



Independent Statistics & Analysis

U.S. Energy Information  
Administration

February 2020

## Short-Term Energy Outlook (STEO)

### Forecast highlights

#### *Global liquid fuels*

- EIA expects global petroleum and liquid fuels demand will average 100.3 million barrels per day (b/d) in the first quarter of 2020. This demand level is 0.9 million b/d less than forecast in the January STEO and reflects both the effects of the coronavirus and warmer-than-normal January temperatures across much of the northern hemisphere. EIA now expects global petroleum and liquid fuels demand will rise by 1.0 million b/d in 2020, which is lower than the forecast increase in the January STEO of 1.3 million b/d in 2020, and by 1.5 million b/d in 2021.
- EIA's global petroleum and liquid fuels supply forecast assumes that the Organization of the Petroleum Exporting Countries (OPEC) will reduce crude oil production by 0.5 million b/d from March through May because of lower expected global oil demand in early 2020. This OPEC reduction is in addition to the [cuts announced at the group's December 2019 meeting](#). EIA now forecasts OPEC crude oil production will average 28.9 million b/d in 2020, which is 0.3 million less than forecast in the January STEO. In addition to these production cuts, EIA's lower forecast OPEC production reflects ongoing crude oil production outages in Libya during the first quarter. In general, EIA assumes that OPEC will limit production through all of 2020 and 2021 to target relatively balanced global oil markets.
- Global liquid fuels inventories fell by roughly 0.1 million b/d in 2019, and EIA expects they will grow by 0.2 million b/d in 2020. Although EIA expects inventories to rise overall in 2020, EIA forecasts inventories will build by 0.6 million b/d in the first half of the year because of slow oil demand growth and strong non-OPEC oil supply growth. Firm demand growth as the global economy strengthens and slower supply growth later in the year contribute to forecast inventory draws of 0.1 million b/d in the second half of 2020. EIA expects global liquid fuels inventories will decline by 0.2 million b/d in 2021.
- Brent crude oil spot prices averaged \$64 per barrel (b) in January, down \$4/b from December. Brent prices fell steadily through January and into the first week of February, closing at less than \$54/b on February 4, the lowest price since December 2018, reflecting market concerns about oil demand. EIA forecasts Brent prices will average \$61/b in 2020; with prices averaging \$58/b during the first half of the year and \$64/b

during the second half of the year. EIA forecasts the average Brent prices will rise to an average of \$68/b in 2021.

- EIA forecasts U.S. crude oil production will average 13.2 million b/d in 2020, up 1.0 million b/d from 2019, and then rise to 13.6 million b/d in 2021. Most of the production growth in the forecast occurs in the Permian region of Texas and New Mexico.

#### *Natural gas*

- In January, the Henry Hub natural gas spot price averaged \$2.02 per million British thermal units (MMBtu), as warm weather contributed to below-average inventory withdrawals and put downward pressure on natural gas prices. As of February 6, the Henry Hub spot price had fallen to \$1.86/MMBtu, and EIA expects prices will remain below \$2.00/MMBtu in February and March. EIA forecasts that prices will rise in the second quarter of 2020, as U.S. natural gas production declines and natural gas use for power generation increases the demand for gas. EIA expects prices to average \$2.36/MMBtu in the third quarter of 2020. EIA forecasts that Henry Hub natural gas spot prices will average \$2.21/MMBtu in 2020. EIA expects that natural gas prices will then increase in 2021, reaching an annual average of \$2.53/MMBtu.
- U.S. dry natural gas production set a record in 2019, averaging 92.1 billion cubic feet per day (Bcf/d). Although EIA forecasts dry natural gas production will average 94.2 Bcf/d in 2020, a 2% increase from 2019, EIA expects monthly production to generally decline through 2020, falling from an estimated 95.4 Bcf/d in January to 92.5 Bcf/d in December. The falling production mostly occurs in the Appalachian and Permian regions. In the Appalachia region, low natural gas prices are discouraging natural gas-directed drilling, and in the Permian, low oil prices are expected to reduce associated gas output from oil-directed wells. In 2021, EIA forecasts dry natural gas production to stabilize near December 2020 levels at an annual average of 92.6 Bcf/d, a 2% decline from 2020, which would be the first decline in annual average natural gas production since 2016.
- EIA estimates that U.S. working natural gas inventories ended January at more than 2.6 trillion cubic feet (Tcf), 9% higher than the five-year (2015–19) average. EIA forecasts that total working inventories will end March at almost 2.0 Tcf, 14% higher than the five-year average. In the forecast, inventories rise by a total of 2.1 Tcf during the April through October injection season to reach almost 4.1 Tcf on October 31, which would be the highest end-of-October inventory level on record.

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

- EIA expects the share of U.S. utility-scale electricity generation from natural gas-fired power plants will remain relatively steady; it was 37% in 2019, and EIA forecasts it will be 38% in 2020 and 37% in 2021. Electricity generation from renewable energy sources will rise from a share of 17% last year to 20% in 2020 and 21% in 2021. The increase in

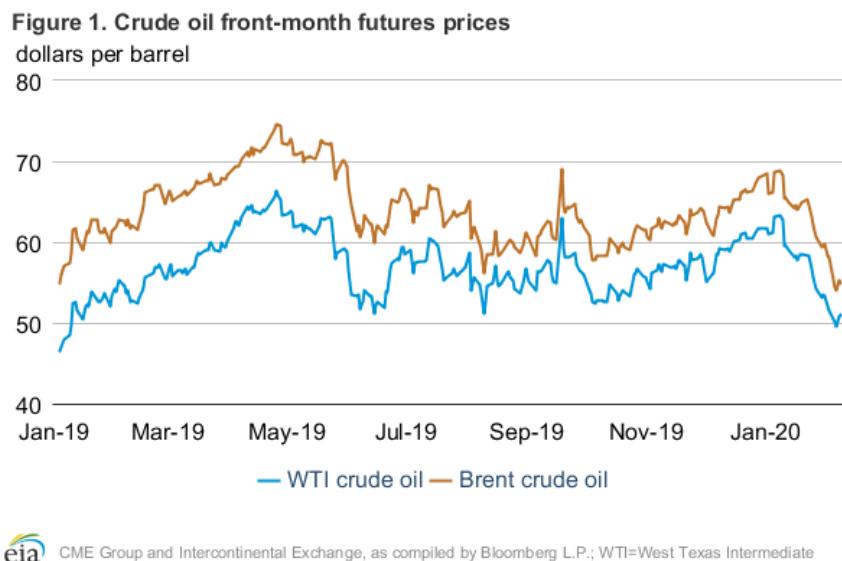
the renewables share is the result of expected use of additions to wind and solar generating capacity. Coal's forecast share of electricity generation will fall from 24% in 2019 to 21% in both 2020 and 2021. The nuclear share of generation, which averaged slightly more than 20% in 2019 will be slightly lower than 20% by 2021, consistent with upcoming reactor retirements.

- EIA forecasts that U.S. coal production will total 595 million short tons (MMst) in 2020, down 95 MMst (14%) from 2019. Lower production reflects declining demand for coal in the electric power sector and lower demand for U.S. exports. EIA forecasts that electric power sector demand for coal will fall by 81 MMst (15%) in 2020. EIA expects that coal production will stabilize in 2021 as export demand stabilizes and U.S. power sector demand for coal increases because of rising natural gas prices.
- After decreasing by 2.3% in 2019, EIA forecasts that energy-related carbon dioxide (CO<sub>2</sub>) emissions will decrease by 2.7% in 2020 and by 0.5% in 2021. Declining emissions in 2020 reflect forecast declines in total U.S. energy consumption because of increases in energy efficiency and weather effects, particularly as a result of warmer-than-normal January temperatures. A forecast return to normal temperatures in 2021 results in a slowing decline in emissions. 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 \$54.93 per barrel (b) on February 6, 2020, a decrease of \$11.32/b from January 2, 2020. The front-month futures price for West Texas Intermediate (WTI) crude oil for delivery at Cushing, Oklahoma, decreased by \$10.23/b during the same period, settling at \$50.95/b on February 6 (**Figure 1**).



Several events in January contributed to significant uncertainty in crude oil markets and the world economy in general. Early in the month, geopolitical developments drove oil prices. [Brent spot prices](#) closed at \$70/b on January 6, the highest level since May 2019, following U.S. [military operations in Iraq](#). However, as tensions in the Middle East deescalated and market concerns over any related oil supply disruptions faded, crude oil prices fell. The price declines accelerated with concerns about economic growth as a result of the outbreak of coronavirus. Oil prices declined for five consecutive days starting on January 21. Further reducing demand in January were the warmer-than-normal temperatures across much of the northern hemisphere, which EIA estimates reduced heating oil consumption.

The magnitude and duration of the coronavirus's effects remain highly uncertain, but EIA is reducing its estimates for Chinese and global oil consumption for 2020 as a result of the events. Travel restrictions in China that began in mid-January are disrupting petroleum demand in not only China but also in other countries. EIA expects liquid fuels consumption in China to average 14.8 million barrels per day (b/d) from February through April, when EIA assumes the effects of travel restrictions will be most acute. That level of consumption is 0.4 million b/d less than forecast in last month's STEO. Jet fuel demand is likely to fall because of travel restrictions and demand for other oil products is likely to fall because of lower economic growth.

EIA has also lowered its expected liquid fuels consumption for the rest of Asia (excluding China) by 0.1 million b/d for the February through April period compared with last month's STEO.

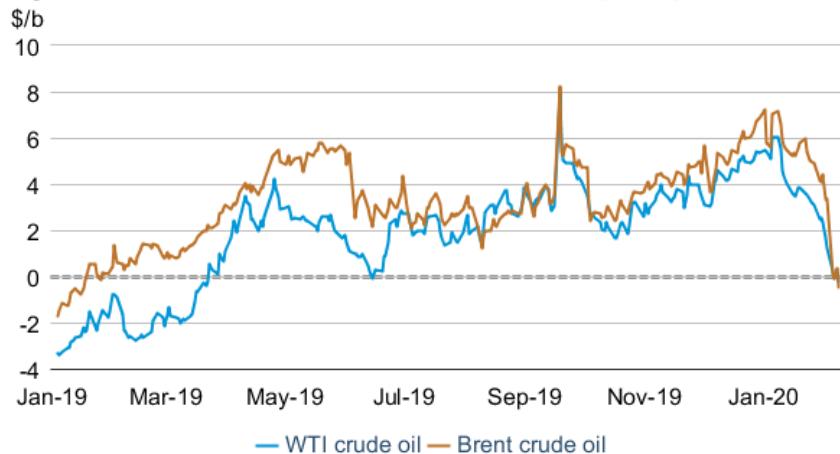
In addition to demand disruptions, oil markets faced renewed supply disruptions from Libya, where unrest in the country led to force majeure events at its main export terminals. EIA estimates that the export terminal disruptions caused Libya's crude oil production to average 0.8 million b/d in January, down from 1.2 million b/d in December. The outages became more severe later in the month, and by the first week of February, EIA estimates Libya was producing less than 0.2 million b/d.

EIA acknowledges significant uncertainty in forecasting global oil inventory and crude oil price changes amid both ongoing disruptions in crude oil supply and reductions in oil demand. EIA estimates global inventories increased by 2.5 million b/d in January and will rise by an average of 0.6 million b/d during the first half of 2020, 0.1 million b/d more than expected in last month's STEO. The higher expected inventory builds primarily reflect a downward adjustment to the global liquid fuels consumption forecast. EIA now forecasts consumption will rise by 1.0 million b/d in 2020, compared with forecast growth of 1.3 million b/d in the January STEO. EIA expects that most of the decrease stems from decreased liquid fuels consumption in China during the first half of 2020. EIA expects that some of the effects of lower oil consumption early in 2020 will be offset by reduced production from the Organization of the Petroleum Exporting Countries (OPEC). EIA assumes that OPEC will reduce crude oil production by 0.5 million b/d from March through May in response to concerns over oil demand growth. This cut would be in addition to existing OPEC cuts.

EIA forecasts global oil inventories will begin drawing by the fourth quarter of 2020, which EIA forecasts will provide upward price pressure in the second half of the year. EIA expects the Brent crude oil price will average \$58/b in the first half of 2020 before rising to average \$64/b during the final six months of the year. Brent crude oil prices are forecast to average \$61/b for all of 2020, a decrease of \$4/b from the January STEO.

Changes in the shapes of the Brent and WTI futures curves supports EIA's estimates of a looser global oil balance in 2020, reversing the market tightness that developed in the fourth quarter of 2019. Prices for both crude oils now exhibit slight contango (when near-term prices are lower than longer-dated ones) in the 1st–13th month spread. The Brent and WTI 1st–13th spread declined \$6.07/b and \$5.27/b, respectively, since January 2, 2020. The Brent 1st–13th spread settled at -46 cents/b on February 6, 2020, and the WTI 1st–13th spread settled at -20 cents/b (**Figure 2**). The contango in the WTI futures curve that developed in January are consistent with increases in U.S. crude oil and other liquids inventories, which—averaging 0.3 million b/d—increased at the fastest pace for the month of January since 2017. In addition, trade press reports a significant decline in China's refinery intake, which is likely contributing to builds in crude oil inventories in Asia.

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



CME Group and Intercontinental Exchange, as compiled by Bloomberg L.P.; WTI=West Texas Intermediate

**Implied volatility:** Implied volatility of crude oil prices increased to the highest levels since September 2019 by early February, as illustrated in higher premiums for options contracts amid the uncertainty surrounding global economic growth and supply disruptions in Libya. The implied volatility of Brent prices increased by 9 percentage points from January 2 to settle at 36.0% on February 6. WTI implied volatility increased by 13 percentage points to settle at 37.5% over the same period (**Figure 3**).

**Figure 3. Crude oil implied volatility**



CME Group, as compiled by Bloomberg L.P.; WTI=West Texas Intermediate

**Swap dealer positions:** Short positions held by swap dealers accounted for 32% of the open interest for the WTI futures contract as of January 21, 2020, slightly less than the all-time high of 33%, reached in 2018 (**Figure 4**). Initiating a short position, or selling a futures contract, enables the holder to lock in a price today for the physical delivery of a commodity at some future date. Oil producers commonly use swap dealers to hedge their future production. Swap dealer short positions increased to 30% of the WTI open interest in mid-December, when WTI prices

increased to more than \$60/b. This price level, according to a survey of U.S. exploration and production companies conducted by the [Federal Reserve Bank of Dallas](#), is sufficient to generate enough cash flow from operations for the majority of firms to cover capital expenditures. The increase in swap dealer short may have increased, in part, because U.S. producers hedged some of their expected 2020 production at about \$60/b.

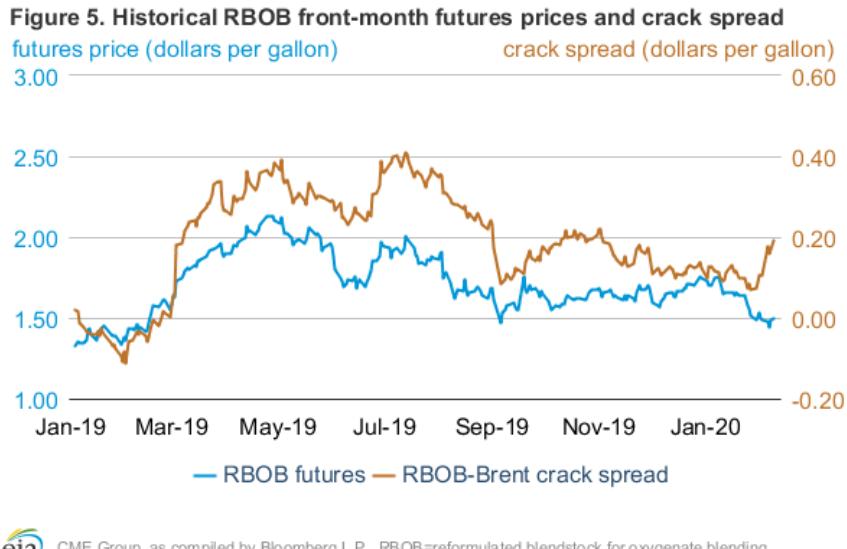
**Figure 4. Swap dealer short positions as a percentage of total WTI open interest and prices**



 CFTC Commitment of Traders Report, CME Group; WTI=West Texas Intermediate

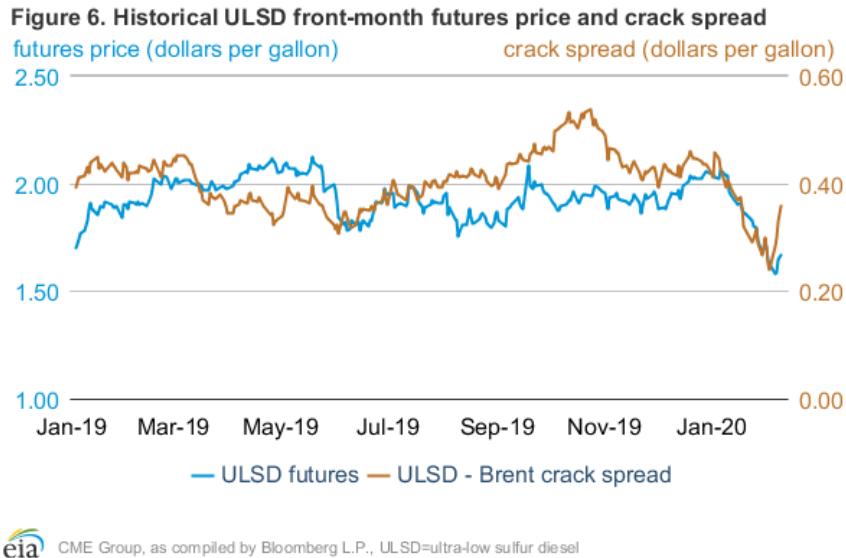
## Petroleum products

**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 \$1.50 per gallon (gal) on February 6, down 21 cents/gal from January 2, 2020 ([Figure 5](#)). The RBOB–Brent crack spread (the difference between the price of RBOB and the price of Brent crude oil) increased by 6 cents/gal to settle at 19 cents/gal during the same period. Almost all of this increase was in the first week of February, when RBOB crack spreads rose after the RBOB and Brent contracts rolled to the next contract month. Despite the recent increase, monthly average RBOB crack spreads were lower in January compared with December, likely because of low U.S. gasoline demand.



RBOB prices and crack spreads tend to be at their lowest during November and December, and they usually begin increasing in January. However, January 2020 deviated from this trend as monthly average RBOB prices and RBOB crack spreads fell by 5 cents/gal and 2 cents/gal, respectively, relative to December. The decline in RBOB crack spreads is the third consecutive month of month-on-month declines, the longest such streak since November 2018. The downward pressure on prices is supported by record inventory levels. Stocks of motor gasoline for the week ending January 24 reached the highest level ever recorded in EIA weekly data going back to 1990. Both the increase in gasoline inventories and the decline in RBOB prices and crack spreads likely stem from a broader decline in gasoline demand. According to EIA estimates, U.S. consumption of motor gasoline in January declined 5% from the previous month to reach a 36-month low of 8.6 million barrels per day (b/d).

**Ultra-low sulfur diesel prices:** The ultra-low sulfur diesel (ULSD) front-month futures price settled at \$1.67/gal on February 6, 2020, a decrease of 36 cents/gal from January 2, 2020. The ULSD–Brent crack spread (the difference between the price of ULSD and the price of Brent crude oil) decreased 9 cents/gal to settle at 36 cents/gal during the same period (**Figure 6**). The decline in crack spreads likely reflects low heating oil demand because of warmer-than-expected weather and market concerns over global economic growth.



U.S. distillate inventories recorded a 4.1 million barrel month-on-month increase in January, a rarity for a month in which inventories typically fall. The increase likely reflects the warmer-than-normal U.S. winter. Based on data from the National Oceanic and Atmospheric Administration (NOAA), EIA estimates that U.S. heating degree days (HDD) in January were 18% lower than the 10-year (2010–19) average. However, at 143.2 million barrels, U.S. distillate inventories remain lower than the five-year (2015–19) average of 149.0 million barrels, suggesting some possible tightness in distillate markets. U.S. distillate inventories have not exceeded the previous five-year average since February 2018, and January 2020 retail prices for on-highway diesel fuel were the highest of any January since 2014. EIA, however, forecasts that prices for on-highway diesel fuel will decline by 19 cents/gal in February, following the recent decline in crude oil prices and ULSD crack spreads.

**Jet fuel prices:** Prices for jet fuel sold in key Asian markets fell sharply in January. The five-day moving average Singapore crack spread for jet fuel against the DME Oman crude oil price declined to \$9.11 per barrel (b) on February 6, 2020, a decrease of \$3.90/b barrel from January 2, 2020 (**Figure 7**). The decline in jet fuel crack spreads likely reflects the large increase in flight cancellations in East Asia's economies—most notably China—in the wake of the coronavirus.

**Figure 7. Singapore jet fuel crack spread (vs DME Oman crude oil)**  
dollars per barrel, five-day moving average



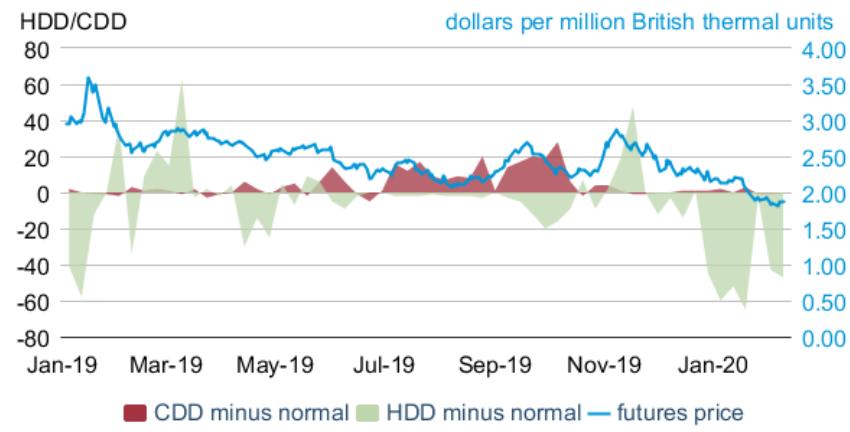
 Thomson Reuters Refinitiv, Dubai Mercantile Exchange

Based on an analysis of publicly available flight data, EIA estimates about 12,000 flights departing from airports located in China, Hong Kong, Taiwan, and Macau were cancelled in January. After factoring in each cancelled flight's distance and adjusting for an estimate of the fuel efficiency of each route's assigned aircraft, EIA estimates that cancellations in these four countries reduced demand for jet fuel by approximately 16,000 b/d during January. According to data from the International Energy Agency, China consumed 860,000 b/d of jet fuel and kerosene in 2019, making this loss equivalent to about 2% of 2019 China's average daily jet fuel consumption. EIA anticipates larger declines during the coming months, assuming the rate of flight cancellations intensifies.

## Natural Gas

**Prices:** The front-month natural gas futures contract for March delivery at the Henry Hub settled at \$1.86 per million British thermal units (MMBtu) on February 6, down 26 cents/MMBtu from January 2 (**Figure 8**). Warmer-than-normal temperatures helped send natural gas front-month futures prices to their lowest level in many years. Typically, January natural gas prices are among the highest of the year. Based on NOAA data, EIA estimates that U.S. heating degree days (HDD) were 18% lower than the 10-year (2010–19) average during January.

**Figure 8. Natural gas front-month futures prices and actual minus historical average HDD and CDD**

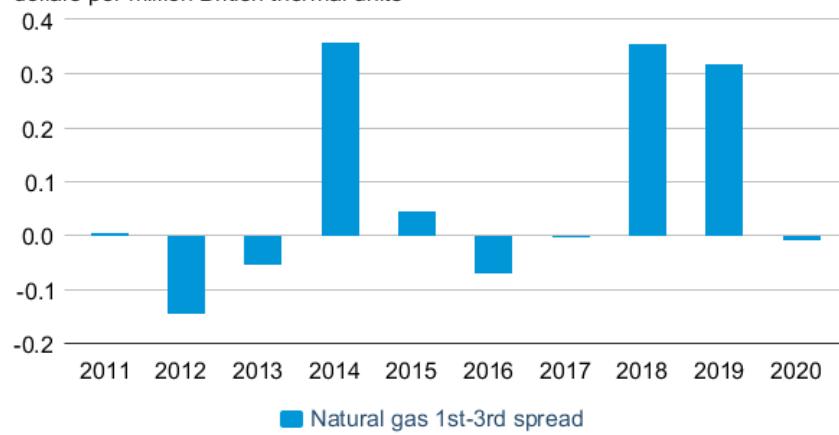


Note: HDD stands for heating degree days, CDD stands for cooling degree days

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

**Natural gas 1st-3rd spread:** The spread between the 1st-month and 3rd-month delivery futures contracts averaged -1 cents/MMBtu in January (**Figure 9**). The spread represents price differences between natural gas delivered in the winter compared with natural gas delivered in the spring, which is typically a seasonally-low consumption period. The spread between the two values can be wide in winters with cold temperatures (as defined by HDD) in January. The difference between the 1st and 3rd month contracts averaged more than 30 cents/MMBtu during January of 2014, 2018, and 2019. Both 2014 and 2018 had more HDD than the 10-year average. However, in years with milder-than-normal weather in January, the spread is generally far smaller or even negative.

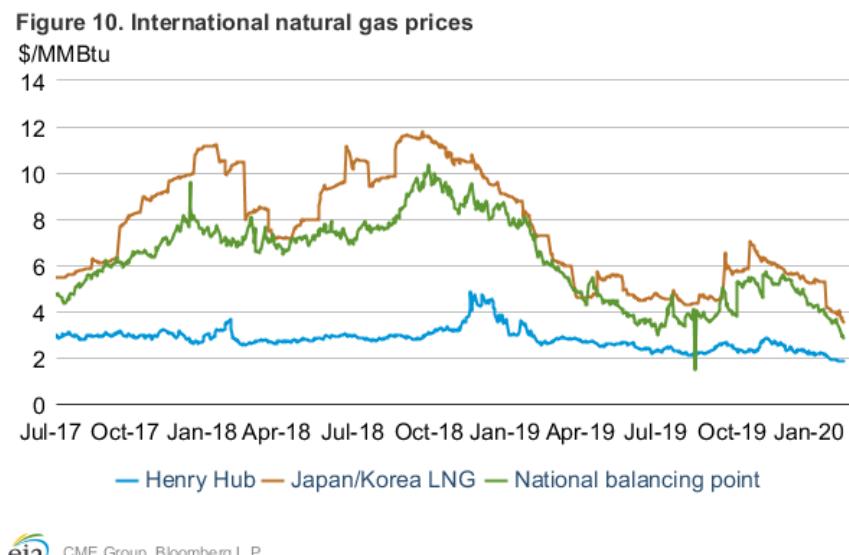
**Figure 9. Natural gas front-month to third-month average January spread**  
dollars per million British thermal units



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

**International natural gas prices:** Asia and Europe have also experienced mild temperatures, which has reduced international natural gas and liquefied natural gas (LNG) prices to their lowest average January prices on record in markets like the National Balancing Point in the

United Kingdom and the Japan-Korea Marker (JKM) (**Figure 10**). Likewise, concerns about the effects on economic activity stemming from the current coronavirus outbreak have also likely had a dampening effect on natural gas prices across markets. Lower LNG prices could reduce the competitiveness of U.S. LNG exports if current price levels persist. However, EIA's forecast for LNG exports in 2020 currently remains relatively unchanged from the January STEO.



## Notable forecast changes

- EIA forecasts Brent crude oil spot prices will average \$61 per barrel (b) in 2020 compared with \$65/b in the January STEO. The lower price forecast reflects EIA's expectations of slower growth in global petroleum and liquid fuels consumption in 2020. EIA now expects Brent prices to be \$7/b lower than previously forecast during the first six months of 2020. During the second half of the year, EIA now expects prices to be \$1/b lower than previously forecast.
- The global oil consumption growth forecast for 2020 in this month's STEO is 1.0 million barrels per day (b/d), down from a forecast of 1.3 million b/d in the January STEO. The lower global oil demand growth forecast is mostly related to the effects of the coronavirus. EIA expects these oil consumption effects will be concentrated in China but some effects will show up in other countries as well. EIA forecasts that liquid fuels consumption in China will average 14.7 million b/d in the first quarter of 2020 and 15.0 million b/d in the second quarter of 2020, down by 0.3 million b/d and 0.2 million b/d, respectively, from last month's STEO.
- EIA revised diesel fuel wholesale margins downward to reflect recent supply trends and weaker-than-anticipated global diesel demand in tandem with the new International Maritime Organization (IMO) Marine Regulations that were enacted on January 1, 2020.

EIA now forecasts diesel wholesale margins to average 41 cents per gallon (gal) in 2020 (9 cents/gal lower than previously forecast) with a forecast peak of 46 cents/gal in March 2020 (7 cents/gal lower than in the previous forecast). Although diesel wholesale margins began the year much lower than initially forecast, EIA assumes that IMO-driven effects will still put upward pressure on diesel prices in the near future as the global market adjusts to the new regulations and as the more stringent carriage ban on non-compliant marine fuel begins on March 1, 2020.

- Henry Hub natural gas spot prices averaged \$2.02 per million British thermal units (MMBtu) in January, which is 16 cents/MMBtu lower than EIA expected in the January STEO. Warmer-than-normal January temperatures reduced space heating demand and left natural gas working inventories 9% higher than the five-year average at the end of the month. With inventories levels expected to remain elevated as the winter heating season winds down, EIA now expects natural gas prices to be lower than previously forecast in the coming months. On average, the EIA forecast Henry Hub spot price will be \$2.21/MMBtu in 2020, compared with a forecast of \$2.33/MMBtu in the January STEO.
- EIA forecasts U.S. total liquid fuels production will average 21.7 million b/d in 2021, which is 240,000 b/d less than EIA had forecast in the January STEO. The lower forecast liquid fuels production reflects both lower crude oil production and hydrocarbon gas liquids production (HGL). EIA reduced its forecast for U.S. crude oil production in 2021 by 160,000 b/d from the January STEO as a result of lower expected crude oil prices in 2020. There is a lagged effect between changes in crude oil prices and changes in crude oil production. EIA reduced its forecast for U.S. HGL production in 2021 by 80,000 b/d as result of lower expected natural gas prices. Although HGLs are included in the liquid fuels category, their production growth is largely the result of natural gas production.
- For more information, see the [detailed table of STEO forecast changes](#).

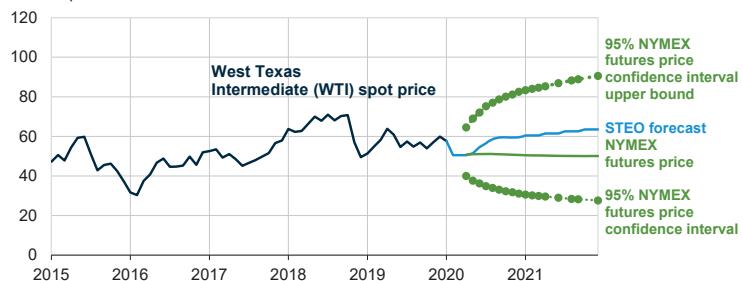
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# Short-Term Energy Outlook

## Chart Gallery for February 2020

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

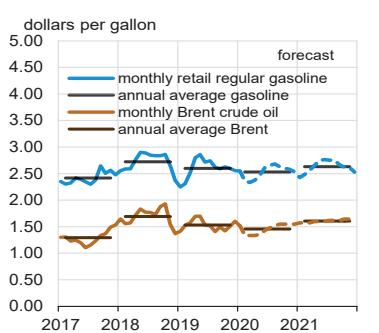


Note: Confidence interval derived from options market information for the five trading days ending Feb 6, 2020. Intervals not calculated for months with sparse trading in near-the-money options contracts.

Sources: Short-Term Energy Outlook, February 2020, and CME Group

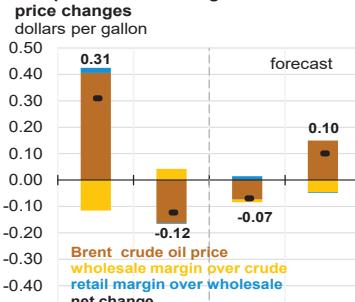


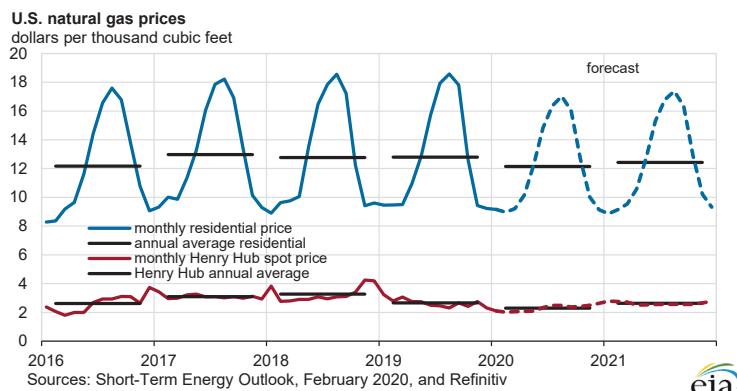
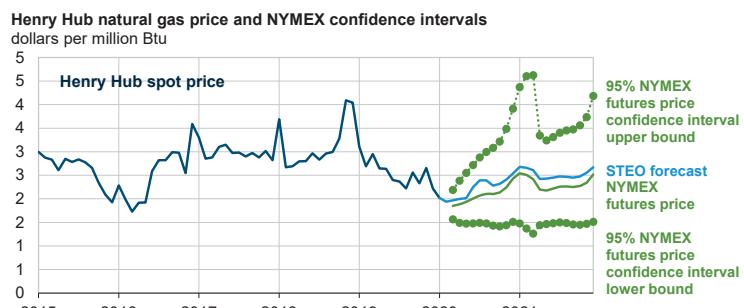
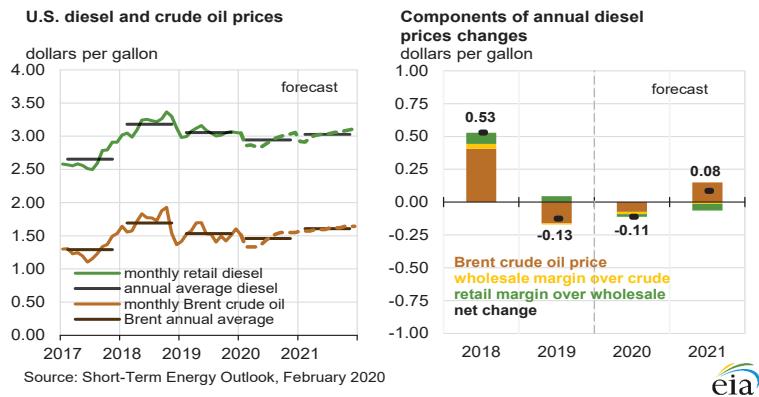
**U.S. gasoline and crude oil prices**

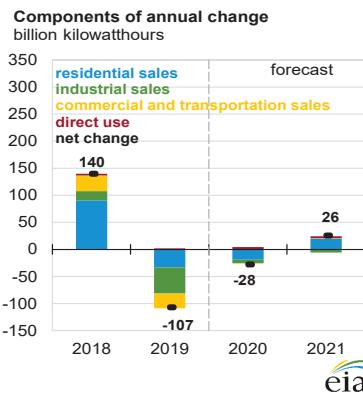
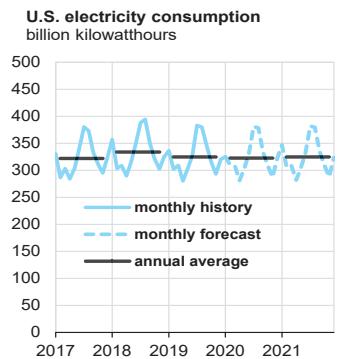


Source: Short-Term Energy Outlook, February 2020

**Components of annual gasoline price changes**



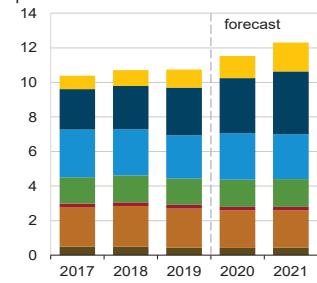




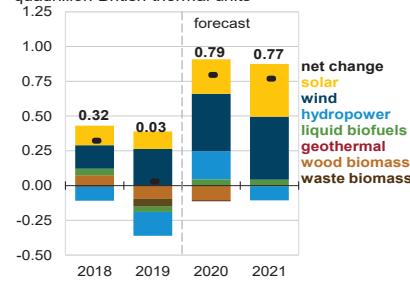
Source: Short-Term Energy Outlook, February 2020



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



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

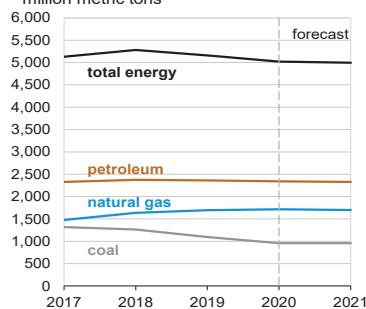


Note: Hydropower excludes pumped storage generation. Liquid biofuels include ethanol and biodiesel. Other biomass includes municipal waste from biogenic sources, landfill gas, and other non-wood waste.

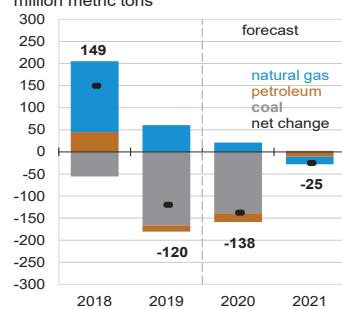
Source: Short-Term Energy Outlook, February 2020



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

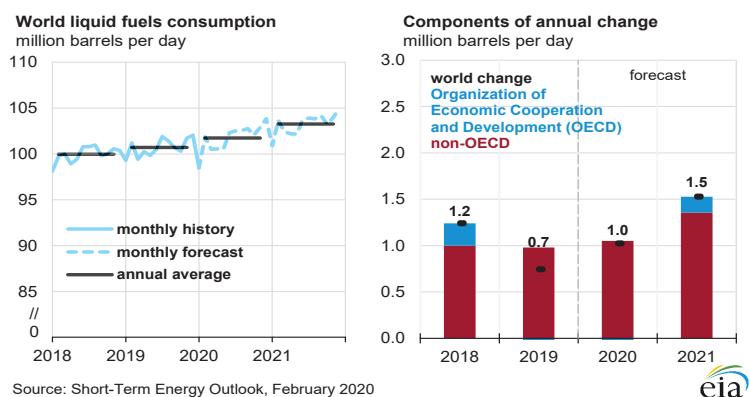
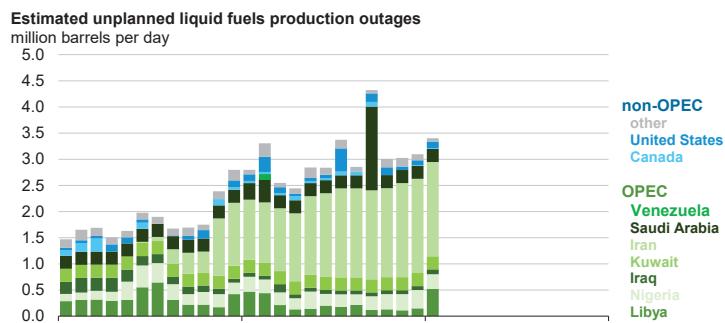
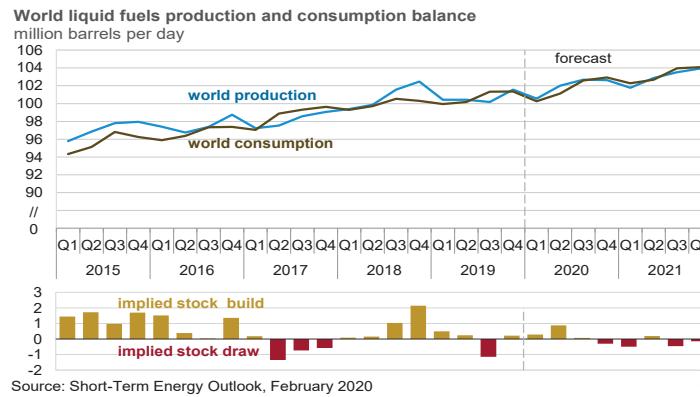


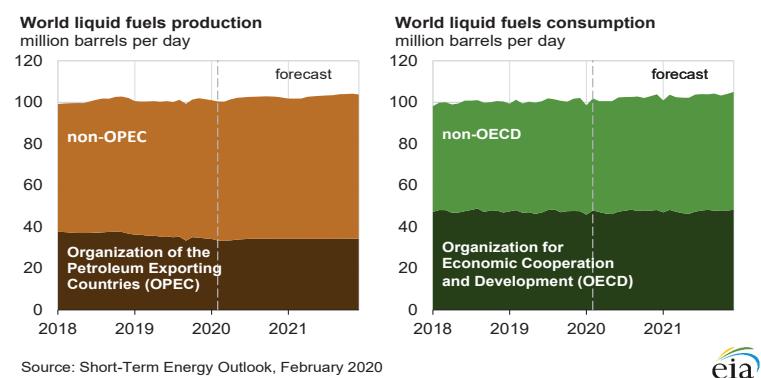
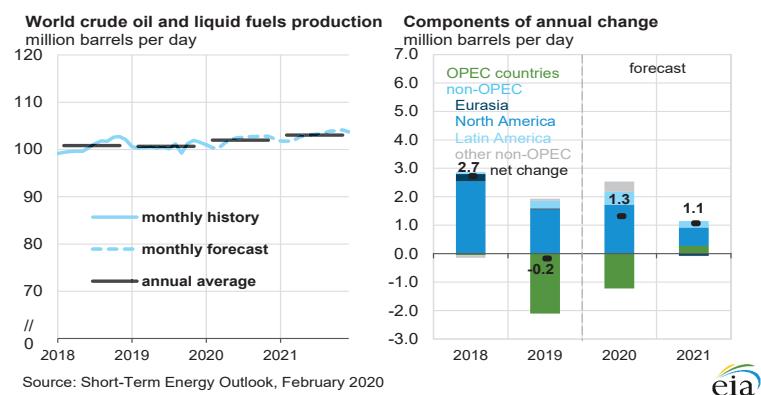
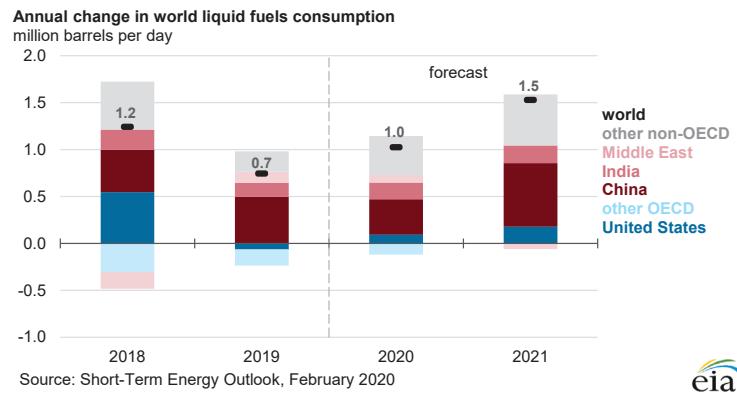
**Components of annual change**  
million metric tons



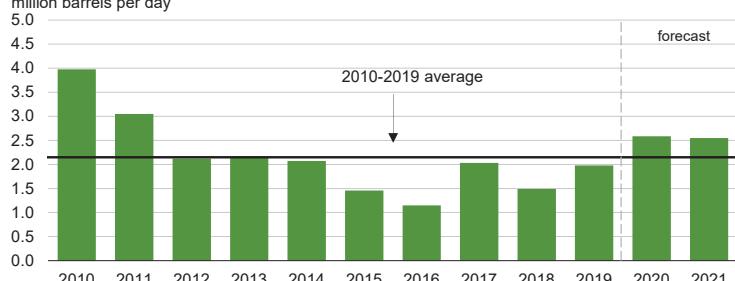
Source: Short-Term Energy Outlook, February 2020







**Organization of the Petroleum Exporting Countries (OPEC) surplus crude oil production capacity**  
million barrels per day

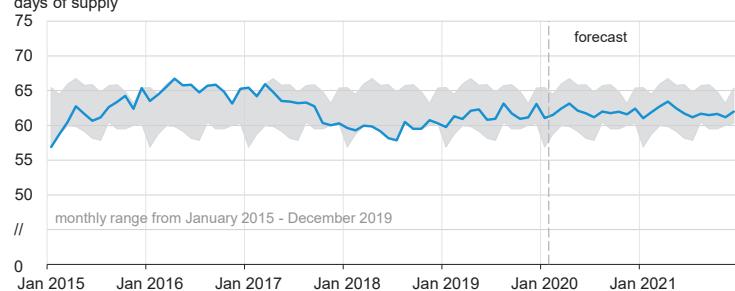


Note: Black line represents 2010-2019 average (2.1 million barrels per day).

Source: Short-Term Energy Outlook, February 2020



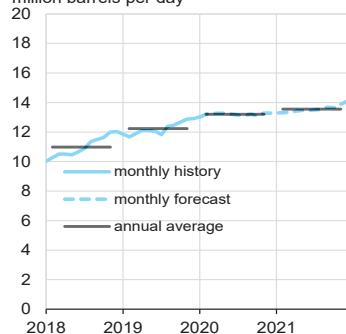
**Organization for Economic Cooperation and Development (OECD) commercial inventories of crude oil and other liquids**  
days of supply



Source: Short-Term Energy Outlook, February 2020

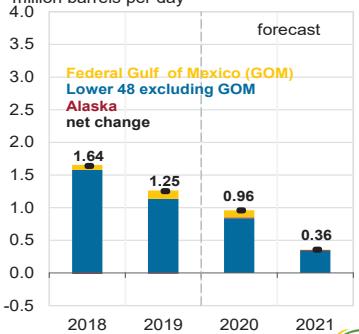


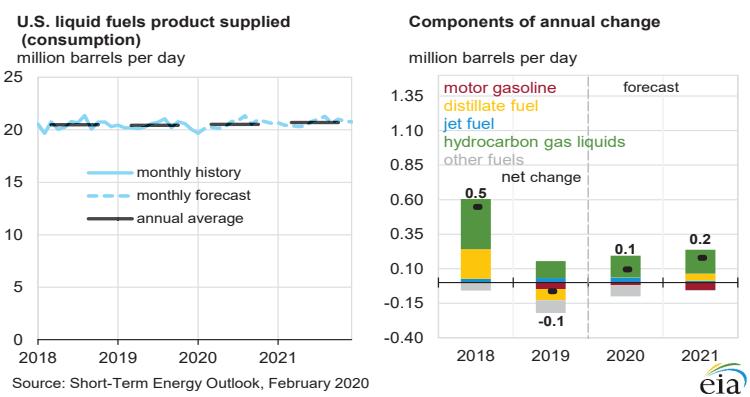
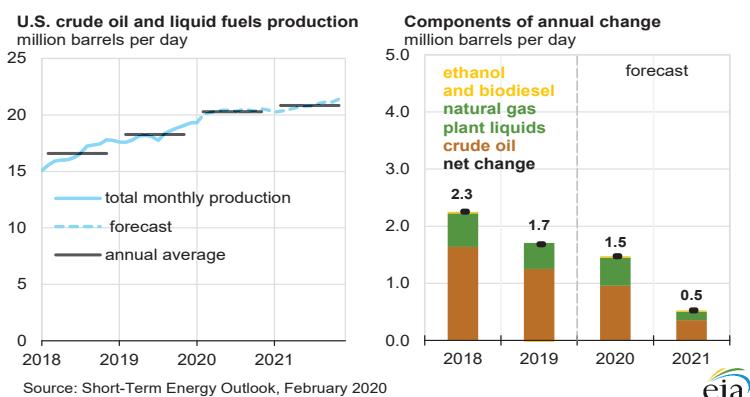
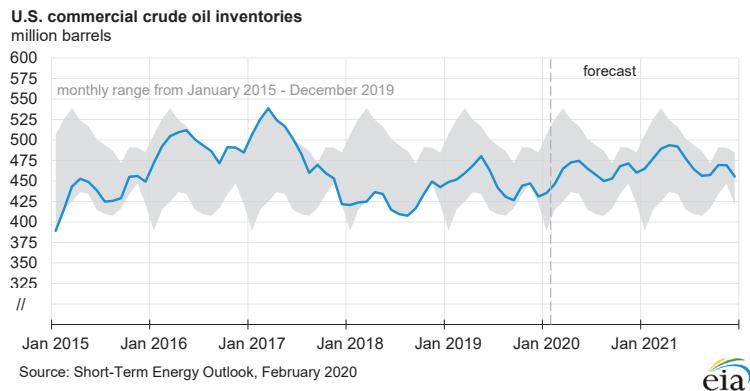
**U.S. crude oil production**  
million barrels per day

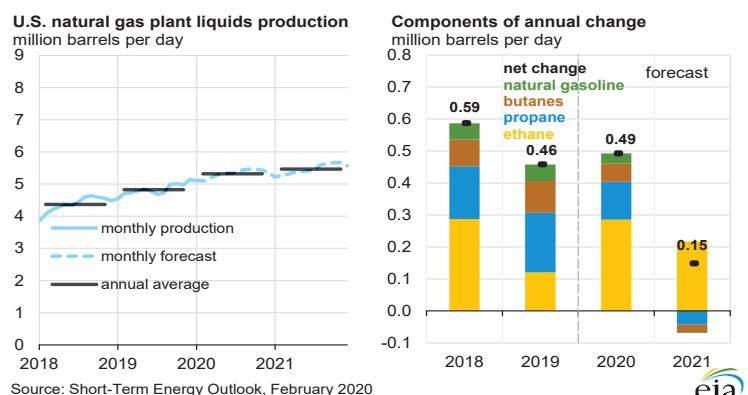
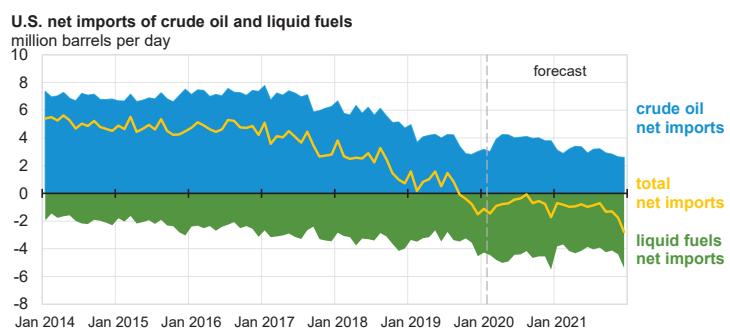
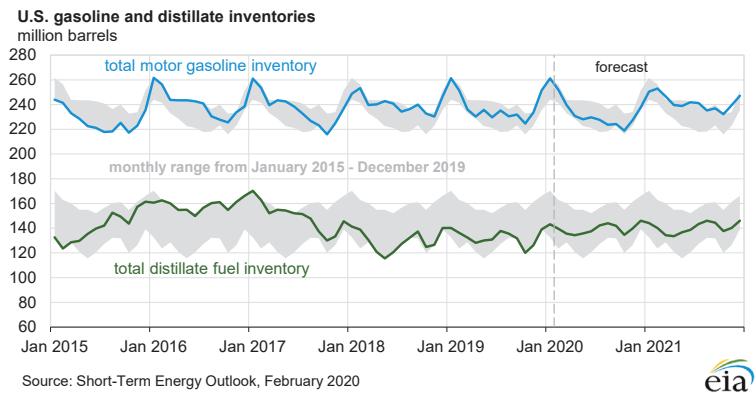


Source: Short-Term Energy Outlook, February 2020

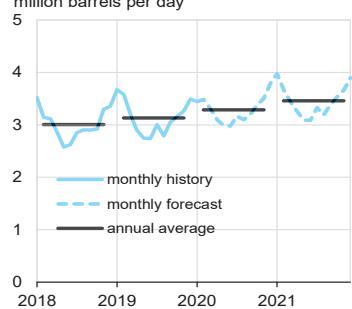
**Components of annual change**  
million barrels per day





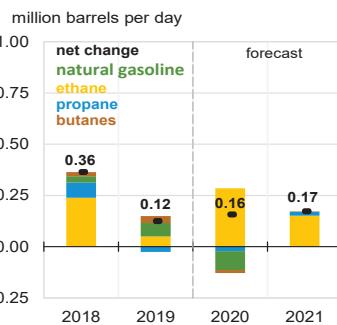


**U.S. hydrocarbon gas liquids product supplied (consumption)**  
million barrels per day



Source: Short-Term Energy Outlook, February 2020

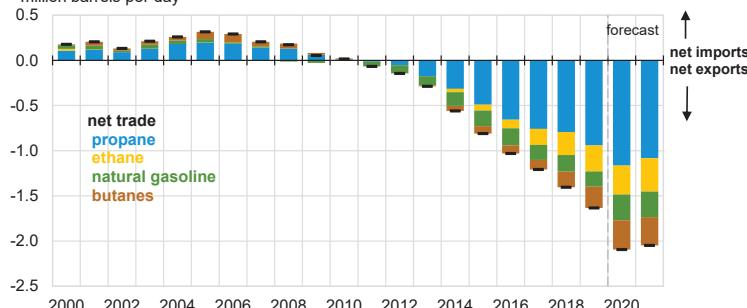
**Components of annual change**



forecast

eia

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

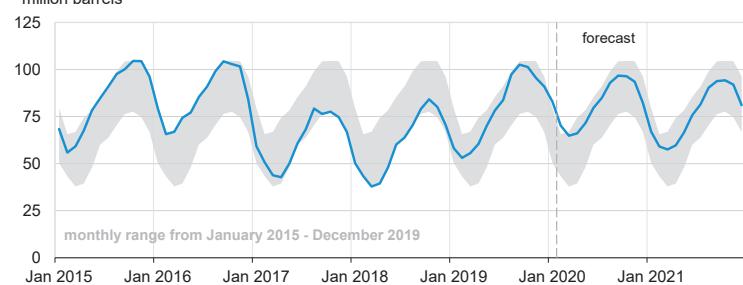


Source: Short-Term Energy Outlook, February 2020

net imports  
↑  
net exports  
↓

eia

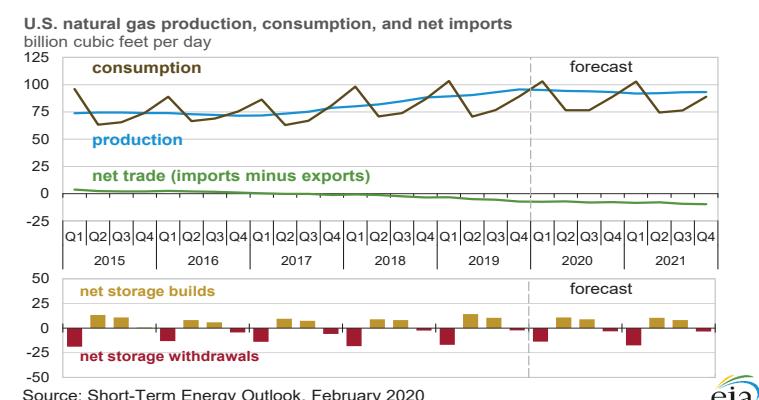
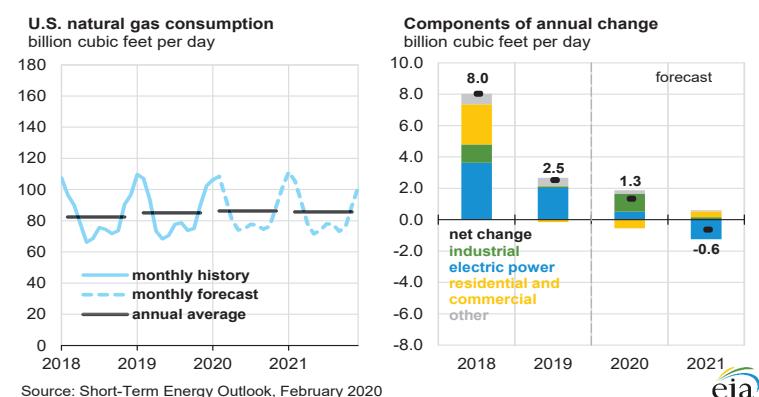
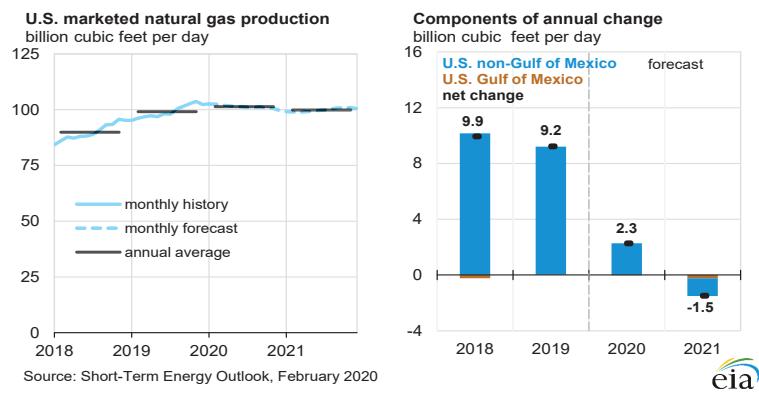
**U.S. commercial propane inventories**  
million barrels



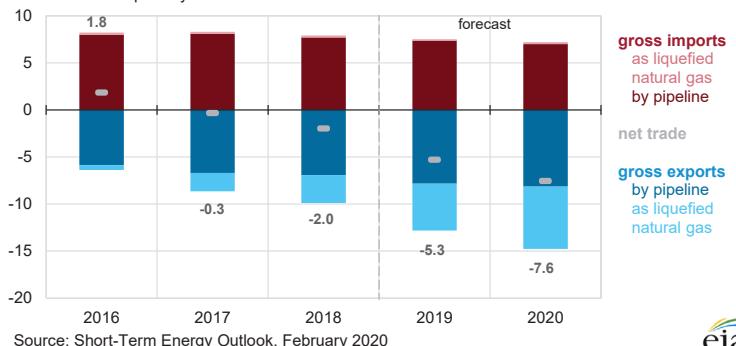
Note: Propane includes refinery propylene.

Source: Short-Term Energy Outlook, February 2020

eia



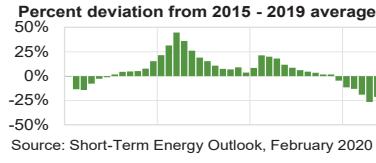
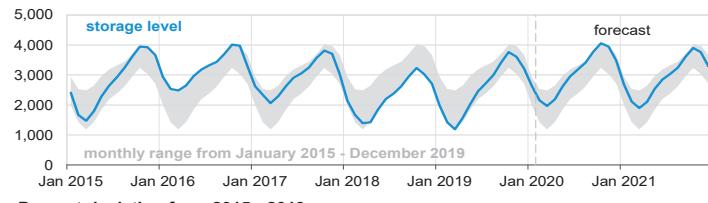
**Annual natural gas trade**  
billion cubic feet per day



Source: Short-Term Energy Outlook, February 2020



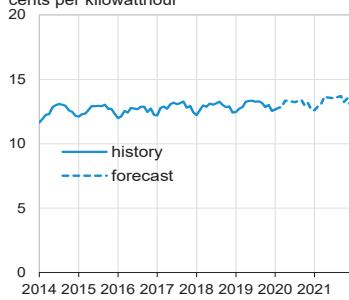
**U.S. working natural gas in storage**  
billion cubic feet



Source: Short-Term Energy Outlook, February 2020

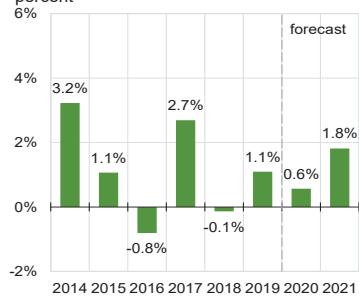


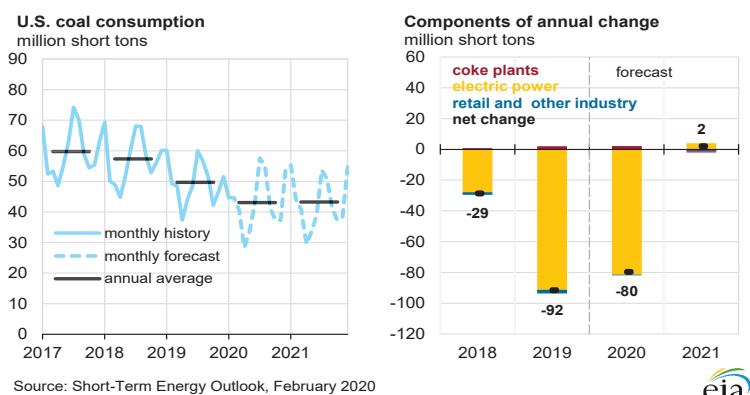
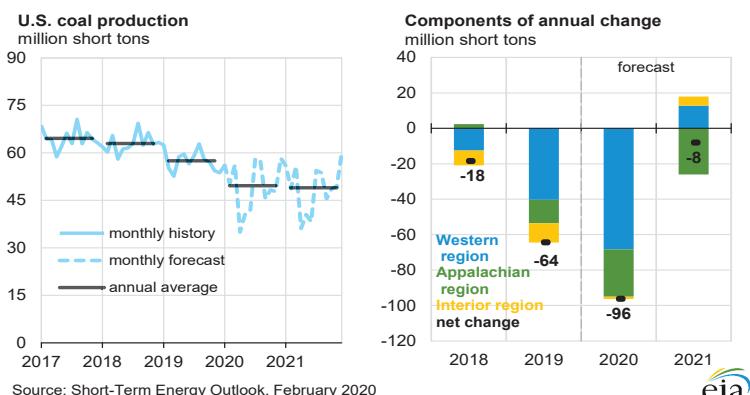
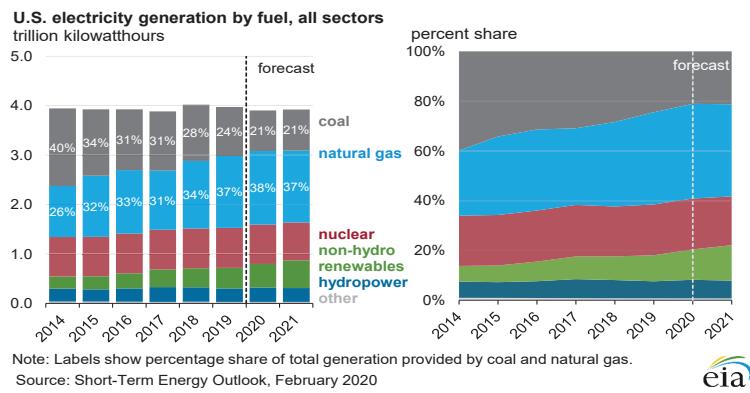
**U.S. monthly residential electricity price**  
cents per kilowatthour

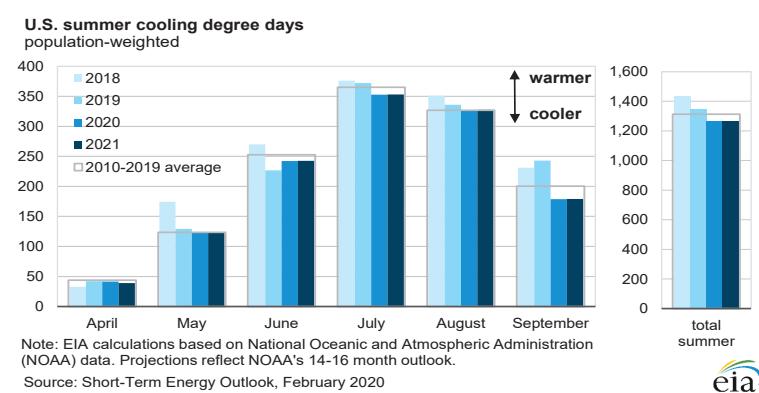
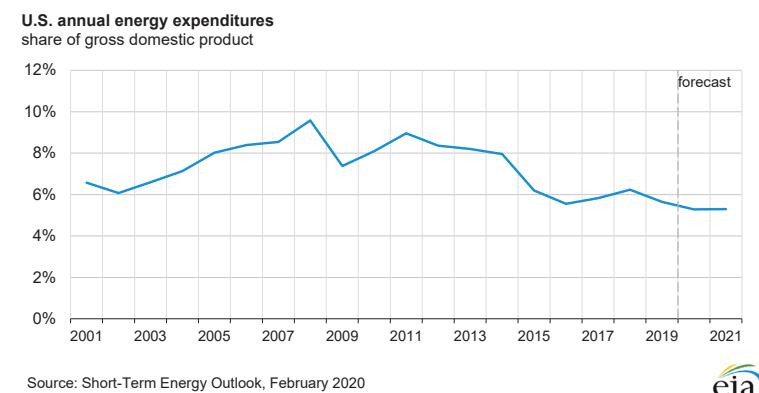
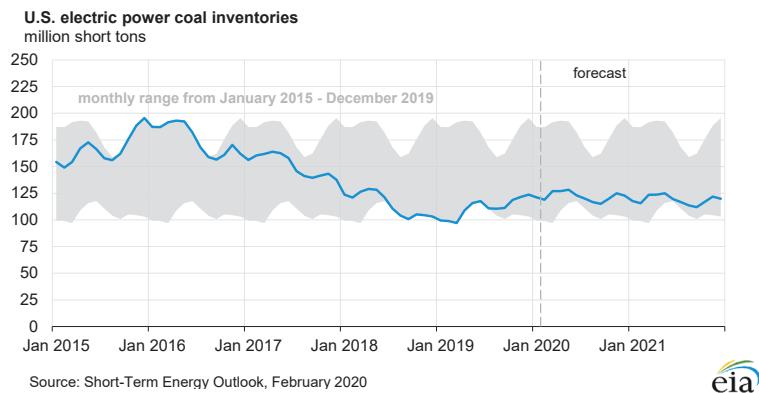


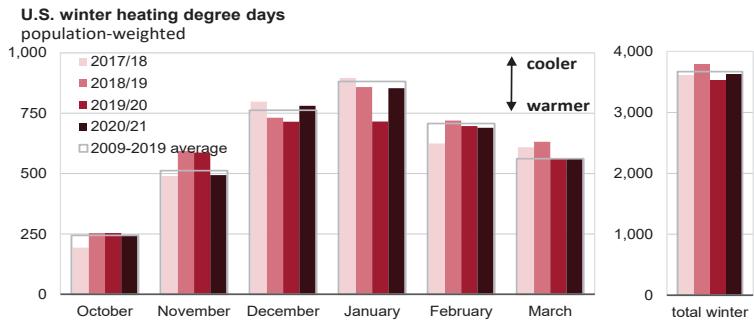
Source: Short-Term Energy Outlook, February 2020

**Annual growth in residential electricity prices**  
percent









### 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 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Energy Supply</b>															
Crude Oil Production (a) (million barrels per day) .....	11.81	12.10	12.23	12.82	13.16	13.25	13.17	13.22	13.32	13.46	13.57	13.86	12.24	13.20	13.56
Dry Natural Gas Production (billion cubic feet per day) .....	89.32	90.50	92.98	95.70	95.15	94.34	93.98	93.17	91.85	92.16	92.99	93.27	92.15	94.16	92.57
Coal Production (million short tons) .....	170	175	180	165	163	117	161	154	160	115	154	158	690	595	587
<b>Energy Consumption</b>															
Liquid Fuels (million barrels per day) .....	20.29	20.32	20.68	20.47	20.03	20.39	20.92	20.79	20.50	20.49	20.98	20.86	20.44	20.53	20.71
Natural Gas (billion cubic feet per day) .....	103.32	70.74	76.75	89.09	103.11	76.52	76.47	88.95	102.88	74.45	76.35	88.98	84.91	86.24	85.60
Coal (b) (million short tons) .....	158	130	168	140	130	104	154	129	140	102	146	131	596	517	519
Electricity (billion kilowatt hours per day) .....	10.53	10.01	12.07	10.09	10.36	10.07	11.87	9.98	10.67	10.09	11.90	10.01	10.68	10.57	10.67
Renewables (c) (quadrillion Btu) .....	2.81	3.08	2.80	2.79	2.96	3.30	2.97	3.01	3.14	3.51	3.21	3.18	11.47	12.25	13.04
Total Energy Consumption (d) (quadrillion Btu) .....	26.53	23.44	24.97	25.36	25.97	23.27	24.50	25.07	26.13	23.24	24.48	25.11	100.30	98.81	98.96
<b>Energy Prices</b>															
Crude Oil West Texas Intermediate Spot (dollars per barrel) .....	54.82	59.94	56.35	56.86	52.89	52.19	58.12	59.50	60.50	61.50	62.50	63.50	57.02	55.71	62.03
Natural Gas Henry Hub Spot (dollars per million Btu) .....	2.92	2.56	2.38	2.40	1.98	2.09	2.36	2.42	2.65	2.43	2.46	2.57	2.57	2.21	2.53
Coal (dollars per million Btu) .....	2.08	2.05	1.99	2.06	2.09	2.09	2.08	2.08	2.09	2.10	2.09	2.09	2.05	2.09	2.09
<b>Macroeconomic</b>															
Real Gross Domestic Product (billion chained 2012 dollars - SAAR) .....	18,927	19,022	19,121	19,207	19,288	19,399	19,513	19,604	19,699	19,778	19,865	19,967	19,069	19,451	19,827
Percent change from prior year .....	2.7	2.3	2.1	2.3	1.9	2.0	2.0	2.1	2.1	2.0	1.8	1.8	2.3	2.0	1.9
GDP Implicit Price Deflator (Index, 2012=100) .....	111.5	112.2	112.7	113.1	113.8	114.3	115.1	115.8	116.5	117.2	118.0	118.7	112.4	114.7	117.6
Percent change from prior year .....	2.0	1.8	1.7	1.7	2.0	1.9	2.1	2.3	2.4	2.5	2.5	2.5	1.8	2.1	2.5
Real Disposable Personal Income (billion chained 2012 dollars - SAAR) .....	14,878	14,934	15,043	15,116	15,184	15,259	15,331	15,415	15,532	15,620	15,706	15,796	14,993	15,297	15,663
Percent change from prior year .....	3.3	3.0	2.9	2.7	2.1	2.2	1.9	2.0	2.3	2.4	2.4	2.5	3.0	2.0	2.4
Manufacturing Production Index (Index, 2012=100) .....	106.5	105.7	105.9	105.6	105.4	105.8	106.5	106.7	106.8	107.1	107.4	108.0	105.9	106.1	107.3
Percent change from prior year .....	1.6	0.1	-0.6	-1.3	-1.1	0.2	0.5	1.0	1.4	1.1	0.9	1.3	0.0	0.2	1.2
<b>Weather</b>															
U.S. Heating Degree-Days .....	2,210	481	57	1,556	1,973	480	72	1,520	2,105	483	72	1,518	4,303	4,046	4,179
U.S. Cooling Degree-Days .....	46	398	951	105	47	407	859	93	43	405	860	93	1,499	1,406	1,401

- = 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 (MER). 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 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Crude Oil</b> (dollars per barrel)															
West Texas Intermediate Spot Average .....	54.82	59.94	56.35	56.86	52.89	52.19	58.12	59.50	60.50	61.50	62.50	63.50	57.02	55.71	62.03
Brent Spot Average .....	63.14	69.07	61.90	63.30	58.59	57.69	63.62	65.00	66.00	67.00	68.00	69.00	64.37	61.25	67.53
U.S. Imported Average .....	55.25	62.98	57.30	55.09	49.12	48.47	55.07	56.43	58.01	59.01	60.01	61.01	57.86	52.35	59.47
U.S. Refiner Average Acquisition Cost .....	56.93	63.55	58.67	56.84	51.77	51.02	57.57	58.93	59.51	60.51	61.51	62.51	59.03	54.87	61.03
<b>U.S. Liquid Fuels</b> (cents per gallon)															
<b>Refiner Prices for Resale</b>															
Gasoline .....	167	205	189	182	165	175	189	180	177	196	195	183	186	177	188
Diesel Fuel .....	192	203	192	198	180	180	192	196	192	201	203	206	196	187	201
Heating Oil .....	189	195	184	192	178	169	180	188	194	198	201	205	190	180	197
<b>Refiner Prices to End Users</b>															
Jet Fuel .....	193	204	194	198	177	179	191	192	192	201	202	205	197	185	200
No. 6 Residual Fuel Oil (a) .....	153	163	155	155	152	146	167	176	147	145	145	148	156	161	146
<b>Retail Prices Including Taxes</b>															
Gasoline Regular Grade (b) .....	236	279	265	259	241	249	266	257	249	272	272	259	260	253	263
Gasoline All Grades (b) .....	245	288	274	269	251	260	278	270	262	285	285	272	269	265	276
On-highway Diesel Fuel .....	302	312	302	306	292	285	297	304	294	302	305	310	306	294	303
Heating Oil .....	300	305	290	307	296	280	280	297	298	297	301	315	302	293	304
<b>Natural Gas</b>															
Henry Hub Spot (dollars per thousand cubic feet) .....	3.03	2.66	2.47	2.49	2.05	2.17	2.45	2.51	2.75	2.53	2.56	2.66	2.66	2.29	2.62
Henry Hub Spot (dollars per million Btu) .....	2.92	2.56	2.38	2.40	1.98	2.09	2.36	2.42	2.65	2.43	2.46	2.57	2.57	2.21	2.53
<b>U.S. Retail Prices</b> (dollars per thousand cubic feet)															
Industrial Sector .....	4.67	3.74	3.30	3.89	3.54	3.05	3.31	3.66	4.07	3.50	3.45	3.84	3.95	3.40	3.74
Commercial Sector .....	7.59	7.97	8.40	7.29	7.08	7.39	7.98	7.28	7.25	7.77	8.21	7.43	7.65	7.30	7.50
Residential Sector .....	9.47	12.48	18.10	9.81	9.11	11.60	16.45	10.00	9.14	12.01	16.80	10.21	10.54	10.25	10.39
<b>U.S. Electricity</b>															
<b>Power Generation Fuel Costs</b> (dollars per million Btu)															
Coal .....	2.08	2.05	1.99	2.06	2.09	2.09	2.08	2.08	2.09	2.10	2.09	2.09	2.05	2.09	2.09
Natural Gas .....	3.71	2.73	2.51	2.92	2.47	2.12	2.39	2.67	3.10	2.55	2.51	2.85	2.91	2.40	2.73
Residual Fuel Oil (c) .....	12.21	13.39	12.79	12.29	11.98	11.74	11.59	11.95	12.28	13.19	12.64	12.61	12.67	11.81	12.64
Distillate Fuel Oil .....	14.88	15.75	15.01	15.50	14.38	14.03	14.80	15.22	14.92	15.60	15.68	15.95	15.27	14.62	15.50
<b>Retail Prices</b> (cents per kilowatthour)															
Industrial Sector .....	6.67	6.72	7.24	6.76	6.57	6.69	7.33	6.78	6.73	6.84	7.43	6.87	6.85	6.86	6.98
Commercial Sector .....	10.41	10.65	11.00	10.52	10.33	10.53	10.95	10.52	10.38	10.67	11.14	10.73	10.66	10.60	10.75
Residential Sector .....	12.67	13.32	13.25	12.78	12.77	13.31	13.31	12.91	12.84	13.60	13.61	13.22	13.01	13.08	13.32

- = 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 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Supply (million barrels per day) (a)</b>															
OECD .....	31.08	31.32	31.44	32.80	33.42	33.78	33.67	33.96	33.90	34.16	34.44	35.05	31.66	33.71	34.39
U.S. (50 States) .....	18.91	19.38	19.49	20.41	20.83	21.23	21.23	21.31	21.17	21.52	21.82	22.19	19.55	21.15	21.68
Canada .....	5.44	5.47	5.46	5.59	5.62	5.62	5.67	5.73	5.80	5.80	5.87	5.94	5.49	5.66	5.85
Mexico .....	1.91	1.91	1.92	1.92	1.90	1.89	1.86	1.81	1.82	1.80	1.78	1.77	1.91	1.86	1.79
Other OECD .....	4.82	4.56	4.57	4.89	5.07	5.03	4.92	5.11	5.11	5.03	4.97	5.15	4.71	5.03	5.07
Non-OECD .....	69.36	69.12	68.75	68.77	67.13	68.24	69.01	68.68	67.88	68.72	69.08	68.89	69.00	68.27	68.65
OPEC .....	36.05	35.50	34.56	34.76	33.62	33.82	34.26	34.25	34.26	34.24	34.23	34.32	35.21	33.99	34.26
Crude Oil Portion .....	30.47	30.00	29.20	29.48	28.55	28.77	29.21	29.19	29.22	29.19	29.17	29.25	29.78	28.93	29.21
Other Liquids (b) .....	5.58	5.50	5.36	5.28	5.07	5.05	5.06	5.06	5.04	5.05	5.06	5.07	5.43	5.06	5.06
Eurasia .....	14.87	14.43	14.59	14.68	14.71	14.57	14.59	14.66	14.61	14.47	14.51	14.59	14.64	14.63	14.55
China .....	4.89	4.92	4.89	4.88	4.92	4.95	4.96	5.00	4.98	5.01	5.01	5.05	4.89	4.96	5.01
Other Non-OECD .....	13.55	14.26	14.72	14.45	13.88	14.89	15.20	14.77	14.03	15.00	15.33	14.93	14.25	14.69	14.83
Total World Supply .....	100.43	100.43	100.19	101.58	100.55	102.01	102.68	102.63	101.78	102.88	103.52	103.94	100.66	101.97	103.04
Non-OPEC Supply .....	64.38	64.93	65.63	66.81	66.93	68.19	68.42	68.38	67.52	68.64	69.29	69.62	65.45	67.98	68.78
<b>Consumption (million barrels per day) (c)</b>															
OECD .....	47.42	46.72	47.85	47.58	46.96	46.64	47.91	47.96	47.47	46.74	47.95	48.01	47.40	47.37	47.54
U.S. (50 States) .....	20.29	20.32	20.68	20.47	20.03	20.39	20.92	20.79	20.50	20.49	20.98	20.86	20.44	20.53	20.71
U.S. Territories .....	0.12	0.11	0.12	0.13	0.12	0.11	0.12	0.13	0.16	0.14	0.14	0.15	0.12	0.12	0.15
Canada .....	2.45	2.44	2.60	2.58	2.52	2.46	2.57	2.54	2.52	2.46	2.57	2.54	2.52	2.52	2.52
Europe .....	13.93	14.04	14.53	14.16	13.75	13.99	14.50	14.20	13.78	13.99	14.49	14.21	14.17	14.11	14.12
Japan .....	4.09	3.41	3.44	3.81	4.05	3.32	3.40	3.74	4.00	3.28	3.36	3.69	3.68	3.63	3.58
Other OECD .....	6.55	6.40	6.49	6.45	6.50	6.38	6.41	6.56	6.51	6.38	6.41	6.56	6.47	6.46	6.46
Non-OECD .....	52.52	53.47	53.49	53.77	53.30	54.49	54.70	54.97	54.81	55.95	56.02	56.08	53.31	54.36	55.72
Eurasia .....	4.83	4.90	5.17	5.12	4.84	4.96	5.34	5.24	4.98	5.04	5.43	5.28	5.01	5.10	5.18
Europe .....	0.76	0.76	0.78	0.78	0.77	0.77	0.79	0.79	0.78	0.78	0.80	0.80	0.77	0.78	0.79
China .....	14.38	14.67	14.39	14.61	14.66	14.97	14.83	15.09	15.50	15.71	15.41	15.65	14.51	14.89	15.57
Other Asia .....	13.95	13.97	13.62	13.97	14.18	14.35	13.97	14.32	14.69	14.86	14.42	14.79	13.88	14.21	14.69
Other Non-OECD .....	18.60	19.16	19.53	19.29	18.85	19.43	19.76	19.51	18.86	19.56	19.96	19.56	19.15	19.39	19.49
Total World Consumption .....	99.94	100.19	101.34	101.36	100.26	101.13	102.60	102.93	102.28	102.69	103.97	104.08	100.71	101.74	103.26
<b>Total Crude Oil and Other Liquids Inventory Net Withdrawals (million barrels per day)</b>															
U.S. (50 States) .....	0.17	-0.62	0.06	0.37	0.08	-0.38	-0.14	0.34	-0.05	-0.35	-0.10	0.45	0.00	-0.02	-0.01
Other OECD .....	-0.21	-0.01	-0.12	0.17	-0.12	-0.16	0.02	-0.02	0.18	0.05	0.18	-0.10	-0.04	-0.07	0.08
Other Stock Draws and Balance .....	-0.45	0.38	1.21	-0.76	-0.25	-0.34	0.04	-0.03	0.37	0.11	0.38	-0.21	0.10	-0.14	0.16
Total Stock Draw .....	-0.49	-0.25	1.15	-0.22	-0.29	-0.88	-0.08	0.30	0.49	-0.19	0.45	0.14	0.05	-0.24	0.23
<b>End-of-period Commercial Crude Oil and Other Liquids Inventories (million barrels)</b>															
U.S. Commercial Inventory .....	1,249	1,310	1,305	1,280	1,273	1,308	1,321	1,293	1,301	1,335	1,346	1,306	1,280	1,293	1,306
OECD Commercial Inventory .....	2,867	2,928	2,934	2,894	2,899	2,948	2,960	2,933	2,924	2,954	2,948	2,918	2,894	2,933	2,918

- = 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, Lithuania, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, the United States.

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

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

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

(c) Consumption of petroleum by the OECD countries is synonymous with "petroleum product supplied," defined in the glossary of the EIA *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 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>North America</b> .....	<b>26.26</b>	<b>26.76</b>	<b>26.87</b>	<b>27.92</b>	28.35	28.74	28.76	28.84	28.79	29.13	29.47	29.90	<b>26.96</b>	<b>28.67</b>	<b>29.32</b>
Canada .....	<b>5.44</b>	<b>5.47</b>	<b>5.46</b>	<b>5.59</b>	5.62	5.62	5.67	5.73	5.80	5.80	5.87	5.94	<b>5.49</b>	<b>5.66</b>	<b>5.85</b>
Mexico .....	<b>1.91</b>	<b>1.91</b>	<b>1.92</b>	<b>1.92</b>	1.90	1.89	1.86	1.81	1.82	1.80	1.78	1.77	<b>1.91</b>	<b>1.86</b>	<b>1.79</b>
United States .....	<b>18.91</b>	<b>19.38</b>	<b>19.49</b>	<b>20.41</b>	20.83	21.23	21.23	21.31	21.17	21.52	21.82	22.19	<b>19.55</b>	<b>21.15</b>	<b>21.68</b>
<b>Central and South America</b> .....	<b>4.91</b>	<b>5.68</b>	<b>6.25</b>	<b>5.85</b>	5.29	6.32	6.65	6.25	5.52	6.53	6.87	6.49	<b>5.68</b>	<b>6.13</b>	<b>6.36</b>
Argentina .....	<b>0.66</b>	<b>0.70</b>	<b>0.70</b>	<b>0.67</b>	0.69	0.71	0.71	0.70	0.71	0.72	0.73	0.71	<b>0.68</b>	<b>0.70</b>	<b>0.72</b>
Brazil .....	<b>2.90</b>	<b>3.65</b>	<b>4.22</b>	<b>3.86</b>	3.21	4.18	4.51	4.12	3.39	4.39	4.73	4.36	<b>3.66</b>	<b>4.01</b>	<b>4.22</b>
Colombia .....	<b>0.92</b>	<b>0.92</b>	<b>0.91</b>	<b>0.91</b>	0.91	0.90	0.90	0.91	0.91	0.91	0.89	0.90	<b>0.91</b>	<b>0.91</b>	<b>0.90</b>
Other Central and S. America .....	<b>0.42</b>	<b>0.41</b>	<b>0.42</b>	<b>0.42</b>	0.48	0.51	0.52	0.53	0.52	0.51	0.52	0.52	<b>0.42</b>	<b>0.51</b>	<b>0.52</b>
<b>Europe</b> .....	<b>4.26</b>	<b>3.97</b>	<b>3.94</b>	<b>4.32</b>	4.52	4.48	4.36	4.54	4.54	4.47	4.41	4.60	<b>4.12</b>	<b>4.47</b>	<b>4.50</b>
Norway .....	<b>1.79</b>	<b>1.58</b>	<b>1.66</b>	<b>1.96</b>	2.11	2.08	2.07	2.17	2.18	2.12	2.13	2.19	<b>1.75</b>	<b>2.11</b>	<b>2.16</b>
United Kingdom .....	<b>1.25</b>	<b>1.17</b>	<b>1.09</b>	<b>1.16</b>	1.21	1.21	1.10	1.17	1.16	1.17	1.10	1.21	<b>1.17</b>	<b>1.17</b>	<b>1.16</b>
<b>Eurasia</b> .....	<b>14.87</b>	<b>14.43</b>	<b>14.59</b>	<b>14.68</b>	14.71	14.57	14.59	14.66	14.61	14.47	14.51	14.59	<b>14.64</b>	<b>14.63</b>	<b>14.55</b>
Azerbaijan .....	<b>0.82</b>	<b>0.79</b>	<b>0.78</b>	<b>0.77</b>	0.78	0.77	0.75	0.76	0.74	0.74	0.73	0.74	<b>0.79</b>	<b>0.76</b>	<b>0.74</b>
Kazakhstan .....	<b>2.03</b>	<b>1.85</b>	<b>1.96</b>	<b>2.02</b>	2.03	1.99	2.03	2.06	2.05	1.94	1.98	2.02	<b>1.97</b>	<b>2.03</b>	<b>2.00</b>
Russia .....	<b>11.58</b>	<b>11.41</b>	<b>11.48</b>	<b>11.49</b>	11.51	11.43	11.42	11.45	11.45	11.42	11.43	11.47	<b>11.49</b>	<b>11.45</b>	<b>11.44</b>
Turkmenistan .....	<b>0.29</b>	<b>0.23</b>	<b>0.22</b>	<b>0.25</b>	0.25	0.25	0.25	0.25	0.24	0.24	0.24	0.24	<b>0.25</b>	<b>0.25</b>	<b>0.24</b>
Other Eurasia .....	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	0.14	0.14	0.14	0.14	0.13	0.13	0.13	0.13	<b>0.15</b>	<b>0.14</b>	<b>0.13</b>
<b>Middle East</b> .....	<b>3.11</b>	<b>3.11</b>	<b>3.12</b>	<b>3.13</b>	3.20	3.20	3.20	3.20	3.26	3.25	3.25	3.25	<b>3.12</b>	<b>3.20</b>	<b>3.25</b>
Oman .....	<b>0.98</b>	<b>0.98</b>	<b>0.98</b>	<b>0.99</b>	0.99	0.99	0.99	0.99	1.00	1.00	1.00	1.00	<b>0.98</b>	<b>0.99</b>	<b>1.00</b>
Qatar .....	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	2.06	2.06	2.06	2.06	2.10	2.10	2.10	2.10	<b>2.00</b>	<b>2.06</b>	<b>2.10</b>
<b>Asia and Oceania</b> .....	<b>9.46</b>	<b>9.44</b>	<b>9.31</b>	<b>9.35</b>	9.38	9.40	9.39	9.42	9.40	9.39	9.37	9.39	<b>9.39</b>	<b>9.39</b>	<b>9.39</b>
Australia .....	<b>0.40</b>	<b>0.44</b>	<b>0.47</b>	<b>0.49</b>	0.50	0.50	0.51	0.52	0.52	0.51	0.50	0.50	<b>0.45</b>	<b>0.51</b>	<b>0.51</b>
China .....	<b>4.89</b>	<b>4.92</b>	<b>4.89</b>	<b>4.88</b>	4.92	4.95	4.96	5.00	4.98	5.01	5.01	5.05	<b>4.89</b>	<b>4.96</b>	<b>5.01</b>
India .....	<b>1.01</b>	<b>0.99</b>	<b>0.98</b>	<b>0.95</b>	0.95	0.93	0.93	0.92	0.94	0.93	0.92	0.92	<b>0.98</b>	<b>0.93</b>	<b>0.93</b>
Indonesia .....	<b>0.94</b>	<b>0.90</b>	<b>0.90</b>	<b>0.85</b>	0.86	0.85	0.84	0.83	0.82	0.81	0.81	0.80	<b>0.90</b>	<b>0.84</b>	<b>0.81</b>
Malaysia .....	<b>0.75</b>	<b>0.73</b>	<b>0.65</b>	<b>0.72</b>	0.72	0.73	0.73	0.72	0.72	0.72	0.71	0.70	<b>0.71</b>	<b>0.72</b>	<b>0.71</b>
Vietnam .....	<b>0.25</b>	<b>0.25</b>	<b>0.23</b>	<b>0.22</b>	0.21	0.21	0.21	0.21	0.20	0.20	0.20	0.20	<b>0.24</b>	<b>0.21</b>	<b>0.20</b>
<b>Africa</b> .....	<b>1.52</b>	<b>1.54</b>	<b>1.55</b>	<b>1.56</b>	1.48	1.48	1.48	1.48	1.41	1.41	1.41	1.41	<b>1.54</b>	<b>1.48</b>	<b>1.41</b>
Egypt .....	<b>0.66</b>	<b>0.65</b>	<b>0.65</b>	<b>0.65</b>	0.60	0.60	0.60	0.60	0.56	0.56	0.56	0.56	<b>0.65</b>	<b>0.60</b>	<b>0.56</b>
South Sudan .....	<b>0.17</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	<b>0.18</b>	<b>0.19</b>	<b>0.19</b>
<b>Total non-OPEC liquids</b> .....	<b>64.38</b>	<b>64.93</b>	<b>65.63</b>	<b>66.81</b>	66.93	68.19	68.42	68.38	67.52	68.64	69.29	69.62	<b>65.45</b>	<b>67.98</b>	<b>68.78</b>
<b>OPEC non-crude liquids</b> .....	<b>5.58</b>	<b>5.50</b>	<b>5.36</b>	<b>5.28</b>	5.07	5.05	5.06	5.06	5.04	5.05	5.06	5.07	<b>5.43</b>	<b>5.06</b>	<b>5.06</b>
<b>Non-OPEC + OPEC non-crude</b> .....	<b>69.96</b>	<b>70.43</b>	<b>70.99</b>	<b>72.10</b>	72.00	73.24	73.47	73.45	72.57	73.69	74.35	74.69	<b>70.88</b>	<b>73.04</b>	<b>73.83</b>
<b>Unplanned non-OPEC Production Outages</b> .....	<b>0.35</b>	<b>0.26</b>	<b>0.39</b>	<b>0.25</b>	n/a	<b>0.31</b>	n/a	n/a							

- = no data available

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

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

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

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

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

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

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

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

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Crude Oil</b>															
Algeria .....	1.01	1.02	1.02	1.02	-	-	-	-	-	-	-	-	1.02	-	-
Angola .....	1.50	1.43	1.40	1.36	-	-	-	-	-	-	-	-	1.42	-	-
Congo (Brazzaville) .....	0.33	0.33	0.33	0.31	-	-	-	-	-	-	-	-	0.32	-	-
Ecuador .....	0.53	0.53	0.55	0.51	-	-	-	-	-	-	-	-	0.53	-	-
Equatorial Guinea .....	0.11	0.11	0.13	0.13	-	-	-	-	-	-	-	-	0.12	-	-
Gabon .....	0.20	0.20	0.20	0.20	-	-	-	-	-	-	-	-	0.20	-	-
Iran .....	2.63	2.33	2.10	2.03	-	-	-	-	-	-	-	-	2.27	-	-
Iraq .....	4.75	4.70	4.70	4.65	-	-	-	-	-	-	-	-	4.70	-	-
Kuwait .....	2.74	2.72	2.70	2.70	-	-	-	-	-	-	-	-	2.72	-	-
Libya .....	0.93	1.14	1.13	1.17	-	-	-	-	-	-	-	-	1.09	-	-
Nigeria .....	1.58	1.65	1.71	1.67	-	-	-	-	-	-	-	-	1.65	-	-
Saudi Arabia .....	10.00	9.92	9.38	9.83	-	-	-	-	-	-	-	-	9.78	-	-
United Arab Emirates .....	3.12	3.12	3.13	3.20	-	-	-	-	-	-	-	-	3.14	-	-
Venezuela .....	1.05	0.79	0.73	0.68	-	-	-	-	-	-	-	-	0.81	-	-
OPEC Total .....	30.47	30.00	29.20	29.48	28.55	28.77	29.21	29.19	29.22	29.19	29.17	29.25	29.78	28.93	29.21
Other Liquids (a) .....	5.58	5.50	5.36	5.28	5.07	5.05	5.06	5.06	5.04	5.05	5.06	5.07	5.43	5.06	5.06
<b>Total OPEC Supply</b> .....	<b>36.05</b>	<b>35.50</b>	<b>34.56</b>	<b>34.76</b>	<b>33.62</b>	<b>33.82</b>	<b>34.26</b>	<b>34.25</b>	<b>34.26</b>	<b>34.24</b>	<b>34.23</b>	<b>34.32</b>	<b>35.21</b>	<b>33.99</b>	<b>34.26</b>
<b>Crude Oil Production Capacity</b>															
Africa .....	5.66	5.89	5.91	5.87	5.25	5.65	5.65	5.66	5.64	5.64	5.66	5.67	5.83	5.56	5.65
Middle East .....	25.31	24.96	23.96	24.13	24.68	24.85	25.03	25.11	25.12	25.20	25.22	25.31	24.59	24.92	25.21
South America .....	1.58	1.32	1.28	1.20	1.19	1.03	1.00	0.97	0.94	0.91	0.88	0.85	1.34	1.04	0.89
OPEC Total .....	32.55	32.18	31.16	31.19	31.12	31.53	31.68	31.73	31.70	31.74	31.75	31.83	31.76	31.51	31.76
<b>Surplus Crude Oil Production Capacity</b>	<b>0.00</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	1.98	2.58	2.55
Middle East .....	2.08	2.18	1.95	1.71	2.57	2.75	2.47	2.55	2.48	2.56	2.58	2.58	1.98	2.58	2.55
South America .....	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEC Total .....	2.08	2.18	1.95	1.71	2.57	2.75	2.47	2.55	2.48	2.56	2.58	2.58	1.98	2.58	2.55
<b>Unplanned OPEC Production Outages</b> .....	<b>2.52</b>	<b>2.45</b>	<b>3.12</b>	<b>2.82</b>	<i>n/a</i>	<b>2.73</b>	<i>n/a</i>	<i>n/a</i>							

- = no data available

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

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

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

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

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

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2020

	2019				2020				2021						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>North America .....</b>	<b>24.68</b>	<b>24.72</b>	<b>25.22</b>	<b>24.90</b>	<b>24.43</b>	<b>24.78</b>	<b>25.41</b>	<b>25.27</b>	<b>24.91</b>	<b>24.87</b>	<b>25.47</b>	<b>25.34</b>	<b>24.88</b>	<b>24.97</b>	<b>25.15</b>
Canada .....	2.45	2.44	2.60	2.58	2.52	2.46	2.57	2.54	2.52	2.46	2.57	2.54	<b>2.52</b>	2.52	2.52
Mexico .....	1.93	1.94	1.93	1.85	1.88	1.91	1.91	1.93	1.88	1.91	1.91	1.93	<b>1.91</b>	1.91	1.91
United States .....	20.29	20.32	20.68	20.47	20.03	20.39	20.92	20.79	20.50	20.49	20.98	20.86	<b>20.44</b>	20.53	20.71
<b>Central and South America .....</b>	<b>6.60</b>	<b>6.79</b>	<b>6.85</b>	<b>6.85</b>	<b>6.63</b>	<b>6.78</b>	<b>6.91</b>	<b>6.92</b>	<b>6.68</b>	<b>6.82</b>	<b>6.95</b>	<b>6.96</b>	<b>6.78</b>	<b>6.81</b>	<b>6.86</b>
Brazil .....	3.01	3.14	3.18	3.15	3.08	3.15	3.24	3.25	3.12	3.19	3.29	3.29	<b>3.12</b>	3.18	3.22
<b>Europe .....</b>	<b>14.70</b>	<b>14.81</b>	<b>15.31</b>	<b>14.94</b>	<b>14.52</b>	<b>14.76</b>	<b>15.28</b>	<b>14.99</b>	<b>14.56</b>	<b>14.77</b>	<b>15.29</b>	<b>15.01</b>	<b>14.94</b>	<b>14.89</b>	<b>14.91</b>
<b>Eurasia .....</b>	<b>4.83</b>	<b>4.90</b>	<b>5.17</b>	<b>5.12</b>	<b>4.84</b>	<b>4.96</b>	<b>5.34</b>	<b>5.24</b>	<b>4.98</b>	<b>5.04</b>	<b>5.43</b>	<b>5.28</b>	<b>5.01</b>	<b>5.10</b>	<b>5.18</b>
Russia .....	3.67	3.76	3.97	3.91	3.67	3.82	4.14	4.03	3.80	3.90	4.22	4.06	<b>3.83</b>	3.92	3.99
<b>Middle East .....</b>	<b>8.19</b>	<b>8.55</b>	<b>8.94</b>	<b>8.53</b>	<b>8.27</b>	<b>8.71</b>	<b>9.01</b>	<b>8.54</b>	<b>8.14</b>	<b>8.68</b>	<b>9.06</b>	<b>8.43</b>	<b>8.55</b>	<b>8.64</b>	<b>8.58</b>
<b>Asia and Oceania .....</b>	<b>36.43</b>	<b>35.91</b>	<b>35.42</b>	<b>36.39</b>	<b>36.93</b>	<b>36.51</b>	<b>36.10</b>	<b>37.21</b>	<b>38.27</b>	<b>37.74</b>	<b>37.10</b>	<b>38.20</b>	<b>36.03</b>	<b>36.69</b>	<b>37.83</b>
China .....	14.38	14.67	14.39	14.61	14.66	14.97	14.83	15.09	15.50	15.71	15.41	15.65	<b>14.51</b>	14.89	15.57
Japan .....	4.09	3.41	3.44	3.81	4.05	3.32	3.40	3.74	4.00	3.28	3.36	3.69	<b>3.68</b>	3.63	3.58
India .....	4.82	4.75	4.48	4.77	4.93	4.99	4.66	4.95	5.12	5.18	4.84	5.14	<b>4.70</b>	4.88	5.07
<b>Africa .....</b>	<b>4.51</b>	<b>4.51</b>	<b>4.43</b>	<b>4.63</b>	<b>4.63</b>	<b>4.63</b>	<b>4.54</b>	<b>4.75</b>	<b>4.75</b>	<b>4.75</b>	<b>4.66</b>	<b>4.87</b>	<b>4.52</b>	<b>4.64</b>	<b>4.76</b>
<b>Total OECD Liquid Fuels Consumption .....</b>	<b>47.42</b>	<b>46.72</b>	<b>47.85</b>	<b>47.58</b>	<b>46.96</b>	<b>46.64</b>	<b>47.91</b>	<b>47.96</b>	<b>47.47</b>	<b>46.74</b>	<b>47.95</b>	<b>48.01</b>	<b>47.40</b>	<b>47.37</b>	<b>47.54</b>
<b>Total non-OECD Liquid Fuels Consumption .....</b>	<b>52.52</b>	<b>53.47</b>	<b>53.49</b>	<b>53.77</b>	<b>53.30</b>	<b>54.49</b>	<b>54.70</b>	<b>54.97</b>	<b>54.81</b>	<b>55.95</b>	<b>56.02</b>	<b>56.08</b>	<b>53.31</b>	<b>54.36</b>	<b>55.72</b>
<b>Total World Liquid Fuels Consumption .....</b>	<b>99.94</b>	<b>100.19</b>	<b>101.34</b>	<b>101.36</b>	<b>100.26</b>	<b>101.13</b>	<b>102.60</b>	<b>102.93</b>	<b>102.28</b>	<b>102.69</b>	<b>103.97</b>	<b>104.08</b>	<b>100.71</b>	<b>101.74</b>	<b>103.26</b>
<b>Oil-weighted Real Gross Domestic Product (a)</b>															
World Index, 2015 Q1 = 100 .....	111.6	112.2	112.8	113.4	113.8	114.7	115.6	116.4	117.4	118.2	118.8	119.6	<b>112.5</b>	115.1	118.5
Percent change from prior year .....	2.1	1.9	1.9	1.9	1.9	2.2	2.5	2.7	3.2	3.0	2.8	2.8	<b>2.0</b>	2.3	2.9
OECD Index, 2015 Q1 = 100 .....	108.9	109.3	109.8	110.1	110.5	110.9	111.4	111.8	112.3	112.8	113.3	113.8	<b>109.5</b>	111.2	113.1
Percent change from prior year .....	1.8	1.7	1.7	1.7	1.5	1.5	1.4	1.5	1.7	1.7	1.7	1.7	<b>1.7</b>	1.5	1.7
Non-OECD Index, 2015 Q1 = 100 .....	114.3	114.9	115.6	116.5	117.0	118.3	119.7	120.9	122.4	123.5	124.3	125.4	<b>115.3</b>	119.0	123.9
Percent change from prior year .....	2.3	2.2	2.1	2.1	2.3	3.0	3.5	3.8	4.6	4.3	3.8	3.7	<b>2.2</b>	3.2	4.1
<b>Real U.S. Dollar Exchange Rate (a)</b>															
Index, 2015 Q1 = 100 .....	<b>105.14</b>	<b>105.73</b>	<b>106.20</b>	<b>106.04</b>	105.15	105.33	105.30	104.92	104.74	104.43	104.05	103.40	<b>105.78</b>	105.17	104.15
Percent change from prior year .....	4.6	3.1	0.8	0.0	0.0	-0.4	-0.8	-1.1	-0.4	-0.9	-1.2	-1.4	<b>2.1</b>	-0.6	-1.0

- = 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, Lithuania, Luxembourg, Mexico, the Netherlands, New Zealand, Norway,

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

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

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

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

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

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

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Supply (million barrels per day)</b>															
Crude Oil Supply															
Domestic Production (a)	<b>11.81</b>	<b>12.10</b>	<b>12.23</b>	<b>12.82</b>	13.16	13.25	13.17	13.22	13.32	13.46	13.57	13.86	<b>12.24</b>	13.20	13.56
Alaska	<b>0.49</b>	<b>0.47</b>	<b>0.43</b>	<b>0.48</b>	0.51	0.49	0.49	0.49	0.51	0.50	0.46	0.50	<b>0.47</b>	0.48	0.49
Federal Gulf of Mexico (b)	<b>1.85</b>	<b>1.93</b>	<b>1.82</b>	<b>1.95</b>	2.02	2.05	1.96	1.96	2.04	2.02	1.94	2.00	<b>1.89</b>	2.00	2.00
Lower 48 States (excl GOM)	<b>9.47</b>	<b>9.70</b>	<b>9.98</b>	<b>10.38</b>	10.64	10.72	10.76	10.78	10.77	10.94	11.17	11.37	<b>9.89</b>	10.72	11.06
Crude Oil Net Imports (c)	<b>4.25</b>	<b>4.14</b>	<b>3.95</b>	<b>2.89</b>	3.36	4.15	4.03	3.86	3.07	3.21	3.10	2.69	<b>3.81</b>	3.85	3.02
SPR Net Withdrawals	<b>0.00</b>	<b>0.05</b>	<b>0.00</b>	<b>0.11</b>	0.01	0.01	0.00	0.03	0.03	0.03	0.01	0.03	<b>0.04</b>	0.01	0.03
Commercial Inventory Net Withdrawals	<b>-0.19</b>	<b>-0.05</b>	<b>0.41</b>	<b>-0.05</b>	-0.37	0.00	0.13	-0.08	-0.32	0.13	0.22	0.02	<b>0.03</b>	-0.08	0.01
Crude Oil Adjustment (d)	<b>0.33</b>	<b>0.53</b>	<b>0.38</b>	<b>0.58</b>	0.27	0.19	0.21	0.15	0.22	0.22	0.23	0.16	<b>0.45</b>	0.20	0.21
Total Crude Oil Input to Refineries	<b>16.20</b>	<b>16.76</b>	<b>16.97</b>	<b>16.35</b>	16.43	17.59	17.55	17.19	16.32	17.05	17.13	16.76	<b>16.57</b>	17.19	16.82
Other Supply															
Refinery Processing Gain	<b>1.06</b>	<b>1.07</b>	<b>1.07</b>	<b>1.13</b>	1.14	1.22	1.23	1.24	1.17	1.21	1.24	1.25	<b>1.08</b>	1.21	1.22
Natural Gas Plant Liquids Production	<b>4.66</b>	<b>4.81</b>	<b>4.80</b>	<b>5.04</b>	5.13	5.31	5.42	5.42	5.27	5.39	5.57	5.63	<b>4.83</b>	5.32	5.47
Renewables and Oxygenate Production (e)	<b>1.18</b>	<b>1.23</b>	<b>1.20</b>	<b>1.21</b>	1.18	1.22	1.19	1.20	1.19	1.23	1.22	1.23	<b>1.21</b>	1.20	1.22
Fuel Ethanol Production	<b>1.01</b>	<b>1.05</b>	<b>1.02</b>	<b>1.04</b>	1.03	1.04	1.02	1.03	1.02	1.03	1.03	1.04	<b>1.03</b>	1.03	1.03
Petroleum Products Adjustment (f)	<b>0.20</b>	<b>0.18</b>	<b>0.19</b>	<b>0.20</b>	0.21	0.23	0.23	0.23	0.22	0.22	0.22	0.22	<b>0.19</b>	0.22	0.22
Product Net Imports (c)	<b>-3.35</b>	<b>-3.10</b>	<b>-3.20</b>	<b>-3.78</b>	-4.51	-4.79	-4.41	-4.87	-3.90	-4.11	-4.06	-4.63	<b>-3.36</b>	-4.65	-4.18
Hydrocarbon Gas Liquids	<b>-1.33</b>	<b>-1.65</b>	<b>-1.66</b>	<b>-1.89</b>	-2.04	-2.16	-2.11	-2.06	-1.87	-2.09	-2.12	-2.11	<b>-1.63</b>	-2.09	-2.05
Unfinished Oils	<b>0.21</b>	<b>0.47</b>	<b>0.47</b>	<b>0.43</b>	0.36	0.55	0.51	0.39	0.35	0.46	0.45	0.32	<b>0.40</b>	0.45	0.39
Other HC/Oxygenates	<b>-0.13</b>	<b>-0.13</b>	<b>-0.13</b>	<b>-0.09</b>	-0.11	-0.11	-0.10	-0.10	-0.09	-0.09	-0.10	-0.10	<b>-0.12</b>	-0.10	-0.09
Motor Gasoline Blend Comp.	<b>0.43</b>	<b>0.79</b>	<b>0.70</b>	<b>0.38</b>	0.23	0.60	0.49	0.23	0.55	0.66	0.50	0.20	<b>0.57</b>	0.39	0.47
Finished Motor Gasoline	<b>-0.82</b>	<b>-0.63</b>	<b>-0.62</b>	<b>-0.85</b>	-0.86	-1.04	-0.88	-1.05	-0.90	-0.83	-0.68	-0.88	<b>-0.73</b>	-0.96	-0.82
Jet Fuel	<b>-0.08</b>	<b>-0.01</b>	<b>-0.05</b>	<b>-0.10</b>	-0.09	-0.06	-0.06	-0.07	0.01	0.03	0.06	0.02	<b>-0.06</b>	-0.07	0.03
Distillate Fuel Oil	<b>-0.91</b>	<b>-1.29</b>	<b>-1.30</b>	<b>-1.04</b>	-1.09	-1.58	-1.41	-1.27	-0.98	-1.30	-1.26	-1.13	<b>-1.14</b>	-1.34	-1.17
Residual Fuel Oil	<b>-0.08</b>	<b>-0.15</b>	<b>-0.08</b>	<b>-0.03</b>	0.04	-0.13	-0.07	-0.04	-0.05	-0.13	-0.08	-0.02	<b>-0.08</b>	-0.05	-0.07
Other Oils (g)	<b>-0.64</b>	<b>-0.50</b>	<b>-0.52</b>	<b>-0.57</b>	-0.96	-0.86	-0.79	-0.89	-0.91	-0.83	-0.83	-0.93	<b>-0.56</b>	-0.88	-0.87
Product Inventory Net Withdrawals	<b>0.35</b>	<b>-0.62</b>	<b>-0.35</b>	<b>0.32</b>	0.44	-0.38	-0.27	0.39	0.24	-0.51	-0.33	0.41	<b>-0.07</b>	0.04	-0.05
Total Supply	<b>20.30</b>	<b>20.32</b>	<b>20.68</b>	<b>20.47</b>	20.03	20.39	20.92	20.79	20.50	20.49	20.98	20.86	<b>20.44</b>	20.53	20.71
<b>Consumption (million barrels per day)</b>															
Hydrocarbon Gas Liquids	<b>3.48</b>	<b>2.79</b>	<b>2.95</b>	<b>3.30</b>	3.41	3.02	3.16	3.56	3.70	3.15	3.30	3.70	<b>3.13</b>	3.29	3.46
Unfinished Oils	<b>-0.03</b>	<b>0.09</b>	<b>0.04</b>	<b>0.09</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.05</b>	0.00	0.00
Motor Gasoline	<b>8.96</b>	<b>9.48</b>	<b>9.49</b>	<b>9.19</b>	8.91	9.43	9.49	9.22	8.88	9.39	9.44	9.12	<b>9.28</b>	9.26	9.21
Fuel Ethanol blended into Motor Gasoline	<b>0.91</b>	<b>0.97</b>	<b>0.95</b>	<b>0.98</b>	0.91	0.96	0.96	0.94	0.90	0.96	0.96	0.94	<b>0.95</b>	0.95	0.94
Jet Fuel	<b>1.65</b>	<b>1.78</b>	<b>1.79</b>	<b>1.74</b>	1.70	1.79	1.83	1.78	1.73	1.80	1.84	1.79	<b>1.74</b>	1.78	1.79
Distillate Fuel Oil	<b>4.28</b>	<b>4.01</b>	<b>3.94</b>	<b>4.03</b>	4.08	4.01	4.06	4.11	4.26	4.03	4.05	4.14	<b>4.06</b>	4.07	4.12
Residual Fuel Oil	<b>0.27</b>	<b>0.23</b>	<b>0.32</b>	<b>0.29</b>	0.27	0.22	0.30	0.27	0.27	0.22	0.30	0.27	<b>0.28</b>	0.26	0.27
Other Oils (g)	<b>1.68</b>	<b>1.95</b>	<b>2.14</b>	<b>1.83</b>	1.66	1.91	2.08	1.86	1.66	1.90	2.07	1.85	<b>1.90</b>	1.88	1.87
Total Consumption	<b>20.29</b>	<b>20.32</b>	<b>20.68</b>	<b>20.47</b>	20.03	20.39	20.92	20.79	20.50	20.49	20.98	20.86	<b>20.44</b>	20.53	20.71
Total Petroleum and Other Liquids Net Imports	<b>0.89</b>	<b>1.04</b>	<b>0.75</b>	<b>-0.89</b>	-1.15	-0.65	-0.38	-1.01	-0.83	-0.90	-0.96	-1.95	<b>0.44</b>	-0.79	-1.16
<b>End-of-period Inventories (million barrels)</b>															
Commercial Inventory															
Crude Oil (excluding SPR)	<b>459.3</b>	<b>464.0</b>	<b>426.5</b>	<b>431.1</b>	464.9	465.1	453.0	460.2	489.2	477.4	457.2	455.3	<b>431.1</b>	460.2	455.3
Hydrocarbon Gas Liquids	<b>163.0</b>	<b>228.9</b>	<b>267.1</b>	<b>218.3</b>	178.3	223.5	259.2	212.0	175.2	224.1	260.9	216.2	<b>218.3</b>	212.0	216.2
Unfinished Oils	<b>92.0</b>	<b>95.9</b>	<b>92.2</b>	<b>89.2</b>	94.2	92.7	90.0	83.6	93.1	91.4	91.1	85.1	<b>89.2</b>	83.6	85.1
Other HC/Oxygenates	<b>32.8</b>	<b>30.7</b>	<b>29.7</b>	<b>28.8</b>	30.6	29.5	28.8	29.4	31.2	30.2	29.4	30.1	<b>28.8</b>	29.4	30.1
Total Motor Gasoline	<b>236.1</b>	<b>229.7</b>	<b>231.9</b>	<b>251.6</b>	239.6	229.7	224.3	237.8	246.6	241.9	237.0	247.2	<b>251.6</b>	237.8	247.2
Finished Motor Gasoline	<b>21.7</b>	<b>21.0</b>	<b>23.0</b>	<b>26.5</b>	24.4	22.7	23.7	24.1	23.7	22.0	23.0	23.4	<b>26.5</b>	24.1	23.4
Motor Gasoline Blend Comp.	<b>214.4</b>	<b>208.8</b>	<b>208.9</b>	<b>225.1</b>	215.2	207.0	200.6	213.7	222.9	219.9	214.0	223.7	<b>225.1</b>	213.7	223.7
Jet Fuel	<b>41.6</b>	<b>40.6</b>	<b>44.4</b>	<b>40.0</b>	41.9	43.2	44.6	42.6	41.7	42.4	44.4	41.3	<b>40.0</b>	42.6	41.3
Distillate Fuel Oil	<b>132.4</b>	<b>130.8</b>	<b>131.7</b>	<b>139.1</b>	135.6	137.5	142.0	146.0	134.3	138.5	144.4	146.0	<b>139.1</b>	146.0	146.0
Residual Fuel Oil	<b>28.7</b>	<b>30.3</b>	<b>29.9</b>	<b>28.3</b>	31.8	31.6	29.7	29.1	31.4	32.5	30.3	32.0	<b>28.3</b>	29.1	32.0
Other Oils (g)	<b>63.2</b>	<b>59.1</b>	<b>51.2</b>	<b>53.7</b>	56.5	55.4	49.9	52.2	57.9	56.7	51.0	53.3	<b>53.7</b>	52.2	53.3
Total Commercial Inventory	<b>1,249</b>	<b>1,310</b>	<b>1,305</b>	<b>1,280</b>	1,273	1,308	1,321	1,293	1,301	1,335	1,346	1,306	<b>1,280</b>	1,293	1,306
Crude Oil in SPR	<b>649</b>	<b>645</b>	<b>645</b>	<b>635</b>	635	634	634	631	628	625	624	621	<b>635</b>	631	621

- = no data available

(a) Includes lease condensate.

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

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

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

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

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

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

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

SPR: Strategic Petroleum Reserve

HC: Hydrocarbons

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

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

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

**Table 4b. U.S. Hydrocarbon Gas Liquids (HGL) and Petroleum Refinery Balances (million barrels per day, except inventories and utilization factor)**  
 U.S. Energy Information Administration | Short-Term Energy Outlook - February 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>HGL Production</b>															
Natural Gas Processing Plants															
Ethane .....	1.87	1.87	1.71	1.89	1.98	2.10	2.15	2.25	2.27	2.28	2.35	2.45	1.83	2.12	2.34
Propane .....	1.50	1.56	1.61	1.68	1.69	1.71	1.73	1.69	1.61	1.65	1.70	1.69	1.59	1.71	1.66
Butanes .....	0.79	0.84	0.87	0.90	0.89	0.91	0.92	0.90	0.85	0.88	0.91	0.90	0.85	0.91	0.88
Natural Gasoline (Pentanes Plus) .....	0.49	0.55	0.60	0.58	0.56	0.59	0.61	0.59	0.55	0.59	0.62	0.59	0.56	0.59	0.59
Refinery and Blender Net Production															
Ethane/Ethylene .....	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.00	0.00
Propane .....	0.28	0.30	0.29	0.30	0.28	0.30	0.30	0.29	0.28	0.31	0.30	0.30	0.29	0.29	0.30
Propylene (refinery-grade) .....	0.28	0.28	0.28	0.29	0.28	0.29	0.29	0.29	0.28	0.29	0.28	0.29	0.28	0.29	0.28
Butanes/Butylenes .....	-0.09	0.26	0.18	-0.23	-0.08	0.26	0.19	-0.20	-0.08	0.26	0.19	-0.20	0.03	0.04	0.04
Renewable Fuels and Oxygenate Plant Net Production															
Natural Gasoline (Pentanes Plus) .....	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02
<b>HGL Net Imports</b>															
Ethane .....	-0.27	-0.27	-0.28	-0.34	-0.27	-0.32	-0.34	-0.35	-0.34	-0.37	-0.37	-0.40	-0.29	-0.32	-0.37
Propane/Propylene .....	-0.75	-0.99	-0.97	-1.05	-1.14	-1.24	-1.15	-1.13	-0.95	-1.14	-1.13	-1.11	-0.94	-1.17	-1.08
Butanes/Butylenes .....	-0.14	-0.26	-0.26	-0.28	-0.34	-0.32	-0.32	-0.32	-0.29	-0.30	-0.32	-0.33	-0.24	-0.32	-0.31
Natural Gasoline (Pentanes Plus) .....	-0.17	-0.14	-0.15	-0.22	-0.30	-0.28	-0.30	-0.27	-0.28	-0.28	-0.30	-0.27	-0.17	-0.29	-0.28
<b>HGL Refinery and Blender Net Inputs</b>															
Butanes/Butylenes .....	0.46	0.29	0.33	0.54	0.42	0.31	0.34	0.51	0.42	0.30	0.33	0.50	0.40	0.40	0.39
Natural Gasoline (Pentanes Plus) .....	0.14	0.17	0.18	0.18	0.16	0.16	0.17	0.17	0.16	0.17	0.18	0.18	0.17	0.17	0.17
<b>HGL Consumption</b>															
Ethane/Ethylene .....	1.61	1.49	1.47	1.55	1.75	1.76	1.84	1.91	1.92	1.88	2.00	2.05	1.53	1.81	1.96
Propane .....	1.20	0.58	0.65	1.05	1.09	0.59	0.66	1.00	1.20	0.59	0.64	1.01	0.87	0.84	0.86
Propylene (refinery-grade) .....	0.28	0.31	0.29	0.30	0.30	0.32	0.31	0.30	0.29	0.32	0.31	0.29	0.30	0.31	0.30
Butanes/Butylenes .....	0.20	0.21	0.30	0.24	0.18	0.26	0.24	0.21	0.18	0.26	0.24	0.21	0.24	0.22	0.22
Natural Gasoline (Pentanes Plus) .....	0.20	0.20	0.23	0.17	0.09	0.10	0.11	0.13	0.10	0.10	0.10	0.13	0.20	0.11	0.11
<b>HGL Inventories (million barrels)</b>															
Ethane .....	48.14	56.18	56.46	58.93	54.85	57.08	55.15	55.99	54.09	58.04	56.43	58.12	54.96	55.77	56.68
Propane .....	47.77	71.72	95.60	83.01	56.88	72.30	89.53	74.12	48.61	67.16	85.86	72.11	83.01	74.12	72.11
Propylene (refinery-grade) .....	7.82	6.57	6.95	7.87	7.98	7.39	7.22	8.10	8.93	8.59	7.99	8.95	7.87	8.10	8.95
Butanes/Butylenes .....	39.30	70.72	85.88	49.50	39.04	64.94	83.64	51.62	40.32	66.22	84.92	52.90	49.50	51.62	52.90
Natural Gasoline (Pentanes Plus) .....	18.12	19.71	21.28	20.30	19.44	21.97	23.60	23.57	22.13	24.15	25.38	24.94	20.30	23.57	24.94
<b>Refinery and Blender Net Inputs</b>															
Crude Oil .....	16.20	16.76	16.97	16.35	16.43	17.59	17.55	17.19	16.32	17.05	17.13	16.76	16.57	17.19	16.82
Hydrocarbon Gas Liquids .....	0.59	0.46	0.51	0.72	0.58	0.47	0.51	0.68	0.58	0.47	0.50	0.68	0.57	0.56	0.56
Other Hydrocarbons/Oxygenates .....	1.16	1.21	1.22	1.21	1.22	1.27	1.24	1.24	1.24	1.30	1.26	1.26	1.20	1.24	1.27
Unfinished Oils .....	0.18	0.34	0.46	0.38	0.31	0.56	0.54	0.46	0.24	0.48	0.45	0.38	0.34	0.47	0.39
Motor Gasoline Blend Components .....	0.63	0.94	0.77	0.31	0.49	0.84	0.66	0.26	0.57	0.84	0.66	0.26	0.66	0.56	0.58
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 .....	18.76	19.70	19.93	18.96	19.02	20.73	20.50	19.83	18.95	20.14	20.02	19.34	19.34	20.02	19.61
<b>Refinery Processing Gain</b>															
	1.06	1.07	1.07	1.13	1.14	1.22	1.23	1.24	1.17	1.21	1.24	1.25	1.08	1.21	1.22
<b>Refinery and Blender Net Production</b>															
Hydrocarbon Gas Liquids .....	0.48	0.84	0.76	0.36	0.48	0.86	0.77	0.39	0.49	0.87	0.77	0.39	0.61	0.63	0.63
Finished Motor Gasoline .....	9.84	10.15	10.20	10.12	9.86	10.57	10.46	10.41	9.88	10.31	10.20	10.14	10.08	10.33	10.13
Jet Fuel .....	1.73	1.78	1.88	1.79	1.81	1.86	1.91	1.83	1.71	1.78	1.80	1.73	1.80	1.85	1.75
Distillate Fuel .....	5.05	5.21	5.18	5.08	5.09	5.55	5.44	5.36	5.07	5.31	5.30	5.21	5.13	5.36	5.23
Residual Fuel .....	0.36	0.39	0.39	0.31	0.26	0.35	0.34	0.30	0.35	0.36	0.35	0.30	0.36	0.31	0.34
Other Oils (a) .....	2.37	2.40	2.58	2.43	2.65	2.76	2.81	2.78	2.63	2.72	2.84	2.80	2.45	2.75	2.75
Total Refinery and Blender Net Production .....	19.82	20.78	21.00	20.10	20.16	21.96	21.73	21.07	20.12	21.35	21.25	20.58	20.43	21.23	20.83
<b>Refinery Distillation Inputs</b>															
	16.48	17.14	17.44	16.86	16.68	17.69	17.73	17.36	16.54	17.21	17.35	16.97	16.98	17.36	17.02
Refinery Operable Distillation Capacity .....	18.78	18.80	18.81	18.81	18.81	18.81	18.81	18.84	18.84	18.84	18.84	18.86	18.80	18.82	18.84
Refinery Distillation Utilization Factor .....	0.88	0.91	0.93	0.90	0.89	0.94	0.94	0.92	0.88	0.91	0.92	0.90	0.90	0.92	0.90

- = no data available

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

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

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

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

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

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

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

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Prices (cents per gallon)</b>															
Refiner Wholesale Price .....	167	205	189	182	165	175	189	180	177	196	195	183	186	177	188
<b>Gasoline Regular Grade Retail Prices Including Taxes</b>															
PADD 1 .....	233	268	256	247	234	238	256	248	244	262	265	253	251	244	256
PADD 2 .....	223	269	257	244	227	239	258	245	236	266	263	247	249	243	253
PADD 3 .....	206	246	234	224	216	224	238	229	227	246	244	231	228	227	237
PADD 4 .....	226	285	270	276	242	241	260	252	244	267	270	254	265	249	259
PADD 5 .....	297	356	331	350	304	312	324	324	304	330	330	318	334	316	321
U.S. Average .....	236	279	265	259	241	249	266	257	249	272	272	259	260	253	263
Gasoline All Grades Including Taxes	245	288	274	269	251	260	278	270	262	285	285	272	269	265	276
<b>End-of-period Inventories (million barrels)</b>															
<b>Total Gasoline Inventories</b>															
PADD 1 .....	62.4	59.7	64.9	64.6	60.3	59.9	57.9	62.1	66.6	66.5	61.7	67.3	64.6	62.1	67.3
PADD 2 .....	53.9	49.6	51.0	55.1	54.7	50.3	49.4	51.4	54.2	52.6	52.5	50.3	55.1	51.4	50.3
PADD 3 .....	82.5	82.4	81.5	91.0	86.8	83.3	81.1	85.3	88.0	86.3	86.3	89.8	91.0	85.3	89.8
PADD 4 .....	6.9	7.5	7.7	8.3	8.0	7.4	6.9	7.2	7.6	7.7	7.4	7.8	8.3	7.2	7.8
PADD 5 .....	30.4	30.6	26.8	32.6	29.8	28.7	29.1	31.8	30.3	28.7	29.1	31.9	32.6	31.8	31.9
U.S. Total .....	236.1	229.7	231.9	251.6	239.6	229.7	224.3	237.8	246.6	241.9	237.0	247.2	251.6	237.8	247.2
<b>Finished Gasoline Inventories</b>															
U.S. Total .....	21.7	21.0	23.0	26.5	24.4	22.7	23.7	24.1	23.7	22.0	23.0	23.4	26.5	24.1	23.4
<b>Gasoline Blending Components Inventories</b>															
U.S. Total .....	214.4	208.8	208.9	225.1	215.2	207.0	200.6	213.7	222.9	219.9	214.0	223.7	225.1	213.7	223.7

- = 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 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Supply (billion cubic feet per day)</b>															
Total Marketed Production .....	96.08	97.44	99.91	102.90	102.34	101.53	101.19	100.38	99.01	99.39	100.34	100.70	99.10	101.36	99.87
Alaska .....	0.96	0.93	0.79	0.93	1.00	0.85	0.78	0.94	1.01	0.87	0.80	0.95	0.90	0.89	0.91
Federal GOM (a) .....	2.80	2.75	2.51	2.75	2.82	2.77	2.60	2.55	2.58	2.52	2.38	2.35	2.70	2.68	2.45
Lower 48 States (excl GOM) .....	92.32	93.76	96.61	99.22	98.52	97.91	97.81	96.89	95.42	96.01	97.17	97.40	95.50	97.78	96.51
Total Dry Gas Production .....	89.32	90.50	92.98	95.70	95.15	94.34	93.98	93.17	91.85	92.16	92.99	93.27	92.15	94.16	92.57
LNG Gross Imports .....	0.28	0.03	0.06	0.21	0.32	0.10	0.18	0.20	0.32	0.18	0.18	0.20	0.15	0.20	0.22
LNG Gross Exports .....	4.01	4.55	4.96	6.37	6.80	5.76	6.58	7.35	8.23	6.88	7.56	8.20	4.98	6.63	7.72
Pipeline Gross Imports .....	8.35	6.73	7.10	7.33	7.70	6.53	6.47	7.33	7.83	6.46	6.66	7.54	7.37	7.01	7.12
Pipeline Gross Exports .....	7.86	7.18	7.80	8.46	8.63	7.95	8.13	7.84	8.41	7.72	8.62	9.24	7.83	8.14	8.50
Supplemental Gaseous Fuels .....	0.20	0.16	0.15	0.16	0.18	0.18	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.18	0.17
Net Inventory Withdrawals .....	16.93	-14.18	-10.40	2.23	13.65	-10.84	-8.88	3.19	17.56	-10.46	-8.21	3.50	-1.42	-0.73	0.54
Total Supply .....	103.21	71.52	77.13	90.81	101.55	76.59	77.21	88.86	101.10	73.91	75.62	87.24	85.61	86.04	84.41
Balancing Item (b) .....	0.12	-0.78	-0.38	-1.72	1.55	-0.08	-0.74	0.09	1.78	0.54	0.73	1.74	-0.70	0.20	1.20
Total Primary Supply .....	103.32	70.74	76.75	89.09	103.11	76.52	76.47	88.95	102.88	74.45	76.35	88.98	84.91	86.24	85.60
<b>Consumption (billion cubic feet per day)</b>															
Residential .....	27.15	7.34	3.53	16.68	25.27	7.74	3.64	16.87	26.52	7.62	3.62	16.92	13.62	13.36	13.62
Commercial .....	16.19	6.36	4.68	11.06	14.78	6.67	4.89	10.70	15.33	6.67	4.88	10.68	9.55	9.25	9.36
Industrial .....	25.12	21.74	21.31	24.08	25.96	23.14	22.29	25.34	26.15	23.18	22.44	25.62	23.05	24.18	24.34
Electric Power (c) .....	26.84	28.14	39.75	29.29	28.79	31.37	37.96	28.02	26.53	29.37	37.61	27.60	31.03	31.54	30.30
Lease and Plant Fuel .....	4.93	5.00	5.13	5.28	5.25	5.21	5.19	5.15	5.08	5.10	5.15	5.17	5.09	5.20	5.12
Pipeline and Distribution Use .....	2.96	2.03	2.20	2.55	2.91	2.24	2.35	2.71	3.12	2.36	2.50	2.84	2.44	2.55	2.70
Vehicle Use .....	0.13	0.13	0.14	0.15	0.15	0.15	0.15	0.15	0.16	0.16	0.16	0.16	0.14	0.15	0.16
Total Consumption .....	103.32	70.74	76.75	89.09	103.11	76.52	76.47	88.95	102.88	74.45	76.35	88.98	84.91	86.24	85.60
<b>End-of-period Inventories (billion cubic feet)</b>															
Working Gas Inventory .....	1,185	2,461	3,415	3,207	1,965	2,952	3,769	3,476	1,895	2,847	3,602	3,281	3,207	3,476	3,281
East Region (d) .....	216	537	845	765	370	653	943	837	321	627	887	758	765	837	758
Midwest Region (d) .....	242	579	990	896	450	732	1,085	979	353	607	955	846	896	979	846
South Central Region (d) .....	519	917	1,049	1,095	819	1,111	1,213	1,192	896	1,144	1,225	1,218	1,095	1,192	1,218
Mountain Region (d) .....	63	135	200	170	100	141	185	153	107	150	193	158	170	153	158
Pacific Region (d) .....	115	259	294	248	196	284	313	284	187	288	313	272	248	284	272
Alaska .....	30	33	37	34	30	30	30	30	30	30	30	30	34	30	30

- = 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 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Wholesale/Spot</b>															
Henry Hub Spot Price .....	<b>3.03</b>	<b>2.66</b>	<b>2.47</b>	<b>2.49</b>	2.05	2.17	2.45	2.51	2.75	2.53	2.56	2.66	<b>2.66</b>	2.29	2.62
<b>Residential Retail</b>															
New England .....	<b>14.44</b>	<b>15.56</b>	<b>19.31</b>	<b>13.91</b>	13.08	13.67	16.57	12.76	12.56	13.66	16.64	12.80	<b>14.79</b>	13.31	13.07
Middle Atlantic .....	<b>10.79</b>	<b>13.08</b>	<b>18.50</b>	<b>11.41</b>	9.91	11.58	15.98	10.19	9.25	11.70	16.22	10.48	<b>11.77</b>	10.68	10.42
E. N. Central .....	<b>7.27</b>	<b>10.48</b>	<b>19.03</b>	<b>7.85</b>	7.14	9.93	15.95	7.91	7.38	10.36	16.08	7.88	<b>8.48</b>	8.35	8.46
W. N. Central .....	<b>7.93</b>	<b>10.67</b>	<b>18.16</b>	<b>8.14</b>	7.18	10.04	16.36	8.55	7.56	10.54	16.62	8.63	<b>8.81</b>	8.51	8.79
S. Atlantic .....	<b>11.63</b>	<b>18.34</b>	<b>26.03</b>	<b>13.14</b>	11.45	15.86	21.92	11.87	10.54	15.78	22.03	11.98	<b>13.94</b>	13.00	12.47
E. S. Central .....	<b>9.64</b>	<b>14.84</b>	<b>21.40</b>	<b>10.33</b>	9.29	13.78	20.94	12.56	10.13	14.86	21.79	13.07	<b>11.02</b>	11.53	12.25
W. S. Central .....	<b>8.29</b>	<b>13.38</b>	<b>21.45</b>	<b>9.77</b>	8.56	13.87	20.11	11.55	8.93	14.68	20.47	11.69	<b>10.31</b>	11.09	11.44
Mountain .....	<b>7.73</b>	<b>9.46</b>	<b>13.40</b>	<b>7.70</b>	7.55	9.12	12.86	7.78	7.61	9.48	13.27	8.12	<b>8.38</b>	8.28	8.50
Pacific .....	<b>12.44</b>	<b>12.75</b>	<b>13.50</b>	<b>11.89</b>	12.09	12.70	13.51	12.51	12.82	13.60	14.30	13.19	<b>12.44</b>	12.49	13.25
U.S. Average .....	<b>9.47</b>	<b>12.48</b>	<b>18.10</b>	<b>9.81</b>	9.11	11.60	16.45	10.00	9.14	12.01	16.80	10.21	<b>10.54</b>	10.25	10.39
<b>Commercial Retail</b>															
New England .....	<b>11.21</b>	<b>11.42</b>	<b>11.61</b>	<b>9.93</b>	9.30	8.77	8.68	8.57	8.84	9.12	9.12	9.09	<b>10.90</b>	8.93	8.99
Middle Atlantic .....	<b>8.43</b>	<b>7.72</b>	<b>6.86</b>	<b>7.56</b>	7.43	7.11	6.62	7.20	7.39	7.27	6.72	7.24	<b>7.89</b>	7.20	7.24
E. N. Central .....	<b>6.27</b>	<b>7.19</b>	<b>8.85</b>	<b>6.23</b>	5.69	6.67	8.31	6.46	6.26	7.29	8.62	6.58	<b>6.57</b>	6.29	6.68
W. N. Central .....	<b>6.79</b>	<b>7.11</b>	<b>8.20</b>	<b>6.36</b>	6.51	6.76	8.04	6.53	6.79	7.25	8.38	6.81	<b>6.80</b>	6.67	6.98
S. Atlantic .....	<b>8.85</b>	<b>9.54</b>	<b>9.64</b>	<b>8.75</b>	8.45	9.14	9.73	8.83	8.66	9.45	9.80	8.72	<b>9.03</b>	8.84	8.94
E. S. Central .....	<b>8.61</b>	<b>9.78</b>	<b>10.06</b>	<b>8.33</b>	7.87	8.50	9.11	8.14	7.74	8.76	9.34	8.32	<b>8.85</b>	8.20	8.24
W. S. Central .....	<b>6.02</b>	<b>6.57</b>	<b>7.42</b>	<b>6.51</b>	6.32	6.58	7.46	6.94	6.59	7.10	7.72	7.10	<b>6.44</b>	6.70	6.98
Mountain .....	<b>6.40</b>	<b>6.72</b>	<b>7.41</b>	<b>6.15</b>	6.50	6.71	7.56	6.62	6.85	7.13	7.91	6.88	<b>6.47</b>	6.69	7.02
Pacific .....	<b>9.08</b>	<b>8.82</b>	<b>9.14</b>	<b>8.78</b>	8.47	8.17	8.43	8.12	8.33	8.44	8.68	8.31	<b>8.95</b>	8.30	8.40
U.S. Average .....	<b>7.59</b>	<b>7.97</b>	<b>8.40</b>	<b>7.29</b>	7.08	7.39	7.98	7.28	7.25	7.77	8.21	7.43	<b>7.65</b>	7.30	7.50
<b>Industrial Retail</b>															
New England .....	<b>9.17</b>	<b>8.27</b>	<b>6.92</b>	<b>7.34</b>	7.55	7.07	6.79	7.87	8.26	7.48	6.88	7.79	<b>8.09</b>	7.40	7.72
Middle Atlantic .....	<b>8.76</b>	<b>7.65</b>	<b>6.99</b>	<b>6.83</b>	7.04	6.39	6.61	6.95	7.40	6.84	6.89	7.12	<b>7.81</b>	6.85	7.17
E. N. Central .....	<b>5.75</b>	<b>5.38</b>	<b>5.64</b>	<b>5.32</b>	5.57	4.94	5.04	5.03	5.68	5.43	5.34	5.30	<b>5.54</b>	5.24	5.48
W. N. Central .....	<b>5.16</b>	<b>3.94</b>	<b>3.37</b>	<b>4.35</b>	4.56	3.54	3.57	4.24	4.79	4.07	3.95	4.60	<b>4.28</b>	4.04	4.40
S. Atlantic .....	<b>5.52</b>	<b>4.60</b>	<b>4.40</b>	<b>4.57</b>	4.44	4.03	4.34	4.65	5.01	4.46	4.43	4.74	<b>4.81</b>	4.37	4.68
E. S. Central .....	<b>4.93</b>	<b>4.04</b>	<b>3.59</b>	<b>4.21</b>	3.98	3.69	3.98	4.36	4.64	4.24	4.13	4.51	<b>4.24</b>	4.01	4.40
W. S. Central .....	<b>3.47</b>	<b>2.88</b>	<b>2.53</b>	<b>2.93</b>	2.27	2.23	2.65	2.69	2.88	2.64	2.76	2.85	<b>2.96</b>	2.46	2.78
Mountain .....	<b>5.31</b>	<b>4.80</b>	<b>5.00</b>	<b>4.86</b>	5.00	4.70	5.13	5.25	5.43	5.13	5.36	5.39	<b>5.01</b>	5.03	5.34
Pacific .....	<b>7.68</b>	<b>6.66</b>	<b>6.49</b>	<b>6.69</b>	6.51	5.64	5.89	6.02	6.52	6.04	6.15	6.20	<b>6.92</b>	6.05	6.24
U.S. Average .....	<b>4.67</b>	<b>3.74</b>	<b>3.30</b>	<b>3.89</b>	3.54	3.05	3.31	3.66	4.07	3.50	3.45	3.84	<b>3.95</b>	3.40	3.74

- = 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 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Supply (million short tons)</b>															
Production .....	<b>170.3</b>	<b>174.9</b>	<b>179.7</b>	<b>165.2</b>	162.7	117.1	161.3	154.4	160.4	114.9	153.7	158.4	<b>690.1</b>	595.5	587.4
Appalachia .....	<b>47.4</b>	<b>49.3</b>	<b>46.6</b>	<b>44.3</b>	47.6	35.8	40.8	36.7	36.6	29.4	34.6	34.3	<b>187.6</b>	160.9	134.9
Interior .....	<b>31.0</b>	<b>32.2</b>	<b>32.4</b>	<b>30.6</b>	32.3	24.9	33.5	34.3	36.1	25.2	32.7	36.2	<b>126.2</b>	124.9	130.1
Western .....	<b>91.9</b>	<b>93.4</b>	<b>102.4</b>	<b>90.3</b>	82.7	56.4	87.0	83.4	87.7	60.4	86.4	87.9	<b>378.0</b>	309.6	322.4
Primary Inventory Withdrawals .....	-1.5	1.3	-1.2	-1.4	-0.5	0.9	1.4	-2.4	-0.4	1.2	1.7	-2.4	-2.7	-0.7	0.1
Imports .....	1.7	1.6	1.7	1.7	1.2	1.3	1.5	1.4	1.2	1.3	1.5	1.4	<b>6.6</b>	5.4	5.4
Exports .....	<b>25.2</b>	<b>25.3</b>	<b>21.9</b>	<b>21.8</b>	25.5	21.1	20.1	19.4	22.7	20.8	20.8	20.8	<b>94.2</b>	86.1	85.1
Metallurgical Coal .....	<b>13.9</b>	<b>15.1</b>	<b>13.5</b>	<b>12.4</b>	14.0	11.8	11.6	11.1	13.5	12.2	12.3	12.1	<b>54.9</b>	48.4	50.1
Steam Coal .....	<b>11.3</b>	<b>10.2</b>	<b>8.4</b>	<b>9.3</b>	11.5	9.3	8.5	8.3	9.1	8.5	8.5	8.8	<b>39.3</b>	37.7	34.9
Total Primary Supply .....	<b>145.3</b>	<b>152.4</b>	<b>158.3</b>	<b>143.8</b>	137.8	98.2	144.0	134.0	138.5	96.6	136.1	136.6	<b>599.8</b>	514.0	507.9
Secondary Inventory Withdrawals .....	6.2	-21.0	6.1	-12.3	-3.2	3.7	7.6	-7.6	-0.4	3.4	7.5	-7.7	-21.0	0.5	2.8
Waste Coal (a) .....	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.0	2.0	2.0	2.0	<b>9.3</b>	9.2	8.0
Total Supply .....	<b>153.8</b>	<b>133.7</b>	<b>166.7</b>	<b>133.8</b>	136.9	104.1	154.0	128.7	140.1	102.1	145.7	130.9	<b>588.2</b>	523.7	518.7
<b>Consumption (million short tons)</b>															
Coke Plants .....	4.5	4.7	4.5	6.8	5.6	5.3	5.2	6.3	5.3	5.2	5.1	6.2	<b>20.4</b>	22.5	21.8
Electric Power Sector (b) .....	<b>145.3</b>	<b>118.0</b>	<b>156.6</b>	<b>126.2</b>	116.6	91.5	141.6	115.0	127.4	89.9	133.8	117.7	<b>546.1</b>	464.7	468.8
Retail and Other Industry .....	8.1	7.2	7.2	7.5	7.7	7.3	7.2	7.3	7.3	7.0	6.8	7.0	<b>30.0</b>	29.4	28.1
Residential and Commercial .....	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.2	<b>0.9</b>	0.7	0.6
Other Industrial .....	7.8	7.0	7.0	7.3	7.5	7.1	7.0	7.1	7.2	6.8	6.7	6.8	<b>29.1</b>	28.8	27.5
Total Consumption .....	<b>157.9</b>	<b>129.9</b>	<b>168.2</b>	<b>140.5</b>	129.9	104.1	154.0	128.7	140.1	102.1	145.7	130.9	<b>596.4</b>	516.7	518.7
Discrepancy (c) .....	-4.0	3.9	-1.4	-6.6	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-8.3	7.0	0.0
<b>End-of-period Inventories (million short tons)</b>															
Primary Inventories (d) .....	23.2	21.9	23.1	24.4	25.0	24.0	22.7	25.1	25.5	24.3	22.6	25.0	<b>24.4</b>	25.1	25.0
Secondary Inventories .....	<b>102.2</b>	<b>123.2</b>	<b>117.1</b>	<b>129.3</b>	132.5	128.9	121.2	128.8	129.3	125.9	118.3	126.0	<b>129.3</b>	128.8	126.0
Electric Power Sector .....	<b>97.1</b>	<b>117.7</b>	<b>111.2</b>	<b>123.6</b>	126.9	122.9	115.1	122.9	123.5	119.7	112.0	119.9	<b>123.6</b>	122.9	119.9
Retail and General Industry .....	2.8	3.0	3.2	3.4	3.7	3.6	3.7	3.5	3.8	3.7	3.8	3.6	<b>3.4</b>	3.5	3.6
Coke Plants .....	2.0	2.3	2.5	2.1	1.7	2.1	2.3	2.3	1.9	2.3	2.4	2.4	<b>2.1</b>	2.3	2.4
<b>Coal Market Indicators</b>															
Coal Miner Productivity															
(Tons per hour) .....	<b>6.37</b>	<b>6.37</b>	<b>6.37</b>	<b>6.37</b>	6.37	6.37	6.37	6.37	6.37	6.32	6.32	6.32	<b>6.37</b>	6.37	6.32
Total Raw Steel Production															
(Million short tons per day) .....	<b>0.273</b>	<b>0.271</b>	<b>0.264</b>	<b>0.265</b>	0.279	0.271	0.258	0.257	0.255	0.254	0.247	0.253	<b>0.268</b>	0.266	0.252
Cost of Coal to Electric Utilities															
(Dollars per million Btu) .....	<b>2.08</b>	<b>2.05</b>	<b>1.99</b>	<b>2.06</b>	2.09	2.09	2.08	2.08	2.09	2.10	2.09	2.09	<b>2.05</b>	2.09	2.09

- = 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 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Electricity Supply (billion kilowatthours)</b>															
Electricity Generation .....	995	974	1,172	978	982	975	1,141	966	998	977	1,144	969	4,120	4,065	4,087
Electric Power Sector (a) .....	955	936	1,130	937	941	934	1,098	924	956	935	1,100	926	3,958	3,897	3,916
Industrial Sector (b) .....	37	36	38	38	38	38	39	39	39	38	40	40	149	154	157
Commercial Sector (b) .....	3	3	4	3	3	3	4	3	3	3	4	3	14	14	14
Net Imports .....	9	9	11	10	11	12	15	11	13	13	15	12	40	50	52
Total Supply .....	1,004	983	1,184	989	994	987	1,156	978	1,011	990	1,159	980	4,160	4,114	4,140
Losses and Unaccounted for (c) .....	57	72	73	55	51	71	63	60	50	71	63	60	257	245	245
<b>Electricity Consumption (billion kilowatthours unless noted)</b>															
Retail Sales .....	911	876	1072	891	912	879	1054	880	922	881	1056	882	3751	3726	3741
Residential Sector .....	361	309	434	331	356	313	423	324	371	314	425	326	1436	1417	1436
Commercial Sector .....	320	328	382	324	325	330	377	323	325	331	377	323	1355	1355	1356
Industrial Sector .....	228	237	255	234	229	235	252	231	225	234	251	231	953	947	941
Transportation Sector .....	2	2	2	2	2	2	2	2	2	2	2	2	8	7	7
Direct Use (d) .....	36	35	38	37	38	37	39	38	38	38	40	39	146	151	154
Total Consumption .....	948	911	1110	928	943	916	1092	918	960	918	1095	921	3897	3869	3895
Average residential electricity usage per customer (kWh) .....	2,677	2,290	3,213	2,460	2,594	2,294	3,102	2,379	2,694	2,284	3,089	2,368	10,640	10,368	10,435
<b>Prices</b>															
<b>Power Generation Fuel Costs (dollars per million Btu)</b>															
Coal .....	2.08	2.05	1.99	2.06	2.09	2.09	2.08	2.08	2.09	2.10	2.09	2.09	2.05	2.09	2.09
Natural Gas .....	3.71	2.73	2.51	2.92	2.47	2.12	2.39	2.67	3.10	2.55	2.51	2.85	2.91	2.40	2.73
Residual Fuel Oil .....	12.21	13.39	12.79	12.29	11.98	11.74	11.59	11.95	12.28	13.19	12.64	12.61	12.67	11.81	12.64
Distillate Fuel Oil .....	14.88	15.75	15.01	15.50	14.38	14.03	14.80	15.22	14.92	15.60	15.68	15.95	15.27	14.62	15.50
<b>Retail Prices (cents per kilowatthour)</b>															
Residential Sector .....	12.67	13.32	13.25	12.78	12.77	13.31	13.31	12.91	12.84	13.60	13.61	13.22	13.01	13.08	13.32
Commercial Sector .....	10.41	10.65	11.00	10.52	10.33	10.53	10.95	10.52	10.38	10.67	11.14	10.73	10.66	10.60	10.75
Industrial Sector .....	6.67	6.72	7.24	6.76	6.57	6.69	7.33	6.78	6.73	6.84	7.43	6.87	6.85	6.86	6.98
<b>Wholesale Electricity Prices (dollars per megawatthour)</b>															
ERCOT North hub .....	28.41	28.34	139.81	28.40	21.73	27.38	32.28	28.45	28.09	28.91	29.46	28.02	56.24	27.46	28.62
CAISO SP15 zone .....	50.42	23.30	37.32	41.57	32.90	29.55	36.37	37.41	37.71	31.27	38.03	37.59	38.15	34.06	36.15
ISO-NE Internal hub .....	47.40	27.15	29.52	35.48	33.01	27.12	29.63	32.38	40.03	27.90	29.40	33.91	34.89	30.53	32.81
NYISO Hudson Valley zone .....	41.77	25.68	27.76	27.04	28.70	26.96	29.21	28.40	32.61	27.74	29.26	28.95	30.56	28.32	29.64
PJM Western hub .....	33.79	28.54	31.17	29.89	28.01	28.16	31.15	28.19	31.97	28.51	31.32	29.15	30.85	28.88	30.24
Midcontinent ISO Illinois hub .....	31.44	27.81	30.71	28.09	27.61	26.62	28.92	26.50	28.47	26.49	29.12	26.77	29.51	27.41	27.71
SPP ISO South hub .....	29.15	27.14	31.51	23.64	24.45	24.38	28.93	24.75	25.15	24.42	28.99	24.86	27.86	25.63	25.86
SERC index, Into Southern .....	30.74	29.87	31.08	29.31	28.60	29.11	32.34	29.05	31.20	29.67	32.33	29.34	30.25	29.77	30.63
FRCC index, Florida Reliability .....	30.71	29.57	30.64	29.47	27.15	28.20	31.29	31.08	32.01	30.90	31.66	31.95	30.10	29.43	31.63
Northwest index, Mid-Columbia ....	55.74	18.55	32.74	37.47	28.08	23.90	33.04	34.13	33.93	25.16	34.33	34.28	36.12	29.79	31.92
Southwest index, Palo Verde .....	44.23	18.45	42.00	36.37	27.57	28.72	36.05	34.12	35.35	30.51	37.21	34.41	35.26	31.61	34.37

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

kWh = kilowatthours. Btu = British thermal units.

Prices are not adjusted for inflation.

(a) Generation supplied by power plants with capacity of at least 1 megawatt operated by electric utilities and independent power producers.

(b) Generation supplied by power plants with capacity of at least 1 megawatt operated by businesses in the commercial and industrial sectors, primarily for onsite use.

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

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

#### Historical data sources:

(1) Electricity supply, consumption, fuel costs, and retail electricity prices: Latest data available from U.S. Energy Information Administration databases supporting the following reports: Electric Power Monthly, DOE/EIA-0226; and Electric Power Annual, DOE/EIA-0348

(2) Wholesale electricity prices (except for PJM RTO price): S&P Global Market Intelligence, SNL Energy Data

(3) PJM ISO Western Hub wholesale electricity prices: PJM Data Miner website

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 (billion kilowatthours)

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Residential Sector</b>															
New England .....	12.4	9.7	13.1	10.8	12.4	9.9	12.9	10.7	12.5	9.9	12.9	10.7	46.0	45.9	46.0
Middle Atlantic .....	35.3	27.7	40.3	30.2	34.7	28.1	38.7	29.5	35.4	28.0	38.7	29.5	133.4	131.1	131.6
E. N. Central .....	50.0	38.1	54.3	43.7	48.4	38.9	51.6	42.9	50.3	38.9	51.7	43.0	186.2	181.8	183.9
W. N. Central .....	29.9	21.6	29.0	25.1	29.0	22.1	29.0	24.7	29.4	22.2	29.2	24.9	105.7	104.8	105.7
S. Atlantic .....	88.3	84.5	111.5	85.2	86.6	83.2	108.4	81.8	93.3	83.7	109.0	82.2	369.5	359.9	368.2
E. S. Central .....	30.6	25.9	36.9	28.0	30.2	25.7	35.8	26.3	33.0	25.8	35.9	26.3	121.4	118.1	121.0
W. S. Central .....	51.7	49.0	75.7	50.8	49.7	50.9	73.7	49.8	53.8	51.5	74.6	50.4	227.1	224.0	230.2
Mountain .....	23.1	22.0	33.0	22.1	23.2	23.3	32.8	22.2	23.4	23.5	33.1	22.4	100.2	101.4	102.5
Pacific contiguous .....	39.0	29.6	38.7	35.0	38.3	29.7	38.9	35.3	38.4	29.7	39.0	35.4	142.3	142.2	142.6
AK and HI .....	1.2	1.1	1.2	1.2	1.2	1.1	1.2	1.2	1.2	1.1	1.2	1.2	4.7	4.7	4.6
Total .....	361.4	309.2	433.8	332.1	353.6	312.8	423.0	324.4	370.8	314.4	425.2	326.0	1,436.5	1,413.8	1,436.4
<b>Commercial Sector</b>															
New England .....	12.8	12.1	13.9	12.4	12.7	11.9	13.6	12.0	12.2	11.5	13.0	11.4	51.1	50.2	48.2
Middle Atlantic .....	38.6	36.3	41.9	36.2	38.4	35.9	40.8	35.8	38.2	35.8	40.6	35.6	152.9	150.9	150.3
E. N. Central .....	44.6	43.1	50.4	43.7	44.4	43.4	49.4	43.5	44.8	43.4	49.4	43.4	181.8	180.6	181.0
W. N. Central .....	25.6	24.2	27.9	24.8	25.7	24.5	27.8	24.9	25.7	24.6	28.0	25.1	102.5	103.0	103.4
S. Atlantic .....	72.1	79.4	90.2	75.3	72.3	78.4	88.5	73.6	72.8	78.4	88.6	73.7	316.9	312.8	313.5
E. S. Central .....	21.0	22.5	27.0	21.9	21.5	22.7	26.5	21.5	22.0	22.7	26.6	21.5	92.4	92.1	92.7
W. S. Central .....	43.8	47.5	57.8	47.0	44.7	49.0	57.5	47.7	46.2	49.6	58.3	48.5	196.0	198.9	202.5
Mountain .....	22.6	23.9	28.3	23.5	23.0	24.7	28.2	23.8	23.2	24.9	28.5	24.0	98.3	99.7	100.5
Pacific contiguous .....	38.0	37.9	42.9	38.5	38.5	38.2	43.0	38.5	38.2	38.2	43.0	38.5	157.4	158.2	157.9
AK and HI .....	1.4	1.4	1.5	1.4	1.4	1.4	1.5	1.4	1.4	1.4	1.4	1.4	5.7	5.6	5.6
Total .....	320.5	328.1	381.8	324.7	322.6	330.0	376.7	322.7	324.5	330.6	377.4	323.1	1,355.0	1,352.1	1,355.7
<b>Industrial Sector</b>															
New England .....	3.8	3.8	4.0	3.8	4.0	3.8	4.1	3.8	3.8	3.8	4.0	3.8	15.4	15.7	15.4
Middle Atlantic .....	17.7	17.5	19.8	18.7	17.5	17.3	19.6	18.3	17.2	17.1	19.4	18.3	73.7	72.7	72.1
E. N. Central .....	44.8	45.4	47.7	43.9	44.5	44.5	46.6	43.4	43.9	44.0	46.0	43.1	181.8	179.0	177.0
W. N. Central .....	21.1	22.0	23.4	21.8	21.3	22.0	23.5	22.2	21.2	22.2	23.8	22.5	88.4	89.0	89.8
S. Atlantic .....	33.0	34.7	36.2	33.2	32.0	33.5	35.0	31.8	31.0	32.6	34.0	31.1	137.2	132.3	128.7
E. S. Central .....	23.4	23.9	24.5	22.7	23.1	23.6	23.9	22.3	22.7	22.9	23.3	21.9	94.5	92.9	90.8
W. S. Central .....	44.2	47.4	50.8	46.6	45.0	47.6	51.2	47.6	45.7	48.4	51.9	48.4	189.0	191.5	194.4
Mountain .....	19.2	21.1	23.5	20.1	19.4	21.2	23.6	20.4	19.6	21.4	23.8	20.6	84.0	84.6	85.3
Pacific contiguous .....	19.1	20.4	23.4	19.9	19.1	20.2	23.2	20.2	18.9	20.3	23.4	20.3	82.7	82.7	83.0
AK and HI .....	1.1	1.2	1.3	1.3	1.1	1.2	1.3	1.3	1.1	1.2	1.3	1.3	4.9	4.9	4.9
Total .....	227.5	237.3	254.7	232.0	226.9	234.9	252.0	231.3	225.1	234.0	251.1	231.2	951.5	945.1	941.4
<b>Total All Sectors (a)</b>															
New England .....	29.1	25.6	31.3	27.1	29.2	25.8	30.7	26.7	28.7	25.4	30.1	26.1	113.1	112.3	110.2
Middle Atlantic .....	92.6	82.4	103.0	85.9	91.6	82.2	100.0	84.5	91.8	81.9	99.7	84.3	363.9	358.3	357.6
E. N. Central .....	139.6	126.7	152.6	131.5	137.4	126.9	147.8	129.9	139.2	126.4	147.3	129.6	550.4	541.9	542.6
W. N. Central .....	76.7	67.7	80.4	71.8	76.0	68.6	80.3	71.8	76.3	69.1	81.0	72.6	296.6	296.8	298.9
S. Atlantic .....	193.7	198.9	238.4	194.0	191.2	195.4	232.2	187.5	197.4	195.1	231.9	187.3	825.0	806.4	811.7
E. S. Central .....	75.0	72.3	88.3	72.7	74.8	71.9	86.2	70.1	77.7	71.4	85.7	69.7	308.3	303.0	304.6
W. S. Central .....	139.8	143.9	184.3	144.3	139.5	147.5	182.5	145.2	145.8	149.5	184.8	147.2	612.3	614.7	627.3
Mountain .....	65.0	67.1	84.8	65.7	65.7	69.2	84.7	66.4	66.2	69.9	85.5	67.0	282.7	285.9	288.6
Pacific contiguous .....	96.3	88.1	105.2	93.7	96.1	88.2	105.4	94.2	95.7	88.5	105.6	94.4	383.3	383.9	384.3
AK and HI .....	3.7	3.6	4.0	3.9	3.7	3.6	4.0	3.9	3.6	3.6	4.0	3.9	15.2	15.2	15.0
Total .....	911.5	876.4	1,072.3	890.6	905.2	879.4	1,053.6	880.2	922.3	880.8	1,055.5	882.1	3,750.7	3,718.4	3,740.8

- = 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 U.S. Energy Information Administration databases supporting the following reports: *Electric Power Monthly*, DOE/EIA-0226; and *Electric Power Annual*, DOE/EIA-0348.

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

Projections: EIA Regional Short-Term Energy Model.

**Table 7c. U.S. Regional Retail Electricity Prices (Cents per Kilowatthour)**

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Residential Sector</b>															
New England .....	21.53	21.56	20.70	20.68	21.54	21.28	20.37	20.32	21.29	21.52	21.04	21.36	21.10	20.87	21.29
Middle Atlantic .....	15.20	16.06	16.16	15.49	14.88	15.69	15.96	15.54	15.09	16.06	16.38	15.89	15.74	15.52	15.86
E. N. Central .....	12.92	13.86	13.27	13.31	13.08	14.02	13.65	13.76	13.49	14.47	14.04	14.15	13.31	13.60	14.01
W. N. Central .....	10.71	12.78	12.93	11.33	11.01	13.08	13.40	11.84	11.43	13.57	13.83	12.18	11.89	12.30	12.72
S. Atlantic .....	11.70	12.17	12.10	11.66	11.70	12.02	11.94	11.56	11.57	12.13	12.11	11.75	11.92	11.81	11.90
E. S. Central .....	11.11	11.70	11.37	11.27	11.25	11.97	11.83	11.73	11.35	12.17	11.97	12.04	11.35	11.69	11.86
W. S. Central .....	10.79	11.41	11.26	11.12	10.93	11.18	11.11	11.04	10.79	11.29	11.31	11.26	11.15	11.07	11.17
Mountain .....	11.51	12.18	12.23	11.65	11.52	12.24	12.37	11.89	11.82	12.58	12.70	12.18	11.92	12.04	12.36
Pacific .....	14.87	15.87	17.31	14.86	15.25	16.38	17.49	14.93	15.61	17.11	18.05	15.30	15.74	16.02	16.51
U.S. Average .....	12.67	13.32	13.25	12.78	12.77	13.31	13.31	12.91	12.84	13.60	13.61	13.22	13.01	13.08	13.32
<b>Commercial Sector</b>															
New England .....	16.83	16.24	15.93	15.95	16.48	15.94	15.70	15.81	16.47	16.16	16.11	16.34	16.23	15.98	16.27
Middle Atlantic .....	11.56	12.17	13.02	11.82	11.16	11.69	12.57	11.63	11.16	11.79	12.73	11.73	12.17	11.78	11.87
E. N. Central .....	10.15	10.29	10.08	10.07	10.11	10.26	10.13	10.19	10.28	10.46	10.33	10.40	10.14	10.17	10.37
W. N. Central .....	8.98	10.04	10.42	9.12	9.04	10.21	10.78	9.50	9.44	10.61	11.15	9.81	9.65	9.90	10.27
S. Atlantic .....	9.44	9.37	9.33	9.28	9.31	9.18	9.16	9.14	9.22	9.21	9.24	9.27	9.35	9.20	9.24
E. S. Central .....	10.70	10.70	10.64	10.65	10.77	10.91	11.08	11.06	11.05	11.12	11.22	11.37	10.67	10.96	11.19
W. S. Central .....	8.04	8.05	8.31	8.10	7.95	7.83	8.16	8.03	7.92	7.87	8.21	8.05	8.14	8.00	8.02
Mountain .....	9.20	9.71	10.01	9.16	9.17	9.71	10.05	9.25	9.31	9.90	10.25	9.43	9.55	9.57	9.75
Pacific .....	12.98	14.15	16.37	14.49	13.23	14.25	16.39	14.53	13.36	14.58	16.98	15.16	14.56	14.65	15.08
U.S. Average .....	10.41	10.65	11.00	10.52	10.33	10.53	10.95	10.52	10.38	10.67	11.14	10.73	10.66	10.60	10.75
<b>Industrial Sector</b>															
New England .....	13.44	12.89	12.66	12.67	13.04	12.65	12.58	12.60	13.26	12.83	12.65	12.68	12.91	12.72	12.85
Middle Atlantic .....	6.72	6.51	6.54	6.39	6.29	6.23	6.43	6.25	6.40	6.30	6.39	6.23	6.54	6.30	6.33
E. N. Central .....	7.03	6.88	6.90	6.91	6.89	6.85	6.99	6.96	7.07	7.01	7.09	7.06	6.93	6.92	7.06
W. N. Central .....	7.13	7.33	8.02	7.01	7.32	7.54	8.29	7.22	7.57	7.79	8.54	7.44	7.39	7.61	7.85
S. Atlantic .....	6.22	6.29	6.72	6.34	6.02	6.15	6.66	6.28	6.09	6.21	6.67	6.29	6.40	6.28	6.32
E. S. Central .....	5.69	5.78	5.95	5.70	5.55	5.69	5.97	5.70	5.67	5.80	6.02	5.75	5.78	5.73	5.81
W. S. Central .....	5.26	5.25	5.99	5.41	5.20	5.21	6.10	5.39	5.34	5.34	6.14	5.43	5.49	5.49	5.58
Mountain .....	6.14	6.25	6.77	5.88	5.98	6.18	6.78	5.89	6.09	6.27	6.84	5.95	6.28	6.23	6.31
Pacific .....	8.65	9.45	11.26	10.13	8.94	9.74	11.68	10.43	9.26	10.09	12.03	10.75	9.94	10.27	10.61
U.S. Average .....	6.67	6.72	7.24	6.76	6.57	6.69	7.33	6.78	6.73	6.84	7.43	6.87	6.85	6.86	6.98
<b>All Sectors (a)</b>															
New England .....	18.36	17.73	17.48	17.35	18.12	17.46	17.22	17.12	18.11	17.72	17.73	17.83	17.73	17.48	17.85
Middle Atlantic .....	12.02	12.27	12.99	11.95	11.64	11.91	12.68	11.83	11.78	12.10	12.90	11.99	12.33	12.03	12.22
E. N. Central .....	10.14	10.14	10.22	10.08	10.11	10.21	10.36	10.28	10.43	10.49	10.61	10.53	10.15	10.24	10.52
W. N. Central .....	9.15	10.03	10.63	9.25	9.31	10.28	10.99	9.60	9.69	10.65	11.35	9.89	9.77	10.06	10.41
S. Atlantic .....	9.92	10.02	10.23	9.82	9.84	9.87	10.08	9.71	9.84	9.96	10.21	9.86	10.01	9.88	9.98
E. S. Central .....	9.30	9.44	9.65	9.34	9.35	9.58	9.97	9.61	9.61	9.79	10.12	9.86	9.44	9.64	9.85
W. S. Central .....	8.17	8.27	8.88	8.28	8.12	8.14	8.78	8.20	8.17	8.23	8.88	8.28	8.43	8.34	8.42
Mountain .....	9.12	9.43	9.97	8.98	9.05	9.48	10.04	9.10	9.25	9.69	10.25	9.28	9.42	9.46	9.66
Pacific .....	12.88	13.63	15.57	13.68	13.17	13.92	15.74	13.79	13.44	14.39	16.27	14.25	13.99	14.20	14.63
U.S. Average .....	10.37	10.52	11.01	10.38	10.34	10.49	11.03	10.42	10.48	10.70	11.25	10.64	10.59	10.59	10.79

- = 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 part 1. U.S. Regional Electricity Generation, Electric Power Sector (billion kilowatthours), continues on Table 7d part 2

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>United States</b>															
Natural Gas .....	317.1	331.0	473.8	347.7	334.6	364.7	455.9	330.7	319.2	348.7	456.1	327.9	1,469.6	1,485.9	1,451.9
Coal .....	257.9	209.0	279.4	220.6	206.1	161.3	252.8	200.0	227.1	160.6	239.1	204.6	966.8	820.1	831.5
Nuclear .....	203.5	196.5	210.0	199.1	206.1	186.1	205.1	200.8	199.5	185.8	198.8	185.5	809.1	798.1	769.6
Renewable Energy Sources: .....	169.8	192.8	161.0	163.9	186.7	215.3	178.5	187.9	203.7	233.5	199.9	202.4	687.5	768.4	839.6
Conventional Hydropower	71.2	81.7	60.6	58.8	76.4	86.9	64.6	63.7	72.1	82.1	63.8	62.5	272.3	291.5	280.5
Wind .....	74.2	78.5	66.1	81.8	85.2	90.6	73.2	96.4	100.9	103.5	84.4	105.9	300.6	345.4	394.6
Solar (a) .....	13.2	21.8	22.5	13.9	15.9	26.9	29.1	18.4	21.2	36.9	40.0	24.5	71.3	90.2	122.5
Biomass .....	7.2	7.0	7.6	5.9	5.3	7.0	7.5	6.0	6.2	7.2	7.6	6.0	27.7	25.9	27.0
Geothermal .....	4.0	3.8	4.1	3.6	3.9	3.9	4.2	3.5	3.3	3.9	4.2	3.5	15.6	15.5	14.9
Pumped Storage Hydropower .....	-1.1	-0.9	-1.9	-1.4	-1.1	-0.6	-1.7	-1.3	-1.1	-0.7	-1.8	-1.3	-5.3	-4.7	-4.9
Petroleum (b) .....	4.9	4.2	4.8	3.9	5.2	4.3	4.5	3.5	4.5	4.1	4.4	4.1	17.8	17.4	17.0
Other Gases .....	1.1	1.0	1.2	1.0	1.1	1.1	1.0	1.0	1.2	1.0	1.1	1.0	4.3	4.3	4.2
Other Nonrenewable Fuels (c) .....	1.9	1.9	2.0	1.9	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.8	7.7	7.8	7.6
Total Generation .....	955.1	935.6	1,130.2	936.7	940.7	934.2	1,098.1	924.4	956.0	934.9	1,099.5	926.0	3,957.6	3,897.4	3,916.4
<b>New England (ISO-NE)</b>															
Natural Gas .....	10.6	10.0	14.8	11.7	13.5	11.7	14.7	11.6	11.7	10.0	14.2	11.9	47.1	51.5	47.8
Coal .....	0.3	0.0	0.1	0.1	0.3	0.0	0.1	0.1	0.3	0.0	0.1	0.1	0.5	0.5	0.5
Nuclear .....	8.6	6.8	7.3	7.1	7.2	5.4	7.3	6.4	7.1	7.1	7.2	5.6	29.8	26.2	27.1
Conventional hydropower .....	2.1	1.9	1.5	1.7	2.1	1.9	1.5	1.7	1.9	1.8	1.5	1.6	7.1	7.2	6.9
Nonhydro renewables (d) .....	2.6	2.7	2.5	2.5	2.0	2.8	2.7	2.7	2.6	3.0	2.8	2.8	10.3	10.2	11.1
Other energy sources (e) .....	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	1.5	1.5	1.4
Total generation .....	24.5	21.7	26.5	23.5	25.5	22.2	26.5	22.8	24.0	22.3	26.1	22.3	96.3	97.1	94.8
Net energy for load (f) .....	29.5	25.8	31.9	28.1	30.5	27.2	32.1	28.2	29.9	26.8	31.7	27.8	115.2	118.0	116.3
<b>New York (NYISO)</b>															
Natural Gas .....	11.9	11.1	18.4	12.8	15.1	18.3	22.5	17.3	14.8	17.6	23.3	18.7	54.2	73.3	74.5
Coal .....	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.1	0.2
Nuclear .....	10.4	10.8	11.6	11.8	11.6	8.7	9.1	9.6	8.9	7.9	7.4	7.3	44.7	39.1	31.4
Conventional hydropower .....	7.4	7.3	7.4	7.2	7.6	7.3	7.4	7.3	6.9	6.8	7.4	7.1	29.3	29.6	28.2
Nonhydro renewables (d) .....	1.6	1.8	1.5	1.6	1.7	2.0	1.6	1.9	2.1	2.4	2.2	2.9	6.5	7.1	9.6
Other energy sources (e) .....	0.4	0.1	0.2	0.1	0.5	0.1	0.2	0.1	0.5	0.1	0.2	0.1	0.8	0.9	0.9
Total generation .....	32.1	31.1	39.1	33.6	36.5	36.5	41.0	36.3	33.2	34.8	40.5	36.2	135.9	150.2	144.8
Net energy for load (f) .....	37.4	34.3	43.3	36.0	38.6	36.3	43.5	36.6	38.0	36.0	43.2	36.5	151.0	155.0	153.7
<b>Mid-Atlantic (PJM)</b>															
Natural Gas .....	69.3	64.2	90.9	64.4	75.7	77.4	93.1	66.5	72.7	74.7	96.0	68.5	288.7	312.7	311.9
Coal .....	53.5	40.0	52.0	41.4	53.3	27.7	46.5	36.9	53.2	31.0	43.9	37.1	186.9	164.5	165.2
Nuclear .....	69.6	68.5	71.7	68.1	69.5	65.8	69.7	70.2	68.7	63.7	68.3	65.9	277.9	275.2	266.6
Conventional hydropower .....	3.4	3.0	1.9	2.2	2.9	2.5	1.7	2.2	2.7	2.3	1.7	2.2	10.5	9.3	8.9
Nonhydro renewables (d) .....	8.8	9.2	7.0	8.5	9.3	10.1	7.8	9.7	10.6	11.6	9.0	10.5	33.6	36.8	41.7
Other energy sources (e) .....	0.9	0.7	0.5	0.5	0.9	0.9	0.5	0.5	1.0	0.8	0.5	0.5	2.6	2.8	2.7
Total generation .....	205.4	185.6	224.0	185.1	211.6	184.5	219.3	185.9	208.7	184.1	219.5	184.7	800.2	801.3	797.0
Net energy for load (f) .....	195.1	173.1	212.3	181.2	197.8	176.7	207.7	181.9	198.7	175.3	206.5	181.1	761.7	764.1	761.6
<b>Southeast (SERC)</b>															
Natural Gas .....	56.3	59.2	77.8	59.5	59.2	65.8	74.7	58.2	56.3	63.6	74.4	58.6	252.8	257.9	253.0
Coal .....	35.1	38.0	53.3	33.4	31.2	34.4	44.6	29.8	37.7	34.1	44.4	31.9	159.8	139.9	148.1
Nuclear .....	52.3	52.8	53.7	52.1	52.0	49.5	54.2	53.2	52.8	52.1	53.6	51.1	210.9	209.0	209.6
Conventional hydropower .....	10.9	9.3	7.1	8.0	10.3	8.1	6.4	8.1	9.5	7.5	6.3	7.9	35.3	32.9	31.2
Nonhydro renewables (d) .....	2.6	3.8	3.9	2.3	2.7	4.9	4.7	2.9	3.7	6.2	5.9	3.5	12.6	15.2	19.3
Other energy sources (e) .....	0.0	-0.2	-0.6	-0.3	0.0	0.1	-0.6	-0.3	0.0	-0.1	-0.6	-0.2	-1.1	-0.7	-1.0
Total generation .....	157.2	162.9	195.1	155.1	155.4	162.8	184.0	151.9	160.0	163.4	184.0	152.8	670.3	654.1	660.2
Net energy for load (f) .....	163.9	158.5	197.9	161.6	156.6	156.7	185.4	154.4	165.0	158.4	186.3	154.8	681.9	653.2	664.6
<b>Florida (FRCC)</b>															
Natural Gas .....	35.5	46.4	52.6	39.3	38.6	49.2	50.3	38.8	36.2	47.8	52.3	38.8	173.8	176.9	175.2
Coal .....	3.7	4.8	5.3	5.2	2.7	1.7	4.8	3.9	2.7	1.1	2.0	3.7	19.1	13.1	9.5
Nuclear .....	7.6	6.4	7.7	7.3	7.2	6.7	7.4	7.8	8.0	7.0	6.9	6.8	29.1	29.1	28.7
Conventional hydropower .....	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.2	0.2	0.2
Nonhydro renewables (d) .....	1.5	1.7	1.6	1.3	1.7	2.3	2.3	1.8	2.2	3.0	2.8	2.2	6.1	8.2	10.2
Other energy sources (e) .....	0.8	0.9	0.8	0.7	0.9	0.9	0.7	0.7	0.8	0.8	0.7	0.7	3.1	3.1	3.1
Total generation .....	49.3	60.2	68.1	53.9	51.2	60.8	65.6	53.0	50.0	59.7	64.8	52.3	231.4	230.6	226.8
Net energy for load (f) .....	48.0	58.4	69.4	53.1	48.7	58.8	67.3	51.9	48.7	58.2	67.0	51.7	229.0	226.7	225.6

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

Data reflect generation supplied by power plants with a combined capacity of at least 1 megawatt operated by electric utilities and independent power producers.

(a) Solar generation from large-scale power plants with more than 1 megawatt of capacity. Excludes generation from small-scale solar photovoltaic systems.

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

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

(d) Wind, large-scale solar, biomass, and geothermal

(e) Pumped storage hydroelectric, petroleum, other gases, batteries, and other nonrenewable fuels. See notes (b) and (c).

(f) Regional generation from generating units operated by electric power sector, plus energy receipts from minus energy deliveries to U.S. balancing authorities outside region.

**Historical data:** Latest data available from U.S. Energy Information Administration databases supporting the following reports: *Electric Power Monthly*, DOE/EIA-0226;**Projections:** EIA Regional Short-Term Energy Model.

**Table 7d part 2. U.S. Regional Electricity Generation, Electric Power Sector (billion kilowatthours), continued from Table 7d part 1**

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Midwest (MISO)</b>															
Natural Gas .....	<b>35.9</b>	<b>41.0</b>	<b>58.1</b>	<b>42.1</b>	40.1	48.0	55.8	44.3	38.9	45.0	55.2	43.1	<b>177.0</b>	188.2	182.2
Coal .....	<b>77.5</b>	<b>61.2</b>	<b>76.2</b>	<b>61.2</b>	62.1	51.2	71.7	54.4	69.3	51.5	72.0	57.5	<b>276.1</b>	239.5	250.3
Nuclear .....	<b>25.3</b>	<b>23.2</b>	<b>27.1</b>	<b>26.6</b>	27.2	22.2	26.8	24.9	25.2	24.2	26.0	21.9	<b>102.2</b>	101.2	97.3
Conventional hydropower .....	<b>2.2</b>	<b>2.3</b>	<b>1.6</b>	<b>1.9</b>	2.3	2.3	1.6	2.0	2.1	2.1	1.6	1.9	<b>8.1</b>	8.2	7.8
Nonhydro renewables (d) .....	<b>16.7</b>	<b>17.3</b>	<b>13.5</b>	<b>18.9</b>	20.1	20.4	16.5	23.2	23.1	23.4	18.6	24.9	<b>66.5</b>	80.2	90.0
Other energy sources (e) .....	<b>2.0</b>	<b>1.4</b>	<b>1.7</b>	<b>1.3</b>	2.2	1.8	1.6	1.2	1.5	1.6	1.5	1.8	<b>6.3</b>	6.8	6.5
Total generation .....	<b>159.5</b>	<b>146.4</b>	<b>178.2</b>	<b>152.1</b>	154.0	145.9	174.1	150.0	160.2	147.8	174.9	151.2	<b>636.2</b>	624.0	634.1
Net energy for load (f) .....	<b>159.6</b>	<b>151.6</b>	<b>180.6</b>	<b>155.0</b>	156.9	151.9	175.3	153.4	158.7	152.4	175.9	154.0	<b>646.7</b>	637.6	641.0
<b>Central (Southwest Power Pool)</b>															
Natural Gas .....	<b>14.0</b>	<b>15.8</b>	<b>26.1</b>	<b>14.4</b>	15.3	15.4	23.6	14.0	13.8	16.1	22.8	12.9	<b>70.3</b>	68.2	65.6
Coal .....	<b>27.3</b>	<b>19.1</b>	<b>27.3</b>	<b>21.6</b>	21.6	11.4	25.9	20.4	22.2	11.0	25.9	21.0	<b>95.3</b>	79.3	80.0
Nuclear .....	<b>4.4</b>	<b>4.4</b>	<b>4.1</b>	<b>3.4</b>	4.1	4.2	4.4	3.6	2.2	1.0	2.6	2.7	<b>16.2</b>	16.3	8.5
Conventional hydropower .....	<b>4.0</b>	<b>4.1</b>	<b>2.6</b>	<b>3.1</b>	3.5	3.7	2.4	3.1	3.1	3.5	2.4	3.0	<b>13.8</b>	12.8	12.0
Nonhydro renewables (d) .....	<b>18.1</b>	<b>18.5</b>	<b>17.5</b>	<b>21.8</b>	19.1	20.3	17.6	24.6	22.8	23.2	20.4	26.4	<b>75.8</b>	81.7	92.9
Other energy sources (e) .....	<b>0.2</b>	<b>0.3</b>	<b>0.1</b>	<b>0.1</b>	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2	<b>0.8</b>	0.7	0.7
Total generation .....	<b>68.0</b>	<b>62.1</b>	<b>77.7</b>	<b>64.4</b>	64.0	55.2	73.9	65.9	64.3	55.1	74.1	66.2	<b>272.2</b>	259.0	259.7
Net energy for load (f) .....	<b>62.5</b>	<b>68.4</b>	<b>73.6</b>	<b>58.5</b>	61.9	60.2	72.9	59.4	61.5	60.2	73.1	59.7	<b>262.9</b>	254.4	254.5
<b>Texas (ERCOT)</b>															
Natural Gas .....	<b>34.7</b>	<b>43.1</b>	<b>62.3</b>	<b>39.5</b>	32.5	41.2	51.8	29.4	30.0	35.8	47.7	27.2	<b>179.6</b>	154.8	140.7
Coal .....	<b>18.1</b>	<b>18.3</b>	<b>21.6</b>	<b>17.5</b>	8.2	12.1	19.1	15.9	9.9	10.1	15.5	15.5	<b>75.6</b>	55.3	51.0
Nuclear .....	<b>10.4</b>	<b>9.8</b>	<b>11.0</b>	<b>10.2</b>	11.1	8.8	11.0	10.4	11.1	9.8	11.0	9.2	<b>41.3</b>	41.4	41.1
Conventional hydropower .....	<b>0.3</b>	<b>0.2</b>	<b>0.1</b>	<b>0.2</b>	0.4	0.2	0.1	0.2	0.3	0.2	0.1	0.2	<b>0.8</b>	0.9	0.8
Nonhydro renewables (d) .....	<b>19.3</b>	<b>21.4</b>	<b>19.4</b>	<b>21.0</b>	24.5	28.1	24.9	26.9	29.7	35.5	33.8	31.9	<b>81.1</b>	104.4	130.9
Other energy sources (e) .....	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	<b>1.6</b>	1.5	1.5
Total generation .....	<b>83.2</b>	<b>93.2</b>	<b>114.8</b>	<b>88.8</b>	77.0	90.8	107.3	83.2	81.4	91.8	108.5	84.3	<b>380.0</b>	358.3	366.0
Net energy for load (f) .....	<b>83.2</b>	<b>93.2</b>	<b>114.8</b>	<b>88.8</b>	77.0	90.8	107.3	83.2	81.4	91.8	108.5	84.3	<b>380.0</b>	358.3	366.0
<b>Northwest</b>															
Natural Gas .....	<b>20.1</b>	<b>16.7</b>	<b>29.4</b>	<b>21.5</b>	20.3	14.3	23.9	15.7	17.1	17.0	28.2	15.7	<b>87.7</b>	74.3	78.0
Coal .....	<b>29.7</b>	<b>18.0</b>	<b>29.4</b>	<b>27.8</b>	17.5	13.7	29.7	27.6	22.2	11.1	24.9	26.8	<b>104.9</b>	88.4	85.0
Nuclear .....	<b>2.5</b>	<b>1.3</b>	<b>2.5</b>	<b>2.6</b>	2.5	2.3	2.3	2.5	2.5	1.2	2.3	2.5	<b>8.9</b>	9.6	8.5
Conventional hydropower .....	<b>30.5</b>	<b>36.5</b>	<b>24.4</b>	<b>27.5</b>	37.6	44.2	29.6	31.9	36.9	42.3	29.1	31.4	<b>119.0</b>	143.2	139.7
Nonhydro renewables (d) .....	<b>11.2</b>	<b>13.4</b>	<b>12.0</b>	<b>12.3</b>	13.4	14.7	13.0	14.5	17.7	18.4	16.1	17.4	<b>49.0</b>	55.5	69.7
Other energy sources (e) .....	<b>0.2</b>	<b>0.2</b>	<b>0.3</b>	<b>0.2</b>	0.2	0.3	0.2	0.1	0.2	0.2	0.2	0.1	<b>0.9</b>	0.8	0.8
Total generation .....	<b>94.3</b>	<b>86.2</b>	<b>97.9</b>	<b>92.0</b>	91.5	89.4	98.7	92.2	96.6	90.3	100.9	93.9	<b>370.4</b>	371.9	381.7
Net energy for load (f) .....	<b>93.8</b>	<b>84.4</b>	<b>91.4</b>	<b>86.5</b>	87.7	81.7	91.2	86.1	88.4	81.9	91.5	86.4	<b>356.0</b>	346.7	348.1
<b>Southwest</b>															
Natural Gas .....	<b>10.4</b>	<b>12.7</b>	<b>19.1</b>	<b>13.6</b>	9.9	13.4	18.5	11.7	9.4	12.7	18.2	11.3	<b>55.8</b>	53.5	51.6
Coal .....	<b>9.7</b>	<b>7.9</b>	<b>11.8</b>	<b>9.5</b>	6.7	7.1	7.9	8.1	7.1	7.2	7.9	8.1	<b>38.8</b>	29.8	30.3
Nuclear .....	<b>8.6</b>	<b>7.6</b>	<b>8.6</b>	<b>7.2</b>	8.7	7.4	8.6	7.7	8.6	7.5	8.6	7.7	<b>31.9</b>	32.4	32.4
Conventional hydropower .....	<b>3.0</b>	<b>4.3</b>	<b>3.9</b>	<b>2.4</b>	2.8	4.1	3.9	2.4	2.5	3.7	3.9	2.3	<b>13.7</b>	13.2	12.4
Nonhydro renewables (d) .....	<b>2.1</b>	<b>2.8</b>	<b>2.7</b>	<b>2.3</b>	2.4	3.1	2.7	2.6	3.4	3.9	3.5	3.4	<b>9.8</b>	10.7	14.2
Other energy sources (e) .....	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>0.0</b>	-0.1	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	<b>0.0</b>	0.0	0.0
Total generation .....	<b>33.8</b>	<b>35.3</b>	<b>46.1</b>	<b>34.9</b>	30.4	35.2	41.5	32.4	30.9	35.2	42.1	32.7	<b>150.1</b>	139.5	140.9
Net energy for load (f) .....	<b>18.0</b>	<b>23.4</b>	<b>33.8</b>	<b>22.2</b>	21.9	26.8	34.4	23.3	22.7	27.3	34.8	23.6	<b>97.3</b>	106.4	108.4
<b>California</b>															
Natural Gas .....	<b>17.7</b>	<b>10.2</b>	<b>23.4</b>	<b>23.2</b>	20.8	9.2	26.3	22.5	17.4	7.7	23.1	20.3	<b>74.5</b>	78.9	68.4
Coal .....	<b>2.2</b>	<b>1.2</b>	<b>1.9</b>	<b>2.4</b>	2.1	1.5	1.9	2.4	2.3	2.9	1.9	2.4	<b>7.6</b>	7.9	9.5
Nuclear .....	<b>3.8</b>	<b>4.9</b>	<b>4.7</b>	<b>2.8</b>	4.9	4.9	4.3	4.4	4.5	4.2	4.9	4.9	<b>16.2</b>	18.6	18.5
Conventional hydropower .....	<b>7.1</b>	<b>12.4</b>	<b>9.6</b>	<b>4.2</b>	6.4	12.0	9.7	4.4	5.7	11.4	9.6	4.2	<b>33.3</b>	32.5	30.9
Nonhydro renewables (d) .....	<b>13.8</b>	<b>18.3</b>	<b>18.5</b>	<b>12.2</b>	13.2	19.3	19.7	13.0	13.2	20.5	20.5	13.6	<b>62.7</b>	65.2	67.8
Other energy sources (e) .....	<b>-0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.0</b>	-0.1	0.2	0.2	0.0	-0.1	0.2	0.2	0.0	<b>0.2</b>	0.4	0.3
Total generation .....	<b>44.4</b>	<b>47.2</b>	<b>58.3</b>	<b>44.7</b>	47.3	47.2	62.2	46.7	43.0	46.8	60.2	45.4	<b>194.6</b>	203.4	195.4
Net energy for load (f) .....	<b>59.6</b>	<b>64.4</b>	<b>77.3</b>	<b>62.3</b>	59.6	63.3	76.9	62.0	59.4	63.1	76.9	62.0	<b>263.6</b>	261.8	261.5

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

Data reflect generation supplied by power plants with a combined capacity of at least 1 megawatt operated by electric utilities and independent power producers.

(a) Large-scale solar generation from power plants with more than 1 megawatt of capacity. Excludes generation from small-scale solar photovoltaic systems.

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

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

(d) Wind, large-scale solar, biomass, and geothermal

(e) Pumped storage hydroelectric, petroleum, other gases, batteries, and other nonrenewable fuels. See notes (b) and (c).

(f) Regional generation from generating units operated by electric power sector, plus energy receipts from minus energy deliveries to U.S. balancing authorities outside region.

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

**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 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Electric Power Sector</b>															
Geothermal .....	<b>0.037</b>	<b>0.035</b>	<b>0.038</b>	<b>0.033</b>	0.036	0.036	0.038	0.032	0.031	0.035	0.039	0.032	<b>0.143</b>	0.142	0.137
Hydroelectric Power (a) .....	<b>0.650</b>	<b>0.745</b>	<b>0.552</b>	<b>0.536</b>	0.704	0.800	0.595	0.587	0.664	0.756	0.588	0.575	<b>2.483</b>	2.685	2.584
Solar (b) .....	<b>0.122</b>	<b>0.200</b>	<b>0.207</b>	<b>0.128</b>	0.146	0.248	0.268	0.169	0.195	0.340	0.368	0.225	<b>0.657</b>	0.831	1.129
Waste Biomass (c) .....	<b>0.059</b>	<b>0.058</b>	<b>0.059</b>	<b>0.058</b>	0.053	0.058	0.060	0.057	0.054	0.059	0.060	0.057	<b>0.234</b>	0.228	0.230
Wood Biomass .....	<b>0.053</b>	<b>0.052</b>	<b>0.058</b>	<b>0.025</b>	0.028	0.047	0.052	0.031	0.039	0.048	0.053	0.033	<b>0.188</b>	0.159	0.173
Wind .....	<b>0.683</b>	<b>0.724</b>	<b>0.609</b>	<b>0.754</b>	0.785	0.835	0.674	0.888	0.929	0.953	0.777	0.976	<b>2.770</b>	3.182	3.636
Subtotal .....	<b>1.604</b>	<b>1.814</b>	<b>1.524</b>	<b>1.533</b>	1.752	2.024	1.687	1.765	1.912	2.193	1.885	1.899	<b>6.475</b>	7.228	7.889
<b>Industrial Sector</b>															
Biofuel Losses and Co-products (d) .....	<b>0.194</b>	<b>0.203</b>	<b>0.199</b>	<b>0.209</b>	0.200	0.202	0.200	0.202	0.195	0.200	0.202	0.203	<b>0.805</b>	0.804	0.801
Geothermal .....	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<b>0.004</b>	0.004	0.004
Hydroelectric Power (a) .....	<b>0.003</b>	<b>0.003</b>	<b>0.002</b>	<b>0.003</b>	0.003	0.003	0.002	0.003	0.003	0.003	0.002	0.003	<b>0.011</b>	0.011	0.010
Solar (b) .....	<b>0.006</b>	<b>0.008</b>	<b>0.009</b>	<b>0.006</b>	0.006	0.009	0.010	0.007	0.007	0.011	0.011	0.008	<b>0.029</b>	0.032	0.036
Waste Biomass (c) .....	<b>0.042</b>	<b>0.038</b>	<b>0.037</b>	<b>0.042</b>	0.040	0.039	0.039	0.041	0.040	0.039	0.039	0.041	<b>0.160</b>	0.158	0.158
Wood Biomass .....	<b>0.373</b>	<b>0.363</b>	<b>0.369</b>	<b>0.359</b>	0.345	0.341	0.351	0.352	0.340	0.337	0.349	0.351	<b>1.463</b>	1.389	1.377
Subtotal .....	<b>0.617</b>	<b>0.613</b>	<b>0.614</b>	<b>0.618</b>	0.593	0.590	0.598	0.604	0.584	0.585	0.598	0.603	<b>2.462</b>	2.385	2.370
<b>Commercial Sector</b>															
Geothermal .....	<b>0.006</b>	<b>0.006</b>	<b>0.006</b>	<b>0.006</b>	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	<b>0.024</b>	0.024	0.024
Solar (b) .....	<b>0.022</b>	<b>0.032</b>	<b>0.032</b>	<b>0.022</b>	0.025	0.037	0.037	0.026	0.029	0.041	0.041	0.029	<b>0.108</b>	0.125	0.141
Waste Biomass (c) .....	<b>0.010</b>	<b>0.008</b>	<b>0.009</b>	<b>0.010</b>	0.010	0.009	0.009	0.010	0.010	0.009	0.009	0.010	<b>0.038</b>	0.038	0.038
Wood Biomass .....	<b>0.021</b>	<b>0.021</b>	<b>0.021</b>	<b>0.021</b>	0.021	0.020	0.022	0.021	0.021	0.020	0.022	0.021	<b>0.084</b>	0.084	0.084
Subtotal .....	<b>0.065</b>	<b>0.074</b>	<b>0.075</b>	<b>0.066</b>	0.069	0.078	0.080	0.069	0.072	0.083	0.085	0.073	<b>0.281</b>	0.297	0.313
<b>Residential Sector</b>															
Geothermal .....	<b>0.010</b>	<b>0.010</b>	<b>0.010</b>	<b>0.010</b>	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	<b>0.040</b>	0.040	0.040
Solar (e) .....	<b>0.050</b>	<b>0.076</b>	<b>0.078</b>	<b>0.053</b>	0.058	0.090	0.092	0.064	0.069	0.107	0.110	0.077	<b>0.257</b>	0.303	0.363
Wood Biomass .....	<b>0.131</b>	<b>0.132</b>	<b>0.134</b>	<b>0.131</b>	0.131	0.132	0.134	0.131	0.131	0.132	0.134	0.131	<b>0.528</b>	0.528	0.528
Subtotal .....	<b>0.190</b>	<b>0.218</b>	<b>0.221</b>	<b>0.194</b>	0.198	0.231	0.235	0.205	0.210	0.249	0.253	0.218	<b>0.824</b>	0.870	0.930
<b>Transportation Sector</b>															
Biomass-based Diesel (f) .....	<b>0.058</b>	<b>0.071</b>	<b>0.070</b>	<b>0.068</b>	0.076	0.086	0.076	0.082	0.094	0.103	0.090	0.098	<b>0.267</b>	0.320	0.385
Ethanol (f) .....	<b>0.275</b>	<b>0.293</b>	<b>0.291</b>	<b>0.303</b>	0.276	0.292	0.296	0.290	0.271	0.293	0.296	0.288	<b>1.162</b>	1.154	1.148
Subtotal .....	<b>0.333</b>	<b>0.365</b>	<b>0.361</b>	<b>0.375</b>	0.352	0.378	0.372	0.371	0.365	0.396	0.385	0.386	<b>1.433</b>	1.474	1.533
<b>All Sectors Total</b>															
Biomass-based Diesel (f) .....	<b>0.058</b>	<b>0.071</b>	<b>0.070</b>	<b>0.068</b>	0.076	0.086	0.076	0.082	0.094	0.103	0.090	0.098	<b>0.267</b>	0.320	0.385
Biofuel Losses and Co-products (d) .....	<b>0.194</b>	<b>0.203</b>	<b>0.199</b>	<b>0.209</b>	0.200	0.202	0.200	0.202	0.195	0.200	0.202	0.203	<b>0.805</b>	0.804	0.801
Ethanol (f) .....	<b>0.285</b>	<b>0.305</b>	<b>0.302</b>	<b>0.313</b>	0.287	0.303	0.307	0.300	0.282	0.304	0.307	0.299	<b>1.204</b>	1.198	1.191
Geothermal .....	<b>0.054</b>	<b>0.052</b>	<b>0.054</b>	<b>0.053</b>	0.053	0.053	0.055	0.049	0.047	0.052	0.056	0.049	<b>0.212</b>	0.210	0.205
Hydroelectric Power (a) .....	<b>0.653</b>	<b>0.748</b>	<b>0.555</b>	<b>0.540</b>	0.707	0.804	0.598	0.590	0.667	0.760	0.591	0.579	<b>2.496</b>	2.698	2.596
Solar (b)(e) .....	<b>0.197</b>	<b>0.315</b>	<b>0.324</b>	<b>0.207</b>	0.236	0.383	0.406	0.266	0.301	0.499	0.530	0.339	<b>1.042</b>	1.290	1.669
Waste Biomass (c) .....	<b>0.111</b>	<b>0.105</b>	<b>0.105</b>	<b>0.110</b>	0.103	0.106	0.108	0.108	0.104	0.107	0.108	0.108	<b>0.431</b>	0.424	0.427
Wood Biomass .....	<b>0.578</b>	<b>0.568</b>	<b>0.582</b>	<b>0.536</b>	0.525	0.540	0.559	0.536	0.531	0.538	0.556	0.536	<b>2.264</b>	2.160	2.161
Wind .....	<b>0.683</b>	<b>0.724</b>	<b>0.609</b>	<b>0.754</b>	0.785	0.835	0.674	0.888	0.929	0.953	0.777	0.976	<b>2.770</b>	3.182	3.636
<b>Total Consumption .....</b>	<b>2.809</b>	<b>3.084</b>	<b>2.795</b>	<b>2.786</b>	2.963	3.303	2.973	3.014	3.143	3.506	3.206	3.179	<b>11.475</b>	12.253	13.035

- = 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 (&gt;1 MW) solar thermal and photovoltaic generators and small-scale (&lt;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 (&lt;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 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Renewable Energy Electric Generating Capacity (megawatts, end of period)</b>															
<b>Electric Power Sector (a)</b>															
Biomass .....	6,970	6,936	6,834	6,929	6,928	6,894	6,897	6,941	6,941	6,960	6,960	6,960	<b>6,929</b>	<b>6,941</b>	<b>6,960</b>
Waste .....	4,135	4,116	4,103	4,101	4,101	4,067	4,069	4,072	4,072	4,091	4,091	4,091	<b>4,101</b>	<b>4,072</b>	<b>4,091</b>
Wood .....	2,835	2,820	2,731	2,828	2,828	2,828	2,828	2,870	2,870	2,870	2,870	2,870	<b>2,828</b>	<b>2,870</b>	<b>2,870</b>
Conventional Hydroelectric .....	<b>79,606</b>	<b>79,587</b>	<b>79,478</b>	<b>79,330</b>	79,537	79,536	79,673	79,766	79,785	79,791	79,791	79,819	<b>79,330</b>	<b>79,766</b>	<b>79,819</b>
Geothermal .....	2,354	2,406	2,406	2,406	2,406	2,406	2,406	2,431	2,431	2,431	2,431	2,431	<b>2,406</b>	<b>2,431</b>	<b>2,431</b>
Large-Scale Solar (b) .....	<b>32,699</b>	<b>33,184</b>	<b>33,830</b>	<b>37,458</b>	39,304	42,165	43,567	51,202	52,194	58,646	60,022	64,419	<b>37,458</b>	<b>51,202</b>	<b>64,419</b>
Wind .....	<b>96,620</b>	<b>98,096</b>	<b>99,674</b>	<b>105,081</b>	108,237	109,654	112,663	125,792	126,557	127,594	127,974	130,749	<b>105,081</b>	<b>125,792</b>	<b>130,749</b>
<b>Other Sectors (c)</b>															
Biomass .....	<b>6,589</b>	<b>6,538</b>	<b>6,538</b>	<b>6,544</b>	6,568	6,568	6,568	6,560	6,572	6,571	6,571	6,571	<b>6,544</b>	<b>6,560</b>	<b>6,571</b>
Waste .....	845	846	846	846	862	862	862	862	874	873	873	873	<b>846</b>	<b>862</b>	<b>873</b>
Wood .....	<b>5,744</b>	<b>5,692</b>	<b>5,692</b>	<b>5,698</b>	5,706	5,706	5,706	5,698	5,698	5,698	5,698	5,698	<b>5,698</b>	<b>5,698</b>	<b>5,698</b>
Conventional Hydroelectric .....	290	290	290	290	290	290	290	290	290	291	291	291	<b>290</b>	<b>290</b>	<b>291</b>
Large-Scale Solar (b) .....	<b>409</b>	<b>415</b>	<b>425</b>	<b>429</b>	429	432	433	434	434	434	434	434	<b>429</b>	<b>434</b>	<b>434</b>
Small-Scale Solar (d) .....	<b>20,327</b>	<b>21,181</b>	<b>22,148</b>	<b>23,028</b>	24,027	25,087	26,213	27,403	28,662	30,000	31,417	32,915	<b>23,028</b>	<b>27,403</b>	<b>32,915</b>
Residential Sector .....	<b>12,271</b>	<b>12,840</b>	<b>13,526</b>	<b>14,223</b>	14,964	15,760	16,612	17,522	18,492	19,533	20,643	21,827	<b>14,223</b>	<b>17,522</b>	<b>21,827</b>
Commercial Sector .....	<b>6,446</b>	<b>6,652</b>	<b>6,885</b>	<b>7,025</b>	7,231	7,444	7,664	7,892	8,127	8,369	8,620	8,879	<b>7,025</b>	<b>7,892</b>	<b>8,879</b>
Industrial Sector .....	<b>1,611</b>	<b>1,689</b>	<b>1,737</b>	<b>1,780</b>	1,832	1,884	1,936	1,989	2,043	2,098	2,153	2,209	<b>1,780</b>	<b>1,989</b>	<b>2,209</b>
Wind .....	118	118	118	127	127	353	353	353	353	353	353	353	127	353	353
<b>Renewable Electricity Generation (billion kilowatthours)</b>															
<b>Electric Power Sector (a)</b>															
Biomass .....	<b>7.2</b>	<b>7.0</b>	<b>7.6</b>	<b>5.9</b>	5.3	7.0	7.5	6.0	6.2	7.2	7.6	6.0	<b>27.7</b>	<b>25.9</b>	<b>27.0</b>
Waste .....	3.9	3.9	4.0	3.8	3.5	3.9	4.0	3.8	3.6	3.9	4.0	3.8	<b>15.6</b>	<b>15.3</b>	<b>15.4</b>
Wood .....	3.3	3.1	3.6	2.0	1.8	3.1	3.5	2.1	2.6	3.2	3.5	2.2	<b>12.1</b>	<b>10.6</b>	<b>11.6</b>
Conventional Hydroelectric .....	<b>71.2</b>	<b>81.7</b>	<b>60.6</b>	<b>58.8</b>	76.4	86.9	64.6	63.7	72.1	82.1	63.8	62.5	<b>272.3</b>	<b>291.5</b>	<b>280.5</b>
Geothermal .....	4.0	3.8	4.1	3.6	3.9	3.9	4.2	3.5	3.3	3.9	4.2	3.5	<b>15.6</b>	<b>15.5</b>	<b>14.9</b>
Large-Scale Solar (b) .....	<b>13.2</b>	<b>21.8</b>	<b>22.5</b>	<b>13.9</b>	15.9	26.9	29.1	18.4	21.2	36.9	40.0	24.5	<b>71.3</b>	<b>90.2</b>	<b>122.5</b>
Wind .....	<b>74.2</b>	<b>78.5</b>	<b>66.1</b>	<b>81.8</b>	85.2	90.6	73.2	96.4	100.9	103.5	84.4	105.9	<b>300.6</b>	<b>345.4</b>	<b>394.6</b>
<b>Other Sectors (c)</b>															
Biomass .....	<b>7.4</b>	<b>7.3</b>	<b>7.6</b>	<b>7.5</b>	7.5	7.3	7.6	7.5	7.4	7.3	7.6	7.5	<b>29.8</b>	<b>29.9</b>	<b>29.8</b>
Waste .....	0.8	0.7	0.7	0.8	0.8	0.7	0.7	0.8	0.8	0.7	0.7	0.8	<b>2.9</b>	<b>2.9</b>	<b>2.9</b>
Wood .....	<b>6.7</b>	<b>6.6</b>	<b>7.0</b>	<b>6.7</b>	6.7	6.6	7.0	6.7	6.7	6.6	7.0	6.7	<b>26.9</b>	<b>27.0</b>	<b>26.9</b>
Conventional Hydroelectric .....	0.3	0.4	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.3	1.4	1.4	1.4
Large-Scale Solar (b) .....	0.1	0.2	0.2	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	<b>0.6</b>	<b>1.1</b>	<b>1.3</b>
Small-Scale Solar (d) .....	<b>6.9</b>	<b>10.4</b>	<b>10.6</b>	<b>7.2</b>	8.1	12.3	12.5	8.7	9.7	14.7	15.0	10.4	<b>35.1</b>	<b>41.5</b>	<b>49.9</b>
Residential Sector .....	4.0	6.2	6.4	4.3	4.8	7.6	7.8	5.4	6.1	9.4	9.7	6.8	<b>20.9</b>	<b>25.6</b>	<b>32.0</b>
Commercial Sector .....	<b>2.3</b>	<b>3.3</b>	<b>3.3</b>	<b>2.2</b>	2.6	3.7	3.7	2.5	2.9	4.2	4.2	2.9	<b>11.2</b>	<b>12.5</b>	<b>14.1</b>
Industrial Sector .....	0.6	0.9	0.9	0.6	0.7	1.0	1.0	0.7	0.8	1.1	1.1	0.8	<b>3.0</b>	<b>3.4</b>	<b>3.8</b>
Wind .....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	<b>0.3</b>	<b>0.4</b>	<b>0.4</b>

-- = 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 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Macroeconomic</b>															
Real Gross Domestic Product (billion chained 2012 dollars - SAAR) .....	18,927	19,022	19,121	19,207	19,288	19,399	19,513	19,604	19,699	19,778	19,865	19,967	19,069	19,451	19,827
Real Personal Consumption Expend. (billion chained 2012 dollars - SAAR) .....	13,103	13,250	13,353	13,428	13,524	13,608	13,698	13,773	13,851	13,925	13,999	14,078	13,284	13,651	13,963
Real Private Fixed Investment (billion chained 2012 dollars - SAAR) .....	3,349	3,337	3,330	3,338	3,358	3,385	3,408	3,431	3,452	3,468	3,476	3,498	3,339	3,396	3,474
Business Inventory Change (billion chained 2012 dollars - SAAR) .....	113	75	67	57	26	-3	15	23	29	28	45	51	78	15	38
Real Government Expenditures (billion chained 2012 dollars - SAAR) .....	3,258	3,297	3,310	3,314	3,327	3,359	3,366	3,371	3,378	3,382	3,385	3,387	3,295	3,356	3,383
Real Exports of Goods & Services (billion chained 2012 dollars - SAAR) .....	2,554	2,517	2,523	2,507	2,514	2,555	2,588	2,614	2,632	2,650	2,661	2,682	2,526	2,568	2,656
Real Imports of Goods & Services (billion chained 2012 dollars - SAAR) .....	3,498	3,498	3,514	3,484	3,511	3,559	3,622	3,672	3,710	3,744	3,771	3,800	3,498	3,591	3,756
Real Disposable Personal Income (billion chained 2012 dollars - SAAR) .....	14,878	14,934	15,043	15,116	15,184	15,259	15,331	15,415	15,532	15,620	15,706	15,796	14,993	15,297	15,663
Non-Farm Employment (millions) .....	150.7	151.1	151.6	152.2	152.7	153.3	153.4	153.6	153.9	154.2	154.4	154.6	151.4	153.3	154.3
Civilian Unemployment Rate (percent) .....	3.9	3.6	3.6	3.5	3.5	3.4	3.5	3.5	3.5	3.6	3.6	3.7	3.7	3.5	3.6
Housing Starts (millions - SAAR) .....	1.21	1.26	1.28	1.35	1.35	1.31	1.30	1.29	1.27	1.26	1.25	1.26	1.27	1.31	1.26
<b>Industrial Production Indices (Index, 2012=100)</b>															
Total Industrial Production .....	109.8	109.2	109.5	109.1	109.0	109.3	109.8	110.0	110.5	110.9	111.2	111.8	109.4	109.5	111.1
Manufacturing .....	106.5	105.7	105.9	105.6	105.4	105.8	106.5	106.7	106.8	107.1	107.4	108.0	105.9	106.1	107.3
Food .....	115.1	115.3	114.6	115.9	116.0	116.3	116.7	117.0	117.3	117.8	118.3	118.8	115.2	116.5	118.0
Paper .....	94.2	91.8	92.5	93.1	92.0	91.1	90.4	89.8	89.4	89.2	89.2	89.3	92.9	90.8	89.3
Petroleum and Coal Products .....	106.3	104.9	106.8	105.4	105.5	105.6	105.6	105.4	105.2	105.0	104.9	104.5	105.8	105.5	104.9
Chemicals .....	101.4	99.9	100.7	99.3	99.8	100.2	100.7	101.2	101.8	102.4	103.1	103.9	100.3	100.5	102.8
Nonmetallic Mineral Products .....	119.7	119.0	119.8	120.0	119.2	118.7	118.4	118.2	118.1	118.1	118.3	118.7	119.6	118.6	118.3
Primary Metals .....	97.9	96.7	96.6	96.2	94.5	93.3	92.3	91.0	90.0	89.4	89.5	90.0	96.9	92.8	89.7
Coal-weighted Manufacturing (a) .....	106.9	105.6	106.1	105.8	105.4	105.3	105.5	105.5	105.8	106.0	106.5	107.2	106.1	105.4	106.4
Distillate-weighted Manufacturing (a) .....	98.5	97.9	98.3	98.5	98.0	97.8	97.7	97.5	97.4	97.3	97.5	97.8	98.3	97.7	97.5
Electricity-weighted Manufacturing (a) .....	106.5	105.3	105.7	105.3	104.7	104.5	104.6	104.4	104.3	104.4	104.8	105.4	105.7	104.5	104.7
Natural Gas-weighted Manufacturing (a) .....	108.7	107.7	108.1	107.5	107.1	107.1	107.2	107.2	107.3	107.6	108.2	108.9	108.0	107.1	108.0
<b>Price Indexes</b>															
Consumer Price Index (all urban consumers) (index, 1982-1984=1.00) .....	2.53	2.55	2.56	2.58	2.59	2.60	2.62	2.63	2.64	2.66	2.67	2.69	2.56	2.61	2.66
Producer Price Index: All Commodities (index, 1982=1.00) .....	2.01	2.00	1.98	2.00	2.01	2.01	2.02	2.03	2.04	2.05	2.06	2.07	2.00	2.02	2.05
Producer Price Index: Petroleum (index, 1982=1.00) .....	1.81	2.08	1.96	1.95	1.84	1.85	2.01	2.01	1.91	2.01	2.01	1.97	1.95	1.93	1.98
GDP Implicit Price Deflator (index, 2012=100) .....	111.5	112.2	112.7	113.1	113.8	114.3	115.1	115.8	116.5	117.2	118.0	118.7	112.4	114.7	117.6
<b>Miscellaneous</b>															
Vehicle Miles Traveled (b) (million miles/day) .....	8,298	9,333	9,289	8,889	8,401	9,415	9,353	9,011	8,481	9,490	9,432	9,078	8,955	9,046	9,123
Air Travel Capacity (Available ton-miles/day, thousands) .....	643	685	707	674	640	676	686	664	645	678	687	665	677	667	669
Aircraft Utilization (Revenue ton-miles/day, thousands) .....	380	426	427	410	398	435	442	422	403	437	443	423	411	424	427
Airline Ticket Price Index (index, 1982-1984=100) .....	255.7	278.3	263.8	263.8	255.1	275.5	272.4	282.6	278.0	300.3	295.9	306.0	265.4	271.4	295.1
Raw Steel Production (million short tons per day) .....	0.273	0.271	0.264	0.265	0.279	0.271	0.258	0.257	0.255	0.254	0.247	0.253	0.268	0.266	0.252
<b>Carbon Dioxide (CO2) Emissions (million metric tons)</b>															
Petroleum .....	575	587	597	600	573	577	596	592	570	576	593	590	2,359	2,339	2,328
Natural Gas .....	507	350	384	456	511	378	382	445	505	368	382	446	1,696	1,717	1,700
Coal .....	290	239	308	257	240	193	283	239	258	189	268	242	1,094	955	957
Total Energy (c) .....	1,374	1,178	1,292	1,316	1,327	1,151	1,264	1,279	1,335	1,136	1,245	1,281	5,160	5,022	4,997

- = 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 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Real Gross State Product (Billion \$2009)</b>															
New England .....	996	999	1,005	1,011	1,014	1,019	1,025	1,029	1,033	1,037	1,041	1,045	1,003	1,022	1,039
Middle Atlantic .....	2,772	2,782	2,793	2,807	2,817	2,830	2,842	2,853	2,864	2,871	2,880	2,892	2,789	2,835	2,877
E. N. Central .....	2,528	2,535	2,542	2,548	2,562	2,574	2,583	2,591	2,601	2,607	2,615	2,625	2,538	2,577	2,612
W. N. Central .....	1,181	1,187	1,191	1,196	1,198	1,203	1,210	1,215	1,220	1,225	1,231	1,237	1,189	1,206	1,228
S. Atlantic .....	3,353	3,367	3,387	3,405	3,416	3,440	3,466	3,488	3,509	3,525	3,543	3,564	3,378	3,452	3,535
E. S. Central .....	832	835	839	842	844	848	852	856	861	864	867	871	837	850	866
W. S. Central .....	2,347	2,370	2,386	2,401	2,410	2,423	2,438	2,449	2,458	2,473	2,487	2,502	2,376	2,430	2,480
Mountain .....	1,252	1,261	1,272	1,279	1,284	1,292	1,301	1,310	1,317	1,324	1,330	1,338	1,266	1,297	1,327
Pacific .....	3,700	3,719	3,740	3,754	3,777	3,806	3,831	3,850	3,871	3,888	3,907	3,929	3,728	3,816	3,899
<b>Industrial Output, Manufacturing (Index, Year 2012=100)</b>															
New England .....	98.9	97.7	97.0	96.9	96.5	96.7	97.1	97.2	97.2	97.4	97.6	98.1	97.6	96.9	97.6
Middle Atlantic .....	98.8	97.5	97.0	96.7	96.4	96.6	97.0	97.0	97.0	97.1	97.3	97.8	97.5	96.7	97.3
E. N. Central .....	108.7	107.4	106.8	105.9	106.0	106.6	107.0	107.1	107.2	107.4	107.6	108.2	107.2	106.7	107.6
W. N. Central .....	106.1	105.1	105.2	104.9	104.7	105.2	105.9	106.1	106.4	106.7	107.1	107.8	105.3	105.5	107.0
S. Atlantic .....	110.6	109.9	110.3	110.0	109.7	110.2	110.8	111.0	111.1	111.3	111.6	112.2	110.2	110.4	111.5
E. S. Central .....	111.4	110.4	110.6	110.0	109.9	110.5	111.1	111.3	111.5	111.7	112.1	112.7	110.6	110.7	112.0
W. S. Central .....	101.5	100.6	101.7	101.4	101.3	101.6	102.1	102.3	102.4	102.6	103.0	103.8	101.3	101.8	103.0
Mountain .....	116.1	116.3	117.6	117.5	117.3	118.2	119.1	119.5	119.8	120.2	120.6	121.4	116.9	118.5	120.5
Pacific .....	105.9	105.2	105.9	105.6	105.3	105.8	106.5	106.8	107.1	107.4	107.8	108.5	105.6	106.1	107.7
<b>Real Personal Income (Billion \$2009)</b>															
New England .....	903	905	909	914	919	923	927	931	937	941	945	949	908	925	943
Middle Atlantic .....	2,301	2,313	2,319	2,331	2,342	2,351	2,360	2,370	2,384	2,393	2,402	2,411	2,316	2,356	2,398
E. N. Central .....	2,428	2,435	2,439	2,454	2,465	2,476	2,485	2,495	2,510	2,520	2,531	2,542	2,439	2,480	2,526
W. N. Central .....	1,147	1,148	1,161	1,164	1,166	1,169	1,173	1,179	1,188	1,195	1,203	1,212	1,155	1,172	1,199
S. Atlantic .....	3,214	3,231	3,250	3,270	3,290	3,310	3,330	3,352	3,381	3,402	3,424	3,446	3,241	3,320	3,413
E. S. Central .....	887	890	895	899	903	907	911	915	921	925	929	934	893	909	928
W. S. Central .....	1,984	1,999	2,012	2,025	2,037	2,048	2,059	2,071	2,089	2,102	2,113	2,126	2,005	2,054	2,108
Mountain .....	1,168	1,175	1,183	1,190	1,197	1,205	1,212	1,221	1,231	1,240	1,248	1,256	1,179	1,209	1,244
Pacific .....	2,809	2,827	2,842	2,851	2,863	2,880	2,897	2,914	2,934	2,953	2,971	2,989	2,832	2,888	2,962
<b>Households (Thousands)</b>															
New England .....	5,943	5,951	5,968	5,976	5,983	5,990	5,998	6,005	6,013	6,021	6,028	6,036	5,976	6,005	6,036
Middle Atlantic .....	16,258	16,285	16,331	16,353	16,371	16,385	16,404	16,423	16,443	16,462	16,481	16,501	16,353	16,423	16,501
E. N. Central .....	19,092	19,122	19,174	19,199	19,219	19,241	19,271	19,300	19,328	19,355	19,382	19,408	19,199	19,300	19,408
W. N. Central .....	8,692	8,714	8,746	8,764	8,780	8,794	8,813	8,830	8,846	8,864	8,882	8,899	8,764	8,830	8,899
S. Atlantic .....	25,709	25,788	25,902	25,982	26,062	26,136	26,220	26,302	26,384	26,470	26,551	26,634	25,982	26,302	26,634
E. S. Central .....	7,651	7,664	7,688	7,702	7,716	7,728	7,744	7,759	7,775	7,790	7,806	7,823	7,702	7,759	7,823
W. S. Central .....	14,812	14,858	14,924	14,971	15,018	15,062	15,112	15,162	15,213	15,265	15,317	15,369	14,971	15,162	15,369
Mountain .....	9,403	9,445	9,499	9,538	9,576	9,611	9,650	9,688	9,725	9,762	9,797	9,833	9,538	9,688	9,833
Pacific .....	18,939	18,984	19,055	19,101	19,146	19,188	19,239	19,289	19,340	19,387	19,435	19,483	19,101	19,289	19,483
<b>Total Non-farm Employment (Millions)</b>															
New England .....	7.5	7.5	7.5	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.5	7.6	7.6
Middle Atlantic .....	20.0	20.0	20.0	20.1	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.3	20.1	20.2	20.2
E. N. Central .....	22.4	22.4	22.4	22.4	22.5	22.6	22.5	22.6	22.6	22.6	22.6	22.6	22.4	22.5	22.6
W. N. Central .....	10.8	10.8	10.8	10.9	10.9	10.9	10.9	10.9	11.0	11.0	11.0	11.0	10.8	10.9	11.0
S. Atlantic .....	29.1	29.1	29.2	29.4	29.5	29.6	29.7	29.8	29.9	29.9	30.0	30.1	29.2	29.7	30.0
E. S. Central .....	8.3	8.3	8.3	8.4	8.4	8.4	8.4	8.4	8.4	8.5	8.5	8.5	8.3	8.4	8.5
W. S. Central .....	17.6	17.7	17.8	17.9	18.0	18.1	18.1	18.1	18.2	18.2	18.3	18.3	17.8	18.1	18.3
Mountain .....	11.0	11.1	11.1	11.2	11.2	11.3	11.3	11.4	11.4	11.5	11.5	11.5	11.1	11.3	11.5
Pacific .....	23.7	23.9	24.0	24.1	24.2	24.3	24.3	24.4	24.4	24.4	24.5	24.5	23.9	24.3	24.4

- = 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 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Heating Degree Days</b>															
New England .....	<b>3,220</b>	<b>892</b>	<b>135</b>	<b>2,273</b>	2,985	869	127	2,162	3,116	856	127	2,162	<b>6,520</b>	<b>6,142</b>	<b>6,260</b>
Middle Atlantic .....	<b>2,983</b>	<b>632</b>	<b>67</b>	<b>2,058</b>	2,742	699	76	1,990	2,915	696	76	1,990	<b>5,740</b>	<b>5,507</b>	<b>5,676</b>
E. N. Central .....	<b>3,328</b>	<b>763</b>	<b>65</b>	<b>2,279</b>	2,935	743	123	2,238	3,157	743	123	2,238	<b>6,436</b>	<b>6,038</b>	<b>6,260</b>
W. N. Central .....	<b>3,646</b>	<b>772</b>	<b>108</b>	<b>2,547</b>	3,142	712	159	2,414	3,235	709	159	2,415	<b>7,073</b>	<b>6,428</b>	<b>6,518</b>
South Atlantic .....	<b>1,335</b>	<b>128</b>	<b>2</b>	<b>916</b>	1,250	189	12	966	1,416	198	12	965	<b>2,381</b>	<b>2,418</b>	<b>2,591</b>
E. S. Central .....	<b>1,713</b>	<b>194</b>	<b>1</b>	<b>1,274</b>	1,647	246	19	1,305	1,834	256	19	1,306	<b>3,182</b>	<b>3,217</b>	<b>3,414</b>
W. S. Central .....	<b>1,208</b>	<b>90</b>	<b>0</b>	<b>849</b>	1,008	75	4	799	1,147	82	4	799	<b>2,147</b>	<b>1,888</b>	<b>2,031</b>
Mountain .....	<b>2,429</b>	<b>786</b>	<b>127</b>	<b>1,960</b>	2,149	663	144	1,804	2,182	673	143	1,803	<b>5,302</b>	<b>4,761</b>	<b>4,802</b>
Pacific .....	<b>1,690</b>	<b>577</b>	<b>97</b>	<b>1,184</b>	1,461	548	86	1,184	1,495	555	86	1,184	<b>3,548</b>	<b>3,278</b>	<b>3,320</b>
U.S. Average .....	<b>2,210</b>	<b>481</b>	<b>57</b>	<b>1,556</b>	1,973	480	72	1,520	2,105	483	72	1,518	<b>4,303</b>	<b>4,046</b>	<b>4,179</b>
<b>Heating Degree Days, Prior 10-year Average</b>															
New England .....	<b>3,166</b>	<b>820</b>	<b>111</b>	<b>2,122</b>	3,152	822	105	2,127	3,158	845	108	2,115	<b>6,218</b>	<b>6,205</b>	<b>6,226</b>
Middle Atlantic .....	<b>2,956</b>	<b>650</b>	<b>76</b>	<b>1,941</b>	2,948	644	69	1,944	2,940	663	71	1,926	<b>5,623</b>	<b>5,605</b>	<b>5,600</b>
E. N. Central .....	<b>3,196</b>	<b>697</b>	<b>112</b>	<b>2,198</b>	3,198	698	102	2,198	3,172	721	104	2,184	<b>6,203</b>	<b>6,196</b>	<b>6,181</b>
W. N. Central .....	<b>3,255</b>	<b>702</b>	<b>140</b>	<b>2,380</b>	3,287	702	132	2,379	3,257	719	132	2,377	<b>6,477</b>	<b>6,500</b>	<b>6,486</b>
South Atlantic .....	<b>1,480</b>	<b>176</b>	<b>11</b>	<b>963</b>	1,459	169	10	951	1,407	174	10	923	<b>2,631</b>	<b>2,588</b>	<b>2,514</b>
E. S. Central .....	<b>1,861</b>	<b>222</b>	<b>17</b>	<b>1,292</b>	1,850	214	15	1,277	1,788	222	16	1,257	<b>3,392</b>	<b>3,357</b>	<b>3,283</b>
W. S. Central .....	<b>1,183</b>	<b>85</b>	<b>4</b>	<b>807</b>	1,199	83	3	794	1,144	83	3	792	<b>2,079</b>	<b>2,078</b>	<b>2,022</b>
Mountain .....	<b>2,164</b>	<b>714</b>	<b>139</b>	<b>1,855</b>	2,192	718	135	1,843	2,175	700	135	1,846	<b>4,873</b>	<b>4,889</b>	<b>4,857</b>
Pacific .....	<b>1,444</b>	<b>582</b>	<b>83</b>	<b>1,175</b>	1,456	580	85	1,162	1,454	555	83	1,157	<b>3,283</b>	<b>3,284</b>	<b>3,249</b>
U.S. Average .....	<b>2,150</b>	<b>475</b>	<b>68</b>	<b>1,518</b>	2,149	472	64	1,508	2,118	476	65	1,494	<b>4,211</b>	<b>4,194</b>	<b>4,152</b>
<b>Cooling Degree Days</b>															
New England .....	<b>0</b>	<b>66</b>	<b>468</b>	<b>0</b>	0	85	419	1	0	85	419	1	<b>535</b>	<b>505</b>	<b>505</b>
Middle Atlantic .....	<b>0</b>	<b>145</b>	<b>632</b>	<b>8</b>	0	153	549	4	0	153	549	4	<b>785</b>	<b>707</b>	<b>707</b>
E. N. Central .....	<b>0</b>	<b>174</b>	<b>647</b>	<b>6</b>	0	210	531	7	0	210	531	7	<b>828</b>	<b>748</b>	<b>748</b>
W. N. Central .....	<b>0</b>	<b>223</b>	<b>727</b>	<b>2</b>	3	259	658	10	3	259	658	10	<b>952</b>	<b>930</b>	<b>930</b>
South Atlantic .....	<b>153</b>	<b>754</b>	<b>1,297</b>	<b>309</b>	141	666	1,175	231	119	660	1,176	232	<b>2,513</b>	<b>2,213</b>	<b>2,187</b>
E. S. Central .....	<b>29</b>	<b>548</b>	<b>1,212</b>	<b>86</b>	24	517	1,050	66	27	514	1,050	66	<b>1,875</b>	<b>1,657</b>	<b>1,657</b>
W. S. Central .....	<b>73</b>	<b>819</b>	<b>1,694</b>	<b>169</b>	94	899	1,506	199	89	890	1,506	199	<b>2,754</b>	<b>2,697</b>	<b>2,684</b>
Mountain .....	<b>10</b>	<b>343</b>	<b>988</b>	<b>60</b>	18	439	940	79	18	439	941	79	<b>1,400</b>	<b>1,476</b>	<b>1,477</b>
Pacific .....	<b>21</b>	<b>166</b>	<b>587</b>	<b>61</b>	27	173	592	58	27	172	591	58	<b>835</b>	<b>849</b>	<b>849</b>
U.S. Average .....	<b>46</b>	<b>398</b>	<b>951</b>	<b>105</b>	47	407	859	93	43	405	860	93	<b>1,499</b>	<b>1,406</b>	<b>1,401</b>
<b>Cooling Degree Days, Prior 10-year Average</b>															
New England .....	<b>0</b>	<b>79</b>	<b>455</b>	<b>1</b>	0	83	470	1	0	79	461	1	<b>536</b>	<b>554</b>	<b>541</b>
Middle Atlantic .....	<b>0</b>	<b>165</b>	<b>589</b>	<b>6</b>	0	170	609	6	0	163	597	6	<b>760</b>	<b>786</b>	<b>766</b>
E. N. Central .....	<b>3</b>	<b>242</b>	<b>548</b>	<b>7</b>	3	240	578	8	3	233	564	7	<b>799</b>	<b>829</b>	<b>807</b>
W. N. Central .....	<b>7</b>	<b>298</b>	<b>669</b>	<b>11</b>	7	296	696	11	7	291	686	11	<b>985</b>	<b>1,010</b>	<b>994</b>
South Atlantic .....	<b>120</b>	<b>684</b>	<b>1,180</b>	<b>239</b>	127	696	1,202	247	138	685	1,190	254	<b>2,224</b>	<b>2,272</b>	<b>2,266</b>
E. S. Central .....	<b>36</b>	<b>555</b>	<b>1,049</b>	<b>67</b>	36	557	1,082	72	37	541	1,063	73	<b>1,706</b>	<b>1,746</b>	<b>1,714</b>
W. S. Central .....	<b>103</b>	<b>897</b>	<b>1,552</b>	<b>205</b>	100	892	1,576	207	106	886	1,568	209	<b>2,758</b>	<b>2,775</b>	<b>2,769</b>
Mountain .....	<b>25</b>	<b>438</b>	<b>932</b>	<b>81</b>	24	433	939	81	25	442	940	82	<b>1,476</b>	<b>1,477</b>	<b>1,489</b>
Pacific .....	<b>31</b>	<b>185</b>	<b>631</b>	<b>76</b>	31	185	624	77	31	190	635	78	<b>923</b>	<b>917</b>	<b>935</b>
U.S. Average .....	<b>46</b>	<b>417</b>	<b>873</b>	<b>97</b>	47	420	892	100	50	416	886	102	<b>1,433</b>	<b>1,459</b>	<b>1,454</b>

- = 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 2020 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**

	Dec 2019	Jan 2020	Dec 19-Jan 2020	Dec 18-Jan 2019	2016- 2018
	Average	Average	Average	Average	Average
<b>Global Petroleum and Other Liquids (million barrels per day)</b>					
Global Petroleum and Other Liquids Production (a)	101.5	101.0	101.2	101.3	98.8
Global Petroleum and Other Liquids Consumption (b)	102.1	98.5	100.3	99.8	98.5
Biofuels Production (c)	2.2	2.0	2.1	2.1	2.4
Biofuels Consumption (c)	2.4	2.3	2.3	2.3	2.3
Iran Liquid Fuels Production	2.6	2.5	2.5	3.6	4.5
Iran Liquid Fuels Consumption	2.1	2.0	2.0	1.9	1.8
<b>Petroleum and Petroleum Products Produced and Consumed in Countries Other Than Iran (million barrels per day)</b>					
Production (d)	96.8	96.5	96.6	95.7	91.9
Consumption (d)	97.6	94.2	95.9	95.7	94.4
Production minus Consumption	-0.8	2.3	0.7	0.0	-2.5
World Inventory Net Withdrawals Including Iran	0.6	-2.5	-1.0	-1.5	-0.4
Estimated OECD Inventory Level (e) (million barrels)	2,894	2,926	2,910	2,867	2,963
<b>Surplus Production Capacity (million barrels per day)</b>					
OPEC Surplus Crude Oil Production Capacity (f)	2.1	2.2	2.1	1.6	1.6

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

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

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

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

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

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

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

Source: U.S. Energy Information Administration.

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

Item	Dec 2019	Jan 2020	Dec 19-Jan 2020	Dec 18-Jan 2019	2016-2018
	Average	Average	Average	Average	Average
Brent Front Month Futures Price (\$ per barrel)	65.17	63.67	64.42	58.99	57.19
WTI Front Month Futures Price (\$ per barrel)	59.80	57.53	58.67	50.30	53.07
Dubai Front Month Futures Price (\$ per barrel)	65.77	64.46	65.12	58.34	55.04
Brent 1st - 13th Month Futures Spread (\$ per barrel)	5.48	5.27	5.38	-0.70	-0.56
WTI 1st - 13th Month Futures Spread (\$ per barrel)	4.61	3.69	4.15	-2.30	-0.92
RBOB Front Month Futures Price (\$ per gallon)	1.67	1.62	1.64	1.39	1.65
Heating Oil Front Month Futures Price (\$ per gallon)	1.99	1.85	1.92	1.83	1.71
RBOB - Brent Futures Crack Spread (\$ per gallon)	0.12	0.10	0.11	-0.02	0.29
Heating Oil - Brent Futures Crack Spread (\$ per gallon)	0.43	0.34	0.39	0.42	0.35

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

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

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

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