid fuels product supplied (consumption)**  
million barrels per day

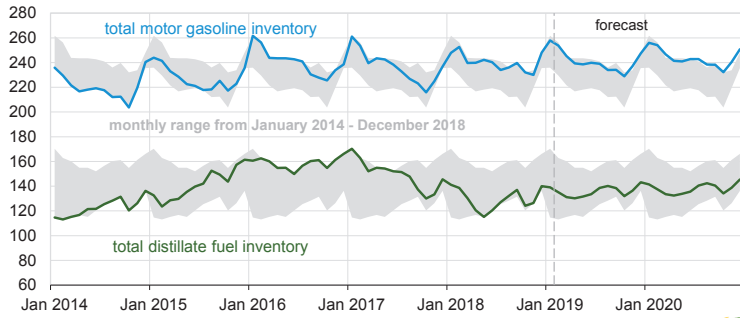


Source: Short-Term Energy Outlook, February 2019

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



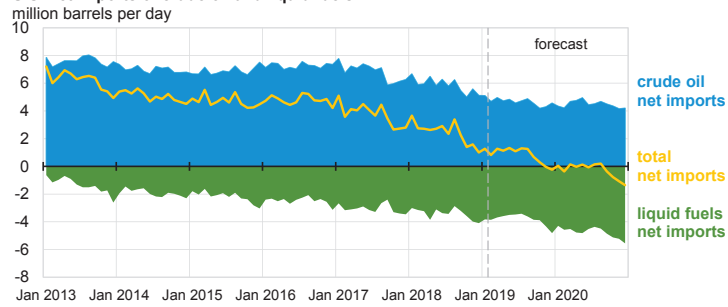
**U.S. gasoline and distillate inventories**  
million barrels



Source: Short-Term Energy Outlook, February 2019



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

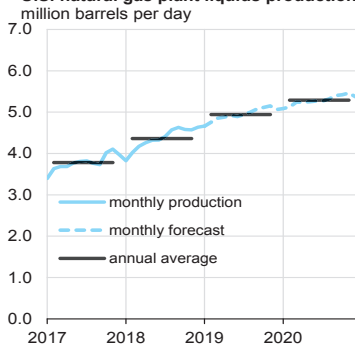


Note: Liquids fuels include: gasoline, distillate fuels, hydrocarbon gas liquids, jet fuel, residual fuel oil, unfinished oils, other hydrocarbons/oxygenates, and other oils.

Source: Short-Term Energy Outlook, February 2019

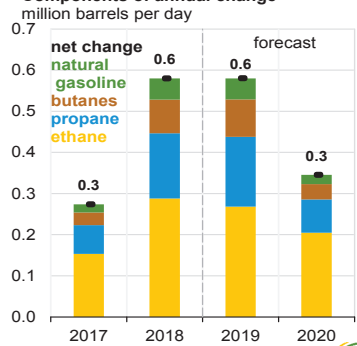


**U.S. natural gas plant liquids production**

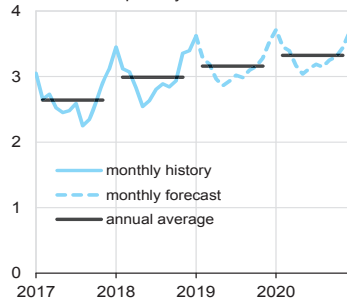


Source: Short-Term Energy Outlook, February 2019

**Components of annual change**

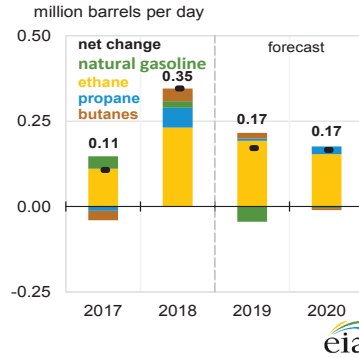


**U.S. hydrocarbon gas liquids product supplied (consumption)**  
million barrels per day

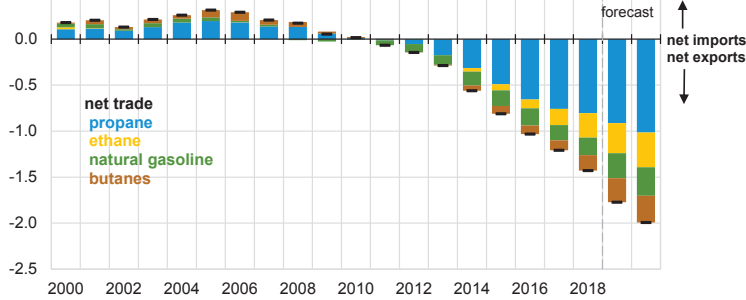


Source: Short-Term Energy Outlook, February 2019

**Components of annual change**



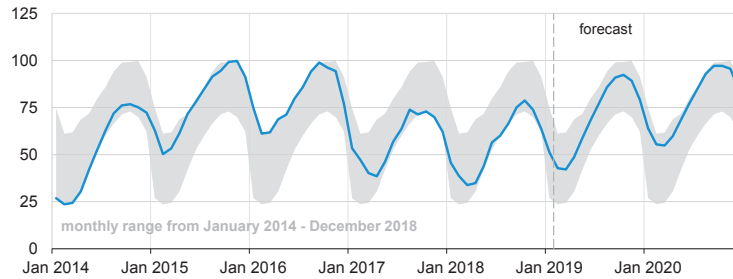
**U.S. net trade of hydrocarbon gas liquids (HGL)**  
million barrels per day



Source: Short-Term Energy Outlook, February 2019



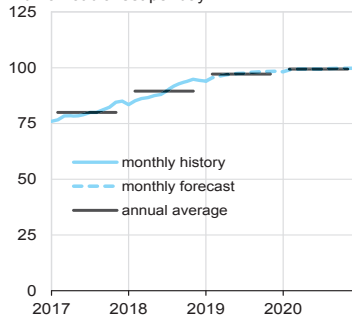
**U.S. commercial propane inventories**  
million barrels



Source: Short-Term Energy Outlook, February 2019

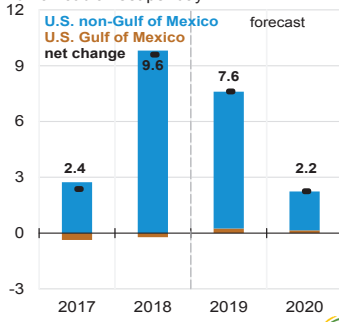


**U.S. marketed natural gas production**  
billion cubic feet per day

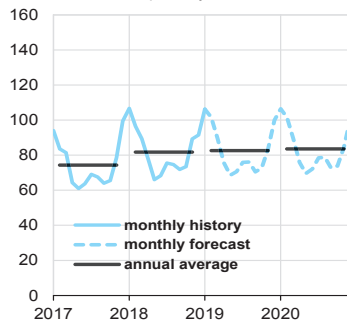


Source: Short-Term Energy Outlook, February 2019

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

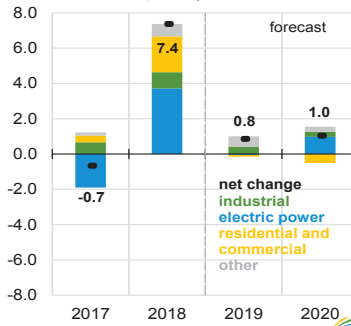


**U.S. natural gas consumption**  
billion cubic feet per day

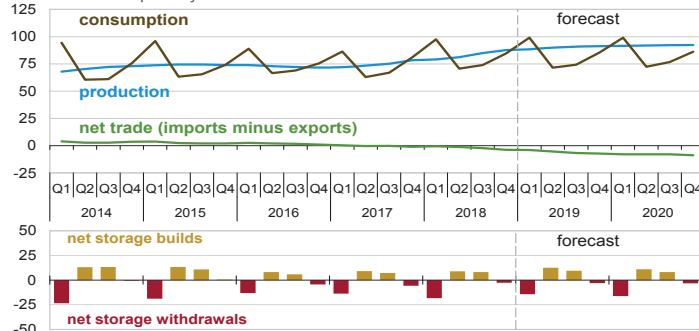


Source: Short-Term Energy Outlook, February 2019

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



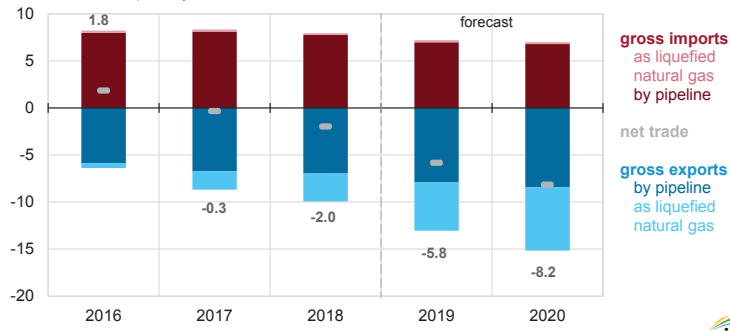
**U.S. natural gas production, consumption, and net imports**  
billion cubic feet per day



Source: Short-Term Energy Outlook, February 2019



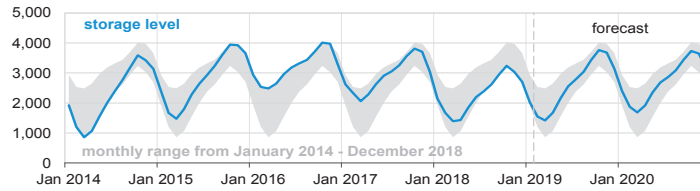
**Annual natural gas trade**  
billion cubic feet per day



Source: Short-Term Energy Outlook, February 2019



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



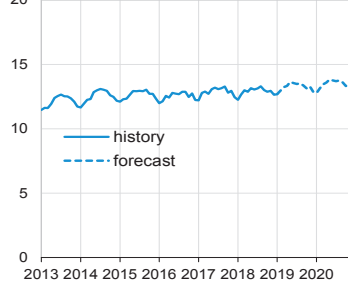
**Percent deviation from 2014 - 2018 average**



Source: Short-Term Energy Outlook, February 2019

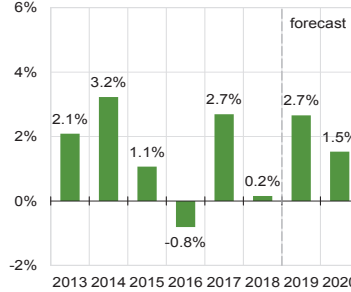


**U.S. monthly residential electricity price**  
cents per kilowatthour

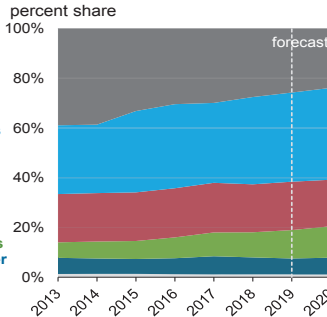
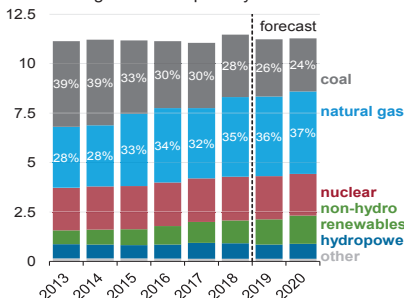


Source: Short-Term Energy Outlook, February 2019

**Annual growth in residential electricity prices**  
percent



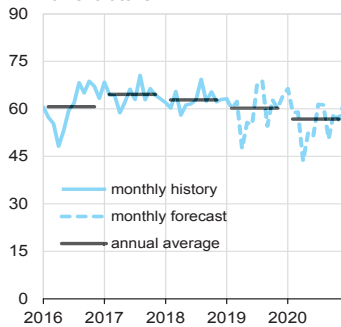
**U.S. electricity generation by fuel, all sectors**  
million megawatthours per day



Note: Labels show percentage share of total generation provided by coal and natural gas.  
Source: Short-Term Energy Outlook, February 2019

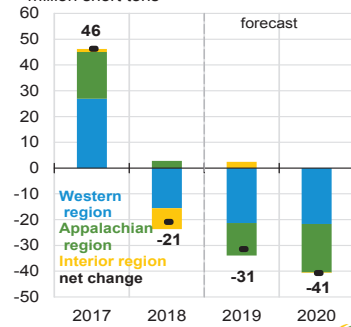


**U.S. coal production**  
million short tons

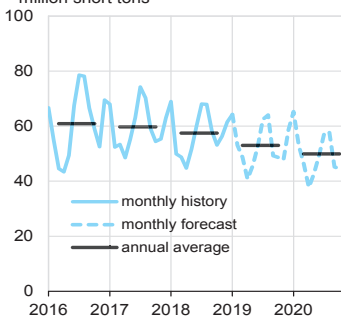


Source: Short-Term Energy Outlook, February 2019

**Components of annual change**  
million short tons

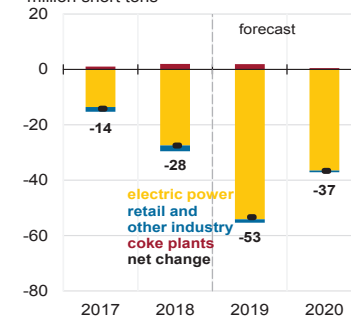


**U.S. coal consumption**  
million short tons

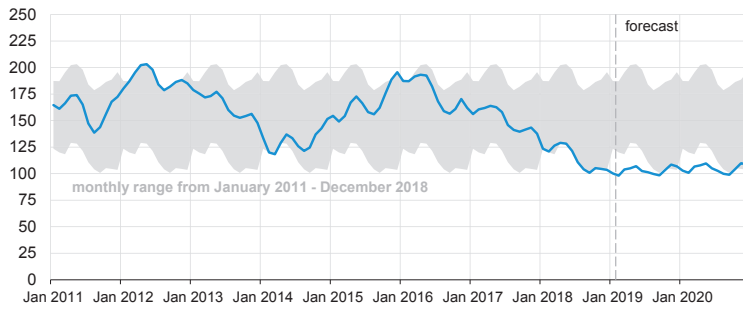


Source: Short-Term Energy Outlook, February 2019

**Components of annual change**  
million short tons



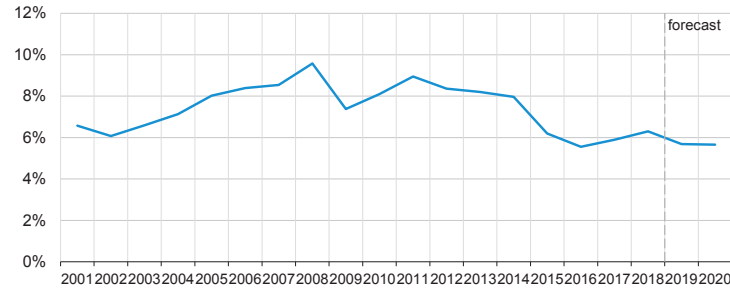
**U.S. electric power coal inventories**  
million short tons



Source: Short-Term Energy Outlook, February 2019



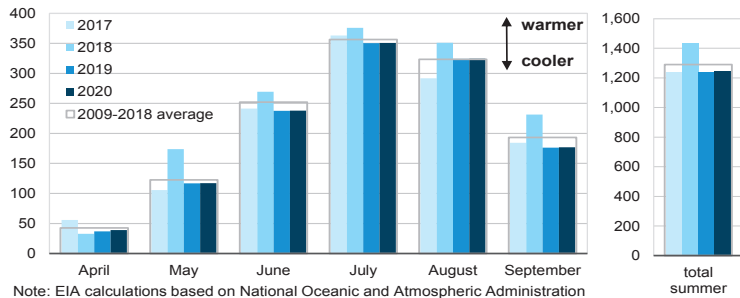
**U.S. annual energy expenditures**  
share of gross domestic product



Source: Short-Term Energy Outlook, February 2019



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



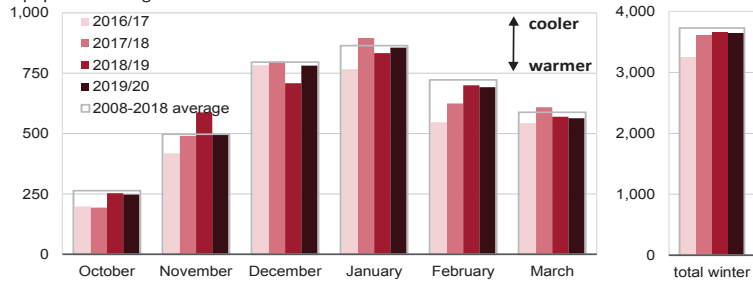
Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data. Projections reflect NOAA's 14-16 month outlook.

Source: Short-Term Energy Outlook, February 2019





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

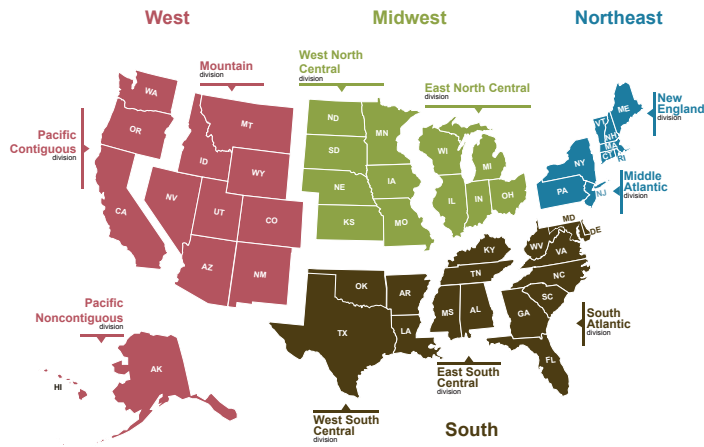


Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data. Projections reflect NOAA's 14-16 month outlook.

Source: Short-Term Energy Outlook, February 2019



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



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



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

U.S. Energy Information Administration | Short-Term Energy Outlook - February 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) (million barrels per day) .....	<b>10.23</b>	<b>10.54</b>	<b>11.24</b>	<b>11.79</b>	12.15	12.41	12.42	12.65	12.97	13.18	13.20	13.45	<b>10.96</b>	12.41	13.20
Dry Natural Gas Production (billion cubic feet per day) .....	<b>79.13</b>	<b>81.17</b>	<b>84.96</b>	<b>87.67</b>	88.48	90.16	90.80	91.18	91.63	92.11	92.16	92.31	<b>83.26</b>	90.16	92.05
Coal Production (million short tons) .....	<b>188</b>	<b>181</b>	<b>195</b>	<b>191</b>	186	158	191	187	184	147	173	177	<b>754</b>	722	681
<b>Energy Consumption</b>															
Liquid Fuels (million barrels per day) .....	<b>20.24</b>	<b>20.33</b>	<b>20.63</b>	<b>20.69</b>	20.59	20.76	21.07	20.85	20.78	20.98	21.36	21.03	<b>20.47</b>	20.82	21.04
Natural Gas (billion cubic feet per day) .....	<b>97.54</b>	<b>70.66</b>	<b>74.04</b>	<b>84.71</b>	99.06	71.62	74.22	85.46	99.02	72.46	76.64		<b>81.68</b>	82.53	83.56
Coal (b) (million short tons) .....	<b>168</b>	<b>157</b>	<b>194</b>	<b>171</b>	166	139	176	155	164	130	161	144	<b>689</b>	636	599
Electricity (billion kilowatt hours per day) .....	<b>10.61</b>	<b>10.32</b>	<b>12.12</b>	<b>10.15</b>	10.52	10.11	11.89	10.09	10.66	10.17	11.95	10.13	<b>10.80</b>	10.65	10.73
Renewables (c) (quadrillion Btu) .....	<b>2.92</b>	<b>3.10</b>	<b>2.72</b>	<b>2.79</b>	2.80	3.09	2.82	2.92	3.02	3.29	2.98	3.06	<b>11.53</b>	11.62	12.35
Total Energy Consumption (d) (quadrillion Btu) .....	<b>26.42</b>	<b>24.05</b>	<b>25.16</b>	<b>25.37</b>	26.12	23.56	24.75	25.22	26.58	23.65	24.86	25.22	<b>101.00</b>	99.64	100.31
<b>Energy Prices</b>															
Crude Oil West Texas Intermediate Spot (dollars per barrel) .....	<b>62.90</b>	<b>68.07</b>	<b>69.69</b>	<b>59.59</b>	53.10	53.69	54.97	57.33	58.00	58.00	58.00	58.00	<b>65.06</b>	54.79	58.00
Natural Gas Henry Hub Spot (dollars per million Btu) .....	<b>3.02</b>	<b>2.85</b>	<b>2.93</b>	<b>3.80</b>	2.97	2.69	2.70	2.95	3.04	2.60	2.64	2.91	<b>3.15</b>	2.83	2.80
Coal (dollars per million Btu) .....	<b>2.06</b>	<b>2.06</b>	<b>2.06</b>	<b>2.07</b>	2.09	2.07	2.06	2.07	2.09	2.08	2.07	2.07	<b>2.06</b>	2.07	2.08
<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>18,798</b>	18,876	19,000	19,121	19,240	19,336	19,420	19,491	19,558	<b>18,575</b>	19,059	19,451
Percent change from prior year .....	<b>2.6</b>	<b>2.9</b>	<b>3.0</b>	<b>3.2</b>	3.0	2.6	2.4	2.4	2.4	2.2	1.9	1.7	<b>2.9</b>	2.6	2.1
GDP Implicit Price Deflator (Index, 2012=100) .....	<b>109.3</b>	<b>110.2</b>	<b>110.7</b>	<b>111.2</b>	111.8	112.3	112.9	113.5	114.2	114.9	115.5	116.2	<b>110.3</b>	112.6	115.2
Percent change from prior year .....	<b>2.0</b>	<b>2.4</b>	<b>2.3</b>	<b>2.2</b>	2.3	1.9	2.0	2.1	2.1	2.3	2.3	2.3	<b>2.2</b>	2.1	2.3
Real Disposable Personal Income (billion chained 2012 dollars - SAAR) .....	<b>14,220</b>	<b>14,282</b>	<b>14,365</b>	<b>14,472</b>	14,602	14,717	14,808	14,894	14,966	15,056	15,140	15,211	<b>14,335</b>	14,755	15,093
Percent change from prior year .....	<b>2.8</b>	<b>2.7</b>	<b>2.7</b>	<b>2.9</b>	2.7	3.0	3.1	2.9	2.5	2.3	2.2	2.1	<b>2.8</b>	2.9	2.3
Manufacturing Production Index (Index, 2012=100) .....	<b>104.1</b>	<b>104.8</b>	<b>105.8</b>	<b>106.1</b>	106.7	107.4	108.3	109.1	109.6	109.8	110.0	110.5	<b>105.2</b>	107.9	110.0
Percent change from prior year .....	<b>2.1</b>	<b>2.0</b>	<b>3.5</b>	<b>2.4</b>	2.5	2.5	2.4	2.8	2.7	2.2	1.5	1.3	<b>2.5</b>	2.5	1.9
<b>Weather</b>															
U.S. Heating Degree-Days .....	<b>2,129</b>	<b>522</b>	<b>48</b>	<b>1,549</b>	2,103	486	73	1,525	2,111	486	73	1,523	<b>4,249</b>	4,186	4,192
U.S. Cooling Degree-Days .....	<b>52</b>	<b>476</b>	<b>958</b>	<b>99</b>	38	391	851	91	43	394	852	91	<b>1,585</b>	1,370	1,380

- = 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 - February 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>	<i>53.10</i>	<i>53.69</i>	<i>54.97</i>	<i>57.33</i>	<i>58.00</i>	<i>58.00</i>	<i>58.00</i>	<i>58.00</i>	<b>65.06</b>	<i>54.79</i>	<i>58.00</i>
Brent Spot Average .....	<b>66.84</b>	<b>74.53</b>	<b>75.02</b>	<b>68.29</b>	<i>61.11</i>	<i>61.38</i>	<i>60.31</i>	<i>61.33</i>	<i>62.00</i>	<i>62.00</i>	<i>62.00</i>	<i>62.00</i>	<b>71.19</b>	<i>61.03</i>	<i>62.00</i>
U.S. Imported Average .....	<b>58.08</b>	<b>64.67</b>	<b>66.20</b>	<b>55.68</b>	<i>50.06</i>	<i>50.18</i>	<i>50.48</i>	<i>51.85</i>	<i>51.50</i>	<i>51.50</i>	<i>51.50</i>	<i>51.50</i>	<b>61.32</b>	<i>50.62</i>	<i>51.50</i>
U.S. Refiner Average Acquisition Cost .....	<b>61.89</b>	<b>67.29</b>	<b>69.03</b>	<b>58.33</b>	<i>51.84</i>	<i>52.27</i>	<i>53.15</i>	<i>55.15</i>	<i>55.35</i>	<i>55.35</i>	<i>55.35</i>	<i>55.35</i>	<b>64.18</b>	<i>53.11</i>	<i>55.35</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>179</b>	<i>161</i>	<i>181</i>	<i>180</i>	<i>169</i>	<i>177</i>	<i>190</i>	<i>184</i>	<i>169</i>	<b>198</b>	<i>173</i>	<i>180</i>
Diesel Fuel .....	<b>199</b>	<b>219</b>	<b>222</b>	<b>214</b>	<i>189</i>	<i>190</i>	<i>193</i>	<i>201</i>	<i>208</i>	<i>214</i>	<i>214</i>	<i>213</i>	<b>214</b>	<i>193</i>	<i>212</i>
Heating Oil .....	<b>193</b>	<b>205</b>	<b>214</b>	<b>202</b>	<i>186</i>	<i>180</i>	<i>184</i>	<i>194</i>	<i>204</i>	<i>203</i>	<i>204</i>	<i>206</i>	<b>200</b>	<i>187</i>	<i>204</i>
<b>Refiner Prices to End Users</b>															
Jet Fuel .....	<b>197</b>	<b>217</b>	<b>220</b>	<b>213</b>	<i>187</i>	<i>186</i>	<i>190</i>	<i>198</i>	<i>206</i>	<i>210</i>	<i>210</i>	<i>209</i>	<b>212</b>	<i>191</i>	<i>209</i>
No. 6 Residual Fuel Oil (a) .....	<b>149</b>	<b>162</b>	<b>176</b>	<b>170</b>	<i>131</i>	<i>128</i>	<i>131</i>	<i>122</i>	<i>112</i>	<i>110</i>	<i>111</i>	<i>111</i>	<b>165</b>	<i>128</i>	<i>111</i>
<b>Retail Prices Including Taxes</b>															
Gasoline Regular Grade (b) .....	<b>258</b>	<b>285</b>	<b>284</b>	<b>263</b>	<i>232</i>	<i>255</i>	<i>256</i>	<i>246</i>	<i>249</i>	<i>265</i>	<i>262</i>	<i>246</i>	<b>273</b>	<i>247</i>	<i>256</i>
Gasoline All Grades (b) .....	<b>270</b>	<b>294</b>	<b>292</b>	<b>271</b>	<i>242</i>	<i>266</i>	<i>267</i>	<i>258</i>	<i>261</i>	<i>278</i>	<i>274</i>	<i>259</i>	<b>282</b>	<i>258</i>	<i>268</i>
On-highway Diesel Fuel .....	<b>302</b>	<b>320</b>	<b>324</b>	<b>327</b>	<i>293</i>	<i>291</i>	<i>293</i>	<i>304</i>	<i>309</i>	<i>316</i>	<i>316</i>	<i>318</i>	<b>318</b>	<i>295</i>	<i>315</i>
Heating Oil .....	<b>287</b>	<b>299</b>	<b>325</b>	<b>315</b>	<i>293</i>	<i>275</i>	<i>273</i>	<i>287</i>	<i>301</i>	<i>294</i>	<i>294</i>	<i>302</i>	<b>302</b>	<i>286</i>	<i>299</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>	<i>3.08</i>	<i>2.79</i>	<i>2.80</i>	<i>3.06</i>	<i>3.15</i>	<i>2.69</i>	<i>2.74</i>	<i>3.01</i>	<b>3.27</b>	<i>2.93</i>	<i>2.90</i>
Henry Hub Spot (dollars per million Btu) .....	<b>3.02</b>	<b>2.85</b>	<b>2.93</b>	<b>3.80</b>	<i>2.97</i>	<i>2.69</i>	<i>2.70</i>	<i>2.95</i>	<i>3.04</i>	<i>2.60</i>	<i>2.64</i>	<i>2.91</i>	<b>3.15</b>	<i>2.83</i>	<i>2.80</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>4.72</b>	<i>4.66</i>	<i>3.78</i>	<i>3.71</i>	<i>4.19</i>	<i>4.54</i>	<i>3.70</i>	<i>3.62</i>	<i>4.11</i>	<b>4.21</b>	<i>4.11</i>	<i>4.02</i>
Commercial Sector .....	<b>7.64</b>	<b>8.05</b>	<b>8.77</b>	<b>7.64</b>	<i>7.91</i>	<i>8.13</i>	<i>8.46</i>	<i>7.75</i>	<i>7.74</i>	<i>8.13</i>	<i>8.43</i>	<i>7.69</i>	<b>7.83</b>	<i>7.96</i>	<i>7.87</i>
Residential Sector .....	<b>9.37</b>	<b>11.94</b>	<b>17.93</b>	<b>9.98</b>	<i>9.70</i>	<i>11.96</i>	<i>16.59</i>	<i>10.69</i>	<i>9.88</i>	<i>12.26</i>	<i>16.75</i>	<i>10.68</i>	<b>10.50</b>	<i>10.79</i>	<i>10.92</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>2.07</b>	<i>2.09</i>	<i>2.07</i>	<i>2.06</i>	<i>2.07</i>	<i>2.09</i>	<i>2.08</i>	<i>2.07</i>	<i>2.07</i>	<b>2.06</b>	<i>2.07</i>	<i>2.08</i>
Natural Gas .....	<b>3.96</b>	<b>3.09</b>	<b>3.23</b>	<b>3.99</b>	<i>3.49</i>	<i>2.85</i>	<i>2.77</i>	<i>3.29</i>	<i>3.55</i>	<i>2.73</i>	<i>2.63</i>	<i>3.18</i>	<b>3.52</b>	<i>3.06</i>	<i>2.97</i>
Residual Fuel Oil (c) .....	<b>11.47</b>	<b>13.02</b>	<b>13.87</b>	<b>14.17</b>	<i>12.25</i>	<i>12.73</i>	<i>11.74</i>	<i>11.53</i>	<i>12.08</i>	<i>12.88</i>	<i>12.19</i>	<i>11.96</i>	<b>12.86</b>	<i>12.07</i>	<i>12.25</i>
Distillate Fuel Oil .....	<b>15.77</b>	<b>16.61</b>	<b>16.82</b>	<b>16.29</b>	<i>14.81</i>	<i>14.82</i>	<i>14.93</i>	<i>15.65</i>	<i>16.15</i>	<i>16.59</i>	<i>16.51</i>	<i>16.59</i>	<b>16.17</b>	<i>15.05</i>	<i>16.43</i>
<b>Retail Prices</b> (cents per kilowatthour)															
Industrial Sector .....	<b>6.81</b>	<b>6.87</b>	<b>7.23</b>	<b>6.83</b>	<i>6.77</i>	<i>6.90</i>	<i>7.26</i>	<i>6.85</i>	<i>6.79</i>	<i>6.98</i>	<i>7.35</i>	<i>6.94</i>	<b>6.94</b>	<i>6.95</i>	<i>7.02</i>
Commercial Sector .....	<b>10.54</b>	<b>10.59</b>	<b>10.89</b>	<b>10.57</b>	<i>10.60</i>	<i>10.64</i>	<i>10.87</i>	<i>10.54</i>	<i>10.57</i>	<i>10.54</i>	<i>10.82</i>	<i>10.58</i>	<b>10.66</b>	<i>10.67</i>	<i>10.63</i>
Residential Sector .....	<b>12.59</b>	<b>13.03</b>	<b>13.15</b>	<b>12.81</b>	<i>12.94</i>	<i>13.51</i>	<i>13.46</i>	<i>13.08</i>	<i>13.08</i>	<i>13.73</i>	<i>13.68</i>	<i>13.31</i>	<b>12.91</b>	<i>13.25</i>	<i>13.45</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 - February 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 .....	<b>29.14</b>	<b>29.27</b>	<b>30.40</b>	<b>31.00</b>	<i>31.15</i>	<i>31.75</i>	<i>31.91</i>	<i>32.55</i>	<i>33.04</i>	<i>33.48</i>	<i>33.57</i>	<i>34.22</i>	<b>29.96</b>	<i>31.84</i>	<i>33.58</i>
U.S. (50 States) .....	<b>16.77</b>	<b>17.39</b>	<b>18.40</b>	<b>18.96</b>	<i>19.40</i>	<i>19.88</i>	<i>20.02</i>	<i>20.40</i>	<i>20.73</i>	<i>21.16</i>	<i>21.28</i>	<i>21.62</i>	<b>17.89</b>	<i>19.93</i>	<i>21.20</i>
Canada .....	<b>5.32</b>	<b>5.10</b>	<b>5.32</b>	<b>5.24</b>	<i>4.92</i>	<i>5.13</i>	<i>5.20</i>	<i>5.25</i>	<i>5.33</i>	<i>5.32</i>	<i>5.37</i>	<i>5.42</i>	<b>5.24</b>	<i>5.13</i>	<i>5.36</i>
Mexico .....	<b>2.18</b>	<b>2.14</b>	<b>2.10</b>	<b>2.06</b>	<i>2.07</i>	<i>2.04</i>	<i>2.02</i>	<i>2.00</i>	<i>1.98</i>	<i>1.96</i>	<i>1.94</i>	<i>1.92</i>	<b>2.12</b>	<i>2.03</i>	<i>1.95</i>
Other OECD .....	<b>4.88</b>	<b>4.64</b>	<b>4.57</b>	<b>4.74</b>	<i>4.76</i>	<i>4.70</i>	<i>4.66</i>	<i>4.90</i>	<i>5.00</i>	<i>5.03</i>	<i>4.98</i>	<i>5.26</i>	<b>4.71</b>	<i>4.76</i>	<i>5.07</i>
Non-OECD .....	<b>69.99</b>	<b>70.34</b>	<b>70.81</b>	<b>70.98</b>	<i>69.58</i>	<i>70.02</i>	<i>70.49</i>	<i>70.09</i>	<i>69.45</i>	<i>70.15</i>	<i>70.40</i>	<i>69.92</i>	<b>70.54</b>	<i>70.05</i>	<i>69.98</i>
OPEC .....	<b>37.43</b>	<b>37.04</b>	<b>37.32</b>	<b>37.32</b>	<i>36.16</i>	<i>36.15</i>	<i>36.20</i>	<i>35.88</i>	<i>35.63</i>	<i>35.67</i>	<i>35.77</i>	<i>35.51</i>	<b>37.28</b>	<i>36.10</i>	<i>35.65</i>
Crude Oil Portion .....	<b>32.10</b>	<b>31.78</b>	<b>32.02</b>	<b>31.96</b>	<i>30.71</i>	<i>30.76</i>	<i>30.87</i>	<i>30.59</i>	<i>30.42</i>	<i>30.51</i>	<i>30.65</i>	<i>30.38</i>	<b>31.97</b>	<i>30.74</i>	<i>30.49</i>
Other Liquids (b) .....	<b>5.33</b>	<b>5.26</b>	<b>5.30</b>	<b>5.36</b>	<i>5.45</i>	<i>5.38</i>	<i>5.33</i>	<i>5.29</i>	<i>5.21</i>	<i>5.16</i>	<i>5.11</i>	<i>5.14</i>	<b>5.31</b>	<i>5.36</i>	<i>5.16</i>
Eurasia .....	<b>14.41</b>	<b>14.43</b>	<b>14.62</b>	<b>14.87</b>	<i>14.82</i>	<i>14.49</i>	<i>14.73</i>	<i>14.95</i>	<i>14.97</i>	<i>14.88</i>	<i>14.87</i>	<i>14.96</i>	<b>14.58</b>	<i>14.75</i>	<i>14.92</i>
China .....	<b>4.75</b>	<b>4.80</b>	<b>4.74</b>	<b>4.82</b>	<i>4.77</i>	<i>4.80</i>	<i>4.80</i>	<i>4.85</i>	<i>4.79</i>	<i>4.81</i>	<i>4.82</i>	<i>4.86</i>	<b>4.78</b>	<i>4.81</i>	<i>4.82</i>
Other Non-OECD .....	<b>13.40</b>	<b>14.07</b>	<b>14.14</b>	<b>13.96</b>	<i>13.83</i>	<i>14.58</i>	<i>14.76</i>	<i>14.41</i>	<i>14.06</i>	<i>14.79</i>	<i>14.95</i>	<i>14.59</i>	<b>13.90</b>	<i>14.40</i>	<i>14.60</i>
Total World Supply .....	<b>99.13</b>	<b>99.61</b>	<b>101.21</b>	<b>101.99</b>	<i>100.73</i>	<i>101.77</i>	<i>102.40</i>	<i>102.64</i>	<i>102.49</i>	<i>103.63</i>	<i>103.97</i>	<i>104.14</i>	<b>100.49</b>	<i>101.89</i>	<i>103.56</i>
Non-OPEC Supply .....	<b>61.70</b>	<b>62.57</b>	<b>63.89</b>	<b>64.66</b>	<i>64.57</i>	<i>65.63</i>	<i>66.20</i>	<i>66.76</i>	<i>66.86</i>	<i>67.95</i>	<i>68.21</i>	<i>68.63</i>	<b>63.22</b>	<i>65.79</i>	<i>67.92</i>
<b>Consumption (million barrels per day) (c)</b>															
OECD .....	<b>47.58</b>	<b>46.94</b>	<b>47.89</b>	<b>48.10</b>	<i>47.91</i>	<i>47.34</i>	<i>48.37</i>	<i>48.32</i>	<i>48.10</i>	<i>47.58</i>	<i>48.70</i>	<i>48.54</i>	<b>47.63</b>	<i>47.99</i>	<i>48.24</i>
U.S. (50 States) .....	<b>20.24</b>	<b>20.33</b>	<b>20.63</b>	<b>20.69</b>	<i>20.59</i>	<i>20.76</i>	<i>21.07</i>	<i>20.85</i>	<i>20.78</i>	<i>20.98</i>	<i>21.36</i>	<i>21.03</i>	<b>20.47</b>	<i>20.82</i>	<i>21.04</i>
U.S. Territories .....	<b>0.10</b>	<b>0.08</b>	<b>0.09</b>	<b>0.11</b>	<i>0.12</i>	<i>0.11</i>	<i>0.12</i>	<i>0.13</i>	<i>0.12</i>	<i>0.11</i>	<i>0.12</i>	<i>0.13</i>	<b>0.10</b>	<i>0.12</i>	<i>0.12</i>
Canada .....	<b>2.32</b>	<b>2.34</b>	<b>2.56</b>	<b>2.52</b>	<i>2.41</i>	<i>2.36</i>	<i>2.47</i>	<i>2.44</i>	<i>2.42</i>	<i>2.36</i>	<i>2.46</i>	<i>2.44</i>	<b>2.44</b>	<i>2.42</i>	<i>2.42</i>
Europe .....	<b>14.05</b>	<b>14.19</b>	<b>14.65</b>	<b>14.28</b>	<i>14.04</i>	<i>14.26</i>	<i>14.77</i>	<i>14.46</i>	<i>14.13</i>	<i>14.34</i>	<i>14.86</i>	<i>14.55</i>	<b>14.29</b>	<i>14.38</i>	<i>14.47</i>
Japan .....	<b>4.27</b>	<b>3.43</b>	<b>3.53</b>	<b>3.91</b>	<i>4.15</i>	<i>3.40</i>	<i>3.47</i>	<i>3.79</i>	<i>4.05</i>	<i>3.32</i>	<i>3.39</i>	<i>3.73</i>	<b>3.79</b>	<i>3.70</i>	<i>3.62</i>
Other OECD .....	<b>6.60</b>	<b>6.57</b>	<b>6.42</b>	<b>6.60</b>	<i>6.60</i>	<i>6.46</i>	<i>6.49</i>	<i>6.64</i>	<i>6.61</i>	<i>6.48</i>	<i>6.51</i>	<i>6.66</i>	<b>6.55</b>	<i>6.55</i>	<i>6.57</i>
Non-OECD .....	<b>51.46</b>	<b>52.53</b>	<b>52.53</b>	<b>52.79</b>	<i>52.74</i>	<i>53.65</i>	<i>53.70</i>	<i>53.75</i>	<i>53.86</i>	<i>54.90</i>	<i>54.95</i>	<i>55.05</i>	<b>52.33</b>	<i>53.46</i>	<i>54.69</i>
Eurasia .....	<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>5.36</i>	<i>5.20</i>	<b>4.93</b>	<i>5.00</i>	<i>5.11</i>
Europe .....	<b>0.75</b>	<b>0.74</b>	<b>0.76</b>	<b>0.76</b>	<i>0.75</i>	<i>0.75</i>	<i>0.77</i>	<i>0.77</i>	<i>0.76</i>	<i>0.76</i>	<i>0.78</i>	<i>0.78</i>	<b>0.75</b>	<i>0.76</i>	<i>0.77</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>
Other Asia .....	<b>13.48</b>	<b>13.72</b>	<b>13.32</b>	<b>13.67</b>	<i>13.96</i>	<i>14.12</i>	<i>13.71</i>	<i>14.04</i>	<i>14.36</i>	<i>14.52</i>	<i>14.10</i>	<i>14.44</i>	<b>13.55</b>	<i>13.96</i>	<i>14.35</i>
Other Non-OECD .....	<b>18.65</b>	<b>19.24</b>	<b>19.61</b>	<b>19.42</b>	<i>18.94</i>	<i>19.43</i>	<i>19.77</i>	<i>19.44</i>	<i>19.07</i>	<i>19.69</i>	<i>20.05</i>	<i>19.73</i>	<b>19.23</b>	<i>19.40</i>	<i>19.64</i>
Total World Consumption .....	<b>99.04</b>	<b>99.47</b>	<b>100.42</b>	<b>100.89</b>	<i>100.64</i>	<i>100.99</i>	<i>102.06</i>	<i>102.07</i>	<i>101.96</i>	<i>102.49</i>	<i>103.65</i>	<i>103.60</i>	<b>99.96</b>	<i>101.45</i>	<i>102.93</i>
<b>Total Crude Oil and Other Liquids Inventory Net Withdrawals (million barrels per day)</b>															
U.S. (50 States) .....	<b>0.36</b>	<b>-0.06</b>	<b>-0.70</b>	<b>0.25</b>	<i>-0.08</i>	<i>-0.49</i>	<i>-0.24</i>	<i>0.29</i>	<i>-0.09</i>	<i>-0.38</i>	<i>-0.14</i>	<i>0.32</i>	<b>-0.04</b>	<i>-0.13</i>	<i>-0.07</i>
Other OECD .....	<b>-0.03</b>	<b>0.11</b>	<b>0.18</b>	<b>-0.15</b>	<i>0.00</i>	<i>-0.10</i>	<i>-0.03</i>	<i>-0.29</i>	<i>-0.15</i>	<i>-0.25</i>	<i>-0.06</i>	<i>-0.29</i>	<b>0.03</b>	<i>-0.10</i>	<i>-0.19</i>
Other Stock Draws and Balance .....	<b>-0.42</b>	<b>-0.19</b>	<b>-0.28</b>	<b>-1.20</b>	<i>0.00</i>	<i>-0.20</i>	<i>-0.06</i>	<i>-0.56</i>	<i>-0.29</i>	<i>-0.51</i>	<i>-0.12</i>	<i>-0.58</i>	<b>-0.52</b>	<i>-0.21</i>	<i>-0.38</i>
Total Stock Draw .....	<b>-0.09</b>	<b>-0.14</b>	<b>-0.79</b>	<b>-1.10</b>	<i>-0.08</i>	<i>-0.78</i>	<i>-0.33</i>	<i>-0.56</i>	<i>-0.53</i>	<i>-1.14</i>	<i>-0.32</i>	<i>-0.55</i>	<b>-0.53</b>	<i>-0.44</i>	<i>-0.63</i>
<b>End-of-period Commercial Crude Oil and Other Liquids Inventories (million barrels)</b>															
U.S. Commercial Inventory .....	<b>1,196</b>	<b>1,207</b>	<b>1,272</b>	<b>1,259</b>	<i>1,267</i>	<i>1,316</i>	<i>1,339</i>	<i>1,315</i>	<i>1,327</i>	<i>1,365</i>	<i>1,379</i>	<i>1,352</i>	<b>1,259</b>	<i>1,315</i>	<i>1,352</i>
OECD Commercial Inventory .....	<b>2,806</b>	<b>2,806</b>	<b>2,858</b>	<b>2,863</b>	<i>2,870</i>	<i>2,929</i>	<i>2,954</i>	<i>2,957</i>	<i>2,982</i>	<i>3,043</i>	<i>3,062</i>	<i>3,062</i>	<b>2,863</b>	<i>2,957</i>	<i>3,062</i>

- = no data available

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

OPEC = Organization of the Petroleum Exporting Countries: Algeria, Angola, Congo (Brazzaville), Ecuador, Equatorial Guinea, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Saudi Arabia, the United Arab Emirates,

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

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

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

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

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

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

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

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

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

U.S. Energy Information Administration | Short-Term Energy Outlook - February 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>24.26</b>	<b>24.63</b>	<b>25.82</b>	<b>26.26</b>	<i>26.39</i>	<i>27.05</i>	<i>27.24</i>	<i>27.65</i>	<i>28.04</i>	<i>28.44</i>	<i>28.59</i>	<i>28.96</i>	<b>25.25</b>	<i>27.09</i>	<i>28.51</i>
Canada .....	<b>5.32</b>	<b>5.10</b>	<b>5.32</b>	<b>5.24</b>	<i>4.92</i>	<i>5.13</i>	<i>5.20</i>	<i>5.25</i>	<i>5.33</i>	<i>5.32</i>	<i>5.37</i>	<i>5.42</i>	<b>5.24</b>	<i>5.13</i>	<i>5.36</i>
Mexico .....	<b>2.18</b>	<b>2.14</b>	<b>2.10</b>	<b>2.06</b>	<i>2.07</i>	<i>2.04</i>	<i>2.02</i>	<i>2.00</i>	<i>1.98</i>	<i>1.96</i>	<i>1.94</i>	<i>1.92</i>	<b>2.12</b>	<i>2.03</i>	<i>1.95</i>
United States .....	<b>16.77</b>	<b>17.39</b>	<b>18.40</b>	<b>18.96</b>	<i>19.40</i>	<i>19.88</i>	<i>20.02</i>	<i>20.40</i>	<i>20.73</i>	<i>21.16</i>	<i>21.28</i>	<i>21.62</i>	<b>17.89</b>	<i>19.93</i>	<i>21.20</i>
<b>Central and South America</b> .....	<b>4.89</b>	<b>5.64</b>	<b>5.72</b>	<b>5.42</b>	<i>5.17</i>	<i>5.94</i>	<i>6.14</i>	<i>5.81</i>	<i>5.44</i>	<i>6.20</i>	<i>6.40</i>	<i>6.06</i>	<b>5.42</b>	<i>5.77</i>	<i>6.02</i>
Argentina .....	<b>0.67</b>	<b>0.69</b>	<b>0.68</b>	<b>0.71</b>	<i>0.66</i>	<i>0.68</i>	<i>0.68</i>	<i>0.70</i>	<i>0.67</i>	<i>0.69</i>	<i>0.69</i>	<i>0.71</i>	<b>0.69</b>	<i>0.68</i>	<i>0.69</i>
Brazil .....	<b>2.95</b>	<b>3.64</b>	<b>3.75</b>	<b>3.39</b>	<i>3.24</i>	<i>3.95</i>	<i>4.19</i>	<i>3.79</i>	<i>3.50</i>	<i>4.22</i>	<i>4.44</i>	<i>4.04</i>	<b>3.43</b>	<i>3.80</i>	<i>4.05</i>
Colombia .....	<b>0.86</b>	<b>0.89</b>	<b>0.89</b>	<b>0.91</b>	<i>0.87</i>	<i>0.89</i>	<i>0.88</i>	<i>0.90</i>	<i>0.86</i>	<i>0.88</i>	<i>0.88</i>	<i>0.90</i>	<b>0.89</b>	<i>0.89</i>	<i>0.88</i>
Other Central and S. America .....	<b>0.41</b>	<b>0.42</b>	<b>0.40</b>	<b>0.42</b>	<i>0.41</i>	<i>0.41</i>	<i>0.39</i>	<i>0.41</i>	<i>0.40</i>	<i>0.41</i>	<i>0.39</i>	<i>0.41</i>	<b>0.41</b>	<i>0.41</i>	<i>0.40</i>
<b>Europe</b> .....	<b>4.36</b>	<b>4.14</b>	<b>4.04</b>	<b>4.24</b>	<i>4.26</i>	<i>4.18</i>	<i>4.12</i>	<i>4.34</i>	<i>4.41</i>	<i>4.43</i>	<i>4.37</i>	<i>4.65</i>	<b>4.19</b>	<i>4.22</i>	<i>4.46</i>
Norway .....	<b>1.97</b>	<b>1.80</b>	<b>1.80</b>	<b>1.89</b>	<i>1.88</i>	<i>1.80</i>	<i>1.82</i>	<i>1.87</i>	<i>1.93</i>	<i>1.96</i>	<i>2.02</i>	<i>2.20</i>	<b>1.87</b>	<i>1.84</i>	<i>2.03</i>
United Kingdom .....	<b>1.13</b>	<b>1.10</b>	<b>1.01</b>	<b>1.10</b>	<i>1.15</i>	<i>1.16</i>	<i>1.08</i>	<i>1.21</i>	<i>1.23</i>	<i>1.24</i>	<i>1.11</i>	<i>1.20</i>	<b>1.09</b>	<i>1.15</i>	<i>1.20</i>
<b>Eurasia</b> .....	<b>14.41</b>	<b>14.43</b>	<b>14.62</b>	<b>14.87</b>	<i>14.82</i>	<i>14.49</i>	<i>14.73</i>	<i>14.95</i>	<i>14.97</i>	<i>14.88</i>	<i>14.87</i>	<i>14.96</i>	<b>14.58</b>	<i>14.75</i>	<i>14.92</i>
Azerbaijan .....	<b>0.82</b>	<b>0.81</b>	<b>0.79</b>	<b>0.79</b>	<i>0.79</i>	<i>0.79</i>	<i>0.78</i>	<i>0.76</i>	<i>0.77</i>	<i>0.77</i>	<i>0.75</i>	<i>0.73</i>	<b>0.80</b>	<i>0.78</i>	<i>0.76</i>
Kazakhstan .....	<b>1.98</b>	<b>1.96</b>	<b>1.90</b>	<b>2.01</b>	<i>2.07</i>	<i>1.87</i>	<i>2.07</i>	<i>2.15</i>	<i>2.16</i>	<i>2.05</i>	<i>2.06</i>	<i>2.14</i>	<b>1.96</b>	<i>2.04</i>	<i>2.10</i>
Russia .....	<b>11.19</b>	<b>11.23</b>	<b>11.49</b>	<b>11.63</b>	<i>11.54</i>	<i>11.41</i>	<i>11.47</i>	<i>11.63</i>	<i>11.65</i>	<i>11.67</i>	<i>11.67</i>	<i>11.70</i>	<b>11.39</b>	<i>11.51</i>	<i>11.67</i>
Turkmenistan .....	<b>0.27</b>	<b>0.28</b>	<b>0.28</b>	<b>0.27</b>	<i>0.25</i>	<i>0.25</i>	<i>0.25</i>	<i>0.24</i>	<i>0.24</i>	<i>0.24</i>	<i>0.24</i>	<i>0.24</i>	<b>0.28</b>	<i>0.25</i>	<i>0.24</i>
Other Eurasia .....	<b>0.16</b>	<b>0.15</b>	<b>0.15</b>	<b>0.16</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>0.16</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>3.04</b>	<i>3.13</i>	<i>3.13</i>	<i>3.13</i>	<i>3.13</i>	<i>3.18</i>	<i>3.18</i>	<i>3.19</i>	<i>3.19</i>	<b>3.03</b>	<i>3.13</i>	<i>3.19</i>
Oman .....	<b>0.98</b>	<b>0.98</b>	<b>0.99</b>	<b>0.99</b>	<i>0.99</i>	<i>0.99</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.01</i>	<i>1.01</i>	<b>0.98</b>	<i>1.00</i>	<i>1.01</i>
Qatar .....	<b>1.94</b>	<b>1.94</b>	<b>1.95</b>	<b>1.93</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>9.25</b>	<b>9.20</b>	<b>9.13</b>	<b>9.30</b>	<i>9.27</i>	<i>9.30</i>	<i>9.30</i>	<i>9.34</i>	<i>9.32</i>	<i>9.33</i>	<i>9.30</i>	<i>9.31</i>	<b>9.22</b>	<i>9.30</i>	<i>9.31</i>
Australia .....	<b>0.37</b>	<b>0.35</b>	<b>0.38</b>	<b>0.42</b>	<i>0.44</i>	<i>0.46</i>	<i>0.49</i>	<i>0.51</i>	<i>0.53</i>	<i>0.55</i>	<i>0.55</i>	<i>0.55</i>	<b>0.38</b>	<i>0.48</i>	<i>0.55</i>
China .....	<b>4.75</b>	<b>4.80</b>	<b>4.74</b>	<b>4.82</b>	<i>4.77</i>	<i>4.80</i>	<i>4.80</i>	<i>4.85</i>	<i>4.79</i>	<i>4.81</i>	<i>4.82</i>	<i>4.86</i>	<b>4.78</b>	<i>4.81</i>	<i>4.82</i>
India .....	<b>1.01</b>	<b>1.01</b>	<b>0.99</b>	<b>0.97</b>	<i>0.98</i>	<i>0.97</i>	<i>0.96</i>	<i>0.96</i>	<i>0.99</i>	<i>0.98</i>	<i>0.97</i>	<i>0.97</i>	<b>0.99</b>	<i>0.97</i>	<i>0.98</i>
Indonesia .....	<b>0.89</b>	<b>0.89</b>	<b>0.88</b>	<b>0.89</b>	<i>0.89</i>	<i>0.88</i>	<i>0.86</i>	<i>0.85</i>	<i>0.84</i>	<i>0.83</i>	<i>0.81</i>	<i>0.80</i>	<b>0.89</b>	<i>0.87</i>	<i>0.82</i>
Malaysia .....	<b>0.77</b>	<b>0.74</b>	<b>0.72</b>	<b>0.74</b>	<i>0.74</i>	<i>0.74</i>	<i>0.73</i>	<i>0.72</i>	<i>0.72</i>	<i>0.71</i>	<i>0.70</i>	<i>0.68</i>	<b>0.74</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>0.24</i>	<i>0.24</i>	<i>0.24</i>	<i>0.23</i>	<i>0.23</i>	<b>0.25</b>	<i>0.24</i>	<i>0.24</i>
<b>Africa</b> .....	<b>1.51</b>	<b>1.50</b>	<b>1.52</b>	<b>1.53</b>	<i>1.52</i>	<i>1.54</i>	<i>1.54</i>	<i>1.54</i>	<i>1.50</i>	<i>1.50</i>	<i>1.50</i>	<i>1.50</i>	<b>1.52</b>	<i>1.53</i>	<i>1.50</i>
Egypt .....	<b>0.66</b>	<b>0.66</b>	<b>0.66</b>	<b>0.66</b>	<i>0.61</i>	<i>0.61</i>	<i>0.61</i>	<i>0.61</i>	<i>0.59</i>	<i>0.59</i>	<i>0.59</i>	<i>0.59</i>	<b>0.66</b>	<i>0.61</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>61.70</b>	<b>62.57</b>	<b>63.89</b>	<b>64.66</b>	<i>64.57</i>	<i>65.63</i>	<i>66.20</i>	<i>66.76</i>	<i>66.86</i>	<i>67.95</i>	<i>68.21</i>	<i>68.63</i>	<b>63.22</b>	<i>65.79</i>	<i>67.92</i>
<b>OPEC non-crude liquids</b> .....	<b>5.33</b>	<b>5.26</b>	<b>5.30</b>	<b>5.36</b>	<i>5.45</i>	<i>5.38</i>	<i>5.33</i>	<i>5.29</i>	<i>5.21</i>	<i>5.16</i>	<i>5.11</i>	<i>5.14</i>	<b>5.31</b>	<i>5.36</i>	<i>5.16</i>
<b>Non-OPEC + OPEC non-crude</b> .....	<b>67.03</b>	<b>67.83</b>	<b>69.19</b>	<b>70.03</b>	<i>70.01</i>	<i>71.01</i>	<i>71.52</i>	<i>72.04</i>	<i>72.07</i>	<i>73.11</i>	<i>73.32</i>	<i>73.77</i>	<b>68.53</b>	<i>71.15</i>	<i>73.07</i>
<b>Unplanned non-OPEC Production Outages</b> .....	<b>0.53</b>	<b>0.40</b>	<b>0.30</b>	<b>0.41</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>	<i>n/a</i>	<b>0.41</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,

**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 - February 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	-	-	-	-	-	-	-	-	1.02	-	-
Angola .....	1.59	1.56	1.56	1.57	-	-	-	-	-	-	-	-	1.57	-	-
Congo (Brazzaville) .....	0.34	0.35	0.33	0.32	-	-	-	-	-	-	-	-	0.34	-	-
Ecuador .....	0.51	0.52	0.52	0.52	-	-	-	-	-	-	-	-	0.52	-	-
Equatorial Guinea .....	0.14	0.13	0.14	0.12	-	-	-	-	-	-	-	-	0.13	-	-
Gabon .....	0.20	0.20	0.19	0.19	-	-	-	-	-	-	-	-	0.20	-	-
Iran .....	3.83	3.80	3.55	2.90	-	-	-	-	-	-	-	-	3.52	-	-
Iraq .....	4.46	4.50	4.66	4.77	-	-	-	-	-	-	-	-	4.60	-	-
Kuwait .....	2.71	2.71	2.80	2.80	-	-	-	-	-	-	-	-	2.76	-	-
Libya .....	1.00	0.92	0.91	1.04	-	-	-	-	-	-	-	-	0.96	-	-
Nigeria .....	1.72	1.53	1.55	1.61	-	-	-	-	-	-	-	-	1.60	-	-
Saudi Arabia .....	10.10	10.20	10.47	10.74	-	-	-	-	-	-	-	-	10.38	-	-
United Arab Emirates .....	2.88	2.86	2.94	3.11	-	-	-	-	-	-	-	-	2.95	-	-
Venezuela .....	1.60	1.49	1.36	1.27	-	-	-	-	-	-	-	-	1.43	-	-
OPEC Total .....	32.10	31.78	32.02	31.96	30.71	30.76	30.87	30.59	30.42	30.51	30.65	30.38	31.97	30.74	30.49
<b>Other Liquids (a) .....</b>	<b>5.33</b>	<b>5.26</b>	<b>5.30</b>	<b>5.36</b>	<b>5.45</b>	<b>5.38</b>	<b>5.33</b>	<b>5.29</b>	<b>5.21</b>	<b>5.16</b>	<b>5.11</b>	<b>5.14</b>	<b>5.31</b>	<b>5.36</b>	<b>5.16</b>
<b>Total OPEC Supply .....</b>	<b>37.43</b>	<b>37.04</b>	<b>37.32</b>	<b>37.32</b>	<b>36.16</b>	<b>36.15</b>	<b>36.20</b>	<b>35.88</b>	<b>35.63</b>	<b>35.67</b>	<b>35.77</b>	<b>35.51</b>	<b>37.28</b>	<b>36.10</b>	<b>35.65</b>
<b>Crude Oil Production Capacity</b>															
Africa .....	6.00	5.70	5.72	5.86	5.67	5.87	5.91	5.95	6.01	6.06	6.11	6.15	5.82	5.85	6.08
Middle East .....	25.84	25.85	25.76	25.29	25.51	25.43	25.43	25.43	25.87	25.91	25.92	25.93	25.68	25.45	25.91
South America .....	2.11	2.01	1.89	1.79	1.60	1.44	1.35	1.26	1.17	1.08	0.99	0.90	1.95	1.41	1.03
OPEC Total .....	33.95	33.56	33.36	32.93	32.79	32.74	32.68	32.63	33.05	33.04	33.01	32.97	33.45	32.71	33.02
<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	2.08	1.98	1.81	2.04	2.63	2.53	2.36	2.60	1.48	1.97	2.53
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	2.08	1.98	1.81	2.04	2.63	2.53	2.36	2.60	1.48	1.97	2.53
<b>Unplanned OPEC Production Outages .....</b>	<b>1.21</b>	<b>1.43</b>	<b>1.59</b>	<b>1.99</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>	<i>n/a</i>	1.56	<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 - February 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>25.17</b>	<i>24.97</i>	<i>25.11</i>	<i>25.53</i>	<i>25.31</i>	<i>25.17</i>	<i>25.35</i>	<i>25.83</i>	<i>25.49</i>	<b>24.91</b>	<i>25.23</i>	<i>25.46</i>
Canada .....	<b>2.32</b>	<b>2.34</b>	<b>2.56</b>	<b>2.52</b>	<i>2.41</i>	<i>2.36</i>	<i>2.47</i>	<i>2.44</i>	<i>2.42</i>	<i>2.36</i>	<i>2.46</i>	<i>2.44</i>	<b>2.44</b>	<i>2.42</i>	<i>2.42</i>
Mexico .....	<b>1.99</b>	<b>2.02</b>	<b>1.97</b>	<b>1.96</b>	<i>1.96</i>	<i>1.98</i>	<i>1.98</i>	<i>2.01</i>	<i>1.97</i>	<i>2.00</i>	<i>2.00</i>	<i>2.01</i>	<b>1.99</b>	<i>1.98</i>	<i>1.99</i>
United States .....	<b>20.24</b>	<b>20.33</b>	<b>20.63</b>	<b>20.69</b>	<i>20.59</i>	<i>20.76</i>	<i>21.07</i>	<i>20.85</i>	<i>20.78</i>	<i>20.98</i>	<i>21.36</i>	<i>21.03</i>	<b>20.47</b>	<i>20.82</i>	<i>21.04</i>
<b>Central and South America</b> .....	<b>6.72</b>	<b>6.76</b>	<b>6.94</b>	<b>6.94</b>	<i>6.69</i>	<i>6.83</i>	<i>6.95</i>	<i>6.94</i>	<i>6.73</i>	<i>6.87</i>	<i>7.00</i>	<i>7.02</i>	<b>6.84</b>	<i>6.85</i>	<i>6.91</i>
Brazil .....	<b>2.98</b>	<b>2.95</b>	<b>3.11</b>	<b>3.13</b>	<i>3.00</i>	<i>3.07</i>	<i>3.15</i>	<i>3.14</i>	<i>3.05</i>	<i>3.12</i>	<i>3.21</i>	<i>3.21</i>	<b>3.04</b>	<i>3.09</i>	<i>3.15</i>
<b>Europe</b> .....	<b>14.80</b>	<b>14.93</b>	<b>15.41</b>	<b>15.04</b>	<i>14.79</i>	<i>15.01</i>	<i>15.54</i>	<i>15.24</i>	<i>14.89</i>	<i>15.11</i>	<i>15.64</i>	<i>15.34</i>	<b>15.05</b>	<i>15.15</i>	<i>15.25</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>5.36</i>	<i>5.20</i>	<b>4.93</b>	<i>5.00</i>	<i>5.11</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>3.73</i>	<i>3.83</i>	<i>4.14</i>	<i>3.99</i>	<b>3.75</b>	<i>3.82</i>	<i>3.92</i>
<b>Middle East</b> .....	<b>8.24</b>	<b>8.79</b>	<b>9.07</b>	<b>8.68</b>	<i>8.50</i>	<i>8.84</i>	<i>9.16</i>	<i>8.65</i>	<i>8.52</i>	<i>8.98</i>	<i>9.31</i>	<i>8.80</i>	<b>8.70</b>	<i>8.79</i>	<i>8.91</i>
<b>Asia and Oceania</b> .....	<b>35.59</b>	<b>35.10</b>	<b>34.46</b>	<b>35.62</b>	<i>36.46</i>	<i>35.90</i>	<i>35.30</i>	<i>36.32</i>	<i>37.24</i>	<i>36.69</i>	<i>36.07</i>	<i>37.14</i>	<b>35.19</b>	<i>35.99</i>	<i>36.79</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>3.91</b>	<i>4.15</i>	<i>3.40</i>	<i>3.47</i>	<i>3.79</i>	<i>4.05</i>	<i>3.32</i>	<i>3.39</i>	<i>3.73</i>	<b>3.79</b>	<i>3.70</i>	<i>3.62</i>
India .....	<b>4.73</b>	<b>4.89</b>	<b>4.57</b>	<b>4.89</b>	<i>5.07</i>	<i>5.13</i>	<i>4.79</i>	<i>5.10</i>	<i>5.30</i>	<i>5.37</i>	<i>5.01</i>	<i>5.33</i>	<b>4.77</b>	<i>5.02</i>	<i>5.25</i>
<b>Africa</b> .....	<b>4.34</b>	<b>4.35</b>	<b>4.26</b>	<b>4.45</b>	<i>4.42</i>	<i>4.43</i>	<i>4.36</i>	<i>4.53</i>	<i>4.50</i>	<i>4.50</i>	<i>4.43</i>	<i>4.61</i>	<b>4.35</b>	<i>4.43</i>	<i>4.51</i>
<b>Total OECD Liquid Fuels Consumption</b> .....	<b>47.58</b>	<b>46.94</b>	<b>47.89</b>	<b>48.10</b>	<i>47.91</i>	<i>47.34</i>	<i>48.37</i>	<i>48.32</i>	<i>48.10</i>	<i>47.58</i>	<i>48.70</i>	<i>48.54</i>	<b>47.63</b>	<i>47.99</i>	<i>48.24</i>
<b>Total non-OECD Liquid Fuels Consumption</b> .....	<b>51.46</b>	<b>52.53</b>	<b>52.53</b>	<b>52.79</b>	<i>52.74</i>	<i>53.65</i>	<i>53.70</i>	<i>53.75</i>	<i>53.86</i>	<i>54.90</i>	<i>54.95</i>	<i>55.05</i>	<b>52.33</b>	<i>53.46</i>	<i>54.69</i>
<b>Total World Liquid Fuels Consumption</b> .....	<b>99.04</b>	<b>99.47</b>	<b>100.42</b>	<b>100.89</b>	<i>100.64</i>	<i>100.99</i>	<i>102.06</i>	<i>102.07</i>	<i>101.96</i>	<i>102.49</i>	<i>103.65</i>	<i>103.60</i>	<b>99.96</b>	<i>101.45</i>	<i>102.93</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>112.2</i>	<i>112.9</i>	<i>113.7</i>	<i>114.5</i>	<i>114.7</i>	<i>116.5</i>	<i>117.3</i>	<i>118.2</i>	<b>110.2</b>	<i>113.4</i>	<i>116.7</i>
Percent change from prior year .....	<b>3.3</b>	<b>3.2</b>	<b>3.0</b>	<b>2.9</b>	<i>2.8</i>	<i>2.8</i>	<i>2.9</i>	<i>2.9</i>	<i>2.2</i>	<i>3.2</i>	<i>3.1</i>	<i>3.2</i>	<b>3.1</b>	<i>2.8</i>	<i>2.9</i>
OECD Index, 2015 Q1 = 100 .....	<b>106.5</b>	<b>107.1</b>	<b>107.5</b>	<b>108.1</b>	<i>108.8</i>	<i>109.2</i>	<i>109.7</i>	<i>110.2</i>	<i>109.9</i>	<i>111.4</i>	<i>111.9</i>	<i>112.4</i>	<b>107.3</b>	<i>109.5</i>	<i>111.4</i>
Percent change from prior year .....	<b>2.5</b>	<b>2.5</b>	<b>2.3</b>	<b>2.2</b>	<i>2.2</i>	<i>2.0</i>	<i>2.0</i>	<i>1.9</i>	<i>1.0</i>	<i>2.1</i>	<i>2.0</i>	<i>2.0</i>	<b>2.4</b>	<i>2.0</i>	<i>1.8</i>
Non-OECD Index, 2015 Q1 = 100 .....	<b>111.7</b>	<b>112.5</b>	<b>113.4</b>	<b>114.4</b>	<i>115.5</i>	<i>116.5</i>	<i>117.6</i>	<i>118.8</i>	<i>119.4</i>	<i>121.4</i>	<i>122.6</i>	<i>123.8</i>	<b>113.0</b>	<i>117.1</i>	<i>121.8</i>
Percent change from prior year .....	<b>4.0</b>	<b>3.9</b>	<b>3.7</b>	<b>3.6</b>	<i>3.4</i>	<i>3.5</i>	<i>3.7</i>	<i>3.8</i>	<i>3.4</i>	<i>4.2</i>	<i>4.2</i>	<i>4.2</i>	<b>3.8</b>	<i>3.6</i>	<i>4.0</i>
<b>Real U.S. Dollar Exchange Rate (a)</b>															
Index, 2015 Q1 = 100 .....	<b>100.72</b>	<b>102.73</b>	<b>105.52</b>	<b>106.29</b>	<i>105.09</i>	<i>104.55</i>	<i>103.94</i>	<i>103.35</i>	<i>102.62</i>	<i>102.13</i>	<i>101.46</i>	<i>100.89</i>	<b>103.81</b>	<i>104.23</i>	<i>101.77</i>
Percent change from prior year .....	<b>-4.0</b>	<b>-0.8</b>	<b>3.4</b>	<b>3.8</b>	<i>4.3</i>	<i>1.8</i>	<i>-1.5</i>	<i>-2.8</i>	<i>-2.3</i>	<i>-2.3</i>	<i>-2.4</i>	<i>-2.4</i>	<b>0.6</b>	<i>0.4</i>	<i>-2.4</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 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 - February 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	1.80	1.93	1.95	1.98	2.06	2.14	2.17	2.18	2.26	1.71	1.98	2.19
Propane .....	1.29	1.37	1.44	1.48	1.49	1.56	1.59	1.61	1.61	1.64	1.66	1.68	1.39	1.56	1.65
Butanes .....	0.69	0.74	0.78	0.79	0.81	0.83	0.85	0.86	0.86	0.87	0.89	0.89	0.75	0.84	0.88
Natural Gasoline (Pentanes Plus) .....	0.44	0.50	0.55	0.52	0.52	0.56	0.58	0.57	0.54	0.58	0.60	0.59	0.50	0.56	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	0.28	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	0.30	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	-0.08	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	-0.30	-0.32	-0.32	-0.32	-0.35	-0.37	-0.37	-0.37	-0.40	-0.27	-0.33	-0.38
Propane/Propylene .....	-0.72	-0.81	-0.87	-0.81	-0.83	-0.89	-0.89	-1.05	-0.96	-0.99	-0.98	-1.12	-0.80	-0.91	-1.02
Butanes/Butylenes .....	-0.10	-0.20	-0.19	-0.18	-0.26	-0.27	-0.26	-0.26	-0.30	-0.30	-0.28	-0.28	-0.17	-0.26	-0.29
Natural Gasoline (Pentanes Plus) .....	-0.18	-0.23	-0.17	-0.18	-0.25	-0.26	-0.29	-0.29	-0.29	-0.30	-0.33	-0.31	-0.19	-0.27	-0.31
<b>HGL Refinery and Blender Net Inputs</b>															
Butanes/Butylenes .....	0.45	0.30	0.32	0.54	0.41	0.30	0.33	0.51	0.42	0.31	0.34	0.52	0.40	0.39	0.40
Natural Gasoline (Pentanes Plus) .....	0.15	0.16	0.18	0.18	0.17	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	1.49	1.61	1.61	1.69	1.75	1.77	1.78	1.84	1.89	1.47	1.66	1.82
Propane .....	1.16	0.60	0.65	1.07	1.16	0.66	0.72	0.97	1.18	0.68	0.74	0.98	0.87	0.88	0.89
Propylene (refinery-grade) .....	0.32	0.31	0.31	0.29	0.31	0.31	0.30	0.29	0.31	0.33	0.31	0.30	0.30	0.30	0.31
Butanes/Butylenes .....	0.20	0.21	0.21	0.24	0.20	0.27	0.25	0.22	0.19	0.26	0.25	0.22	0.22	0.24	0.23
Natural Gasoline (Pentanes Plus) .....	0.10	0.09	0.16	0.14	0.09	0.07	0.07	0.08	0.08	0.06	0.07	0.08	0.12	0.08	0.07
<b>HGL Inventories (million barrels)</b>															
Ethane .....	51.41	47.90	46.07	49.88	48.49	51.47	49.60	49.09	47.34	50.38	48.51	48.00	48.80	49.66	48.56
Propane .....	33.83	56.51	75.16	63.67	42.19	68.23	90.90	79.06	54.79	77.07	97.16	84.95	63.67	79.06	84.95
Propylene (refinery-grade) .....	3.82	3.64	3.86	6.57	5.97	5.83	5.79	6.91	6.56	5.94	5.98	6.78	6.57	6.91	6.78
Butanes/Butylenes .....	32.02	55.37	78.52	44.51	32.48	56.15	74.59	43.97	32.17	55.84	74.28	43.66	44.51	43.97	43.66
Natural Gasoline (Pentanes Plus) .....	19.36	18.59	20.34	21.41	20.31	22.67	24.16	23.96	22.50	24.58	25.88	25.59	21.41	23.96	25.59
<b>Refinery and Blender Net Inputs</b>															
Crude Oil .....	16.41	17.14	17.32	17.02	16.75	17.38	17.45	17.11	17.17	18.20	18.15	17.81	16.98	17.17	17.83
Hydrocarbon Gas Liquids .....	0.61	0.47	0.50	0.71	0.58	0.48	0.52	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	1.22	1.20	1.27	1.26	1.27	1.22	1.30	1.30	1.27	1.21	1.25	1.27
Unfinished Oils .....	0.12	0.42	0.45	0.29	0.31	0.43	0.46	0.43	0.39	0.62	0.65	0.60	0.32	0.41	0.56
Motor Gasoline Blend Components .....	0.34	0.70	0.58	0.28	0.42	0.83	0.66	0.49	0.57	0.84	0.66	0.49	0.47	0.60	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	19.52	19.25	20.40	20.35	19.99	19.93	21.44	21.27	20.85	19.55	20.00	20.88
<b>Refinery Processing Gain</b>															
.....	1.11	1.12	1.17	1.14	1.10	1.12	1.14	1.18	1.20	1.25	1.26	1.27	1.14	1.14	1.24
<b>Refinery and Blender Net Production</b>															
Hydrocarbon Gas Liquids .....	0.48	0.84	0.80	0.40	0.48	0.85	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	10.18	9.92	10.32	10.26	10.39	10.18	10.62	10.50	10.60	10.06	10.22	10.48
Jet Fuel .....	1.72	1.83	1.90	1.77	1.75	1.81	1.88	1.80	1.76	1.90	1.96	1.88	1.81	1.81	1.88
Distillate Fuel .....	4.81	5.25	5.29	5.31	5.20	5.41	5.43	5.47	5.58	6.03	6.02	6.01	5.17	5.38	5.91
Residual Fuel .....	0.44	0.40	0.42	0.43	0.43	0.45	0.40	0.40	0.41	0.42	0.38	0.39	0.43	0.42	0.40
Other Oils (a) .....	2.49	2.61	2.72	2.56	2.57	2.67	2.76	2.72	2.69	2.84	2.90	2.85	2.60	2.68	2.82
Total Refinery and Blender Net Production .....	19.74	21.08	21.25	20.66	20.35	21.52	21.49	21.17	21.13	22.69	22.54	22.13	20.69	21.14	22.12
<b>Refinery Distillation Inputs</b>															
.....	16.76	17.50	17.69	17.35	16.95	17.49	17.63	17.28	17.31	18.24	18.27	17.91	17.33	17.34	17.93
<b>Refinery Operable Distillation Capacity</b>															
.....	18.57	18.60	18.60	18.60	18.60	18.60	18.61	18.62	18.62	18.62	18.62	18.65	18.59	18.61	18.63
<b>Refinery Distillation Utilization Factor</b>															
.....	0.90	0.94	0.95	0.93	0.91	0.94	0.95	0.93	0.93	0.98	0.98	0.96	0.93	0.93	0.96

- = 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 - February 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>179</b>	<i>161</i>	<i>181</i>	<i>180</i>	<i>169</i>	<i>177</i>	<i>190</i>	<i>184</i>	<i>169</i>	<b>198</b>	<i>173</i>	<i>180</i>
<b>Gasoline Regular Grade Retail Prices Including Taxes</b>															
PADD 1 .....	<b>255</b>	<b>279</b>	<b>278</b>	<b>257</b>	<i>228</i>	<i>248</i>	<i>250</i>	<i>245</i>	<i>247</i>	<i>258</i>	<i>256</i>	<i>246</i>	<b>268</b>	<i>243</i>	<i>252</i>
PADD 2 .....	<b>246</b>	<b>274</b>	<b>276</b>	<b>245</b>	<i>217</i>	<i>246</i>	<i>248</i>	<i>237</i>	<i>242</i>	<i>257</i>	<i>254</i>	<i>238</i>	<b>261</b>	<i>238</i>	<i>248</i>
PADD 3 .....	<b>230</b>	<b>261</b>	<b>258</b>	<b>231</b>	<i>206</i>	<i>231</i>	<i>229</i>	<i>219</i>	<i>226</i>	<i>240</i>	<i>234</i>	<i>219</i>	<b>245</b>	<i>221</i>	<i>230</i>
PADD 4 .....	<b>247</b>	<b>288</b>	<b>297</b>	<b>281</b>	<i>228</i>	<i>248</i>	<i>257</i>	<i>243</i>	<i>234</i>	<i>258</i>	<i>264</i>	<i>244</i>	<b>279</b>	<i>244</i>	<i>250</i>
PADD 5 .....	<b>312</b>	<b>342</b>	<b>335</b>	<b>333</b>	<i>289</i>	<i>308</i>	<i>306</i>	<i>286</i>	<i>289</i>	<i>319</i>	<i>314</i>	<i>287</i>	<b>330</b>	<i>297</i>	<i>303</i>
U.S. Average .....	<b>258</b>	<b>285</b>	<b>284</b>	<b>263</b>	<i>232</i>	<i>255</i>	<i>256</i>	<i>246</i>	<i>249</i>	<i>265</i>	<i>262</i>	<i>246</i>	<b>273</b>	<i>247</i>	<i>256</i>
<b>Gasoline All Grades Including Taxes</b>	<b>270</b>	<b>294</b>	<b>292</b>	<b>271</b>	<i>242</i>	<i>266</i>	<i>267</i>	<i>258</i>	<i>261</i>	<i>278</i>	<i>274</i>	<i>259</i>	<b>282</b>	<i>258</i>	<i>268</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>63.5</b>	<i>67.2</i>	<i>67.7</i>	<i>64.3</i>	<i>68.1</i>	<i>67.8</i>	<i>68.7</i>	<i>65.7</i>	<i>69.0</i>	<b>63.5</b>	<i>68.1</i>	<i>69.0</i>
PADD 2 .....	<b>57.3</b>	<b>53.5</b>	<b>53.1</b>	<b>57.0</b>	<i>57.0</i>	<i>53.6</i>	<i>51.7</i>	<i>53.7</i>	<i>56.7</i>	<i>54.1</i>	<i>52.5</i>	<i>54.3</i>	<b>57.0</b>	<i>53.7</i>	<i>54.3</i>
PADD 3 .....	<b>84.2</b>	<b>82.3</b>	<b>80.5</b>	<b>89.4</b>	<i>83.4</i>	<i>82.4</i>	<i>82.2</i>	<i>86.1</i>	<i>84.2</i>	<i>83.7</i>	<i>83.8</i>	<i>87.7</i>	<b>89.4</b>	<i>86.1</i>	<i>87.7</i>
PADD 4 .....	<b>7.7</b>	<b>7.3</b>	<b>7.0</b>	<b>7.5</b>	<i>7.6</i>	<i>7.6</i>	<i>7.4</i>	<i>7.8</i>	<i>7.6</i>	<i>7.7</i>	<i>7.6</i>	<i>8.0</i>	<b>7.5</b>	<i>7.8</i>	<i>8.0</i>
PADD 5 .....	<b>32.0</b>	<b>30.7</b>	<b>28.8</b>	<b>30.7</b>	<i>30.0</i>	<i>28.6</i>	<i>28.6</i>	<i>31.7</i>	<i>30.3</i>	<i>28.7</i>	<i>28.8</i>	<i>31.8</i>	<b>30.7</b>	<i>31.7</i>	<i>31.8</i>
U.S. Total .....	<b>239.6</b>	<b>240.3</b>	<b>239.7</b>	<b>248.1</b>	<i>245.2</i>	<i>239.8</i>	<i>234.1</i>	<i>247.4</i>	<i>246.6</i>	<i>242.9</i>	<i>238.3</i>	<i>250.8</i>	<b>248.1</b>	<i>247.4</i>	<i>250.8</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>	<i>25.4</i>	<i>24.1</i>	<i>24.9</i>	<i>25.5</i>	<i>25.2</i>	<i>24.1</i>	<i>25.1</i>	<i>25.3</i>	<b>25.7</b>	<i>25.5</i>	<i>25.3</i>
<b>Gasoline Blending Components Inventories</b>															
U.S. Total .....	<b>216.5</b>	<b>215.6</b>	<b>214.9</b>	<b>222.4</b>	<i>219.8</i>	<i>215.7</i>	<i>209.3</i>	<i>221.9</i>	<i>221.5</i>	<i>218.8</i>	<i>213.2</i>	<i>225.5</i>	<b>222.4</b>	<i>221.9</i>	<i>225.5</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 - February 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>94.33</b>	<i>95.25</i>	<i>97.11</i>	<i>97.85</i>	<i>98.31</i>	<i>98.86</i>	<i>99.43</i>	<i>99.53</i>	<i>99.75</i>	<b>89.57</b>	<i>97.14</i>	<i>99.39</i>
Alaska .....	<b>1.00</b>	<b>0.92</b>	<b>0.86</b>	<b>0.95</b>	<i>1.00</i>	<i>0.86</i>	<i>0.79</i>	<i>0.94</i>	<i>1.01</i>	<i>0.87</i>	<i>0.81</i>	<i>0.95</i>	<b>0.93</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>2.81</b>	<i>2.92</i>	<i>2.94</i>	<i>2.89</i>	<i>2.94</i>	<i>3.02</i>	<i>3.06</i>	<i>3.05</i>	<i>3.13</i>	<b>2.68</b>	<i>2.92</i>	<i>3.07</i>
Lower 48 States (excl GOM) .....	<b>81.37</b>	<b>83.98</b>	<b>87.79</b>	<b>90.57</b>	<i>91.33</i>	<i>93.30</i>	<i>94.17</i>	<i>94.43</i>	<i>94.83</i>	<i>95.49</i>	<i>95.67</i>	<i>95.67</i>	<b>85.96</b>	<i>93.32</i>	<i>95.42</i>
Total Dry Gas Production .....	<b>79.13</b>	<b>81.17</b>	<b>84.96</b>	<b>87.67</b>	<i>88.48</i>	<i>90.16</i>	<i>90.80</i>	<i>91.18</i>	<i>91.63</i>	<i>92.11</i>	<i>92.16</i>	<i>92.31</i>	<b>83.26</b>	<i>90.16</i>	<i>92.05</i>
LNG Gross Imports .....	<b>0.33</b>	<b>0.10</b>	<b>0.15</b>	<b>0.18</b>	<i>0.32</i>	<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>0.19</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>3.47</b>	<i>4.11</i>	<i>4.27</i>	<i>5.55</i>	<i>6.52</i>	<i>7.01</i>	<i>6.16</i>	<i>6.47</i>	<i>7.38</i>	<b>2.97</b>	<i>5.12</i>	<i>6.76</i>
Pipeline Gross Imports .....	<b>8.76</b>	<b>7.63</b>	<b>7.50</b>	<b>7.19</b>	<i>8.35</i>	<i>6.38</i>	<i>6.10</i>	<i>7.11</i>	<i>8.26</i>	<i>6.14</i>	<i>6.13</i>	<i>6.63</i>	<b>7.76</b>	<i>6.98</i>	<i>6.79</i>
Pipeline Gross Exports .....	<b>7.02</b>	<b>6.15</b>	<b>7.04</b>	<b>7.65</b>	<i>8.60</i>	<i>7.69</i>	<i>7.37</i>	<i>8.02</i>	<i>9.49</i>	<i>8.15</i>	<i>7.74</i>	<i>8.26</i>	<b>6.97</b>	<i>7.92</i>	<i>8.41</i>
Supplemental Gaseous Fuels .....	<b>0.21</b>	<b>0.17</b>	<b>0.19</b>	<b>0.19</b>	<i>0.20</i>	<i>0.21</i>	<i>0.21</i>	<i>0.21</i>	<i>0.21</i>	<i>0.21</i>	<i>0.21</i>	<i>0.21</i>	<b>0.19</b>	<i>0.21</i>	<i>0.21</i>
Net Inventory Withdrawals .....	<b>18.31</b>	<b>-8.86</b>	<b>-8.22</b>	<b>2.68</b>	<i>14.29</i>	<i>-12.48</i>	<i>-9.54</i>	<i>3.04</i>	<i>16.11</i>	<i>-11.01</i>	<i>-8.11</i>	<i>3.24</i>	<b>0.91</b>	<i>-1.23</i>	<i>0.04</i>
Total Supply .....	<b>97.09</b>	<b>71.27</b>	<b>74.59</b>	<b>86.80</b>	<i>98.93</i>	<i>72.48</i>	<i>74.81</i>	<i>87.20</i>	<i>100.03</i>	<i>73.31</i>	<i>76.35</i>	<i>86.93</i>	<b>82.39</b>	<i>83.30</i>	<i>84.14</i>
Balancing Item (b) .....	<b>0.45</b>	<b>-0.61</b>	<b>-0.55</b>	<b>-2.09</b>	<i>0.13</i>	<i>-0.85</i>	<i>-0.58</i>	<i>-1.74</i>	<i>-1.01</i>	<i>-0.86</i>	<i>0.29</i>	<i>-0.74</i>	<b>-0.70</b>	<i>-0.77</i>	<i>-0.58</i>
Total Primary Supply .....	<b>97.54</b>	<b>70.66</b>	<b>74.04</b>	<b>84.71</b>	<i>99.06</i>	<i>71.62</i>	<i>74.22</i>	<i>85.46</i>	<i>99.02</i>	<i>72.46</i>	<i>76.64</i>	<i>86.19</i>	<b>81.68</b>	<i>82.53</i>	<i>83.56</i>
<b>Consumption (billion cubic feet per day)</b>															
Residential .....	<b>25.75</b>	<b>7.97</b>	<b>3.44</b>	<b>16.87</b>	<i>25.98</i>	<i>7.74</i>	<i>3.56</i>	<i>16.56</i>	<i>25.51</i>	<i>7.59</i>	<i>3.45</i>	<i>16.23</i>	<b>13.46</b>	<i>13.41</i>	<i>13.18</i>
Commercial .....	<b>15.34</b>	<b>6.61</b>	<b>4.58</b>	<b>10.88</b>	<i>15.20</i>	<i>6.77</i>	<i>4.64</i>	<i>10.62</i>	<i>14.92</i>	<i>6.37</i>	<i>4.60</i>	<i>10.13</i>	<b>9.33</b>	<i>9.28</i>	<i>9.00</i>
Industrial .....	<b>24.27</b>	<b>21.78</b>	<b>21.23</b>	<b>23.52</b>	<i>24.62</i>	<i>22.05</i>	<i>21.43</i>	<i>24.33</i>	<i>25.00</i>	<i>22.36</i>	<i>21.60</i>	<i>24.56</i>	<b>22.69</b>	<i>23.10</i>	<i>23.38</i>
Electric Power (c) .....	<b>24.91</b>	<b>27.61</b>	<b>37.80</b>	<b>25.99</b>	<i>25.37</i>	<i>27.73</i>	<i>37.02</i>	<i>26.00</i>	<i>25.22</i>	<i>28.47</i>	<i>39.19</i>	<i>27.13</i>	<b>29.10</b>	<i>29.05</i>	<i>30.02</i>
Lease and Plant Fuel .....	<b>4.55</b>	<b>4.68</b>	<b>4.90</b>	<b>5.05</b>	<i>5.10</i>	<i>5.20</i>	<i>5.24</i>	<i>5.27</i>	<i>5.30</i>	<i>5.33</i>	<i>5.33</i>	<i>5.34</i>	<b>4.80</b>	<i>5.21</i>	<i>5.33</i>
Pipeline and Distribution Use .....	<b>2.60</b>	<b>1.88</b>	<b>1.97</b>	<b>2.26</b>	<i>2.66</i>	<i>2.01</i>	<i>2.20</i>	<i>2.57</i>	<i>2.94</i>	<i>2.22</i>	<i>2.35</i>	<i>2.67</i>	<b>2.18</b>	<i>2.36</i>	<i>2.54</i>
Vehicle Use .....	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<b>0.12</b>	<i>0.12</i>	<i>0.12</i>
Total Consumption .....	<b>97.54</b>	<b>70.66</b>	<b>74.04</b>	<b>84.71</b>	<i>99.06</i>	<i>71.62</i>	<i>74.22</i>	<i>85.46</i>	<i>99.02</i>	<i>72.46</i>	<i>76.64</i>	<i>86.19</i>	<b>81.68</b>	<i>82.53</i>	<i>83.56</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>2,703</b>	<i>1,417</i>	<i>2,552</i>	<i>3,430</i>	<i>3,151</i>	<i>1,685</i>	<i>2,687</i>	<i>3,433</i>	<i>3,135</i>	<b>2,703</b>	<i>3,151</i>	<i>3,135</i>
East Region (d) .....	<b>229</b>	<b>465</b>	<b>778</b>	<b>657</b>	<i>244</i>	<i>594</i>	<i>913</i>	<i>807</i>	<i>311</i>	<i>615</i>	<i>875</i>	<i>789</i>	<b>657</b>	<i>807</i>	<i>789</i>
Midwest Region (d) .....	<b>261</b>	<b>459</b>	<b>846</b>	<b>783</b>	<i>258</i>	<i>551</i>	<i>927</i>	<i>797</i>	<i>273</i>	<i>543</i>	<i>878</i>	<i>757</i>	<b>783</b>	<i>797</i>	<i>757</i>
South Central Region (d) .....	<b>614</b>	<b>846</b>	<b>846</b>	<b>872</b>	<i>629</i>	<i>959</i>	<i>1,060</i>	<i>1,082</i>	<i>761</i>	<i>1,041</i>	<i>1,126</i>	<i>1,113</i>	<b>872</b>	<i>1,082</i>	<i>1,113</i>
Mountain Region (d) .....	<b>87</b>	<b>140</b>	<b>179</b>	<b>141</b>	<i>82</i>	<i>129</i>	<i>177</i>	<i>150</i>	<i>108</i>	<i>153</i>	<i>194</i>	<i>158</i>	<b>141</b>	<i>150</i>	<i>158</i>
Pacific Region (d) .....	<b>169</b>	<b>253</b>	<b>263</b>	<b>213</b>	<i>169</i>	<i>285</i>	<i>318</i>	<i>280</i>	<i>197</i>	<i>300</i>	<i>325</i>	<i>284</i>	<b>213</b>	<i>280</i>	<i>284</i>
Alaska .....	<b>31</b>	<b>33</b>	<b>38</b>	<b>37</b>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<b>37</b>	<i>35</i>	<i>35</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 - February 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>	<i>3.08</i>	<i>2.79</i>	<i>2.80</i>	<i>3.06</i>	<i>3.15</i>	<i>2.69</i>	<i>2.74</i>	<i>3.01</i>	<b>3.27</b>	2.93	2.90
<b>Residential Retail</b>															
New England .....	<b>14.38</b>	<b>16.60</b>	<b>19.08</b>	<b>13.96</b>	<i>13.34</i>	<i>13.80</i>	<i>16.99</i>	<i>13.53</i>	<i>13.10</i>	<i>13.88</i>	<i>16.96</i>	<i>13.42</i>	<b>14.87</b>	13.70	13.57
Middle Atlantic .....	<b>10.17</b>	<b>11.92</b>	<b>18.30</b>	<b>11.41</b>	<i>10.11</i>	<i>11.77</i>	<i>16.57</i>	<i>11.40</i>	<i>10.51</i>	<i>12.25</i>	<i>16.63</i>	<i>11.16</i>	<b>11.30</b>	11.16	11.39
E. N. Central .....	<b>7.20</b>	<b>9.77</b>	<b>18.40</b>	<b>8.15</b>	<i>7.94</i>	<i>10.62</i>	<i>16.36</i>	<i>8.72</i>	<i>7.92</i>	<i>10.70</i>	<i>16.36</i>	<i>8.67</i>	<b>8.47</b>	9.08	9.07
W. N. Central .....	<b>8.15</b>	<b>10.48</b>	<b>18.55</b>	<b>8.79</b>	<i>8.65</i>	<i>11.70</i>	<i>17.47</i>	<i>9.50</i>	<i>8.63</i>	<i>11.38</i>	<i>17.09</i>	<i>9.32</i>	<b>9.20</b>	9.85	9.73
S. Atlantic .....	<b>11.07</b>	<b>15.63</b>	<b>24.90</b>	<b>12.70</b>	<i>11.62</i>	<i>16.07</i>	<i>22.42</i>	<i>13.08</i>	<i>11.68</i>	<i>16.45</i>	<i>22.48</i>	<i>12.88</i>	<b>13.06</b>	13.49	13.46
E. S. Central .....	<b>9.61</b>	<b>12.70</b>	<b>21.52</b>	<b>10.66</b>	<i>9.87</i>	<i>14.08</i>	<i>20.41</i>	<i>13.01</i>	<i>10.75</i>	<i>15.28</i>	<i>21.39</i>	<i>13.65</i>	<b>10.93</b>	11.87	12.77
W. S. Central .....	<b>9.27</b>	<b>14.25</b>	<b>22.03</b>	<b>10.34</b>	<i>8.62</i>	<i>13.53</i>	<i>20.10</i>	<i>12.23</i>	<i>9.13</i>	<i>14.54</i>	<i>20.60</i>	<i>12.46</i>	<b>11.02</b>	11.25	11.82
Mountain .....	<b>8.22</b>	<b>10.41</b>	<b>14.03</b>	<b>7.98</b>	<i>8.63</i>	<i>9.82</i>	<i>13.49</i>	<i>8.91</i>	<i>8.76</i>	<i>10.07</i>	<i>13.66</i>	<i>9.03</i>	<b>8.88</b>	9.30	9.45
Pacific .....	<b>11.62</b>	<b>12.02</b>	<b>12.88</b>	<b>11.50</b>	<i>12.63</i>	<i>12.46</i>	<i>12.66</i>	<i>11.55</i>	<i>12.66</i>	<i>12.83</i>	<i>13.03</i>	<i>11.87</i>	<b>11.80</b>	12.26	12.49
U.S. Average .....	<b>9.37</b>	<b>11.94</b>	<b>17.93</b>	<b>9.98</b>	<i>9.70</i>	<i>11.96</i>	<i>16.59</i>	<i>10.69</i>	<i>9.88</i>	<i>12.26</i>	<i>16.75</i>	<i>10.68</i>	<b>10.50</b>	10.79	10.92
<b>Commercial Retail</b>															
New England .....	<b>11.05</b>	<b>11.73</b>	<b>10.85</b>	<b>10.44</b>	<i>10.60</i>	<i>10.25</i>	<i>9.81</i>	<i>9.42</i>	<i>9.51</i>	<i>9.44</i>	<i>9.37</i>	<i>9.38</i>	<b>10.95</b>	10.13	9.45
Middle Atlantic .....	<b>8.13</b>	<b>7.67</b>	<b>7.47</b>	<b>7.71</b>	<i>7.80</i>	<i>7.51</i>	<i>6.91</i>	<i>7.56</i>	<i>7.78</i>	<i>7.60</i>	<i>6.96</i>	<i>7.51</i>	<b>7.85</b>	7.57	7.57
E. N. Central .....	<b>6.19</b>	<b>6.95</b>	<b>9.01</b>	<b>6.68</b>	<i>6.84</i>	<i>7.61</i>	<i>8.84</i>	<i>6.86</i>	<i>6.66</i>	<i>7.58</i>	<i>8.81</i>	<i>6.79</i>	<b>6.66</b>	7.11	7.00
W. N. Central .....	<b>6.96</b>	<b>7.13</b>	<b>8.92</b>	<b>7.18</b>	<i>7.63</i>	<i>7.82</i>	<i>8.77</i>	<i>7.18</i>	<i>7.41</i>	<i>7.68</i>	<i>8.64</i>	<i>7.10</i>	<b>7.20</b>	7.61	7.45
S. Atlantic .....	<b>8.29</b>	<b>9.14</b>	<b>9.73</b>	<b>8.80</b>	<i>8.83</i>	<i>9.38</i>	<i>9.84</i>	<i>9.09</i>	<i>9.06</i>	<i>9.77</i>	<i>9.97</i>	<i>8.95</i>	<b>8.75</b>	9.12	9.25
E. S. Central .....	<b>8.62</b>	<b>9.32</b>	<b>10.51</b>	<b>8.78</b>	<i>8.90</i>	<i>9.57</i>	<i>9.92</i>	<i>8.79</i>	<i>8.39</i>	<i>9.29</i>	<i>9.69</i>	<i>8.61</i>	<b>8.97</b>	9.08	8.73
W. S. Central .....	<b>7.21</b>	<b>7.90</b>	<b>8.55</b>	<b>7.40</b>	<i>7.66</i>	<i>7.60</i>	<i>8.06</i>	<i>7.48</i>	<i>7.17</i>	<i>7.49</i>	<i>7.94</i>	<i>7.38</i>	<b>7.56</b>	7.66	7.40
Mountain .....	<b>7.00</b>	<b>7.52</b>	<b>7.92</b>	<b>6.26</b>	<i>6.94</i>	<i>7.30</i>	<i>8.11</i>	<i>7.11</i>	<i>7.34</i>	<i>7.57</i>	<i>8.23</i>	<i>7.14</i>	<b>6.92</b>	7.18	7.41
Pacific .....	<b>8.90</b>	<b>8.58</b>	<b>9.11</b>	<b>8.62</b>	<i>9.01</i>	<i>8.76</i>	<i>8.90</i>	<i>8.55</i>	<i>8.80</i>	<i>8.79</i>	<i>8.92</i>	<i>8.54</i>	<b>8.78</b>	8.80	8.74
U.S. Average .....	<b>7.64</b>	<b>8.05</b>	<b>8.77</b>	<b>7.64</b>	<i>7.91</i>	<i>8.13</i>	<i>8.46</i>	<i>7.75</i>	<i>7.74</i>	<i>8.13</i>	<i>8.43</i>	<i>7.69</i>	<b>7.83</b>	7.96	7.87
<b>Industrial Retail</b>															
New England .....	<b>8.95</b>	<b>8.62</b>	<b>6.49</b>	<b>7.70</b>	<i>8.47</i>	<i>7.51</i>	<i>6.96</i>	<i>8.12</i>	<i>8.72</i>	<i>7.88</i>	<i>7.06</i>	<i>7.98</i>	<b>8.11</b>	7.90	8.05
Middle Atlantic .....	<b>8.33</b>	<b>8.07</b>	<b>7.73</b>	<b>7.51</b>	<i>8.03</i>	<i>7.25</i>	<i>7.17</i>	<i>7.45</i>	<i>7.91</i>	<i>7.22</i>	<i>7.13</i>	<i>7.38</i>	<b>8.01</b>	7.65	7.57
E. N. Central .....	<b>5.69</b>	<b>5.02</b>	<b>5.20</b>	<b>5.85</b>	<i>6.68</i>	<i>6.00</i>	<i>5.70</i>	<i>5.62</i>	<i>6.20</i>	<i>5.73</i>	<i>5.55</i>	<i>5.58</i>	<b>5.56</b>	6.13	5.86
W. N. Central .....	<b>5.05</b>	<b>4.23</b>	<b>4.21</b>	<b>5.18</b>	<i>5.80</i>	<i>4.66</i>	<i>4.36</i>	<i>4.98</i>	<i>5.48</i>	<i>4.46</i>	<i>4.20</i>	<i>4.91</i>	<b>4.72</b>	5.02	4.83
S. Atlantic .....	<b>5.34</b>	<b>4.67</b>	<b>4.68</b>	<b>5.42</b>	<i>5.57</i>	<i>4.65</i>	<i>4.64</i>	<i>5.13</i>	<i>5.49</i>	<i>4.68</i>	<i>4.58</i>	<i>5.02</i>	<b>5.06</b>	5.03	4.97
E. S. Central .....	<b>4.93</b>	<b>4.21</b>	<b>4.14</b>	<b>4.94</b>	<i>5.03</i>	<i>4.22</i>	<i>4.20</i>	<i>4.76</i>	<i>5.01</i>	<i>4.33</i>	<i>4.22</i>	<i>4.75</i>	<b>4.59</b>	4.58	4.61
W. S. Central .....	<b>3.32</b>	<b>3.09</b>	<b>3.12</b>	<b>4.09</b>	<i>3.51</i>	<i>2.99</i>	<i>3.06</i>	<i>3.26</i>	<i>3.37</i>	<i>2.85</i>	<i>2.95</i>	<i>3.19</i>	<b>3.41</b>	3.21	3.10
Mountain .....	<b>5.43</b>	<b>5.36</b>	<b>4.72</b>	<b>5.01</b>	<i>5.69</i>	<i>5.55</i>	<i>5.83</i>	<i>5.89</i>	<i>6.03</i>	<i>5.59</i>	<i>5.69</i>	<i>5.70</i>	<b>5.15</b>	5.74	5.78
Pacific .....	<b>6.97</b>	<b>6.03</b>	<b>6.72</b>	<b>6.62</b>	<i>7.29</i>	<i>6.37</i>	<i>6.38</i>	<i>6.47</i>	<i>7.01</i>	<i>6.37</i>	<i>6.36</i>	<i>6.43</i>	<b>6.60</b>	6.66	6.57
U.S. Average .....	<b>4.44</b>	<b>3.83</b>	<b>3.73</b>	<b>4.72</b>	<i>4.66</i>	<i>3.78</i>	<i>3.71</i>	<i>4.19</i>	<i>4.54</i>	<i>3.70</i>	<i>3.62</i>	<i>4.11</i>	<b>4.21</b>	4.11	4.02

- = 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 - February 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	190.6	185.6	158.1	191.5	187.0	184.1	147.2	173.2	176.9	753.7	722.2	681.5
Appalachia .....	50.0	51.6	49.0	50.7	53.8	46.2	46.4	42.2	47.4	40.3	41.0	41.2	201.2	188.6	169.8
Interior .....	34.0	34.6	34.7	33.9	34.5	29.0	37.1	38.9	36.4	29.6	35.8	37.6	137.1	139.6	139.4
Western .....	103.7	94.6	111.0	106.0	97.3	82.9	107.9	105.9	100.4	77.4	96.4	98.1	415.3	394.0	372.3
Primary Inventory Withdrawals .....	-2.8	2.3	1.1	-0.7	0.7	1.2	0.9	-3.3	-1.1	1.2	0.9	-3.5	-0.1	-0.5	-2.5
Imports .....	1.4	1.5	1.4	1.3	1.2	1.4	1.7	1.7	1.4	1.4	1.7	1.4	5.7	6.0	6.0
Exports .....	27.2	30.9	29.1	28.9	27.1	24.9	24.4	24.1	22.6	23.7	23.3	23.2	116.1	100.6	92.7
Metallurgical Coal .....	14.9	16.9	14.5	15.5	13.7	12.8	13.2	13.1	11.8	12.3	13.1	12.9	61.8	52.9	50.1
Steam Coal .....	12.3	13.9	14.5	13.4	13.4	12.1	11.2	11.0	10.8	11.4	10.2	10.2	54.2	47.7	42.6
Total Primary Supply .....	159.0	153.7	168.1	162.4	160.4	135.8	169.7	161.3	161.8	126.1	152.6	151.7	643.3	627.1	592.2
Secondary Inventory Withdrawals .....	11.9	4.9	20.4	-2.8	-0.1	1.1	3.8	-8.5	0.4	1.5	5.6	-9.6	34.3	-3.8	-2.1
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	10.1	9.3	9.2
Total Supply .....	173.6	160.9	191.2	162.1	162.7	139.2	175.7	155.0	164.5	129.8	160.5	144.4	687.7	632.7	599.2
<b>Consumption (million short tons)</b>															
Coke Plants .....	4.2	4.6	4.7	6.0	5.1	4.6	5.3	6.4	5.0	4.7	5.6	6.7	19.5	21.4	21.9
Electric Power Sector (b) .....	154.8	144.2	181.6	157.0	152.8	126.9	162.9	140.9	151.3	117.6	147.7	130.3	637.5	583.4	546.9
Retail and Other Industry .....	8.5	7.9	7.7	8.1	8.1	7.6	7.5	7.7	8.2	7.5	7.3	7.4	32.2	31.0	30.4
Residential and Commercial .....	0.4	0.2	0.2	0.3	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.2	1.0	0.7	0.7
Other Industrial .....	8.2	7.7	7.5	7.8	7.9	7.5	7.4	7.5	7.9	7.4	7.2	7.2	31.2	30.3	29.7
Total Consumption .....	167.6	156.6	194.1	171.0	165.9	139.2	175.7	155.0	164.5	129.8	160.5	144.4	689.3	635.9	599.2
Discrepancy (c) .....	6.1	4.2	-2.9	-9.0	-3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.6	-3.2	0.0
<b>End-of-period Inventories (million short tons)</b>															
Primary Inventories (d) .....	26.8	24.5	23.4	24.1	23.4	22.2	21.3	24.6	25.7	24.5	23.6	27.1	24.1	24.6	27.1
Secondary Inventories .....	131.1	126.2	105.8	108.6	108.7	107.6	103.8	112.4	112.0	110.6	104.9	114.5	108.6	112.4	114.5
Electric Power Sector .....	126.4	121.4	100.7	103.6	103.9	102.4	98.3	106.8	106.8	105.0	99.0	108.6	103.6	106.8	108.6
Retail and General Industry .....	2.9	2.9	3.0	2.9	3.1	3.1	3.2	3.2	3.3	3.3	3.5	3.4	2.9	3.2	3.4
Coke Plants .....	1.5	1.6	1.8	1.9	1.5	1.9	2.0	2.1	1.7	2.0	2.2	2.3	1.9	2.1	2.3
<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	0.287	0.290	0.276	0.246	0.306	0.303	0.280	0.244	0.259	0.274	0.283
Cost of Coal to Electric Utilities															
(Dollars per million Btu) .....	2.06	2.06	2.06	2.07	2.09	2.07	2.06	2.07	2.09	2.08	2.07	2.07	2.06	2.07	2.08

- = 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 - February 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>12.82</b>	<b>10.76</b>	<i>11.03</i>	<i>10.79</i>	<i>12.46</i>	<i>10.64</i>	<i>11.10</i>	<i>10.84</i>	<i>12.51</i>	<i>10.67</i>	<b>11.47</b>	<i>11.23</i>	<i>11.28</i>
Electric Power Sector (a) .....	<b>10.69</b>	<b>10.71</b>	<b>12.37</b>	<b>10.32</b>	<i>10.58</i>	<i>10.35</i>	<i>12.01</i>	<i>10.21</i>	<i>10.65</i>	<i>10.40</i>	<i>12.05</i>	<i>10.23</i>	<b>11.03</b>	<i>10.79</i>	<i>10.83</i>
Comm. and Indus. Sectors (b) .....	<b>0.43</b>	<b>0.43</b>	<b>0.45</b>	<b>0.44</b>	<i>0.45</i>	<i>0.44</i>	<i>0.45</i>	<i>0.44</i>	<i>0.45</i>	<i>0.44</i>	<i>0.46</i>	<i>0.45</i>	<b>0.44</b>	<i>0.44</i>	<i>0.45</i>
Net Imports .....	<b>0.13</b>	<b>0.12</b>	<b>0.14</b>	<b>0.10</b>	<i>0.13</i>	<i>0.14</i>	<i>0.17</i>	<i>0.13</i>	<i>0.15</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>11.27</b>	<b>12.96</b>	<b>10.86</b>	<i>11.16</i>	<i>10.93</i>	<i>12.62</i>	<i>10.77</i>	<i>11.25</i>	<i>10.99</i>	<i>12.68</i>	<i>10.81</i>	<b>11.59</b>	<i>11.37</i>	<i>11.43</i>
Losses and Unaccounted for (c) .....	<b>0.65</b>	<b>0.94</b>	<b>0.84</b>	<b>0.71</b>	<i>0.64</i>	<i>0.82</i>	<i>0.73</i>	<i>0.68</i>	<i>0.59</i>	<i>0.82</i>	<i>0.74</i>	<i>0.68</i>	<b>0.79</b>	<i>0.72</i>	<i>0.71</i>
<b>Electricity Consumption (billion kilowatthours per day unless noted)</b>															
Retail Sales .....	<b>10.23</b>	<b>9.95</b>	<b>11.72</b>	<b>9.76</b>	<i>10.12</i>	<i>9.72</i>	<i>11.49</i>	<i>9.71</i>	<i>10.26</i>	<i>9.78</i>	<i>11.54</i>	<i>9.73</i>	<b>10.42</b>	<i>10.26</i>	<i>10.33</i>
Residential Sector .....	<b>4.10</b>	<b>3.61</b>	<b>4.72</b>	<b>3.59</b>	<i>4.00</i>	<i>3.41</i>	<i>4.53</i>	<i>3.53</i>	<i>4.10</i>	<i>3.45</i>	<i>4.57</i>	<i>3.56</i>	<b>4.00</b>	<i>3.87</i>	<i>3.92</i>
Commercial Sector .....	<b>3.61</b>	<b>3.71</b>	<b>4.21</b>	<b>3.56</b>	<i>3.60</i>	<i>3.66</i>	<i>4.15</i>	<i>3.56</i>	<i>3.62</i>	<i>3.68</i>	<i>4.17</i>	<i>3.57</i>	<b>3.77</b>	<i>3.74</i>	<i>3.76</i>
Industrial Sector .....	<b>2.50</b>	<b>2.62</b>	<b>2.77</b>	<b>2.59</b>	<i>2.51</i>	<i>2.64</i>	<i>2.79</i>	<i>2.60</i>	<i>2.52</i>	<i>2.63</i>	<i>2.78</i>	<i>2.59</i>	<b>2.62</b>	<i>2.64</i>	<i>2.63</i>
Transportation Sector .....	<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>	<i>0.02</i>	<b>0.02</b>	<i>0.02</i>	<i>0.02</i>
Direct Use (d) .....	<b>0.38</b>	<b>0.38</b>	<b>0.40</b>	<b>0.39</b>	<i>0.40</i>	<i>0.38</i>	<i>0.39</i>	<i>0.38</i>	<i>0.40</i>	<i>0.39</i>	<i>0.40</i>	<i>0.39</i>	<b>0.39</b>	<i>0.39</i>	<i>0.40</i>
Total Consumption .....	<b>10.61</b>	<b>10.32</b>	<b>12.12</b>	<b>10.15</b>	<i>10.52</i>	<i>10.11</i>	<i>11.89</i>	<i>10.09</i>	<i>10.66</i>	<i>10.17</i>	<i>11.95</i>	<i>10.13</i>	<b>10.80</b>	<i>10.65</i>	<i>10.73</i>
Average residential electricity usage per customer (kWh) .....	<b>2,754</b>	<b>2,446</b>	<b>3,238</b>	<b>2,474</b>	<i>2,660</i>	<i>2,289</i>	<i>3,074</i>	<i>2,392</i>	<i>2,722</i>	<i>2,286</i>	<i>3,068</i>	<i>2,385</i>	<b>10,912</b>	<i>10,415</i>	<i>10,461</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>2.07</b>	<i>2.09</i>	<i>2.07</i>	<i>2.06</i>	<i>2.07</i>	<i>2.09</i>	<i>2.08</i>	<i>2.07</i>	<i>2.07</i>	<b>2.06</b>	<i>2.07</i>	<i>2.08</i>
Natural Gas .....	<b>3.96</b>	<b>3.09</b>	<b>3.23</b>	<b>3.99</b>	<i>3.49</i>	<i>2.85</i>	<i>2.77</i>	<i>3.29</i>	<i>3.55</i>	<i>2.73</i>	<i>2.63</i>	<i>3.18</i>	<b>3.52</b>	<i>3.06</i>	<i>2.97</i>
Residual Fuel Oil .....	<b>11.47</b>	<b>13.02</b>	<b>13.87</b>	<b>14.17</b>	<i>12.25</i>	<i>12.73</i>	<i>11.74</i>	<i>11.53</i>	<i>12.08</i>	<i>12.88</i>	<i>12.19</i>	<i>11.96</i>	<b>12.86</b>	<i>12.07</i>	<i>12.25</i>
Distillate Fuel Oil .....	<b>15.77</b>	<b>16.61</b>	<b>16.82</b>	<b>16.29</b>	<i>14.81</i>	<i>14.82</i>	<i>14.93</i>	<i>15.65</i>	<i>16.15</i>	<i>16.59</i>	<i>16.51</i>	<i>16.59</i>	<b>16.17</b>	<i>15.05</i>	<i>16.43</i>
<b>Retail Prices (cents per kilowatthour)</b>															
Residential Sector .....	<b>12.59</b>	<b>13.03</b>	<b>13.15</b>	<b>12.81</b>	<i>12.94</i>	<i>13.51</i>	<i>13.46</i>	<i>13.08</i>	<i>13.08</i>	<i>13.73</i>	<i>13.68</i>	<i>13.31</i>	<b>12.91</b>	<i>13.25</i>	<i>13.45</i>
Commercial Sector .....	<b>10.54</b>	<b>10.59</b>	<b>10.89</b>	<b>10.57</b>	<i>10.60</i>	<i>10.64</i>	<i>10.87</i>	<i>10.54</i>	<i>10.57</i>	<i>10.54</i>	<i>10.82</i>	<i>10.58</i>	<b>10.66</b>	<i>10.67</i>	<i>10.63</i>
Industrial Sector .....	<b>6.81</b>	<b>6.87</b>	<b>7.23</b>	<b>6.83</b>	<i>6.77</i>	<i>6.90</i>	<i>7.26</i>	<i>6.85</i>	<i>6.79</i>	<i>6.98</i>	<i>7.35</i>	<i>6.94</i>	<b>6.94</b>	<i>6.95</i>	<i>7.02</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 - February 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	122	140	111	139	119	141	112	140	120	131	127	128
Middle Atlantic .....	394	323	453	334	391	314	417	327	393	314	417	327	376	362	363
E. N. Central .....	552	480	604	482	542	441	573	475	546	443	575	477	530	508	510
W. N. Central .....	327	274	318	270	315	244	317	266	323	249	323	270	297	285	291
S. Atlantic .....	1,040	920	1,184	930	1,001	877	1,147	897	1,042	886	1,158	905	1,019	981	998
E. S. Central .....	368	301	396	300	349	277	383	287	366	278	385	289	341	324	329
W. S. Central .....	608	582	803	526	580	541	783	521	600	551	797	529	630	607	619
Mountain .....	239	263	360	234	245	257	351	237	248	261	356	240	274	273	276
Pacific contiguous .....	422	339	435	377	420	338	408	384	430	340	410	386	393	387	392
AK and HI .....	14	12	13	13	14	12	13	13	14	12	12	13	13	13	13
Total .....	4,103	3,605	4,719	3,589	3,996	3,412	4,532	3,527	4,102	3,445	4,573	3,556	4,005	3,867	3,920
<b>Commercial Sector</b>															
New England .....	141	136	160	136	140	135	152	134	137	132	147	128	143	140	136
Middle Atlantic .....	431	411	480	412	429	406	462	409	427	403	459	407	434	427	424
E. N. Central .....	499	501	556	481	497	487	545	479	497	486	544	478	509	502	501
W. N. Central .....	282	282	308	272	280	273	309	273	283	275	312	274	286	284	286
S. Atlantic .....	811	862	975	817	803	850	958	807	807	852	959	808	867	855	856
E. S. Central .....	242	253	296	237	241	246	292	235	245	248	293	235	257	254	255
W. S. Central .....	501	549	637	516	508	550	649	528	529	572	671	540	551	559	578
Mountain .....	249	270	310	252	251	267	307	255	252	268	309	256	270	270	271
Pacific contiguous .....	435	424	470	426	432	426	459	426	433	426	460	427	439	436	436
AK and HI .....	16	15	16	16	16	15	16	15	16	15	15	15	16	15	15
Total .....	3,606	3,705	4,205	3,565	3,597	3,657	4,150	3,562	3,625	3,679	4,169	3,569	3,771	3,742	3,761
<b>Industrial Sector</b>															
New England .....	42	43	47	43	40	42	45	42	39	41	44	42	44	42	42
Middle Atlantic .....	196	194	214	193	198	196	216	195	199	196	215	194	200	201	201
E. N. Central .....	499	517	530	501	500	520	533	502	498	516	526	495	512	514	509
W. N. Central .....	232	242	258	245	236	247	264	251	241	252	267	254	244	250	254
S. Atlantic .....	366	388	404	375	362	384	400	371	357	377	390	361	383	379	371
E. S. Central .....	257	261	286	262	254	258	284	261	251	254	277	254	267	264	259
W. S. Central .....	467	500	511	506	475	510	522	514	485	518	528	520	496	506	513
Mountain .....	208	229	251	218	212	233	257	223	216	235	259	225	227	231	234
Pacific contiguous .....	216	231	258	228	216	232	258	229	217	233	258	228	233	234	234
AK and HI .....	13	13	14	13	13	13	14	14	13	13	14	14	13	13	13
Total .....	2,498	2,618	2,773	2,586	2,508	2,637	2,792	2,601	2,516	2,634	2,780	2,587	2,619	2,635	2,630
<b>Total All Sectors (a)</b>															
New England .....	325	292	361	303	322	290	338	297	319	286	333	291	320	312	307
Middle Atlantic .....	1,033	939	1,157	950	1,030	925	1,105	941	1,030	923	1,102	938	1,020	1,000	998
E. N. Central .....	1,552	1,500	1,691	1,466	1,541	1,450	1,652	1,458	1,543	1,447	1,647	1,452	1,552	1,525	1,522
W. N. Central .....	841	798	883	788	831	765	891	790	847	776	902	799	828	819	831
S. Atlantic .....	2,220	2,174	2,567	2,126	2,170	2,115	2,508	2,079	2,209	2,118	2,510	2,077	2,272	2,219	2,229
E. S. Central .....	867	815	979	799	844	782	959	783	862	780	956	778	865	842	844
W. S. Central .....	1,577	1,632	1,951	1,549	1,564	1,602	1,955	1,564	1,614	1,642	1,997	1,590	1,678	1,672	1,711
Mountain .....	697	762	921	704	708	757	916	716	716	765	924	721	772	774	782
Pacific contiguous .....	1,075	996	1,166	1,032	1,071	999	1,128	1,041	1,081	1,001	1,131	1,043	1,067	1,060	1,064
AK and HI .....	42	41	42	42	42	40	42	42	42	40	42	42	42	42	42
Total .....	10,230	9,948	11,718	9,759	10,122	9,725	11,494	9,709	10,264	9,778	11,542	9,732	10,416	10,265	10,331

- = 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 - February 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>20.58</b>	<b>20.39</b>	<b>20.44</b>	21.42	21.49	21.59	21.14	21.87	21.91	22.11	21.77	<b>20.49</b>	21.42	21.92
Middle Atlantic .....	<b>15.62</b>	<b>16.22</b>	<b>16.33</b>	<b>15.85</b>	15.80	16.55	16.70	16.06	16.00	16.81	17.01	16.37	<b>16.02</b>	16.28	16.55
E. N. Central .....	<b>12.94</b>	<b>13.48</b>	<b>13.09</b>	<b>13.26</b>	13.28	14.05	13.58	13.65	13.64	14.44	13.97	14.07	<b>13.18</b>	13.62	14.01
W. N. Central .....	<b>10.90</b>	<b>12.63</b>	<b>13.10</b>	<b>11.55</b>	11.22	13.22	13.45	11.86	11.46	13.53	13.78	12.15	<b>12.04</b>	12.42	12.71
S. Atlantic .....	<b>11.66</b>	<b>11.91</b>	<b>11.82</b>	<b>11.74</b>	11.94	12.23	12.11	11.97	12.00	12.33	12.22	12.11	<b>11.78</b>	12.06	12.16
E. S. Central .....	<b>10.86</b>	<b>11.40</b>	<b>11.16</b>	<b>11.22</b>	11.16	11.88	11.47	11.49	11.25	12.10	11.73	11.79	<b>11.15</b>	11.48	11.69
W. S. Central .....	<b>10.53</b>	<b>11.01</b>	<b>10.97</b>	<b>10.88</b>	10.83	11.37	11.10	10.82	10.69	11.31	11.14	10.90	<b>10.85</b>	11.04	11.02
Mountain .....	<b>11.58</b>	<b>12.25</b>	<b>12.26</b>	<b>11.83</b>	11.78	12.53	12.52	12.05	12.01	12.79	12.79	12.32	<b>12.02</b>	12.26	12.51
Pacific .....	<b>14.88</b>	<b>15.28</b>	<b>17.20</b>	<b>14.68</b>	15.25	15.86	17.72	15.13	15.74	16.49	18.12	15.36	<b>15.56</b>	16.01	16.43
U.S. Average .....	<b>12.59</b>	<b>13.03</b>	<b>13.15</b>	<b>12.81</b>	12.94	13.51	13.46	13.08	13.08	13.73	13.68	13.31	<b>12.91</b>	13.25	13.45
<b>Commercial Sector</b>															
New England .....	<b>16.61</b>	<b>15.91</b>	<b>16.18</b>	<b>16.35</b>	16.47	15.22	15.58	15.64	16.13	14.48	14.92	15.29	<b>16.26</b>	15.73	15.21
Middle Atlantic .....	<b>12.08</b>	<b>12.22</b>	<b>13.15</b>	<b>12.10</b>	12.00	12.13	13.04	12.09	11.87	11.99	13.00	12.22	<b>12.41</b>	12.34	12.29
E. N. Central .....	<b>10.10</b>	<b>10.15</b>	<b>10.08</b>	<b>10.16</b>	10.21	10.34	10.26	10.31	10.30	10.45	10.40	10.48	<b>10.12</b>	10.28	10.41
W. N. Central .....	<b>9.18</b>	<b>10.03</b>	<b>10.38</b>	<b>9.27</b>	9.25	10.27	10.60	9.51	9.37	10.46	10.86	9.82	<b>9.73</b>	9.93	10.15
S. Atlantic .....	<b>9.61</b>	<b>9.30</b>	<b>9.18</b>	<b>9.48</b>	9.98	9.49	9.26	9.52	10.15	9.49	9.24	9.54	<b>9.38</b>	9.54	9.59
E. S. Central .....	<b>10.51</b>	<b>10.48</b>	<b>10.34</b>	<b>10.58</b>	10.21	10.45	10.35	10.62	10.00	10.37	10.39	10.79	<b>10.47</b>	10.40	10.38
W. S. Central .....	<b>8.37</b>	<b>8.17</b>	<b>8.12</b>	<b>8.01</b>	7.83	7.66	7.62	7.67	7.32	7.13	7.27	7.58	<b>8.16</b>	7.69	7.32
Mountain .....	<b>9.26</b>	<b>9.87</b>	<b>9.99</b>	<b>9.43</b>	9.14	9.84	10.00	9.45	9.13	9.83	10.01	9.51	<b>9.66</b>	9.63	9.64
Pacific .....	<b>12.90</b>	<b>14.02</b>	<b>15.87</b>	<b>13.86</b>	13.45	14.56	16.45	13.97	13.91	14.85	16.65	13.94	<b>14.21</b>	14.64	14.87
U.S. Average .....	<b>10.54</b>	<b>10.59</b>	<b>10.89</b>	<b>10.57</b>	10.60	10.64	10.87	10.54	10.57	10.54	10.82	10.58	<b>10.66</b>	10.67	10.63
<b>Industrial Sector</b>															
New England .....	<b>13.48</b>	<b>12.61</b>	<b>12.82</b>	<b>13.04</b>	14.26	13.17	13.20	13.28	14.90	13.56	13.46	13.44	<b>12.98</b>	13.46	13.82
Middle Atlantic .....	<b>7.20</b>	<b>6.80</b>	<b>6.85</b>	<b>6.85</b>	6.89	6.63	6.72	6.69	6.74	6.52	6.67	6.66	<b>6.92</b>	6.73	6.65
E. N. Central .....	<b>7.10</b>	<b>6.96</b>	<b>6.99</b>	<b>7.03</b>	7.00	6.95	7.00	7.06	7.04	7.03	7.07	7.13	<b>7.02</b>	7.00	7.07
W. N. Central .....	<b>7.05</b>	<b>7.38</b>	<b>7.99</b>	<b>6.85</b>	7.15	7.50	8.12	6.96	7.26	7.64	8.25	7.07	<b>7.33</b>	7.45	7.57
S. Atlantic .....	<b>6.54</b>	<b>6.40</b>	<b>6.60</b>	<b>6.49</b>	6.49	6.45	6.62	6.48	6.47	6.51	6.69	6.56	<b>6.51</b>	6.51	6.56
E. S. Central .....	<b>5.74</b>	<b>5.93</b>	<b>5.87</b>	<b>5.92</b>	5.82	6.05	5.96	5.99	5.92	6.21	6.09	6.12	<b>5.87</b>	5.96	6.08
W. S. Central .....	<b>5.42</b>	<b>5.41</b>	<b>5.67</b>	<b>5.33</b>	5.20	5.33	5.60	5.27	5.06	5.31	5.62	5.35	<b>5.46</b>	5.36	5.34
Mountain .....	<b>6.10</b>	<b>6.48</b>	<b>6.93</b>	<b>6.02</b>	6.11	6.57	7.07	6.16	6.28	6.76	7.27	6.33	<b>6.41</b>	6.51	6.69
Pacific .....	<b>8.63</b>	<b>9.53</b>	<b>11.19</b>	<b>9.81</b>	8.84	9.63	11.31	9.89	8.98	9.73	11.41	9.96	<b>9.85</b>	9.98	10.08
U.S. Average .....	<b>6.81</b>	<b>6.87</b>	<b>7.23</b>	<b>6.83</b>	6.77	6.90	7.26	6.85	6.79	6.98	7.35	6.94	<b>6.94</b>	6.95	7.02
<b>All Sectors (a)</b>															
New England .....	<b>17.88</b>	<b>17.16</b>	<b>17.49</b>	<b>17.48</b>	18.32	17.29	17.71	17.49	18.48	17.22	17.73	17.66	<b>17.51</b>	17.71	17.79
Middle Atlantic .....	<b>12.48</b>	<b>12.46</b>	<b>13.22</b>	<b>12.34</b>	12.45	12.45	13.17	12.34	12.44	12.46	13.27	12.50	<b>12.66</b>	12.62	12.69
E. N. Central .....	<b>10.14</b>	<b>10.11</b>	<b>10.18</b>	<b>10.11</b>	10.25	10.25	10.35	10.28	10.43	10.45	10.58	10.51	<b>10.14</b>	10.28	10.49
W. N. Central .....	<b>9.26</b>	<b>10.12</b>	<b>10.66</b>	<b>9.31</b>	9.40	10.32	10.88	9.49	9.57	10.53	11.13	9.73	<b>9.86</b>	10.04	10.26
S. Atlantic .....	<b>10.06</b>	<b>9.88</b>	<b>9.99</b>	<b>9.94</b>	10.30	10.07	10.14	10.03	10.42	10.15	10.22	10.14	<b>9.97</b>	10.14	10.23
E. S. Central .....	<b>9.24</b>	<b>9.36</b>	<b>9.36</b>	<b>9.30</b>	9.29	9.50	9.50	9.40	9.34	9.63	9.68	9.63	<b>9.32</b>	9.42	9.57
W. S. Central .....	<b>8.33</b>	<b>8.34</b>	<b>8.65</b>	<b>8.13</b>	8.15	8.17	8.48	7.93	7.89	7.96	8.38	7.95	<b>8.38</b>	8.20	8.06
Mountain .....	<b>9.11</b>	<b>9.67</b>	<b>10.04</b>	<b>9.16</b>	9.15	9.75	10.14	9.29	9.28	9.89	10.31	9.46	<b>9.54</b>	9.62	9.78
Pacific .....	<b>12.81</b>	<b>13.39</b>	<b>15.32</b>	<b>13.26</b>	13.22	13.83	15.72	13.49	13.64	14.20	15.97	13.58	<b>13.75</b>	14.10	14.38
U.S. Average .....	<b>10.45</b>	<b>10.50</b>	<b>10.94</b>	<b>10.41</b>	10.57	10.63	11.01	10.47	10.65	10.70	11.12	10.61	<b>10.59</b>	10.69	10.78

- = 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 - February 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 .....	<b>3,127</b>	<b>2,859</b>	<b>3,559</b>	<b>3,077</b>	<i>3,098</i>	<i>2,529</i>	<i>3,190</i>	<i>2,743</i>	<i>3,029</i>	<i>2,336</i>	<i>2,878</i>	<i>2,524</i>	<b>3,157</b>	<i>2,890</i>	<i>2,691</i>
Natural Gas .....	<b>3,456</b>	<b>3,806</b>	<b>5,160</b>	<b>3,660</b>	<i>3,573</i>	<i>3,831</i>	<i>5,027</i>	<i>3,659</i>	<i>3,565</i>	<i>3,943</i>	<i>5,327</i>	<i>3,825</i>	<b>4,024</b>	<i>4,026</i>	<i>4,167</i>
Petroleum (a) .....	<b>102</b>	<b>53</b>	<b>61</b>	<b>54</b>	<i>74</i>	<i>57</i>	<i>64</i>	<i>56</i>	<i>73</i>	<i>57</i>	<i>64</i>	<i>57</i>	<b>67</b>	<i>63</i>	<i>63</i>
Other Gases .....	<b>34</b>	<b>33</b>	<b>36</b>	<b>31</b>	<i>33</i>	<i>32</i>	<i>36</i>	<i>31</i>	<i>33</i>	<i>32</i>	<i>36</i>	<i>31</i>	<b>33</b>	<i>33</i>	<i>33</i>
Nuclear .....	<b>2,294</b>	<b>2,155</b>	<b>2,277</b>	<b>2,118</b>	<i>2,239</i>	<i>2,097</i>	<i>2,271</i>	<i>2,135</i>	<i>2,180</i>	<i>2,023</i>	<i>2,180</i>	<i>2,061</i>	<b>2,211</b>	<i>2,185</i>	<i>2,111</i>
Renewable Energy Sources:	<b>2,094</b>	<b>2,212</b>	<b>1,718</b>	<b>1,799</b>	<i>1,987</i>	<i>2,219</i>	<i>1,850</i>	<i>1,998</i>	<i>2,201</i>	<i>2,428</i>	<i>2,007</i>	<i>2,153</i>	<b>1,954</b>	<i>2,013</i>	<i>2,196</i>
Conventional Hydropower .....	<b>856</b>	<b>944</b>	<b>696</b>	<b>688</b>	<i>712</i>	<i>840</i>	<i>705</i>	<i>666</i>	<i>780</i>	<i>889</i>	<i>730</i>	<i>682</i>	<b>795</b>	<i>730</i>	<i>770</i>
Wind .....	<b>869</b>	<b>821</b>	<b>582</b>	<b>757</b>	<i>901</i>	<i>917</i>	<i>677</i>	<i>942</i>	<i>1,020</i>	<i>1,036</i>	<i>758</i>	<i>1,043</i>	<b>756</b>	<i>859</i>	<i>964</i>
Wood Biomass .....	<b>119</b>	<b>113</b>	<b>115</b>	<b>111</b>	<i>116</i>	<i>114</i>	<i>122</i>	<i>116</i>	<i>119</i>	<i>115</i>	<i>123</i>	<i>117</i>	<b>114</b>	<i>117</i>	<i>119</i>
Waste Biomass .....	<b>61</b>	<b>58</b>	<b>57</b>	<b>59</b>	<i>57</i>	<i>58</i>	<i>59</i>	<i>59</i>	<i>58</i>	<i>58</i>	<i>59</i>	<i>59</i>	<b>59</b>	<i>58</i>	<i>58</i>
Geothermal .....	<b>46</b>	<b>45</b>	<b>46</b>	<b>46</b>	<i>46</i>	<i>45</i>	<i>45</i>	<i>46</i>	<i>46</i>	<i>45</i>	<i>45</i>	<i>47</i>	<b>46</b>	<i>45</i>	<i>46</i>
Solar .....	<b>142</b>	<b>232</b>	<b>222</b>	<b>139</b>	<i>155</i>	<i>245</i>	<i>242</i>	<i>170</i>	<i>179</i>	<i>285</i>	<i>292</i>	<i>204</i>	<b>184</b>	<i>203</i>	<i>240</i>
Pumped Storage Hydropower .....	<b>-15</b>	<b>-13</b>	<b>-22</b>	<b>-14</b>	<i>-13</i>	<i>-12</i>	<i>-18</i>	<i>-14</i>	<i>-13</i>	<i>-12</i>	<i>-18</i>	<i>-14</i>	<b>-16</b>	<i>-14</i>	<i>-14</i>
Other Nonrenewable Fuels (b) .....	<b>36</b>	<b>35</b>	<b>32</b>	<b>36</b>	<i>35</i>	<i>36</i>	<i>36</i>	<i>36</i>	<i>35</i>	<i>36</i>	<i>36</i>	<i>36</i>	<b>35</b>	<i>36</i>	<i>36</i>
Total Generation .....	<b>11,128</b>	<b>11,141</b>	<b>12,822</b>	<b>10,761</b>	<i>11,026</i>	<i>10,788</i>	<i>12,457</i>	<i>10,644</i>	<i>11,103</i>	<i>10,842</i>	<i>12,510</i>	<i>10,673</i>	<b>11,466</b>	<i>11,231</i>	<i>11,284</i>
<b>Northeast Census Region</b>															
Coal .....	<b>149</b>	<b>120</b>	<b>132</b>	<b>141</b>	<i>179</i>	<i>73</i>	<i>73</i>	<i>119</i>	<i>183</i>	<i>75</i>	<i>54</i>	<i>101</i>	<b>136</b>	<i>111</i>	<i>103</i>
Natural Gas .....	<b>500</b>	<b>527</b>	<b>783</b>	<b>548</b>	<i>552</i>	<i>607</i>	<i>775</i>	<i>591</i>	<i>556</i>	<i>635</i>	<i>822</i>	<i>614</i>	<b>590</b>	<i>632</i>	<i>657</i>
Petroleum (a) .....	<b>32</b>	<b>3</b>	<b>3</b>	<b>3</b>	<i>13</i>	<i>2</i>	<i>4</i>	<i>4</i>	<i>11</i>	<i>2</i>	<i>4</i>	<i>5</i>	<b>10</b>	<i>6</i>	<i>5</i>
Other Gases .....	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<i>2</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>2</i>	<i>2</i>	<b>2</b>	<i>2</i>	<i>2</i>
Nuclear .....	<b>552</b>	<b>507</b>	<b>525</b>	<b>497</b>	<i>512</i>	<i>476</i>	<i>507</i>	<i>463</i>	<i>473</i>	<i>429</i>	<i>459</i>	<i>435</i>	<b>520</b>	<i>489</i>	<i>449</i>
Hydropower (c) .....	<b>108</b>	<b>114</b>	<b>106</b>	<b>117</b>	<i>105</i>	<i>106</i>	<i>102</i>	<i>102</i>	<i>105</i>	<i>103</i>	<i>99</i>	<i>101</i>	<b>111</b>	<i>104</i>	<i>102</i>
Other Renewables (d) .....	<b>81</b>	<b>76</b>	<b>72</b>	<b>75</b>	<i>83</i>	<i>76</i>	<i>70</i>	<i>84</i>	<i>87</i>	<i>79</i>	<i>72</i>	<i>87</i>	<b>76</b>	<i>78</i>	<i>81</i>
Other Nonrenewable Fuels (b) .....	<b>11</b>	<b>10</b>	<b>11</b>	<b>11</b>	<i>11</i>	<i>11</i>	<i>12</i>	<i>12</i>	<i>11</i>	<i>11</i>	<i>11</i>	<i>12</i>	<b>11</b>	<i>11</i>	<i>11</i>
Total Generation .....	<b>1,435</b>	<b>1,359</b>	<b>1,635</b>	<b>1,394</b>	<i>1,456</i>	<i>1,354</i>	<i>1,544</i>	<i>1,376</i>	<i>1,427</i>	<i>1,335</i>	<i>1,524</i>	<i>1,357</i>	<b>1,456</b>	<i>1,433</i>	<i>1,411</i>
<b>South Census Region</b>															
Coal .....	<b>1,262</b>	<b>1,260</b>	<b>1,529</b>	<b>1,253</b>	<i>1,253</i>	<i>1,089</i>	<i>1,379</i>	<i>1,094</i>	<i>1,223</i>	<i>996</i>	<i>1,214</i>	<i>986</i>	<b>1,326</b>	<i>1,204</i>	<i>1,105</i>
Natural Gas .....	<b>2,049</b>	<b>2,345</b>	<b>2,955</b>	<b>2,061</b>	<i>1,990</i>	<i>2,324</i>	<i>2,913</i>	<i>2,067</i>	<i>2,057</i>	<i>2,415</i>	<i>3,090</i>	<i>2,167</i>	<b>2,354</b>	<i>2,325</i>	<i>2,433</i>
Petroleum (a) .....	<b>39</b>	<b>21</b>	<b>26</b>	<b>20</b>	<i>29</i>	<i>25</i>	<i>28</i>	<i>22</i>	<i>30</i>	<i>25</i>	<i>28</i>	<i>22</i>	<b>26</b>	<i>26</i>	<i>26</i>
Other Gases .....	<b>13</b>	<b>12</b>	<b>14</b>	<b>12</b>	<i>12</i>	<i>12</i>	<i>13</i>	<i>12</i>	<i>12</i>	<i>11</i>	<i>13</i>	<i>12</i>	<b>13</b>	<i>12</i>	<i>12</i>
Nuclear .....	<b>1,008</b>	<b>952</b>	<b>1,010</b>	<b>934</b>	<i>1,008</i>	<i>947</i>	<i>1,032</i>	<i>978</i>	<i>998</i>	<i>937</i>	<i>1,018</i>	<i>965</i>	<b>976</b>	<i>991</i>	<i>980</i>
Hydropower (c) .....	<b>114</b>	<b>127</b>	<b>112</b>	<b>136</b>	<i>111</i>	<i>118</i>	<i>107</i>	<i>117</i>	<i>111</i>	<i>114</i>	<i>104</i>	<i>117</i>	<b>122</b>	<i>114</i>	<i>112</i>
Other Renewables (d) .....	<b>452</b>	<b>494</b>	<b>375</b>	<b>405</b>	<i>476</i>	<i>522</i>	<i>431</i>	<i>487</i>	<i>535</i>	<i>593</i>	<i>493</i>	<i>543</i>	<b>431</b>	<i>479</i>	<i>541</i>
Other Nonrenewable Fuels (b) .....	<b>16</b>	<b>16</b>	<b>11</b>	<b>16</b>	<i>15</i>	<i>15</i>	<i>15</i>	<i>15</i>	<i>15</i>	<i>15</i>	<i>14</i>	<i>15</i>	<b>15</b>	<i>15</i>	<i>15</i>
Total Generation .....	<b>4,952</b>	<b>5,227</b>	<b>6,031</b>	<b>4,837</b>	<i>4,895</i>	<i>5,051</i>	<i>5,917</i>	<i>4,793</i>	<i>4,982</i>	<i>5,107</i>	<i>5,975</i>	<i>4,826</i>	<b>5,264</b>	<i>5,166</i>	<i>5,224</i>
<b>Midwest Census Region</b>															
Coal .....	<b>1,303</b>	<b>1,140</b>	<b>1,386</b>	<b>1,237</b>	<i>1,219</i>	<i>1,000</i>	<i>1,250</i>	<i>1,087</i>	<i>1,182</i>	<i>955</i>	<i>1,194</i>	<i>1,044</i>	<b>1,267</b>	<i>1,139</i>	<i>1,094</i>
Natural Gas .....	<b>403</b>	<b>441</b>	<b>552</b>	<b>388</b>	<i>430</i>	<i>409</i>	<i>567</i>	<i>387</i>	<i>416</i>	<i>411</i>	<i>611</i>	<i>409</i>	<b>446</b>	<i>449</i>	<i>462</i>
Petroleum (a) .....	<b>10</b>	<b>7</b>	<b>9</b>	<b>8</b>	<i>10</i>	<i>9</i>	<i>10</i>	<i>8</i>	<i>10</i>	<i>9</i>	<i>10</i>	<i>8</i>	<b>8</b>	<i>9</i>	<i>9</i>
Other Gases .....	<b>13</b>	<b>12</b>	<b>14</b>	<b>11</b>	<i>12</i>	<i>12</i>	<i>14</i>	<i>11</i>	<i>13</i>	<i>13</i>	<i>15</i>	<i>12</i>	<b>12</b>	<i>12</i>	<i>13</i>
Nuclear .....	<b>571</b>	<b>539</b>	<b>569</b>	<b>533</b>	<i>553</i>	<i>519</i>	<i>564</i>	<i>534</i>	<i>546</i>	<i>505</i>	<i>536</i>	<i>503</i>	<b>553</b>	<i>542</i>	<i>522</i>
Hydropower (c) .....	<b>57</b>	<b>58</b>	<b>36</b>	<b>42</b>	<i>56</i>	<i>55</i>	<i>36</i>	<i>37</i>	<i>55</i>	<i>54</i>	<i>35</i>	<i>36</i>	<b>48</b>	<i>46</i>	<i>45</i>
Other Renewables (d) .....	<b>367</b>	<b>303</b>	<b>234</b>	<b>332</b>	<i>399</i>	<i>372</i>	<i>274</i>	<i>441</i>	<i>467</i>	<i>437</i>	<i>317</i>	<i>498</i>	<b>309</b>	<i>371</i>	<i>429</i>
Other Nonrenewable Fuels (b) .....	<b>4</b>	<b>3</b>	<b>4</b>	<b>4</b>	<i>4</i>	<i>4</i>	<i>4</i>	<i>4</i>	<i>4</i>	<i>4</i>	<i>4</i>	<i>4</i>	<b>4</b>	<i>4</i>	<i>4</i>
Total Generation .....	<b>2,727</b>	<b>2,505</b>	<b>2,804</b>	<b>2,554</b>	<i>2,683</i>	<i>2,380</i>	<i>2,719</i>	<i>2,510</i>	<i>2,692</i>	<i>2,386</i>	<i>2,722</i>	<i>2,514</i>	<b>2,647</b>	<i>2,573</i>	<i>2,579</i>
<b>West Census Region</b>															
Coal .....	<b>413</b>	<b>339</b>	<b>512</b>	<b>446</b>	<i>447</i>	<i>366</i>	<i>488</i>	<i>443</i>	<i>441</i>	<i>310</i>	<i>415</i>	<i>392</i>	<b>428</b>	<i>436</i>	<i>389</i>
Natural Gas .....	<b>503</b>	<b>493</b>	<b>871</b>	<b>664</b>	<i>601</i>	<i>492</i>	<i>773</i>	<i>614</i>	<i>535</i>	<i>482</i>	<i>803</i>	<i>635</i>	<b>634</b>	<i>620</i>	<i>615</i>
Petroleum (a) .....	<b>21</b>	<b>21</b>	<b>23</b>	<b>24</b>	<i>22</i>	<i>21</i>	<i>22</i>	<i>22</i>	<i>22</i>	<i>21</i>	<i>23</i>	<i>22</i>	<b>22</b>	<i>22</i>	<i>22</i>
Other Gases .....	<b>7</b>	<b>7</b>	<b>7</b>	<b>6</b>	<i>7</i>	<i>7</i>	<i>6</i>	<i>6</i>	<i>7</i>	<i>7</i>	<i>7</i>	<i>6</i>	<b>6</b>	<i>6</i>	<i>6</i>
Nuclear .....	<b>164</b>	<b>158</b>	<b>173</b>	<b>154</b>	<i>165</i>	<i>155</i>	<i>169</i>	<i>160</i>	<i>163</i>	<i>153</i>	<i>166</i>	<i>158</i>	<b>162</b>	<i>162</i>	<i>160</i>
Hydropower (c) .....	<b>562</b>	<b>632</b>	<b>420</b>	<b>379</b>	<i>427</i>	<i>548</i>	<i>442</i>	<i>395</i>	<i>496</i>	<i>605</i>	<i>474</i>	<i>414</i>	<b>497</b>	<i>453</i>	<i>497</i>
Other Renewables (d) .....	<b>338</b>	<b>395</b>	<b>341</b>	<b>298</b>	<i>316</i>	<i>409</i>	<i>370</i>	<i>320</i>	<i>332</i>	<i>430</i>	<i>394</i>	<i>342</i>	<b>343</b>	<i>354</i>	<i>375</i>
Other Nonrenewable Fuels (b) .....	<b>6</b>	<b>6</b>	<b>6</b>	<b>5</b>	<i>5</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>5</i>	<i>6</i>	<i>6</i>	<i>6</i>	<b>6</b>	<i>6</i>	<i>6</i>
Total Generation .....	<b>2,014</b>	<b>2,051</b>	<b>2,352</b>	<b>1,976</b>	<i>1,991</i>	<i>2,003</i>	<i>2,276</i>	<i>1,966</i>	<i>2,001</i>	<i>2,014</i>	<i>2,288</i>	<i>1,975</i>	<b>2,099</b>	<i>2,060</i>	<i>2,070</i>

(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 - February 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	1,704	1,693	1,390	1,765	1,526	1,657	1,287	1,600	1,410	1,745	1,593	1,489
Natural Gas (million cf/d) .....	<b>25,473</b>	<b>28,252</b>	<b>38,455</b>	<b>26,670</b>	26,032	28,420	37,696	26,680	25,935	29,215	39,906	27,852	<b>29,740</b>	29,731	30,744
Petroleum (thousand b/d) .....	<b>180</b>	<b>96</b>	<b>111</b>	<b>96</b>	132	103	116	102	132	103	116	104	<b>120</b>	113	114
Residual Fuel Oil .....	<b>51</b>	<b>27</b>	<b>30</b>	<b>27</b>	39	24	28	25	36	25	29	28	<b>33</b>	29	30
Distillate Fuel Oil .....	<b>71</b>	<b>26</b>	<b>22</b>	<b>26</b>	33	25	25	28	35	25	25	28	<b>36</b>	27	28
Petroleum Coke (a) .....	<b>48</b>	<b>40</b>	<b>54</b>	<b>39</b>	55	50	59	45	56	50	59	45	<b>45</b>	52	52
Other Petroleum Liquids (b) ....	<b>9</b>	<b>4</b>	<b>5</b>	<b>5</b>	6	3	4	4	5	3	4	4	<b>6</b>	4	4
<b>Northeast Census Region</b>															
Coal (thousand st/d) .....	<b>77</b>	<b>63</b>	<b>69</b>	<b>74</b>	92	38	39	62	94	39	29	53	<b>71</b>	58	54
Natural Gas (million cf/d) .....	<b>3,815</b>	<b>3,894</b>	<b>5,823</b>	<b>3,975</b>	4,096	4,540	5,904	4,362	4,131	4,745	6,261	4,533	<b>4,381</b>	4,729	4,920
Petroleum (thousand b/d) .....	<b>53</b>	<b>6</b>	<b>6</b>	<b>5</b>	22	4	7	7	19	4	7	9	<b>17</b>	10	10
<b>South Census Region</b>															
Coal (thousand st/d) .....	<b>659</b>	<b>670</b>	<b>821</b>	<b>679</b>	654	573	732	586	637	526	648	531	<b>708</b>	636	586
Natural Gas (million cf/d) .....	<b>14,730</b>	<b>17,258</b>	<b>21,785</b>	<b>14,960</b>	14,274	17,098	21,609	14,933	14,715	17,731	22,870	15,608	<b>17,197</b>	16,993	17,739
Petroleum (thousand b/d) .....	<b>72</b>	<b>39</b>	<b>48</b>	<b>37</b>	54	46	52	42	57	46	51	42	<b>49</b>	48	49
<b>Midwest Census Region</b>															
Coal (thousand st/d) .....	<b>743</b>	<b>654</b>	<b>793</b>	<b>697</b>	689	570	715	622	671	545	683	598	<b>722</b>	649	624
Natural Gas (million cf/d) .....	<b>3,135</b>	<b>3,415</b>	<b>4,309</b>	<b>2,924</b>	3,214	3,098	4,413	2,884	3,108	3,111	4,750	3,036	<b>3,448</b>	3,404	3,503
Petroleum (thousand b/d) .....	<b>19</b>	<b>15</b>	<b>17</b>	<b>14</b>	19	18	20	17	19	18	20	16	<b>16</b>	18	18
<b>West Census Region</b>															
Coal (thousand st/d) .....	<b>239</b>	<b>195</b>	<b>290</b>	<b>254</b>	258	209	279	256	255	178	240	228	<b>245</b>	250	225
Natural Gas (million cf/d) .....	<b>3,793</b>	<b>3,685</b>	<b>6,538</b>	<b>4,811</b>	4,448	3,684	5,770	4,502	3,981	3,628	6,024	4,675	<b>4,715</b>	4,605	4,581
Petroleum (thousand b/d) .....	<b>36</b>	<b>36</b>	<b>39</b>	<b>39</b>	37	35	37	36	37	35	38	37	<b>38</b>	36	37
<b>End-of-period U.S. Fuel Inventories Held by Electric Power Sector</b>															
Coal (million short tons) .....	<b>126.4</b>	<b>121.4</b>	<b>100.7</b>	<b>103.6</b>	103.9	102.4	98.3	106.8	106.8	105.0	99.0	108.6	<b>103.6</b>	106.8	108.6
Residual Fuel Oil (mmb) .....	<b>10.1</b>	<b>9.9</b>	<b>8.5</b>	<b>9.0</b>	9.7	10.1	10.4	10.9	10.7	10.7	10.6	10.9	<b>9.0</b>	10.9	10.9
Distillate Fuel Oil (mmb) .....	<b>14.8</b>	<b>14.6</b>	<b>14.2</b>	<b>14.7</b>	15.0	15.1	15.2	15.5	15.7	15.6	15.5	15.7	<b>14.7</b>	15.5	15.7
Petroleum Coke (mmb) .....	<b>4.8</b>	<b>4.1</b>	<b>3.7</b>	<b>3.5</b>	3.5	3.5	3.5	3.5	3.5	3.5	3.6	3.6	<b>3.5</b>	3.5	3.6

(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 - February 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>0.038</b>	<b>0.039</b>	<b>0.039</b>	<i>0.038</i>	<i>0.038</i>	<i>0.038</i>	<i>0.039</i>	<i>0.038</i>	<i>0.038</i>	<i>0.038</i>	<i>0.040</i>	<b>0.154</b>	<i>0.153</i>	<i>0.155</i>
Hydroelectric Power (a) .....	<b>0.706</b>	<b>0.787</b>	<b>0.587</b>	<b>0.580</b>	<i>0.587</i>	<i>0.701</i>	<i>0.596</i>	<i>0.562</i>	<i>0.652</i>	<i>0.743</i>	<i>0.617</i>	<i>0.575</i>	<b>2.660</b>	<i>2.446</i>	<i>2.586</i>
Solar (b) .....	<b>0.116</b>	<b>0.193</b>	<b>0.186</b>	<b>0.117</b>	<i>0.127</i>	<i>0.203</i>	<i>0.203</i>	<i>0.142</i>	<i>0.148</i>	<i>0.236</i>	<i>0.245</i>	<i>0.171</i>	<b>0.613</b>	<i>0.676</i>	<i>0.800</i>
Waste Biomass (c) .....	<b>0.073</b>	<b>0.070</b>	<b>0.067</b>	<b>0.070</b>	<i>0.067</i>	<i>0.069</i>	<i>0.071</i>	<i>0.070</i>	<i>0.068</i>	<i>0.069</i>	<i>0.071</i>	<i>0.070</i>	<b>0.281</b>	<i>0.276</i>	<i>0.279</i>
Wood Biomass .....	<b>0.058</b>	<b>0.053</b>	<b>0.056</b>	<b>0.052</b>	<i>0.054</i>	<i>0.054</i>	<i>0.066</i>	<i>0.060</i>	<i>0.060</i>	<i>0.056</i>	<i>0.068</i>	<i>0.061</i>	<b>0.218</b>	<i>0.235</i>	<i>0.245</i>
Wind .....	<b>0.722</b>	<b>0.689</b>	<b>0.494</b>	<b>0.642</b>	<i>0.748</i>	<i>0.770</i>	<i>0.574</i>	<i>0.799</i>	<i>0.856</i>	<i>0.870</i>	<i>0.643</i>	<i>0.885</i>	<b>2.546</b>	<i>2.892</i>	<i>3.254</i>
Subtotal .....	<b>1.714</b>	<b>1.830</b>	<b>1.429</b>	<b>1.499</b>	<i>1.622</i>	<i>1.835</i>	<i>1.548</i>	<i>1.672</i>	<i>1.821</i>	<i>2.011</i>	<i>1.682</i>	<i>1.803</i>	<b>6.472</b>	<i>6.678</i>	<i>7.318</i>
<b>Industrial Sector</b>															
Biofuel Losses and Co-products (d) .....	<b>0.202</b>	<b>0.204</b>	<b>0.211</b>	<b>0.214</b>	<i>0.202</i>	<i>0.206</i>	<i>0.206</i>	<i>0.206</i>	<i>0.204</i>	<i>0.207</i>	<i>0.208</i>	<i>0.206</i>	<b>0.831</b>	<i>0.820</i>	<i>0.825</i>
Geothermal .....	<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>	<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>	<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>	<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>	<i>0.006</i>	<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>	<i>0.042</i>	<i>0.041</i>	<i>0.041</i>	<i>0.043</i>	<i>0.042</i>	<i>0.041</i>	<i>0.041</i>	<i>0.043</i>	<b>0.167</b>	<i>0.167</i>	<i>0.167</i>
Wood Biomass .....	<b>0.381</b>	<b>0.382</b>	<b>0.389</b>	<b>0.379</b>	<i>0.357</i>	<i>0.349</i>	<i>0.359</i>	<i>0.361</i>	<i>0.350</i>	<i>0.346</i>	<i>0.358</i>	<i>0.360</i>	<b>1.531</b>	<i>1.426</i>	<i>1.413</i>
Subtotal .....	<b>0.636</b>	<b>0.635</b>	<b>0.647</b>	<b>0.646</b>	<i>0.610</i>	<i>0.605</i>	<i>0.615</i>	<i>0.619</i>	<i>0.604</i>	<i>0.604</i>	<i>0.616</i>	<i>0.617</i>	<b>2.565</b>	<i>2.448</i>	<i>2.440</i>
<b>Commercial Sector</b>															
Geothermal .....	<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>	<i>0.005</i>	<b>0.020</b>	<i>0.020</i>	<i>0.020</i>
Solar (b) .....	<b>0.019</b>	<b>0.029</b>	<b>0.029</b>	<b>0.020</b>	<i>0.023</i>	<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>0.117</i>	<i>0.142</i>
Waste Biomass (c) .....	<b>0.011</b>	<b>0.011</b>	<b>0.010</b>	<b>0.012</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>	<i>0.011</i>	<b>0.045</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>	<i>0.021</i>	<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>0.065</b>	<i>0.067</i>	<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>0.273</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>0.012</b>	<i>0.013</i>	<i>0.013</i>	<i>0.013</i>	<i>0.013</i>	<i>0.013</i>	<i>0.013</i>	<i>0.013</i>	<i>0.013</i>	<b>0.042</b>	<i>0.053</i>	<i>0.053</i>
Solar (e) .....	<b>0.043</b>	<b>0.066</b>	<b>0.066</b>	<b>0.046</b>	<i>0.049</i>	<i>0.076</i>	<i>0.078</i>	<i>0.054</i>	<i>0.058</i>	<i>0.088</i>	<i>0.090</i>	<i>0.062</i>	<b>0.221</b>	<i>0.256</i>	<i>0.298</i>
Wood Biomass .....	<b>0.128</b>	<b>0.129</b>	<b>0.130</b>	<b>0.113</b>	<i>0.105</i>	<i>0.105</i>	<i>0.105</i>	<i>0.105</i>	<i>0.105</i>	<i>0.105</i>	<i>0.105</i>	<i>0.105</i>	<b>0.500</b>	<i>0.420</i>	<i>0.420</i>
Subtotal .....	<b>0.180</b>	<b>0.205</b>	<b>0.207</b>	<b>0.171</b>	<i>0.167</i>	<i>0.194</i>	<i>0.196</i>	<i>0.172</i>	<i>0.176</i>	<i>0.206</i>	<i>0.208</i>	<i>0.181</i>	<b>0.762</b>	<i>0.729</i>	<i>0.770</i>
<b>Transportation Sector</b>															
Biomass-based Diesel (f) .....	<b>0.054</b>	<b>0.068</b>	<b>0.071</b>	<b>0.068</b>	<i>0.063</i>	<i>0.078</i>	<i>0.083</i>	<i>0.096</i>	<i>0.072</i>	<i>0.085</i>	<i>0.089</i>	<i>0.094</i>	<b>0.262</b>	<i>0.321</i>	<i>0.341</i>
Ethanol (f) .....	<b>0.273</b>	<b>0.286</b>	<b>0.294</b>	<b>0.296</b>	<i>0.274</i>	<i>0.296</i>	<i>0.297</i>	<i>0.289</i>	<i>0.277</i>	<i>0.297</i>	<i>0.299</i>	<i>0.288</i>	<b>1.148</b>	<i>1.156</i>	<i>1.161</i>
Subtotal .....	<b>0.327</b>	<b>0.354</b>	<b>0.365</b>	<b>0.369</b>	<i>0.337</i>	<i>0.373</i>	<i>0.380</i>	<i>0.385</i>	<i>0.349</i>	<i>0.382</i>	<i>0.389</i>	<i>0.382</i>	<b>1.416</b>	<i>1.476</i>	<i>1.502</i>
<b>All Sectors Total</b>															
Biomass-based Diesel (f) .....	<b>0.054</b>	<b>0.068</b>	<b>0.071</b>	<b>0.068</b>	<i>0.063</i>	<i>0.078</i>	<i>0.083</i>	<i>0.096</i>	<i>0.072</i>	<i>0.085</i>	<i>0.089</i>	<i>0.094</i>	<b>0.262</b>	<i>0.321</i>	<i>0.341</i>
Biofuel Losses and Co-products (d) .....	<b>0.202</b>	<b>0.204</b>	<b>0.211</b>	<b>0.214</b>	<i>0.202</i>	<i>0.206</i>	<i>0.206</i>	<i>0.206</i>	<i>0.204</i>	<i>0.207</i>	<i>0.208</i>	<i>0.206</i>	<b>0.831</b>	<i>0.820</i>	<i>0.825</i>
Ethanol (f) .....	<b>0.283</b>	<b>0.297</b>	<b>0.305</b>	<b>0.301</b>	<i>0.286</i>	<i>0.307</i>	<i>0.308</i>	<i>0.300</i>	<i>0.288</i>	<i>0.308</i>	<i>0.311</i>	<i>0.299</i>	<b>1.186</b>	<i>1.201</i>	<i>1.206</i>
Geothermal .....	<b>0.054</b>	<b>0.053</b>	<b>0.055</b>	<b>0.056</b>	<i>0.057</i>	<i>0.057</i>	<i>0.057</i>	<i>0.058</i>	<i>0.057</i>	<i>0.057</i>	<i>0.058</i>	<i>0.059</i>	<b>0.219</b>	<i>0.229</i>	<i>0.231</i>
Hydroelectric Power (a) .....	<b>0.710</b>	<b>0.791</b>	<b>0.590</b>	<b>0.584</b>	<i>0.591</i>	<i>0.705</i>	<i>0.599</i>	<i>0.565</i>	<i>0.655</i>	<i>0.747</i>	<i>0.620</i>	<i>0.579</i>	<b>2.675</b>	<i>2.461</i>	<i>2.601</i>
Solar (b)(e) .....	<b>0.183</b>	<b>0.295</b>	<b>0.288</b>	<b>0.190</b>	<i>0.205</i>	<i>0.321</i>	<i>0.324</i>	<i>0.227</i>	<i>0.241</i>	<i>0.375</i>	<i>0.387</i>	<i>0.271</i>	<b>0.956</b>	<i>1.078</i>	<i>1.274</i>
Waste Biomass (c) .....	<b>0.128</b>	<b>0.122</b>	<b>0.117</b>	<b>0.126</b>	<i>0.120</i>	<i>0.121</i>	<i>0.122</i>	<i>0.124</i>	<i>0.121</i>	<i>0.121</i>	<i>0.123</i>	<i>0.125</i>	<b>0.493</b>	<i>0.487</i>	<i>0.490</i>
Wood Biomass .....	<b>0.588</b>	<b>0.585</b>	<b>0.596</b>	<b>0.567</b>	<i>0.537</i>	<i>0.529</i>	<i>0.552</i>	<i>0.546</i>	<i>0.535</i>	<i>0.528</i>	<i>0.552</i>	<i>0.546</i>	<b>2.335</b>	<i>2.164</i>	<i>2.162</i>
Wind .....	<b>0.722</b>	<b>0.689</b>	<b>0.494</b>	<b>0.642</b>	<i>0.748</i>	<i>0.770</i>	<i>0.574</i>	<i>0.799</i>	<i>0.856</i>	<i>0.870</i>	<i>0.643</i>	<i>0.885</i>	<b>2.546</b>	<i>2.892</i>	<i>3.254</i>
<b>Total Consumption</b> .....	<b>2.920</b>	<b>3.097</b>	<b>2.720</b>	<b>2.790</b>	<i>2.803</i>	<i>3.085</i>	<i>2.818</i>	<i>2.917</i>	<i>3.023</i>	<i>3.288</i>	<i>2.981</i>	<i>3.057</i>	<b>11.527</b>	<i>11.623</i>	<i>12.350</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 - February 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 .....	7,254	7,227	7,223	7,170	7,363	7,358	7,358	7,358	7,358	7,359	7,401	7,401	7,170	7,358	7,401
Waste .....	4,212	4,184	4,181	4,182	4,217	4,212	4,212	4,212	4,212	4,213	4,213	4,213	4,182	4,212	4,213
Wood .....	3,042	3,042	3,042	2,987	3,146	3,146	3,146	3,146	3,146	3,146	3,188	3,188	2,987	3,146	3,188
Conventional Hydroelectric .....	79,444	79,412	79,412	79,533	79,568	79,607	79,508	79,538	79,629	79,636	79,758	79,763	79,533	79,538	79,763
Geothermal .....	2,499	2,499	2,499	2,499	2,507	2,507	2,507	2,507	2,507	2,507	2,597	2,622	2,499	2,507	2,622
Large-Scale Solar (b) .....	27,974	28,818	29,321	31,679	32,687	33,429	33,730	36,363	37,019	40,126	40,478	43,074	31,679	36,363	43,074
Wind .....	88,541	88,665	89,674	94,657	96,533	97,880	99,688	105,250	107,459	108,264	108,698	113,652	94,657	105,250	113,652
<b>Other Sectors (c)</b>															
Biomass .....	6,656	6,621	6,621	6,621	6,630	6,605	6,607	6,621	6,621	6,621	6,621	6,621	6,621	6,621	6,621
Waste .....	873	873	873	873	873	873	875	889	889	889	889	889	873	889	889
Wood .....	5,783	5,747	5,747	5,748	5,757	5,732	5,732	5,732	5,732	5,732	5,732	5,732	5,748	5,732	5,732
Conventional Hydroelectric .....	357	357	357	357	364	364	364	364	364	362	362	362	357	364	362
Large-Scale Solar (b) .....	359	366	371	377	379	382	382	381	381	384	384	384	377	381	384
Small-Scale Solar (d) .....	17,029	17,863	18,708	19,571	20,512	21,487	22,496	23,541	24,624	25,747	26,908	28,109	19,571	23,541	28,109
Residential Sector .....	10,155	10,657	11,180	11,738	12,308	12,895	13,496	14,116	14,752	15,407	16,079	16,767	11,738	14,116	16,767
Commercial Sector .....	5,490	5,761	6,020	6,273	6,585	6,913	7,258	7,621	8,002	8,403	8,824	9,266	6,273	7,621	9,266
Industrial Sector .....	1,385	1,445	1,509	1,560	1,619	1,679	1,741	1,804	1,870	1,937	2,006	2,077	1,560	1,804	2,077
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 .....	93	85	86	84	86	86	95	90	90	87	96	91	87	89	91
Waste .....	52	49	48	49	48	49	50	49	48	49	50	50	50	49	49
Wood .....	41	36	38	35	38	37	45	40	41	38	46	41	37	40	42
Conventional Hydroelectric .....	852	939	692	683	707	835	701	661	776	884	726	677	791	726	765
Geothermal .....	46	45	46	46	46	45	45	46	46	45	45	47	46	45	46
Large-Scale Solar (b) .....	140	230	219	138	153	242	240	167	176	281	289	201	182	201	237
Wind .....	869	820	581	756	900	917	676	941	1,019	1,035	757	1,042	756	858	963
<b>Other Sectors (c)</b>															
Biomass .....	87	86	86	85	87	86	86	85	87	86	86	85	86	86	86
Waste .....	78	77	77	76	78	77	77	76	78	77	77	76	77	77	77
Wood .....	9	9	8	9	9	9	8	9	9	9	8	9	9	9	9
Conventional Hydroelectric .....	5	5	4	4	5	5	4	4	5	5	4	4	4	4	4
Large-Scale Solar (b) .....	1	3	3	2	2	3	3	3	3	3	3	3	2	3	3
Small-Scale Solar (d) .....	64	97	96	66	76	115	117	82	93	139	140	98	81	98	118
Residential Sector .....	37	57	56	38	44	68	69	48	54	82	82	57	47	57	69
Commercial Sector .....	22	32	32	22	26	38	38	27	32	46	46	33	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 - February 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>18,798</b>	<i>18,876</i>	<i>19,000</i>	<i>19,121</i>	<i>19,240</i>	<i>19,336</i>	<i>19,420</i>	<i>19,491</i>	<i>19,558</i>	<b>18,575</b>	<i>19,059</i>	<i>19,451</i>
Real Personal Consumption Expend. (billion chained 2012 dollars - SAAR) .....	<b>12,723</b>	<b>12,842</b>	<b>12,953</b>	<b>13,073</b>	<i>13,119</i>	<i>13,217</i>	<i>13,311</i>	<i>13,402</i>	<i>13,488</i>	<i>13,557</i>	<i>13,630</i>	<i>13,701</i>	<b>12,898</b>	<i>13,262</i>	<i>13,594</i>
Real Private Fixed Investment (billion chained 2012 dollars - SAAR) .....	<b>3,271</b>	<b>3,322</b>	<b>3,332</b>	<b>3,357</b>	<i>3,378</i>	<i>3,400</i>	<i>3,430</i>	<i>3,469</i>	<i>3,500</i>	<i>3,524</i>	<i>3,550</i>	<i>3,569</i>	<b>3,321</b>	<i>3,419</i>	<i>3,536</i>
Business Inventory Change (billion chained 2012 dollars - SAAR) .....	<b>36</b>	<b>-10</b>	<b>93</b>	<b>92</b>	<i>75</i>	<i>76</i>	<i>84</i>	<i>85</i>	<i>85</i>	<i>79</i>	<i>70</i>	<i>61</i>	<b>53</b>	<i>80</i>	<i>74</i>
Real Government Expenditures (billion chained 2012 dollars - SAAR) .....	<b>3,152</b>	<b>3,172</b>	<b>3,192</b>	<b>3,222</b>	<i>3,250</i>	<i>3,269</i>	<i>3,276</i>	<i>3,280</i>	<i>3,285</i>	<i>3,301</i>	<i>3,297</i>	<i>3,297</i>	<b>3,184</b>	<i>3,269</i>	<i>3,295</i>
Real Exports of Goods & Services (billion chained 2012 dollars - SAAR) .....	<b>2,518</b>	<b>2,574</b>	<b>2,542</b>	<b>2,562</b>	<i>2,597</i>	<i>2,632</i>	<i>2,671</i>	<i>2,715</i>	<i>2,752</i>	<i>2,783</i>	<i>2,808</i>	<i>2,829</i>	<b>2,549</b>	<i>2,654</i>	<i>2,793</i>
Real Imports of Goods & Services (billion chained 2012 dollars - SAAR) .....	<b>3,420</b>	<b>3,415</b>	<b>3,492</b>	<b>3,561</b>	<i>3,605</i>	<i>3,659</i>	<i>3,720</i>	<i>3,783</i>	<i>3,855</i>	<i>3,910</i>	<i>3,955</i>	<i>3,993</i>	<b>3,472</b>	<i>3,692</i>	<i>3,928</i>
Real Disposable Personal Income (billion chained 2012 dollars - SAAR) .....	<b>14,220</b>	<b>14,282</b>	<b>14,365</b>	<b>14,472</b>	<i>14,602</i>	<i>14,717</i>	<i>14,808</i>	<i>14,894</i>	<i>14,966</i>	<i>15,056</i>	<i>15,140</i>	<i>15,211</i>	<b>14,335</b>	<i>14,755</i>	<i>15,093</i>
Non-Farm Employment (millions) .....	<b>148.1</b>	<b>148.7</b>	<b>149.3</b>	<b>150.0</b>	<i>150.5</i>	<i>151.0</i>	<i>151.4</i>	<i>151.9</i>	<i>152.3</i>	<i>152.9</i>	<i>153.0</i>	<i>153.1</i>	<b>149.0</b>	<i>151.2</i>	<i>152.8</i>
Civilian Unemployment Rate (percent) .....	<b>4.1</b>	<b>3.9</b>	<b>3.8</b>	<b>3.8</b>	<i>3.7</i>	<i>3.7</i>	<i>3.6</i>	<i>3.6</i>	<i>3.6</i>	<i>3.6</i>	<i>3.7</i>	<i>3.8</i>	<b>3.9</b>	<i>3.6</i>	<i>3.7</i>
Housing Starts (millions - SAAR) .....	<b>1.32</b>	<b>1.26</b>	<b>1.23</b>	<b>1.24</b>	<i>1.25</i>	<i>1.27</i>	<i>1.31</i>	<i>1.34</i>	<i>1.38</i>	<i>1.40</i>	<i>1.41</i>	<i>1.43</i>	<b>1.26</b>	<i>1.29</i>	<i>1.40</i>
<b>Industrial Production Indices (Index, 2012=100)</b>															
Total Industrial Production .....	<b>105.9</b>	<b>107.3</b>	<b>108.5</b>	<b>109.2</b>	<i>109.8</i>	<i>110.2</i>	<i>110.9</i>	<i>111.5</i>	<i>112.0</i>	<i>112.2</i>	<i>112.5</i>	<i>113.0</i>	<b>107.7</b>	<i>110.6</i>	<i>112.4</i>
Manufacturing .....	<b>104.1</b>	<b>104.8</b>	<b>105.8</b>	<b>106.1</b>	<i>106.7</i>	<i>107.4</i>	<i>108.3</i>	<i>109.1</i>	<i>109.6</i>	<i>109.8</i>	<i>110.0</i>	<i>110.5</i>	<b>105.2</b>	<i>107.9</i>	<i>110.0</i>
Food .....	<b>114.1</b>	<b>114.8</b>	<b>115.8</b>	<b>114.2</b>	<i>115.2</i>	<i>115.9</i>	<i>116.6</i>	<i>117.2</i>	<i>117.7</i>	<i>118.2</i>	<i>118.6</i>	<i>119.2</i>	<b>114.7</b>	<i>116.2</i>	<i>118.4</i>
Paper .....	<b>96.0</b>	<b>96.1</b>	<b>96.2</b>	<b>96.3</b>	<i>96.0</i>	<i>96.0</i>	<i>96.0</i>	<i>96.0</i>	<i>95.7</i>	<i>95.4</i>	<i>95.1</i>	<i>95.1</i>	<b>96.1</b>	<i>96.0</i>	<i>95.3</i>
Petroleum and Coal Products .....	<b>106.6</b>	<b>107.5</b>	<b>107.6</b>	<b>105.7</b>	<i>106.9</i>	<i>107.8</i>	<i>108.6</i>	<i>109.3</i>	<i>109.9</i>	<i>110.1</i>	<i>110.5</i>	<i>110.8</i>	<b>106.8</b>	<i>108.1</i>	<i>110.3</i>
Chemicals .....	<b>96.7</b>	<b>98.9</b>	<b>99.9</b>	<b>100.0</b>	<i>101.2</i>	<i>102.1</i>	<i>102.9</i>	<i>103.8</i>	<i>104.5</i>	<i>105.2</i>	<i>106.0</i>	<i>106.9</i>	<b>98.9</b>	<i>102.5</i>	<i>105.7</i>
Nonmetallic Mineral Products .....	<b>119.2</b>	<b>120.8</b>	<b>119.3</b>	<b>118.5</b>	<i>118.0</i>	<i>118.4</i>	<i>119.1</i>	<i>120.0</i>	<i>120.8</i>	<i>121.5</i>	<i>122.1</i>	<i>122.7</i>	<b>119.4</b>	<i>118.9</i>	<i>121.8</i>
Primary Metals .....	<b>96.1</b>	<b>96.4</b>	<b>96.7</b>	<b>100.4</b>	<i>103.1</i>	<i>104.8</i>	<i>105.6</i>	<i>105.4</i>	<i>104.5</i>	<i>102.8</i>	<i>100.7</i>	<i>98.7</i>	<b>97.4</b>	<i>104.7</i>	<i>101.7</i>
Coal-weighted Manufacturing (a) .....	<b>103.5</b>	<b>104.8</b>	<b>105.2</b>	<b>105.6</b>	<i>106.7</i>	<i>107.6</i>	<i>108.2</i>	<i>108.7</i>	<i>108.7</i>	<i>108.5</i>	<i>108.3</i>	<i>108.2</i>	<b>104.8</b>	<i>107.8</i>	<i>108.5</i>
Distillate-weighted Manufacturing (a) .....	<b>111.1</b>	<b>111.7</b>	<b>111.9</b>	<b>111.5</b>	<i>111.9</i>	<i>112.5</i>	<i>113.2</i>	<i>113.8</i>	<i>114.2</i>	<i>114.3</i>	<i>114.5</i>	<i>114.7</i>	<b>111.5</b>	<i>112.9</i>	<i>114.4</i>
Electricity-weighted Manufacturing (a) .....	<b>104.1</b>	<b>105.2</b>	<b>106.0</b>	<b>106.5</b>	<i>107.5</i>	<i>108.4</i>	<i>109.2</i>	<i>109.8</i>	<i>110.1</i>	<i>110.1</i>	<i>110.0</i>	<i>110.2</i>	<b>105.5</b>	<i>108.7</i>	<i>110.1</i>
Natural Gas-weighted Manufacturing (a) ...	<b>103.8</b>	<b>105.6</b>	<b>106.5</b>	<b>106.4</b>	<i>107.6</i>	<i>108.6</i>	<i>109.4</i>	<i>110.1</i>	<i>110.5</i>	<i>110.6</i>	<i>110.9</i>	<i>111.4</i>	<b>105.6</b>	<i>108.9</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>2.50</b>	<b>2.52</b>	<b>2.53</b>	<i>2.53</i>	<i>2.55</i>	<i>2.56</i>	<i>2.58</i>	<i>2.60</i>	<i>2.61</i>	<i>2.62</i>	<i>2.63</i>	<b>2.51</b>	<i>2.55</i>	<i>2.61</i>
Producer Price Index: All Commodities (index, 1982=1.00) .....	<b>2.01</b>	<b>2.01</b>	<b>2.02</b>	<b>2.02</b>	<i>2.00</i>	<i>2.00</i>	<i>2.01</i>	<i>2.03</i>	<i>2.05</i>	<i>2.05</i>	<i>2.05</i>	<i>2.06</i>	<b>2.01</b>	<i>2.01</i>	<i>2.05</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>	<i>1.78</i>	<i>1.87</i>	<i>1.88</i>	<i>1.83</i>	<i>1.85</i>	<i>1.92</i>	<i>1.90</i>	<i>1.83</i>	<b>2.14</b>	<i>1.84</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>	<i>111.8</i>	<i>112.3</i>	<i>112.9</i>	<i>113.5</i>	<i>114.2</i>	<i>114.9</i>	<i>115.5</i>	<i>116.2</i>	<b>110.3</b>	<i>112.6</i>	<i>115.2</i>
<b>Miscellaneous</b>															
Vehicle Miles Traveled (b) (million miles/day) .....	<b>8,232</b>	<b>9,225</b>	<b>9,080</b>	<b>8,845</b>	<i>8,415</i>	<i>9,372</i>	<i>9,223</i>	<i>8,954</i>	<i>8,491</i>	<i>9,501</i>	<i>9,369</i>	<i>9,033</i>	<b>8,848</b>	<i>8,993</i>	<i>9,099</i>
Air Travel Capacity (Available ton-miles/day, thousands) .....	<b>603</b>	<b>664</b>	<b>667</b>	<b>641</b>	<i>624</i>	<i>658</i>	<i>666</i>	<i>642</i>	<i>622</i>	<i>655</i>	<i>665</i>	<i>643</i>	<b>644</b>	<i>647</i>	<i>646</i>
Aircraft Utilization (Revenue ton-miles/day, thousands) .....	<b>368</b>	<b>414</b>	<b>418</b>	<b>400</b>	<i>385</i>	<i>419</i>	<i>424</i>	<i>403</i>	<i>384</i>	<i>419</i>	<i>426</i>	<i>405</i>	<b>400</b>	<i>408</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>264.1</b>	<i>285.0</i>	<i>326.9</i>	<i>321.6</i>	<i>325.3</i>	<i>323.7</i>	<i>354.5</i>	<i>341.6</i>	<i>341.1</i>	<b>266.1</b>	<i>314.7</i>	<i>340.2</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>	<i>0.287</i>	<i>0.290</i>	<i>0.276</i>	<i>0.246</i>	<i>0.306</i>	<i>0.303</i>	<i>0.280</i>	<i>0.244</i>	<b>0.259</b>	<i>0.274</i>	<i>0.283</i>
<b>Carbon Dioxide (CO2) Emissions (million metric tons)</b>															
Petroleum .....	<b>578</b>	<b>591</b>	<b>601</b>	<b>606</b>	<i>581</i>	<i>595</i>	<i>607</i>	<i>599</i>	<i>590</i>	<i>596</i>	<i>611</i>	<i>601</i>	<b>2,376</b>	<i>2,382</i>	<i>2,399</i>
Natural Gas .....	<b>478</b>	<b>349</b>	<b>370</b>	<b>421</b>	<i>485</i>	<i>354</i>	<i>371</i>	<i>427</i>	<i>490</i>	<i>358</i>	<i>383</i>	<i>431</i>	<b>1,618</b>	<i>1,637</i>	<i>1,662</i>
Coal .....	<b>308</b>	<b>288</b>	<b>356</b>	<b>317</b>	<i>307</i>	<i>257</i>	<i>324</i>	<i>289</i>	<i>304</i>	<i>240</i>	<i>297</i>	<i>270</i>	<b>1,269</b>	<i>1,177</i>	<i>1,110</i>
Total Energy (c) .....	<b>1,366</b>	<b>1,232</b>	<b>1,330</b>	<b>1,346</b>	<i>1,376</i>	<i>1,208</i>	<i>1,304</i>	<i>1,319</i>	<i>1,387</i>	<i>1,196</i>	<i>1,294</i>	<i>1,305</i>	<b>5,274</b>	<i>5,208</i>	<i>5,182</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 - February 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	997	1,002	1,007	1,013	1,017	1,022	1,025	1,028	983	1,005	1,023
Middle Atlantic .....	2,735	2,759	2,777	2,796	2,806	2,820	2,835	2,851	2,863	2,874	2,883	2,890	2,767	2,828	2,877
E. N. Central .....	2,480	2,504	2,523	2,538	2,544	2,557	2,570	2,582	2,591	2,596	2,600	2,604	2,511	2,563	2,597
W. N. Central .....	1,145	1,159	1,167	1,174	1,177	1,183	1,190	1,196	1,201	1,205	1,209	1,213	1,161	1,187	1,207
S. Atlantic .....	3,263	3,295	3,322	3,347	3,362	3,385	3,407	3,428	3,448	3,465	3,479	3,495	3,307	3,395	3,472
E. S. Central .....	815	823	829	834	837	842	847	851	855	857	860	862	826	844	859
W. S. Central .....	2,214	2,246	2,270	2,290	2,304	2,322	2,339	2,358	2,373	2,388	2,401	2,412	2,255	2,331	2,394
Mountain .....	1,197	1,210	1,222	1,231	1,238	1,248	1,258	1,267	1,274	1,282	1,289	1,295	1,215	1,253	1,285
Pacific .....	3,536	3,569	3,601	3,629	3,645	3,675	3,702	3,728	3,749	3,766	3,781	3,795	3,584	3,688	3,773
<b>Industrial Output, Manufacturing (Index, Year 2012=100)</b>															
New England .....	98.9	99.3	100.0	99.9	100.2	100.6	101.3	101.8	102.1	102.2	102.3	102.7	99.5	101.0	102.3
Middle Atlantic .....	98.1	98.4	98.8	99.0	99.4	99.9	100.6	101.2	101.6	101.7	101.9	102.2	98.6	100.3	101.9
E. N. Central .....	106.5	107.1	107.7	108.1	108.7	109.7	110.6	111.5	112.0	112.0	111.9	112.2	107.4	110.1	112.0
W. N. Central .....	104.0	104.6	105.8	106.1	106.6	107.4	108.3	109.2	109.8	110.0	110.3	110.8	105.1	107.9	110.2
S. Atlantic .....	107.8	108.7	110.0	110.2	110.8	111.4	112.4	113.1	113.6	113.8	113.9	114.4	109.2	111.9	113.9
E. S. Central .....	108.9	109.0	110.4	110.9	111.7	112.5	113.6	114.5	115.0	115.2	115.4	115.8	109.8	113.1	115.4
W. S. Central .....	97.5	99.0	100.0	100.4	101.2	102.0	103.1	103.8	104.4	104.7	105.0	105.7	99.2	102.5	105.0
Mountain .....	111.6	113.0	115.0	115.3	116.0	116.8	117.9	118.9	119.5	120.0	120.4	121.0	113.7	117.4	120.2
Pacific .....	103.6	103.7	104.6	104.8	105.3	105.9	106.8	107.5	108.0	108.2	108.4	109.0	104.2	106.4	108.4
<b>Real Personal Income (Billion \$2009)</b>															
New England .....	858	859	864	869	876	882	887	891	895	899	903	907	862	884	901
Middle Atlantic .....	2,218	2,223	2,235	2,248	2,266	2,280	2,292	2,303	2,312	2,322	2,332	2,339	2,231	2,285	2,326
E. N. Central .....	2,342	2,351	2,367	2,382	2,401	2,418	2,430	2,442	2,453	2,465	2,475	2,482	2,361	2,423	2,469
W. N. Central .....	1,080	1,085	1,094	1,102	1,112	1,121	1,128	1,136	1,143	1,151	1,158	1,163	1,090	1,124	1,154
S. Atlantic .....	3,082	3,092	3,113	3,137	3,166	3,194	3,218	3,240	3,260	3,283	3,305	3,324	3,106	3,204	3,293
E. S. Central .....	862	865	869	875	882	888	893	897	902	906	911	914	868	890	908
W. S. Central .....	1,876	1,890	1,902	1,919	1,939	1,955	1,969	1,982	1,995	2,009	2,022	2,033	1,897	1,961	2,015
Mountain .....	1,101	1,104	1,112	1,121	1,133	1,143	1,152	1,160	1,168	1,178	1,186	1,194	1,110	1,147	1,181
Pacific .....	2,669	2,677	2,692	2,713	2,736	2,761	2,780	2,798	2,813	2,832	2,850	2,865	2,688	2,769	2,840
<b>Households (Thousands)</b>															
New England .....	5,906	5,915	5,929	5,938	5,947	5,955	5,964	5,974	5,983	5,993	6,001	6,008	5,938	5,974	6,008
Middle Atlantic .....	16,127	16,146	16,182	16,204	16,225	16,245	16,267	16,292	16,315	16,340	16,360	16,379	16,204	16,292	16,379
E. N. Central .....	18,967	18,996	19,043	19,071	19,095	19,119	19,149	19,181	19,212	19,252	19,286	19,317	19,071	19,181	19,317
W. N. Central .....	8,608	8,634	8,665	8,687	8,708	8,728	8,750	8,772	8,794	8,818	8,839	8,859	8,687	8,772	8,859
S. Atlantic .....	25,526	25,627	25,749	25,845	25,941	26,030	26,120	26,214	26,309	26,408	26,498	26,584	25,845	26,214	26,584
E. S. Central .....	7,644	7,664	7,690	7,708	7,727	7,745	7,765	7,785	7,804	7,825	7,843	7,861	7,708	7,785	7,861
W. S. Central .....	14,716	14,768	14,837	14,896	14,957	15,016	15,077	15,139	15,202	15,267	15,328	15,387	14,896	15,139	15,387
Mountain .....	9,224	9,268	9,321	9,362	9,402	9,440	9,479	9,519	9,559	9,600	9,639	9,678	9,362	9,519	9,678
Pacific .....	18,896	18,950	19,029	19,085	19,140	19,188	19,241	19,294	19,346	19,400	19,450	19,497	19,085	19,294	19,497
<b>Total Non-farm Employment (Millions)</b>															
New England .....	7.4	7.5	7.5	7.5	7.5	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.5	7.6	7.6
Middle Atlantic .....	19.7	19.8	19.8	19.9	20.0	20.0	20.0	20.1	20.1	20.2	20.2	20.2	19.8	20.0	20.1
E. N. Central .....	22.1	22.2	22.2	22.3	22.4	22.4	22.5	22.5	22.6	22.6	22.6	22.6	22.2	22.4	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	10.8	10.9	11.0
S. Atlantic .....	28.4	28.6	28.7	28.9	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.6	28.7	29.1	29.5
E. S. Central .....	8.1	8.2	8.2	8.2	8.3	8.3	8.3	8.3	8.3	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	17.8	17.8	17.9	18.0	18.1	18.1	18.1	17.5	17.8	18.1
Mountain .....	10.7	10.8	10.8	10.9	10.9	11.0	11.0	11.1	11.1	11.2	11.2	11.3	10.8	11.0	11.2
Pacific .....	23.3	23.4	23.5	23.6	23.7	23.7	23.8	23.9	24.0	24.1	24.1	24.1	23.4	23.8	24.1

- = no data available

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

Regions refer to U.S. Census divisions.

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

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

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

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

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

U.S. Energy Information Administration | Short-Term Energy Outlook - February 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>3,051</b>	<b>907</b>	<b>70</b>	<b>2,273</b>	<i>3,191</i>	<i>868</i>	<i>126</i>	<i>2,129</i>	<i>3,166</i>	<i>874</i>	<i>126</i>	<i>2,129</i>	<b>6,300</b>	<i>6,314</i>	<i>6,295</i>
Middle Atlantic .....	<b>2,936</b>	<b>753</b>	<b>38</b>	<b>2,010</b>	<i>2,955</i>	<i>698</i>	<i>78</i>	<i>1,969</i>	<i>2,946</i>	<i>705</i>	<i>78</i>	<i>1,969</i>	<b>5,737</b>	<i>5,701</i>	<i>5,699</i>
E. N. Central .....	<b>3,209</b>	<b>825</b>	<b>60</b>	<b>2,298</b>	<i>3,178</i>	<i>740</i>	<i>125</i>	<i>2,229</i>	<i>3,153</i>	<i>742</i>	<i>125</i>	<i>2,229</i>	<b>6,392</b>	<i>6,272</i>	<i>6,248</i>
W. N. Central .....	<b>3,421</b>	<b>828</b>	<b>120</b>	<b>2,589</b>	<i>3,243</i>	<i>712</i>	<i>159</i>	<i>2,410</i>	<i>3,224</i>	<i>708</i>	<i>159</i>	<i>2,410</i>	<b>6,958</b>	<i>6,524</i>	<i>6,502</i>
South Atlantic .....	<b>1,443</b>	<b>220</b>	<b>2</b>	<b>945</b>	<i>1,399</i>	<i>198</i>	<i>14</i>	<i>991</i>	<i>1,426</i>	<i>200</i>	<i>14</i>	<i>990</i>	<b>2,611</b>	<i>2,602</i>	<i>2,630</i>
E. S. Central .....	<b>1,818</b>	<b>327</b>	<b>2</b>	<b>1,322</b>	<i>1,786</i>	<i>258</i>	<i>20</i>	<i>1,326</i>	<i>1,825</i>	<i>254</i>	<i>20</i>	<i>1,326</i>	<b>3,469</b>	<i>3,390</i>	<i>3,426</i>
W. S. Central .....	<b>1,192</b>	<b>142</b>	<b>3</b>	<b>904</b>	<i>1,164</i>	<i>94</i>	<i>4</i>	<i>784</i>	<i>1,140</i>	<i>83</i>	<i>4</i>	<i>783</i>	<b>2,240</b>	<i>2,046</i>	<i>2,010</i>
Mountain .....	<b>2,119</b>	<b>598</b>	<b>124</b>	<b>1,934</b>	<i>2,185</i>	<i>692</i>	<i>143</i>	<i>1,818</i>	<i>2,187</i>	<i>685</i>	<i>143</i>	<i>1,817</i>	<b>4,775</b>	<i>4,839</i>	<i>4,832</i>
Pacific .....	<b>1,440</b>	<b>539</b>	<b>84</b>	<b>1,050</b>	<i>1,396</i>	<i>538</i>	<i>85</i>	<i>1,203</i>	<i>1,478</i>	<i>546</i>	<i>85</i>	<i>1,204</i>	<b>3,113</b>	<i>3,223</i>	<i>3,313</i>
U.S. Average .....	<b>2,129</b>	<b>522</b>	<b>48</b>	<b>1,549</b>	<i>2,103</i>	<i>486</i>	<i>73</i>	<i>1,525</i>	<i>2,111</i>	<i>486</i>	<i>73</i>	<i>1,523</i>	<b>4,249</b>	<i>4,186</i>	<i>4,192</i>
<b>Heating Degree Days, Prior 10-year Average</b>															
New England .....	<b>3,171</b>	<b>817</b>	<b>119</b>	<b>2,120</b>	<i>3,165</i>	<i>820</i>	<i>111</i>	<i>2,119</i>	<i>3,149</i>	<i>820</i>	<i>104</i>	<i>2,109</i>	<b>6,229</b>	<i>6,215</i>	<i>6,182</i>
Middle Atlantic .....	<b>2,947</b>	<b>646</b>	<b>81</b>	<b>1,949</b>	<i>2,956</i>	<i>650</i>	<i>76</i>	<i>1,937</i>	<i>2,945</i>	<i>650</i>	<i>70</i>	<i>1,931</i>	<b>5,623</b>	<i>5,618</i>	<i>5,596</i>
E. N. Central .....	<b>3,209</b>	<b>692</b>	<b>116</b>	<b>2,211</b>	<i>3,196</i>	<i>697</i>	<i>112</i>	<i>2,195</i>	<i>3,183</i>	<i>696</i>	<i>108</i>	<i>2,189</i>	<b>6,228</b>	<i>6,199</i>	<i>6,175</i>
W. N. Central .....	<b>3,264</b>	<b>705</b>	<b>144</b>	<b>2,379</b>	<i>3,255</i>	<i>702</i>	<i>140</i>	<i>2,379</i>	<i>3,247</i>	<i>696</i>	<i>137</i>	<i>2,364</i>	<b>6,492</b>	<i>6,476</i>	<i>6,444</i>
South Atlantic .....	<b>1,476</b>	<b>177</b>	<b>12</b>	<b>974</b>	<i>1,480</i>	<i>177</i>	<i>11</i>	<i>961</i>	<i>1,465</i>	<i>176</i>	<i>11</i>	<i>957</i>	<b>2,638</b>	<i>2,629</i>	<i>2,609</i>
E. S. Central .....	<b>1,868</b>	<b>217</b>	<b>18</b>	<b>1,301</b>	<i>1,862</i>	<i>222</i>	<i>17</i>	<i>1,291</i>	<i>1,857</i>	<i>221</i>	<i>17</i>	<i>1,281</i>	<b>3,404</b>	<i>3,391</i>	<i>3,376</i>
W. S. Central .....	<b>1,181</b>	<b>80</b>	<b>4</b>	<b>801</b>	<i>1,183</i>	<i>85</i>	<i>4</i>	<i>806</i>	<i>1,194</i>	<i>84</i>	<i>3</i>	<i>786</i>	<b>2,066</b>	<i>2,078</i>	<i>2,067</i>
Mountain .....	<b>2,194</b>	<b>737</b>	<b>144</b>	<b>1,841</b>	<i>2,164</i>	<i>714</i>	<i>139</i>	<i>1,853</i>	<i>2,168</i>	<i>709</i>	<i>137</i>	<i>1,827</i>	<b>4,917</b>	<i>4,871</i>	<i>4,841</i>
Pacific .....	<b>1,464</b>	<b>592</b>	<b>84</b>	<b>1,182</b>	<i>1,444</i>	<i>581</i>	<i>82</i>	<i>1,169</i>	<i>1,426</i>	<i>576</i>	<i>84</i>	<i>1,158</i>	<b>3,322</b>	<i>3,276</i>	<i>3,245</i>
U.S. Average .....	<b>2,160</b>	<b>478</b>	<b>71</b>	<b>1,525</b>	<i>2,150</i>	<i>475</i>	<i>68</i>	<i>1,515</i>	<i>2,138</i>	<i>473</i>	<i>66</i>	<i>1,502</i>	<b>4,233</b>	<i>4,209</i>	<i>4,179</i>
<b>Cooling Degree Days</b>															
New England .....	<b>0</b>	<b>79</b>	<b>582</b>	<b>0</b>	<i>0</i>	<i>86</i>	<i>420</i>	<i>2</i>	<i>0</i>	<i>86</i>	<i>420</i>	<i>2</i>	<b>661</b>	<i>508</i>	<i>508</i>
Middle Atlantic .....	<b>0</b>	<b>176</b>	<b>706</b>	<b>4</b>	<i>0</i>	<i>154</i>	<i>541</i>	<i>4</i>	<i>0</i>	<i>154</i>	<i>541</i>	<i>4</i>	<b>887</b>	<i>699</i>	<i>699</i>
E. N. Central .....	<b>0</b>	<b>332</b>	<b>638</b>	<b>4</b>	<i>0</i>	<i>211</i>	<i>531</i>	<i>7</i>	<i>0</i>	<i>211</i>	<i>531</i>	<i>7</i>	<b>974</b>	<i>749</i>	<i>749</i>
W. N. Central .....	<b>2</b>	<b>439</b>	<b>686</b>	<b>6</b>	<i>3</i>	<i>257</i>	<i>664</i>	<i>10</i>	<i>3</i>	<i>257</i>	<i>664</i>	<i>10</i>	<b>1,132</b>	<i>934</i>	<i>934</i>
South Atlantic .....	<b>137</b>	<b>724</b>	<b>1,266</b>	<b>286</b>	<i>112</i>	<i>646</i>	<i>1,151</i>	<i>219</i>	<i>121</i>	<i>649</i>	<i>1,152</i>	<i>220</i>	<b>2,413</b>	<i>2,128</i>	<i>2,142</i>
E. S. Central .....	<b>36</b>	<b>648</b>	<b>1,161</b>	<b>79</b>	<i>20</i>	<i>504</i>	<i>1,044</i>	<i>61</i>	<i>27</i>	<i>505</i>	<i>1,044</i>	<i>61</i>	<b>1,925</b>	<i>1,629</i>	<i>1,637</i>
W. S. Central .....	<b>126</b>	<b>1,006</b>	<b>1,565</b>	<b>163</b>	<i>69</i>	<i>828</i>	<i>1,508</i>	<i>207</i>	<i>90</i>	<i>840</i>	<i>1,509</i>	<i>207</i>	<b>2,859</b>	<i>2,612</i>	<i>2,645</i>
Mountain .....	<b>21</b>	<b>506</b>	<b>999</b>	<b>48</b>	<i>16</i>	<i>421</i>	<i>932</i>	<i>78</i>	<i>18</i>	<i>423</i>	<i>933</i>	<i>78</i>	<b>1,575</b>	<i>1,447</i>	<i>1,451</i>
Pacific .....	<b>31</b>	<b>183</b>	<b>726</b>	<b>75</b>	<i>27</i>	<i>173</i>	<i>590</i>	<i>58</i>	<i>28</i>	<i>172</i>	<i>589</i>	<i>58</i>	<b>1,014</b>	<i>847</i>	<i>847</i>
U.S. Average .....	<b>52</b>	<b>476</b>	<b>958</b>	<b>99</b>	<i>38</i>	<i>391</i>	<i>851</i>	<i>91</i>	<i>43</i>	<i>394</i>	<i>852</i>	<i>91</i>	<b>1,585</b>	<i>1,370</i>	<i>1,380</i>
<b>Cooling Degree Days, Prior 10-year Average</b>															
New England .....	<b>0</b>	<b>81</b>	<b>433</b>	<b>1</b>	<i>0</i>	<i>79</i>	<i>455</i>	<i>1</i>	<i>0</i>	<i>84</i>	<i>466</i>	<i>1</i>	<b>515</b>	<i>535</i>	<i>551</i>
Middle Atlantic .....	<b>0</b>	<b>166</b>	<b>567</b>	<b>5</b>	<i>0</i>	<i>165</i>	<i>589</i>	<i>6</i>	<i>0</i>	<i>171</i>	<i>600</i>	<i>6</i>	<b>738</b>	<i>760</i>	<i>777</i>
E. N. Central .....	<b>3</b>	<b>228</b>	<b>533</b>	<b>7</b>	<i>3</i>	<i>242</i>	<i>548</i>	<i>7</i>	<i>3</i>	<i>244</i>	<i>567</i>	<i>8</i>	<b>770</b>	<i>800</i>	<i>821</i>
W. N. Central .....	<b>7</b>	<b>277</b>	<b>659</b>	<b>11</b>	<i>7</i>	<i>298</i>	<i>669</i>	<i>11</i>	<i>7</i>	<i>300</i>	<i>690</i>	<i>12</i>	<b>954</b>	<i>985</i>	<i>1,009</i>
South Atlantic .....	<b>119</b>	<b>675</b>	<b>1,161</b>	<b>227</b>	<i>120</i>	<i>684</i>	<i>1,180</i>	<i>240</i>	<i>123</i>	<i>685</i>	<i>1,187</i>	<i>239</i>	<b>2,183</b>	<i>2,224</i>	<i>2,234</i>
E. S. Central .....	<b>34</b>	<b>539</b>	<b>1,031</b>	<b>63</b>	<i>36</i>	<i>554</i>	<i>1,049</i>	<i>67</i>	<i>35</i>	<i>552</i>	<i>1,065</i>	<i>69</i>	<b>1,667</b>	<i>1,706</i>	<i>1,721</i>
W. S. Central .....	<b>100</b>	<b>887</b>	<b>1,532</b>	<b>204</b>	<i>103</i>	<i>897</i>	<i>1,552</i>	<i>205</i>	<i>100</i>	<i>893</i>	<i>1,557</i>	<i>211</i>	<b>2,722</b>	<i>2,758</i>	<i>2,760</i>
Mountain .....	<b>24</b>	<b>426</b>	<b>922</b>	<b>84</b>	<i>25</i>	<i>438</i>	<i>932</i>	<i>81</i>	<i>24</i>	<i>440</i>	<i>933</i>	<i>83</i>	<b>1,457</b>	<i>1,476</i>	<i>1,481</i>
Pacific .....	<b>30</b>	<b>185</b>	<b>621</b>	<b>78</b>	<i>31</i>	<i>185</i>	<i>632</i>	<i>77</i>	<i>31</i>	<i>186</i>	<i>625</i>	<i>78</i>	<b>915</b>	<i>924</i>	<i>920</i>
U.S. Average .....	<b>45</b>	<b>408</b>	<b>855</b>	<b>94</b>	<i>46</i>	<i>417</i>	<i>873</i>	<i>97</i>	<i>46</i>	<i>419</i>	<i>882</i>	<i>98</i>	<b>1,402</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 February 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**

	December 2018	January 2019	Dec 2018 – Jan 2019 Average	Dec 2017 – Jan 2018 Average	2015 – 2017 Average
<b>Global Petroleum and Other Liquids (million barrels per day)</b>					
Global Petroleum and Other Liquids Production (a)	101.8	100.6	101.2	98.9	97.5
Global Petroleum and Other Liquids Consumption (b)	101.6	99.2	100.4	98.6	97.1
Biofuels Production (c)	2.3	2.0	2.2	2.1	2.3
Biofuels Consumption (c)	2.4	2.3	2.3	2.3	2.3
Iran Liquid Fuels Production	3.5	3.6	3.6	4.8	4.2
Iran Liquid Fuels Consumption	1.9	1.9	1.9	1.8	1.8
<b>Petroleum and Petroleum Products Produced and Consumed in Countries Other Than Iran (million barrels per day)</b>					
Production (d)	96.0	94.9	95.5	91.9	90.9
Consumption (d)	97.3	95.0	96.2	94.6	93.0
Production minus Consumption	-1.3	-0.1	-0.7	-2.6	-2.1
World Inventory Net Withdrawals Including Iran	-0.3	-1.4	-0.8	-0.2	-0.3
Estimated OECD Inventory Level (e) (million barrels)	2,863	2,875	2,869	2,854	2,968
<b>Surplus Production Capacity (million barrels per day)</b>					
OPEC Surplus Crude Oil Production Capacity (f)	1.2	2.1	1.6	1.9	1.5

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	December 2018	January 2019	December 2018 – January 2019 Average	December 2017 – January 2018 Average	2015–2017 Average
Brent Front Month Futures Price (\$ per barrel)	57.67	60.24	58.99	66.65	51.16
WTI Front Month Futures Price (\$ per barrel)	48.98	51.55	50.30	60.87	47.69
Dubai Front Month Futures Price (\$ per barrel)	56.98	59.64	58.34	64.01	48.82
Brent 1st - 13th Month Futures Spread (\$ per barrel)	-1.11	-0.31	-0.70	3.92	-3.90
WTI 1st - 13th Month Futures Spread (\$ per barrel)	-2.31	-2.29	-2.30	3.32	-4.26
RBOB Front Month Futures Price (\$ per gallon)	1.39	1.38	1.39	1.79	1.55
Heating Oil Front Month Futures Price (\$ per gallon)	1.80	1.86	1.83	2.01	1.56
RBOB - Brent Futures Crack Spread (\$ per gallon)	0.01	-0.05	-0.02	0.20	0.34
Heating Oil - Brent Futures Crack Spread (\$ per gallon)	0.43	0.42	0.42	0.43	0.34

(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).