



## Short-Term Energy Outlook (STEO)

---

### Forecast highlights

- This edition of the *Short-Term Energy Outlook* is the first to include forecasts for 2021.
- EIA forecasts Brent crude oil spot prices will average \$65 per barrel (b) in 2020 and \$68/b in 2021, compared with an average of \$64/b in 2019. EIA expects West Texas Intermediate (WTI) crude oil prices will average about \$5.50/b lower than Brent prices through 2020 and 2021, compared with an average WTI discount of about \$7.35/b in 2019.
- Global liquid fuels inventories were mostly unchanged in 2019, and EIA expects they will grow by 0.3 million b/d in 2020 and then decline by 0.2 million b/d in 2021.
- On January 1, 2020, the International Maritime Organization (IMO) enacted Annex VI of the International Convention for the Prevention of Pollution from Ships (MARPOL Convention), [which lowers the maximum sulfur content of marine fuel oil](#) used in ocean-going vessels from 3.5% of weight to 0.5%. EIA expects this regulation will encourage global refiners to increase refinery runs and maximize upgrading of high-sulfur heavy fuel oil into low-sulfur distillate fuel to create compliant bunker fuels. EIA forecasts that U.S. refinery runs will rise by 3% from 2019 to a record level of 17.5 million b/d in 2020, resulting in refinery utilization rates that average 93% in 2020. EIA expects one of the most significant effects of the regulation will be on diesel wholesale margins, which will rise from an average of 43 cents per gallon (gal) in 2019 to a forecast peak of 53 cents/gal in March 2020 and an annual average of 50 cents/gal in 2020. EIA expects diesel margins to decline to 49 cents/gal in 2021.
- U.S. regular gasoline retail prices averaged \$2.60/gal in 2019, and EIA forecasts that they will average \$2.63/gal in both 2020 and 2021.
- EIA estimates that U.S. crude oil production averaged 12.2 million b/d in 2019, up 1.3 million b/d from 2018. EIA forecasts U.S. crude oil production will average 13.3 million b/d in 2020 and 13.7 million b/d in 2021. Most of the production growth in the forecast occurs in the Permian region of Texas and New Mexico.
- U.S. net imports of crude oil and petroleum product fell from an average of 2.3 million b/d in 2018 to an average of 0.5 million b/d in 2019, and EIA estimates the United States has [exported more total crude oil and petroleum products than it has imported](#) since

September. EIA forecasts that the United States will be a net exporter of total crude oil and petroleum products by 0.8 million b/d in 2020 and by 1.4 million b/d in 2021.

- U.S. dry natural gas production set a new record in 2019, averaging 92.0 billion cubic feet per day (Bcf/d). EIA forecasts dry natural gas production will rise to 94.7 Bcf/d in 2020 and then decline to 94.1 Bcf/d in 2021. Production in the Appalachian region drives the forecast as it shifts from growth in 2020 to declining production in 2021.
- EIA forecasts that Henry Hub natural gas spot prices will average \$2.33 per million British thermal units (MMBtu) in 2020, down from [\\$2.57/MMBtu in 2019](#). EIA expects that natural gas prices will then increase in 2021, reaching an annual average of \$2.54/MMBtu.
- EIA forecasts that U.S. coal production will total 597 million short tons (MMst) in 2020, down 93 MMst (14%) from 2019, as a result of declining domestic demand for coal in the electric power sector and lower demand for U.S. exports. EIA expects that coal production will again fall by 16 MMst (3%) in 2021 as export demand stabilizes and declines in U.S. power sector demand slow.
- EIA expects the share of U.S. total utility-scale electricity generation from natural gas-fired power plants will remain relatively steady, it was 37% in 2019, and we forecast it will be 38% in 2020 and 37% in 2021. Electricity generation from renewable energy sources rises from a share of 17% last year to 19% in 2020 and 22% in 2021. The increase in the renewables share is the result of expected additions to wind and solar generating capacity. Coal's forecast share of electricity generation falls 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 less than 20% by 2021, consistent with upcoming reactor retirements.
- After decreasing by 2.1% in 2019, EIA forecasts that energy-related carbon dioxide (CO<sub>2</sub>) emissions will decrease by 2.0% in 2020 and by 1.5% in 2021. Declining emissions reflect forecast declines in total U.S. energy consumption combined with assumptions of relatively normal weather. Energy-related CO<sub>2</sub> emissions are sensitive to changes in weather, economic growth, energy prices, and fuel mix.

## Global Liquid Fuels

EIA estimates that global oil markets were roughly balanced in 2019, as global oil supply declined slightly and global oil consumption grew at its slowest pace since 2011. Both supply and consumption grow in 2020 in this forecast. EIA expects global oil supply will rise by 1.6 million barrels per day (b/d) in 2020 and global oil consumption will rise by 1.3 million b/d, contributing to global oil inventories rising at a pace of 0.3 million b/d. Supply growth in 2020 is led by countries that are not members of the Organization of the Petroleum Exporting Countries (OPEC), particularly the United States, Norway, Brazil, and Canada. EIA expects non-OPEC producers will increase oil supply by 2.6 million b/d in 2020, which will more than offset forecast supply declines of 1.0 million b/d from OPEC members.

In the first half of 2020, EIA expects global oil inventory builds of 0.5 million b/d will contribute to Brent spot prices falling to an average of \$62 per barrel (b) by May from an average of \$67/b in January. The relatively weak market balances EIA is forecasting for the first six months of 2020 occur amid market concerns about potential supply disruptions. However, a forecast of inventory growth and OPEC spare capacity of more than 2.0 million b/d could help reduce upward price pressure in the case of a limited disruption to oil supply or transportation. For all of 2020, EIA forecasts that global oil inventories will build by 0.3 million b/d and Brent prices will average \$65/b.

Oil balances in EIA's forecast begin to tighten in mid-2020, and in 2021, global oil supply growth slows. Non-OPEC supply growth slows to 0.9 million b/d in 2021, driven by a decelerating pace of growth in U.S. tight oil. EIA expects OPEC supply to add another 0.1 million b/d of growth, bringing total forecast global supply growth for 2021 to 1.0 million b/d. EIA forecasts global oil consumption growth will average 1.4 million b/d in 2021, and with consumption growth outpacing supply growth, EIA expects inventories to draw by 0.2 million b/d. These draws contribute to EIA's forecast that Brent prices will rise to an average of \$68/b in 2021.

**Global Petroleum and Other Liquid Fuels Consumption.** Preliminary data and estimates indicate that global liquid fuels consumption grew by 0.8 million b/d in 2019. EIA forecasts that consumption will rise by 1.3 million b/d in 2020 and by 1.4 million b/d 2021. The expected rise in consumption growth from 2019 results from a forecast of rising global gross domestic product (GDP). Based on forecasts from Oxford Economics, EIA assumes global oil-weighted GDP growth will rise from 1.9% in 2019 to 2.4% in 2020 and 3.0% in 2021.

EIA expects that global liquid fuels consumption will also rise in 2020 because of newly completed petrochemical plants in China, the United States, and Russia that use liquefied petroleum gases (LPG) as feedstock. Additionally, EIA forecasts that demand will further grow further as a result of the new International Maritime Organization (IMO) rules on sulfur content of fuel used by ocean-going vessels. EIA assumes that the switch from residual fuel to less energy-dense marine distillate will likely result in an increase in total liquid fuels consumption of about 0.1 million b/d. This increase in total consumption is the result of ships using less energy-dense fuel that requires some increase in volume to serve

the same level of shipping traffic. Absent the increase in LPG consumption and IMO 2020, EIA's forecast for liquid fuels consumption growth would be lower in 2020.

Countries that are not part of the Organization for Economic Cooperation and Development (OECD) continue to drive demand growth in the forecast. Non-OECD liquid fuels consumption growth accounts for 1.2 million b/d of the forecast global growth in both 2020 and 2021; China and India represent about half of all global growth in the forecast.

EIA forecasts that China's consumption will increase by 0.5 million b/d in both 2020 and 2021. EIA does not expect growth in China's oil consumption to slow as much as slowing GDP growth would imply because a number of new petrochemical plants add more than 0.2 million b/d of consumption in 2020 and almost 0.1 million b/d in 2021. EIA also forecasts that liquid fuels consumption in India will grow by about 0.2 million b/d in both 2020 and 2021, driven by rising gasoline, jet fuel, and hydrocarbon gas liquids consumption.

OECD petroleum and other liquid fuels consumption in the forecast grows by 0.1 million b/d in both 2020 and 2021. The United States is the main contributor to this growth. EIA forecasts that Europe's liquid fuels consumption will decline slightly in 2020 and then remain flat in 2021. Japan is expected to see liquid fuels consumption continue to decline in both years.

**Non-OPEC Petroleum and Other Liquid Fuels Supply.** EIA estimates that non-OPEC petroleum and other liquid fuels supply increased by 2.0 million b/d in 2019. Production growth of 1.6 million b/d in the United States accounted for more than 80% of the 2019 supply growth, and Brazil, Canada, Russia, and China collectively added an additional 0.6 million b/d. EIA expects non-OPEC petroleum and other liquid fuels production will rise by 2.6 million b/d in 2020 and by 0.9 million b/d in 2021. Forecast growth in the United States contributes 1.7 million b/d and 0.6 million b/d, respectively, in each year. Brazil provides another 0.3 million b/d in 2020 and 0.2 million b/d in 2021. Norway contributes 0.4 million b/d of growth in 2020, and then its production growth slows to less than 0.1 million b/d in 2021.

EIA expects Canada's total liquid fuels production will increase by almost 0.2 million b/d in 2020 and 2021. Canada's production growth will accelerate compared with 2019 as the Alberta Government's production curtailments are reduced and more rail takeaway capacity gives producers an outlet for supplies. However, EIA still expects lower production growth in Canada than experienced during most of the past decade. EIA does not expect any additional production from new oil sands projects to come online during the forecast, and production growth stems from expansions of existing projects.

EIA expects Brazil's total liquid fuels production will grow by more than 0.3 million b/d in 2020 and by 0.2 million b/d in 2021. After a number of delays, the seven floating production, storage, and offloading vessels (FPSOs) that came online in 2018 and 2019 are now producing at maximum or near-maximum capacity. The main driver of growth will continue to be at least four more new FPSOs through 2023. EIA believes the Santos Basin, particularly the Lula and Buzios fields, will produce enough crude oil in the next two years to offset declines in Brazil's more mature onshore and offshore areas.

In Norway, Phase 1 of the Johan Sverdrup field came online in October 2019, and it will drive most of the production growth in Norway in 2020 and 2021. At its peak, Phase 1 will produce 0.4 million b/d.

EIA currently forecasts that Russia's production levels in 2020 and 2021 will be similar to production in 2019 because EIA assumes that the agreement between Russia and OPEC to restrain production will continue throughout the forecast period.

EIA forecasts the largest declines among non-OPEC producers will be in Mexico, though Mexico's production declines slow from 0.2 million b/d in 2019 to less than 0.1 million b/d in 2020 and 2021.

**OPEC Petroleum and Other Liquid Fuels Supply.** On December 6, 2019, OPEC and a group of other oil producers [announced they were deepening the production cuts](#) originally announced in December 2018. The group is now targeting production that is 1.7 b/d lower than in October 2018, compared with the former target reduction of 1.2 million b/d. OPEC announced that the cuts would remain in effect through the end of March 2020. However, EIA assumes that OPEC will limit production through all of 2020 and 2021 to target relatively balanced global oil markets. As a result of production restraint from most OPEC members and continuing production declines in Iran and Venezuela, EIA expects OPEC production will fall in 2020. EIA forecasts that OPEC crude oil production will average 29.2 million b/d in 2020, down 0.6 million b/d from 2019. In 2021, forecast OPEC crude oil production increases by 0.1 million b/d.

EIA estimates that Venezuela's crude oil production for 2019 averaged 0.8 million b/d. EIA expects Venezuela's production will continue recent trends and fall through the forecast period—albeit at a slower overall rate of decline—while the financial situation of the state-owned Petróleos de Venezuela (PdVSA) remains extremely precarious. Venezuela, which relies heavily on oil revenues, has seen its cash income severely constricted because only about half of its crude oil exports generate cash revenues. The rest is used for in-kind loan payments to China, which become less valuable with lower global oil prices. Venezuela's oil revenue is also reduced by ongoing payments to ConocoPhillips following an arbitration agreement about its seized assets and to holders of PdVSA's 2020 bonds.

In OPEC Africa, EIA expects Nigeria's production growth to slow considerably through 2021 following production gains from the Egina field, which was commissioned in early 2019. Nigeria's production growth slows reflecting a lack of investment in exploration and development of new fields and declining production from its older fields. Angola's production declined in 2019 as a result of technical issues at existing fields and underinvestment in field exploration and development. Several marginal expansions of existing fields will offset some of the declines from Angola's mature fields through 2021, resulting in production that will remain roughly unchanged. Libya's production increased in 2019 as a result of the restart and development of new or previously shut-in wells. Libya's 2019 production level was the highest since 2012 and remained relatively stable throughout the year despite the ongoing civil war and some minor field disruptions. However, supply disruptions will remain a significant risk through

2021 because of the tenuous security situation in the country and because of infrastructure that needs upgrades for continued operability.

EIA expects that crude oil production in the Neutral Zone shared between Saudi Arabia and Kuwait, which has been offline since 2014, will begin to return to the market in the second half of 2020 and increase to full production levels in 2021. However, EIA assumes that when the Neutral Zone fields start producing, production at other fields will be reduced, and overall OPEC production will be unaffected.

EIA estimates that OPEC non-crude oil liquids production averaged 5.4 million b/d in 2019. EIA forecasts that it will fall to 5.0 million b/d in 2020 and remain flat in 2021. The decrease in non-crude oil liquids production next year is the result of lower expected condensate output in Iran.

EIA expects that OPEC surplus crude oil production capacity, which averaged 2.0 million b/d in 2019, will increase to 2.4 million b/d in 2020 and then to 2.5 million b/d in 2021. This estimate does not include additional capacity that may be available in Iran but is offline because of U.S. sanctions on Iran's oil sales.

**OECD Petroleum Inventories.** EIA estimates that OECD commercial crude oil and other liquid fuels inventories were 2.91 billion barrels at the end of 2019, equivalent to about 62 days of consumption. EIA expects OECD inventories rise to 2.95 billion barrels at the end of 2020, staying at about the same level at the end of 2021.

**Crude Oil Prices.** The spot price of Brent crude oil averaged \$67/b in December 2019, up \$4/b from the average in November and \$10/b higher than in December 2018. Price increases in December partly reflect market expectations that global economic conditions in 2020 will be better than previously anticipated, and the announced first phase of a trade deal between the United States and China to be signed in January. Also putting upward pressure on prices, on December 6, 2019, OPEC and partner countries agreed to deepen production cuts through March 2020. More recently, on January 3, events in Iraq increased uncertainty around potential disruptions to oil production and shipping in the Middle East, adding volatility and an additional risk premium to global oil prices in the short term.

EIA estimates that global liquid fuels inventories fell by less than 0.1 million b/d in 2019, an indication that markets were relatively balanced. EIA expects global oil markets will experience builds in 2020, with forecast inventories rising at a rate of 0.3 million b/d. The combination of continuing crude oil production restraint on the part of OPEC and accelerating global demand growth is expected to be more than offset by growth in non-OPEC production, largely in the United States, Norway, Brazil, and Canada. However, in 2021, EIA expects oil markets will experience inventory draws, as non-OPEC production growth slows, led by decelerating growth in the United States. EIA assumes that OPEC will continue to try to adjust production levels to target relative balance in global oil markets. Based on a forecast of slowing oil supply growth and mostly stable oil demand growth, EIA expects global oil inventories will fall by almost 0.2 million b/d in 2021.

Given the expectation of inventory builds in 2020 and draws in 2021, EIA forecasts Brent prices will average \$65/b in 2020 and \$68/b in 2021. In the first half of 2020, EIA expects global oil prices to be affected by both the downward price pressures of relatively weak oil market balances and by the upward price pressures of geopolitical risk. This forecast assumes that Brent crude oil prices will decline in early 2020, falling from a January average of \$67/b to an average of \$62/b in May 2020, as risk premiums slowly fade. EIA does not forecast supply disruptions, and any physical supply disruptions would likely cause prices to be higher than this forecast. Beginning in mid-2020 and into 2021, EIA expects that tightening market fundamentals will be the main driver of upward price pressures, with forecast Brent prices increasing to \$69/b at the end of 2021 and averaging \$68/b for the year.

Global economic developments and geopolitical events in the coming months could push oil prices higher or lower than the current STEO price forecast. Uncertainty remains regarding the duration of, and adherence to, the current OPEC production cuts. Geopolitical-related disruption risks are always present in the oil market, and—as the [attacks on Saudi Arabia's oil infrastructure in September 2019](#) demonstrate—can bring significant volumes of both current production and spare capacity off the market suddenly. Developments regarding the rate of economic growth and its effect on global oil demand growth further contribute to price uncertainty. Also, although EIA expects that crude oil price impacts from IMO regulations that started in 2020 will be limited, how the global refining and shipping industries will respond and how the actual outcomes of these decisions will affect crude oil prices remain unknown. Finally, the U.S. tight oil sector continues to be dynamic, and quickly evolving trends in this sector could affect both current crude oil prices and expectations for future prices.

EIA forecasts average West Texas Intermediate (WTI) crude oil prices average about \$5.50/b lower than Brent prices in both 2020 and 2021. This price discount is based on the assumption of continued [sufficient pipeline capacity](#) from production areas in West Texas and from Cushing, Oklahoma, to refineries and export terminals along the U.S. Gulf Coast. Given recent growth in U.S. crude oil production, volumes in excess of Gulf Coast refinery demand are exported, and WTI prices are set by competition with Brent into the marginal export markets in Asia. EIA's forecast of a \$5.50/b price spread between WTI and Brent reflects the additional costs incurred in bringing volumes from Cushing to Asia compared with the costs of shipping from the North Sea to Asia.

The current values of futures and options contracts suggest significant uncertainty in the oil price outlook. WTI futures contracts for April 2020 delivery that were traded during the five-day period ending January 9 averaged \$61/b, and implied volatility averaged 28%. These levels established the lower and upper limits of the 95% confidence interval for the market's expectations of monthly average WTI prices in April 2020 at \$48/b and \$78/b, respectively. The 95% confidence interval for market expectations widens over time; the lower and upper limits for prices in December 2020 are \$36/b and \$91/b, respectively.

## U.S. Liquid Fuels

**Consumption.** EIA forecasts that total U.S. petroleum and other liquid fuels consumption will average 20.6 million barrels per day (b/d) in 2020, an increase of 160,000 b/d (0.8%) from the 2019 level. Forecast consumption growth slows to 70,000 b/d (0.3%) in 2020. Increased forecast consumption of hydrocarbon gas liquids (HGL) is the primary reason for the growth.

HGL consumption increased by an estimated 150,000 b/d (5.0%) in 2019, and EIA expects that it will increase by 170,000 b/d (5.3%) in 2020 and by 120,000 b/d (3.6%) in 2021. Ethane, used as a petrochemical feedstock, is responsible for most of the forecast growth in HGL consumption. Ethane consumption is expected to increase by 290,000 b/d in 2020 as outages at existing petrochemical steam cracking plants come back online and several new plants ramp up operations. EIA anticipates ethane consumption will increase by 130,000 b/d in 2021 as cracking plants increase their utilization and an additional plant comes online.

Motor gasoline consumption in the United States averaged 9.3 million b/d in 2019. EIA forecasts U.S. gasoline consumption will stay near that level in 2020 and then fall by 50,000 b/d (0.6%) in 2021. In 2020, gasoline consumption is supported by forecast growth in employment and population, but that support is balanced by expected gains in vehicle fuel efficiency. However, as employment growth in the forecast slows in 2021, the effects of vehicle fuel efficiency gains contribute to the forecast decrease in consumption in 2021.

EIA forecasts that distillate fuel consumption in the United States will increase by 40,000 b/d (1.1%) in 2020 and remain flat in 2021. Forecast U.S. distillate fuel consumption will average about 4.1 million b/d in both years. The consumption growth in 2020 is driven by assumed U.S. real gross domestic product (GDP) growth of 2.0% in 2020 and 1.8% in 2021. The flat distillate consumption growth from 2020 to 2021 reflects a decline in heating oil consumption in 2021 that is offset by increased diesel fuel consumption as a result of GDP growth. The diesel fuel consumption growth also reflects a small expected shift to marine diesel for bunkering purposes as a result of the International Maritime Organization (IMO) 2020 change to marine fuel sulfur specifications.

EIA forecasts U.S. jet fuel consumption will grow by 30,000 b/d (1.6%) in 2020 and by 10,000 b/d (0.4%) in 2021, reaching almost 1.8 million b/d. Growth in the demand for air travel is a result, in part, of expectations of rising disposable incomes.

**Crude Oil Supply.** EIA estimates that annual average U.S. crude oil production reached a new record of 12.2 million b/d in 2019, up 1.3 million b/d from 2018. EIA forecasts U.S. crude oil production to average 13.3 million b/d in 2020 and 13.7 million b/d in 2021. More production from the Lower 48 states' onshore regions, especially the Permian region, drives the forecast increase.

Slowing crude oil production growth in the forecast results from a decline in drilling rigs over the past year that EIA expects will continue into 2020 and 2021. Despite the decline in the number of rigs, EIA forecasts production will continue to grow as rig efficiency and well-level productivity

rises. For 2020, EIA's WTI crude oil price forecast rises by \$2 per barrel (b) from 2019 levels to average \$59/b for the year. For 2021, EIA expects WTI prices will rise further to an average of \$62/b. EIA expects oil prices above \$60/b to contribute to rising crude oil production, as producers will be able to fund drilling programs through cash flow and other funding sources, despite a somewhat more restrictive capital market.

EIA estimates that onshore crude oil production in the Lower 48 states averaged 9.9 million b/d in 2019, up from 8.8 million b/d in 2018. In 2020, EIA expects Lower 48 production will increase by almost 1.0 million b/d and rise by another 0.4 million b/d in 2021. Almost all of the Lower 48 production growth can be attributed to production from tight oil formations within the Permian region in Texas and New Mexico, which account for 0.8 million b/d of the Lower 48 production growth expected by EIA in 2020 and almost 0.4 million b/d in 2021. Favorable geology and technological and operational improvements have allowed the Permian region to become one of the most prolific regions for oil production.

EIA expects crude oil production in the Gulf of Mexico will average 2.0 million b/d in 2020, an increase of 0.1 million b/d over 2019 levels. Production in 2021 is expected to stay flat at 2.0 million b/d.

Crude oil production in Alaska in the forecast remains unchanged at 0.5 million b/d during 2020 and 2021.

**Hydrocarbon Gas Liquids Supply.** EIA forecasts HGL production at natural gas processing plants will increase from an estimated 4.8 million b/d in 2019 to 5.4 million b/d in 2020 and to 5.5 million b/d in 2021. HGLs produced at natural gas plants—ethane, propane, butanes, and natural gasoline—will increase along with growth in natural gas production and natural gas processing plant capacity. EIA expects ethane will contribute more than two-thirds of the 0.7 million b/d HGL production growth between 2019 and 2021. Higher rates of ethane recovery at natural gas processing plants are expected to help meet growing demand for ethane as a petrochemical feedstock in the United States and abroad.

**Liquid Biofuels.** On December 19, 2019, the U.S. Environmental Protection Agency (EPA) finalized a rule setting Renewable Fuel Standard (RFS) volumes for 2020 and biomass-based diesel volumes for 2021. EIA used these final volumes to develop the forecasts for liquid biofuels for 2020 and 2021. EIA expects that the largest effect of the current RFS targets will continue to be on biomass-based diesel production and net imports, which help to meet multiple RFS targets for biomass-based diesel, advanced biofuel, and total renewable fuel. Biodiesel production fell by nearly 2% from 2018 to 2019, averaging an estimated 119,000 b/d last year. EIA expects biodiesel production will increase by 13% to average 135,000 b/d in 2020 and increase by 17% to average 158,000 b/d in 2021, driven largely by increasing RFS targets and the renewal of the biodiesel production tax credit through 2022.

Net imports of biomass-based diesel increased by 47% to an average 23,000 b/d in 2019, and EIA expects them to increase further to an average 28,000 b/d in 2020 and to 39,000 b/d in 2021. Increased net imports of biomass-based diesel are driven primarily by increased volumes

of renewable diesel imported to meet both [California Low Carbon Fuel Standard requirements](#) and the rising RFS targets.

As a result of limited demand growth and oversupply, [U.S. ethanol producers experienced weakening operating margins](#) and ethanol production fell for the first time in seven years in 2019, down 2.0% from 2018 levels to an average of 1.03 million b/d. EIA forecasts that limited domestic and global demand growth potential will result in ethanol production staying largely unchanged in 2020 and 2021. Ethanol consumption averaged 951,000 b/d in 2019, and EIA forecasts a slight decrease to an average 947,000 b/d in 2020 and 945,000 b/d in 2021, driven by falling motor gasoline consumption by 2021. This level of consumption results in the ethanol share of total gasoline, which was an estimated 10.1% in 2018 and 10.2% in 2019, remaining largely flat in 2020 and 2021. This stable ethanol share assumes growth in higher-level ethanol blends is limited by a combination of unfavorable blending economics compared with gasoline, depressed [Renewable Identification Number \(RIN\)](#) prices, and limited consumer demand for higher levels of ethanol blending beyond 10% of gasoline (i.e., E10).

**Product Prices.** EIA expects the retail price of regular gasoline in the United States will average \$2.54 per gallon (gal) during the first quarter of 2020, 18 cents/gal higher than at the same time last year, primarily reflecting stronger expected refinery margins despite similar forecast crude oil prices. EIA expects the U.S. monthly regular retail gasoline price will increase from an average of \$2.57/gal in January to \$2.76/gal in June and July (a 2020 peak) before falling to \$2.53/gal in December 2020. The U.S. regular gasoline retail price, [which averaged \\$2.60/gal in 2019](#), is forecast to average \$2.63/gal in both 2020 and 2021.

Regional annual average forecast prices for 2020 range from a low of \$2.36/gal in the Gulf Coast region—[Petroleum Administration for Defense District \(PADD\) 3](#)—to a high of \$3.24/gal in the West Coast region (PADD 5).

Refinery wholesale gasoline margins in the United States (the difference between the wholesale price of gasoline and the price of Brent crude oil) averaged 15 cents/gal in December 2019. This level was similar to the average in December 2018, but it was 10 cents/gal lower than the five-year (2014–18) average for December. Refinery wholesale gasoline margins averaged 32 cents/gal in 2019, which was 4 cents/gal higher than the 2018 level but 5 cents/gal lower than the five-year average. EIA expects the refinery wholesale gasoline margin will average 33 cents/gal in 2020 and 27 cents/gal in 2021.

The diesel fuel retail price averaged \$3.06/gal in 2019, which was 13 cents/gal lower than the average in 2018. EIA forecasts the diesel price will average \$3.11/gal in 2020 and \$3.12/gal in 2021. The rising prices from 2019 to 2020 primarily reflect the assumption that diesel refinery margins increase because of IMO 2020 regulations, which became effective on January 1. EIA expects that low-sulfur IMO regulations will drive global demand for U.S. ultra-low sulfur diesel volumes and contribute to gradually increasing diesel refinery margins. Diesel refinery margins based on Brent crude oil, which averaged 43 cents/gal in 2019, are expected to average 50 cents/gal in 2020 and 49 cents/gal in 2021.

## Natural Gas

**Natural Gas Consumption.** Total domestic U.S. natural gas consumption averaged an estimated 85.3 billion cubic feet per day (Bcf/d) in 2019, and EIA expects it will increase by 1.4 Bcf/d (1.7%) in 2020 before decreasing by 1.0 Bcf/d (1.2%) in 2021.

The largest natural gas consuming sector in the United States is the electric power sector. EIA estimates that electric generation consumed an average 31.0 Bcf/d in 2019, up 7.0% from 2018 because of new natural gas-fired electric generation capacity and competitive natural gas prices. EIA forecasts growth in power sector consumption of natural gas to slow in 2020, increasing by 1.3% before decreasing by 3.2% in 2021. Declining power sector consumption in 2021 reflects increased competition from renewable sources of electricity generation as a result of continuing renewables capacity additions. Declining natural gas consumption also reflects a forecast of higher natural gas spot prices in 2021 compared with 2020, which would make natural gas less competitive against coal in power markets.

EIA expects combined residential and commercial natural gas consumption will average 23.2 Bcf/d in 2020, down 1.0% from 2019. The lower consumption reflects lower forecast space heating demand. Based on forecasts by the National Oceanic and Atmospheric Administration (NOAA), EIA forecasts 1.8% fewer heating degree days (HDD) in 2020 compared with 2019. Natural gas consumption in the residential and commercial sectors is expected to decline by 0.9% in 2021, based on a forecast decline in HDD of 0.7% in 2021.

EIA forecasts U.S. industrial sector consumption of natural gas to rise by 4.6% in 2020 and then remain flat in 2021. Most of the 2020 increase in the forecast is the result of new chemical projects. Low natural gas prices in recent years have made it economical to increase use of natural gas as feedstock in ammonia for nitrogenous fertilizer and methanol manufacturers. Two methanol plants plan to come online by the end of 2020, including a methanol plant in St. James, Louisiana, which would be the second-largest methanol facility in the United States after a facility in Beaumont, Texas, which entered service in June 2018.

**Natural Gas Production and Trade.** EIA estimates that dry natural gas production in the United States will average 94.7 Bcf/d in 2020, up 2.9% from 2019. In 2021, EIA's forecast production declines by 0.7% to an average of 94.1 Bcf/d for the year. EIA's expected growth in natural gas production for 2020 is largely in response to improved drilling efficiency and cost reductions, higher associated gas production from oil-directed rigs, and increased takeaway pipeline capacity from the Appalachian and Permian production regions. Forecast natural gas production growth is also supported by planned expansions in liquefied natural gas (LNG) capacity and increased pipeline exports to Mexico. The decline in natural gas production in 2021 is in response to a forecast of low natural gas spot prices in 2020 that reduces drilling activity in the Appalachian Basin.

The United States exported more natural gas than it imported in 2019, with net exports averaging 5.3 Bcf/d, up 2.0 Bcf/d from 2018. EIA forecasts net natural gas exports will rise to average 7.3 Bcf/d in 2020 and 8.9 Bcf/d in 2021. Rising LNG exports and pipeline exports

changed the United States from its long history as net importer of natural gas, which it had been as recently first quarter of 2017. EIA estimates that U.S. LNG exports averaged 5.0 Bcf/d in 2019. EIA expects LNG exports will increase to 6.5 Bcf/d in 2020 and 7.7 Bcf/d in 2021.

In 2020, EIA assumes U.S. LNG export capacity will reach 8.9 Bcf/d by the end of the year as Cameron, Freeport, and Elba Island place their remaining trains in service. Cameron Trains 2 and 3 are expected to begin production in April and July of 2020, respectively, and Freeport Train 3 is set to start in May 2020. Elba Island shipped its first LNG export cargo in December 2019 after placing the first three of its Moveable Modular Liquefaction System (MMLS) units in service. EIA assumes that the remaining Trains 4–10 at Elba Island will be placed in service by the middle of 2020. In 2021, EIA expects the third train at Corpus Christi facility in Texas to come online, bringing the total baseload U.S. liquefaction capacity to 9.5 Bcf/d. The additional capacity will drive continuing growth in LNG exports to an annual average of 7.7 Bcf/d in 2021, as facilities gradually ramp up to full production.

U.S. natural gas exports to Mexico via pipeline have also increased as more infrastructure has been built to transport natural gas both to and within Mexico. U.S. pipeline exports to Mexico through October averaged 5.1 Bcf/d, increasing by 10% in 2019 compared with the same period in 2018. Exports to Mexico should continue to increase as more natural gas-fired power plants come online in Mexico and more pipeline infrastructure within Mexico is built.

U.S. net natural gas pipeline imports from Canada decreased from 2018 to 2019, continuing a trend that began in 2008. This decrease in net imports is expected to continue as Appalachian production growth displaces some of Canada's natural gas imports in the U.S. Midwest markets.

**Natural Gas Inventories.** As of January 3, 2020, U.S. working gas inventories were 3,148 billion cubic feet (Bcf), 20% higher than the year-ago level and 2% higher than the five-year (2015–19) average level. After beginning 2019 with stocks much lower than the five-year (2014–18) average, record levels of natural gas production led to [storage injections exceeding the five-year average](#) throughout 2019.

Based on an assumption of milder winter temperatures in the first quarter of 2020, along with a forecast of growing natural gas production, EIA forecasts that total inventories will be 1,807 Bcf at the end of March, which would be 5% higher than the five-year average for that time of year. For the 2020 storage injection season, EIA expects injections will exceed the five-year average rate as production outpaces consumption and exports from the end of March through October. EIA expects that inventories will reach 4,016 Bcf at the end of October 2020, which would be 7% higher than the previous five-year average for the end of October and 7% higher than at the end of October 2019.

**Natural Gas Prices.** Henry Hub spot prices [averaged \\$2.57 per million British thermal units \(MMBtu\) in 2019](#), down 59 cents/MMBtu from 2018 levels. EIA forecasts that Henry Hub natural gas spot prices will average \$2.33/MMBtu in 2020 and \$2.54/MMBtu in 2021. EIA expects some upward price pressures to emerge in 2021 because of falling natural gas production that stems

from the low prices forecast in 2020. However, falling demand for natural gas should limit upward price movements.

## Coal

**Coal Supply.** EIA estimates that U.S. coal production declined by 65 million short tons (MMst) (9%) to 690 MMst in 2019. In 2020, EIA expects total U.S. coal production will decline by a further 14% to 597 MMst because of anticipated declines in both exports and domestic consumption in the electric power sector. EIA expects the largest declines in coal production in 2020 will occur in the Western production region. The coal market has undergone significant restructuring in the past year.

EIA expects coal production will fall by an additional 3% in 2021 to 581 MMst. The slowing declines in production for 2021 are based on EIA's expectation of modest increases in demand for U.S. exports offset by continuing, albeit slowing, demand declines in the U.S. electric power sector.

**Coal Consumption.** EIA estimates that coal consumption for all sectors totaled 596 MMst in 2019. EIA expects total coal consumption will fall by 65 MMst (11%) in 2020 and by 18 MMst (3%) in 2021. The declines in total consumption of coal closely track those in electric power consumption, which accounted for 91% of all coal consumption in 2019. The decrease in power sector coal consumption in 2020 reflects expected coal plant retirements and increasing shares of electricity generation from low priced natural gas and new renewables generating capacity. However, because EIA expects slight rises in natural gas prices in 2021, coal will become slightly more price competitive.

**Coal Trade.** In 2019, coal exports decreased 20% from 2018 to 92 MMst. Less favorable market conditions, such as competitive steam coal cargoes from Eastern Europe and high freight costs, contributed to the decline, which was offset somewhat by residual contracts that will expire in 2020. EIA estimates that U.S. coal exports will decrease by 11% in 2020 to 83 MMst and then stabilize near that level in 2021.

Despite EIA's forecast decline in total U.S. coal exports, shipments to top destinations such as India, Japan, and South Korea, are expected to remain stable. Exports to these three countries accounted for 34% (27 MMst) of the coal exported in 2019 through October. Europe received about 36% of U.S. exports during that period. Although U.S. exports to Europe are mostly metallurgical coal and used predominantly for steel production, U.S. steam coal is still used in Germany, Portugal, and the United Kingdom.

U.S. coal exports to North Africa, particularly Egypt and Morocco, rose 5% compared with the same period in 2018, accounting for 9% of total exports. Comparatively, coal exports to North and South America accounted for 8% and 9% of total coal, respectively.

**Coal Prices.** EIA estimates the delivered coal price to U.S. electricity generators averaged \$2.05 per million British thermal units (MMBtu) in 2019, which was down slightly from the 2018 price. EIA forecasts that coal prices will increase to \$2.10/MMBtu in both 2020 and 2021.

## Electricity

**Electricity Consumption.** EIA forecasts total U.S. electricity consumption, including direct use of electricity by combined-heat-and-power plants, will decline by 0.4% in 2020 and remain flat in 2021.

The reduced need for air conditioning in the typical household, partly offset by continued growth in the number of retail electricity customers, contributes to EIA's forecast that total retail sales of electricity to the residential sector will decline by 0.5% in 2020. EIA expects the average residential electricity customer will use 1.6% less electricity in 2020 than last year, primarily as a result of milder expected summer temperatures. According to data from the National Oceanic and Atmospheric Administration (NOAA), there were 5% more U.S. cooling degree days (CDD) during 2019 than on average over the previous 10 years. NOAA is projecting that CDDs in 2020 will be about 4% lower than the 10-year average. In 2021, EIA expects total sales of electricity to the residential sector to rise by 0.4%.

Milder expected summer weather in 2020 also affects the forecast for retail sales of electricity to the commercial sector. The reduced need for air conditioning in the commercial sector is generally offset by continued economic growth. As a result, EIA's overall forecast for U.S. commercial sector retail sales of electricity in 2020 is similar to the level in 2019. In 2021, EIA again expects little change in retail electricity sales to the commercial sector.

EIA forecasts that industrial production by electricity-intensive industries will decline by 1.1% in 2020. This decline in industrial production contributes to EIA's forecast that retail sales of electricity to the industrial sector will fall by 1.1% in 2020. In 2021, EIA forecast retail sales of electricity to the industrial sector will fall by 0.9%.

**Electricity Generation.** EIA expects 1.0% less total U.S. power generation in the electric power sector during 2020 than in 2019. Electric power sector generation in the forecast falls by an additional 0.3% in 2021. Electricity produced by combined-heat-and-power generators in the industrial and commercial sectors will grow by 1.9% in 2020 and 2.9% in 2021.

The share of U.S. electricity generation supplied by natural gas-fired power plants has increased significantly during the past decade, rising from 23% of total generation in 2010 to an estimated 37% in 2019. This increase in the natural gas share of generation has been offset by reduced generation from coal-fired power plants. Coal supplied 46% of U.S. generation in 2010, compared with an estimated 24% in 2019. Much of this change in the generation mix is a result of sustained low prices for natural gas, which have made it competitive.

EIA expects this trend in the U.S. generation mix will continue in the near term. The electric power sector has added or plans to add 11.4 gigawatts (GW) of generating capacity at natural

gas combined-cycle power plants in 2019 and 2020. These additions represent an increase of 4% of the capacity that existed at the end of 2018. In contrast, the industry has retired, or plans to retire, 18.5 GW (8%) of coal-fired capacity in 2019 and 2020. As a result of these changes in generating capacity and fuel prices that continue to favor natural gas, EIA forecasts that the natural gas-fired share of generation will remain fairly steady and close to its 2019 share of 37%, averaging a 38% share in 2020 and 37% in 2021. The forecast share of generation from coal-fired power plants declines to 21% this year, and slightly less than that in 2021.

EIA expects the share of generation from renewable sources will increase from 17% in 2019 to 19% this year and to 22% in 2021. Within the renewables category, hydropower was 7% of total generation in 2019, and EIA forecasts that it will be about that share in 2020 and in 2021. In the forecast, the share of total generation for renewables other than hydropower, which was 10% in 2019, will rise to 12% in 2020 and to 14% in 2021.

According to the latest information about the U.S. inventory of generating capacity, five nuclear reactors are scheduled to retire in either 2020 or 2021. The nuclear share of total electricity generation, which averaged slightly more than 20% in 2019 will be slightly less than 20% by 2021, consistent with upcoming retirements.

**Renewables Capacity.** EIA forecasts 13 GW of utility-scale solar photovoltaic (PV) capacity will be added in 2020 and 13 GW more will be added in 2021. EIA also expects a total of 11 GW of small-scale solar PV capacity will be installed during 2020 and 2021, mostly in the residential sector. Various state and federal policies support EIA's forecast solar capacity growth, including California's requirement that, beginning in 2020, all new home construction has rooftop solar panels.

Tariffs on PV modules imported into the United States started at 30% in January 2018, but they have declined to 20% in January 2020 and are expected to decline to 15% in 2021 and expire completely after 2021. During 2018 and 2019, increases in U.S. domestic module prices were, to an extent, offset by declines in global module prices. This price decline was in response to reductions in China's domestic PV installation targets and subsequent release of module inventories for global markets. Although global PV module prices showed signs of stabilizing in 2019, the net price impact of the tariffs versus the surplus of modules is uncertain over the short-term forecast.

EIA expects wind capacity will increase from 106 GW at the end of 2019 to 125 GW at the end of 2020 and to 130 GW by the end of 2021. Because [wind capacity is often added at the end of the calendar year](#), increases in generation frequently lag behind increases in capacity for the year they occur in, and they are reflected in the generation for the next year.

In 2019, [onshore wind installations grew](#) as many developers worked to meet the deadline on December 31, 2019, to secure the production tax credit (PTC). However, the Taxpayer Certainty and Disaster Tax Relief Act of 2019 that passed in December included a one-year extension to the wind PTC. The legislation extended the PTC through 2020 and restored it to 60% (from 40%) of its full 2.5 cents per kilowatt-hour (kWh) value for facilities that either enter service or secure

5% safe harboring (spending at least 5% of the total estimated project cost) through the 2020 calendar year. Because of the safe harboring provision, EIA does not expect the extension to have an effect on capacity additions until after the 2021 forecast horizon.

**Electricity Prices.** EIA expects wholesale electricity prices in many areas of the country in 2020 will be lower than last year, reflecting the lower cost for natural gas as a fuel for power generation. EIA forecasts that wholesale prices in the Southwest will rise 5% this year as a result of the recent retirement of some coal-fired generating units. In 2021, EIA expects wholesale power prices will increase in most areas as a result of an expected 9% increase in the cost of natural gas.

EIA forecasts the U.S. retail electricity price for the residential sector will average 13 cents/kWh in 2020, which is 1.2% higher than the average retail price in 2019. Forecast residential prices increase by an additional 1.2% in 2021.

## U.S. Economic Assumptions and Energy-Related Carbon Dioxide Emissions

EIA used the December 2019 version of the IHS Markit macroeconomic model with EIA's energy price forecasts as model inputs to develop the economic forecasts in STEO.

Using the IHS Markit model, EIA forecasts U.S. real gross domestic product (GDP) will grow by 2.0% in 2020 and by 1.8% in 2021, compared with 2.3% in 2019. EIA forecasts that total industrial production will increase 0.3% in 2020 and 0.9% in 2021, compared with 0.8% growth in 2019. EIA forecasts nonfarm employment, which grew by 1.6% in 2019, to increase by 1.1% in 2020 and by 0.6% in 2021.

Using the IHS Markit model, EIA forecasts private real fixed investment will grow by 1.6% in 2020 and by 2.1% in 2021, compared with 1.4% in 2019. EIA forecasts real consumption expenditures, which grew by 2.6% in 2019, to grow by 2.7% in 2020 and by 2.2% in 2021.

Using the IHS Markit model, EIA forecasts U.S. exports will grow by 1.4% in 2020 and by 3.3% in 2021, compared with a decline of 0.3% in 2019. EIA forecasts imports to grow by 2.5% in 2020 and by 4.4% in 2021, compared with 1.3% growth in 2019.

**Energy-Related Carbon Dioxide Emissions.** After decreasing by 2.1% in 2019, EIA forecasts that energy-related carbon dioxide (CO<sub>2</sub>) emissions will decrease by 2.0% in 2020 and decrease by 1.5% in 2021. EIA expects CO<sub>2</sub> emissions attributable to natural gas alone, which rose by 4.2% in 2019, will rise 1.3% in 2020. However, EIA expects a 1.5% decline in natural gas CO<sub>2</sub> in 2021. EIA expects coal-related CO<sub>2</sub> will decline by 10.7% in 2020 after declining by 12.7% in 2019. EIA expects an additional decrease of 3.4% in coal-related CO<sub>2</sub> in 2021. Energy-related CO<sub>2</sub> emissions are sensitive to changes in weather, economic growth, energy prices, and fuel mix.

### Notable forecast changes

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

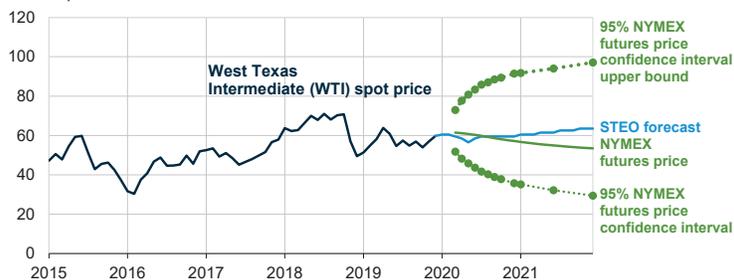
This report was prepared by the U.S. Energy Information Administration (EIA), the statistical and analytical agency within the U.S. Department of Energy. By law, EIA's data, analyses, and forecasts are independent of approval by any other officer or employee of the United States Government. The views in this report therefore should not be construed as representing those of the U.S. Department of Energy or other federal agencies.



# Short-Term Energy Outlook

## Chart Gallery for January 2020

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

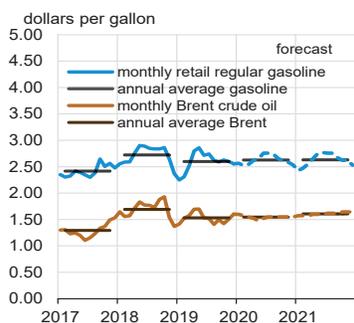


Note: Confidence interval derived from options market information for the five trading days ending Jan 9, 2020. Intervals not calculated for months with sparse trading in near-the-money options contracts.

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

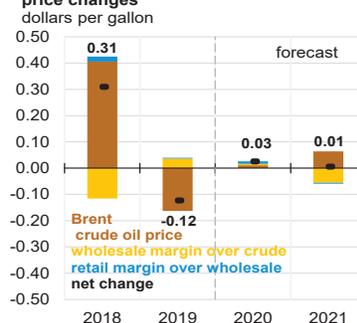


**U.S. gasoline and crude oil prices**

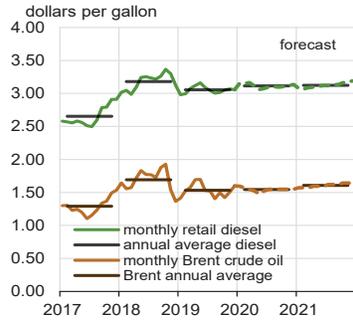


Source: Short-Term Energy Outlook, January 2020

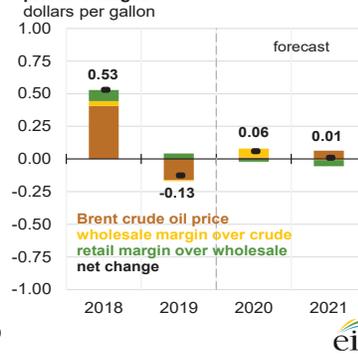
**Components of annual gasoline price changes**



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

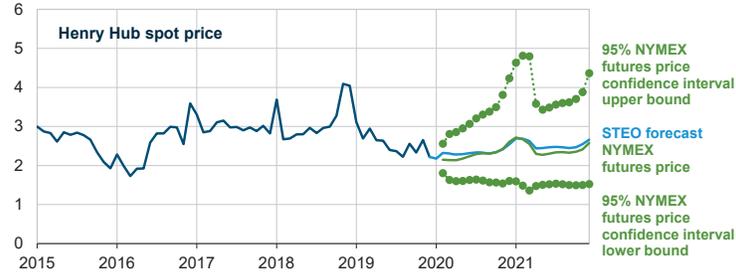


### Components of annual diesel prices changes



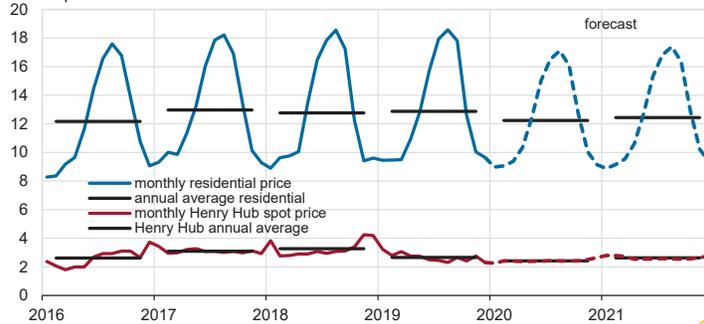
### Henry Hub natural gas price and NYMEX confidence intervals

dollars per million Btu

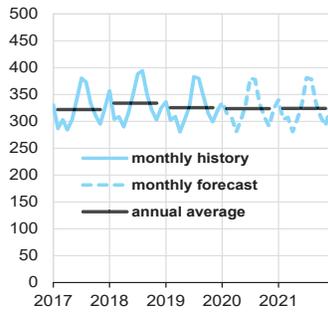


### U.S. natural gas prices

dollars per thousand cubic feet

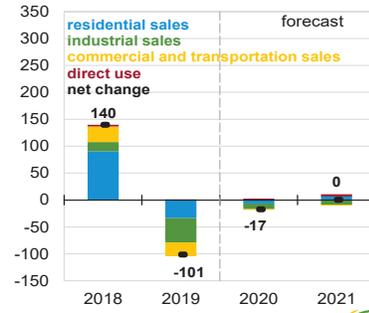


**U.S. electricity consumption**  
billion kilowatthours

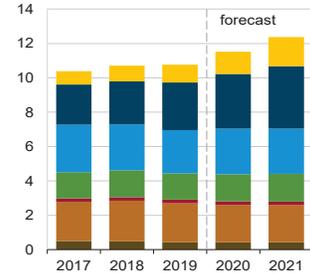


Source: Short-Term Energy Outlook, January 2020

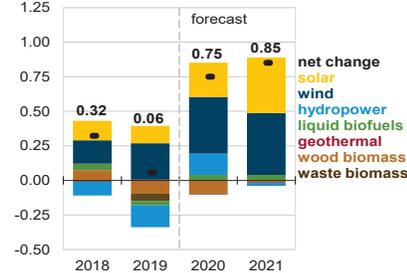
**Components of annual change**  
billion kilowatthours



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



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

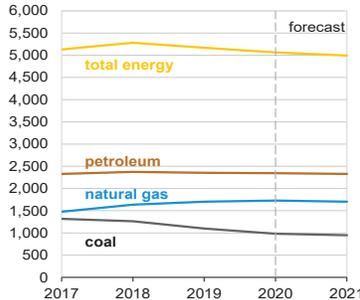


Note: Hydropower excludes pumped storage generation. Liquid biofuels include ethanol and biodiesel. Other biomass includes municipal waste from biogenic sources, landfill gas, and other non-wood waste.

Source: Short-Term Energy Outlook, January 2020

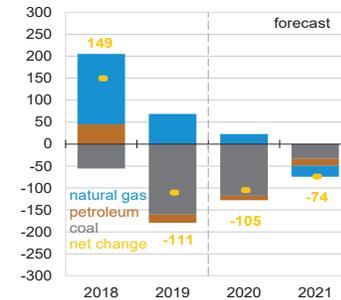


**U.S. annual carbon emissions by source**  
million metric tons



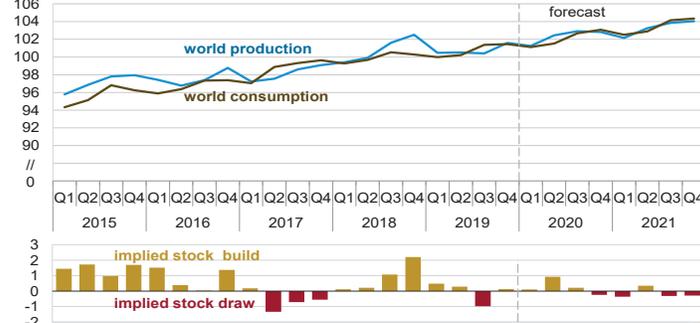
Source: Short-Term Energy Outlook, January 2020

**Components of annual change**  
million metric tons



**World liquid fuels production and consumption balance**

million barrels per day

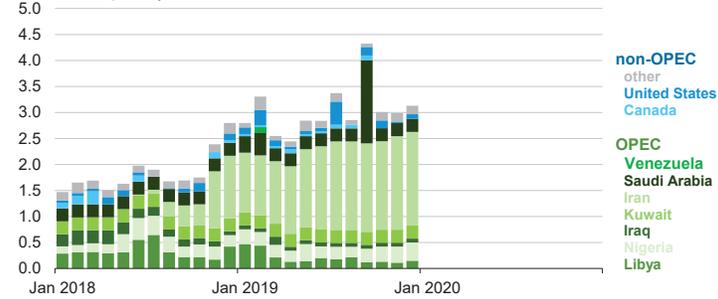


Source: Short-Term Energy Outlook, January 2020



**Estimated unplanned liquid fuels production outages**

million barrels per day

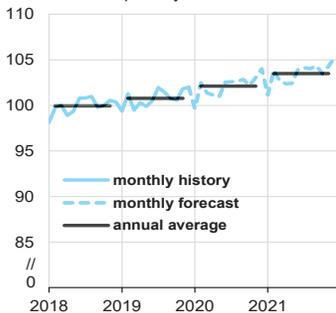


Source: Short-Term Energy Outlook, January 2020



**World liquid fuels consumption**

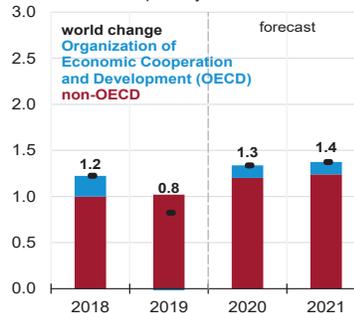
million barrels per day



Source: Short-Term Energy Outlook, January 2020

**Components of annual change**

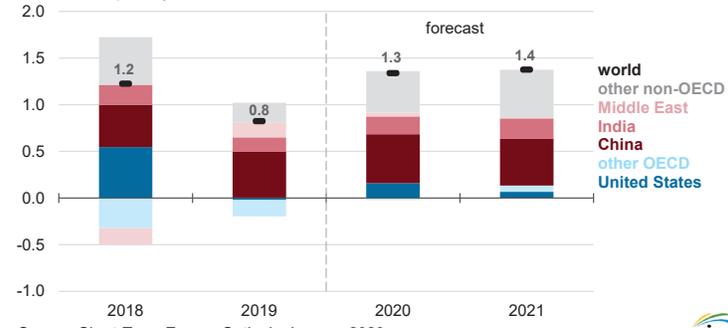
million barrels per day



Source: Short-Term Energy Outlook, January 2020



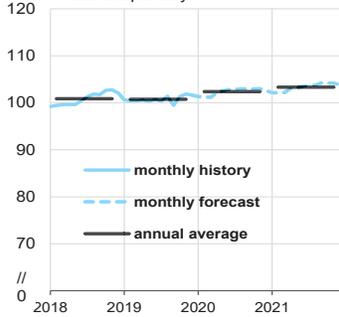
**Annual change in world liquid fuels consumption**  
million barrels per day



Source: Short-Term Energy Outlook, January 2020

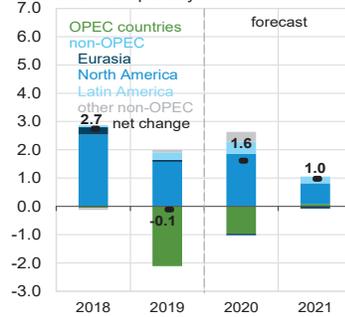


**World crude oil and liquid fuels production**  
million barrels per day

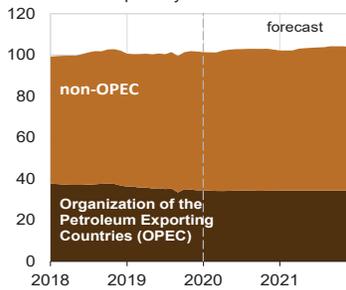


Source: Short-Term Energy Outlook, January 2020

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

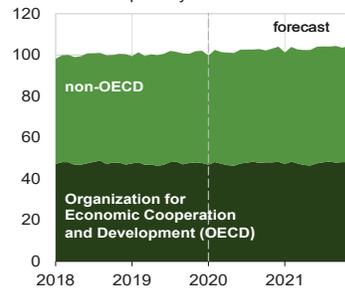


**World liquid fuels production**  
million barrels per day

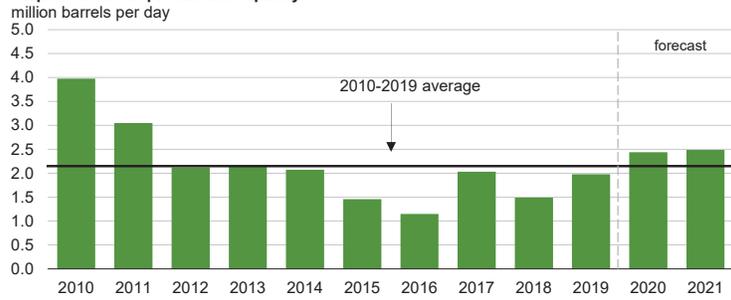


Source: Short-Term Energy Outlook, January 2020

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



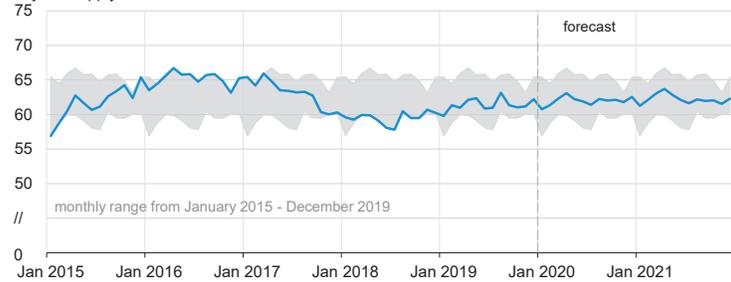
**Organization of the Petroleum Exporting Countries (OPEC)  
surplus crude oil production capacity**



Note: Black line represents 2010-2019 average (2.1 million barrels per day).  
Source: Short-Term Energy Outlook, January 2020



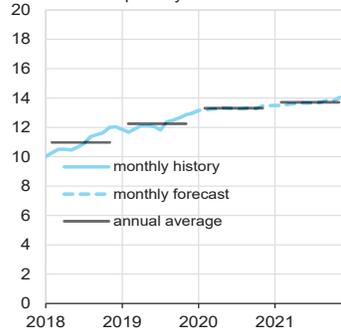
**Organization for Economic Cooperation and Development (OECD)  
commercial inventories of crude oil and other liquids**



Source: Short-Term Energy Outlook, January 2020

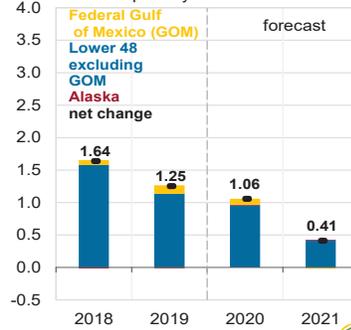


**U.S. crude oil production**

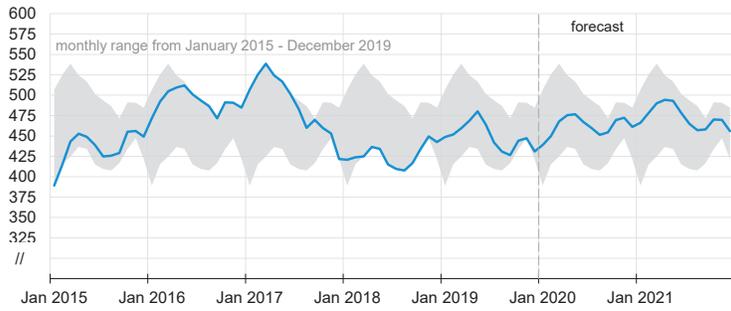


Source: Short-Term Energy Outlook, January 2020

**Components of annual change**



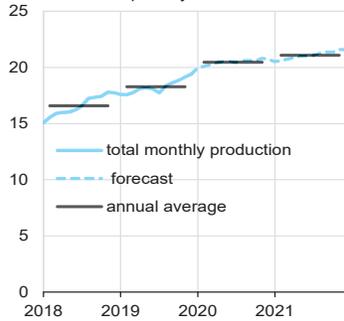
**U.S. commercial crude oil inventories**  
million barrels



Source: Short-Term Energy Outlook, January 2020

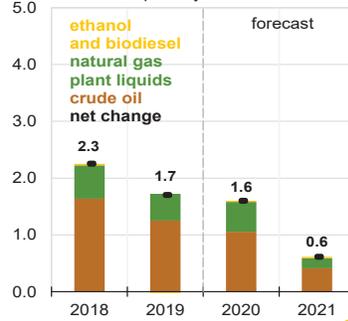


**U.S. crude oil and liquid fuels production**  
million barrels per day

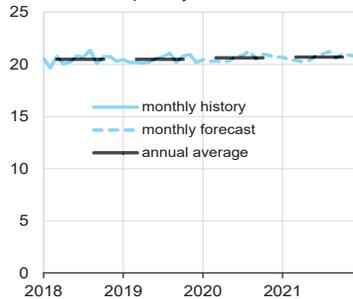


Source: Short-Term Energy Outlook, January 2020

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

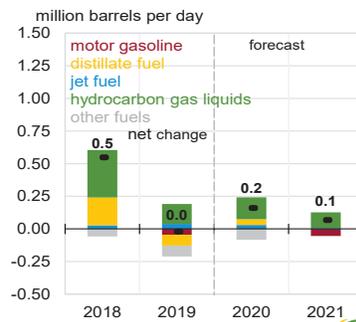


**U.S. liquid fuels product supplied (consumption)**  
million barrels per day

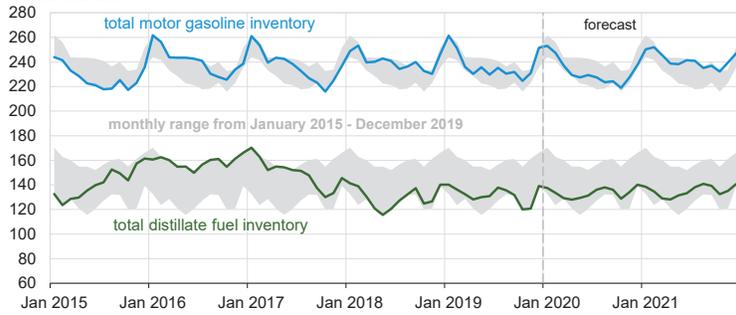


Source: Short-Term Energy Outlook, January 2020

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



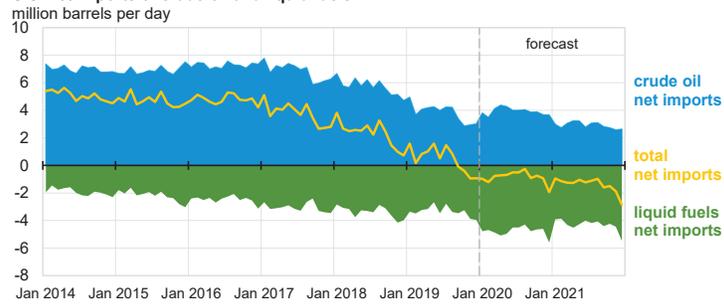
**U.S. gasoline and distillate inventories**  
million barrels



Source: Short-Term Energy Outlook, January 2020



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

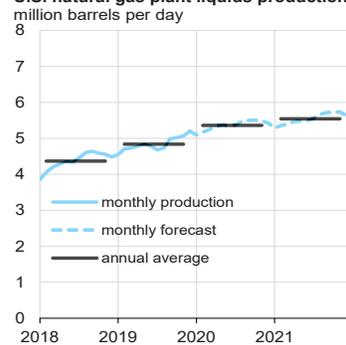


Note: Liquids fuels include: gasoline, distillate fuels, hydrocarbon gas liquids, jet fuel, residual fuel oil, unfinished oils, other hydrocarbons/oxygenates, and other oils.

Source: Short-Term Energy Outlook, January 2020

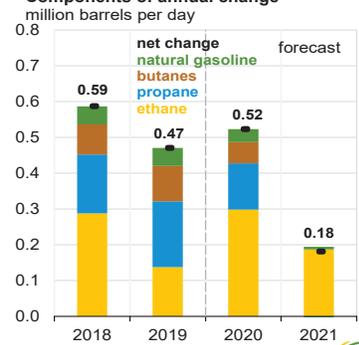


**U.S. natural gas plant liquids production**

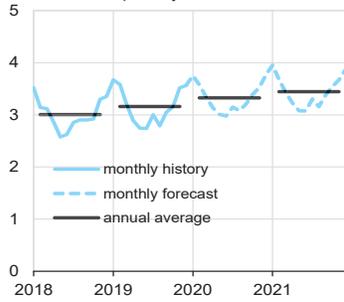


Source: Short-Term Energy Outlook, January 2020

**Components of annual change**

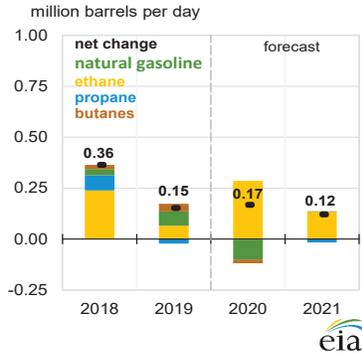


**U.S. hydrocarbon gas liquids product supplied (consumption)**  
million barrels per day

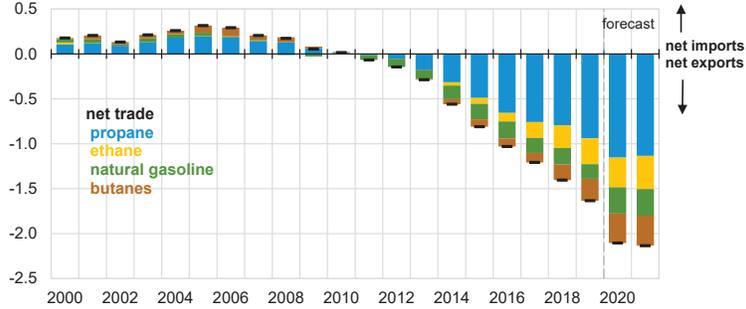


Source: Short-Term Energy Outlook, January 2020

**Components of annual change**



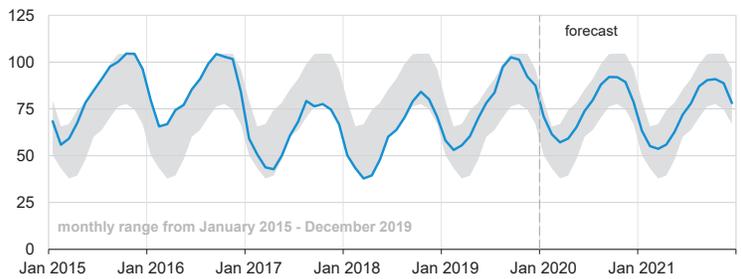
**U.S. net trade of hydrocarbon gas liquids (HGL)**  
million barrels per day



Source: Short-Term Energy Outlook, January 2020



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

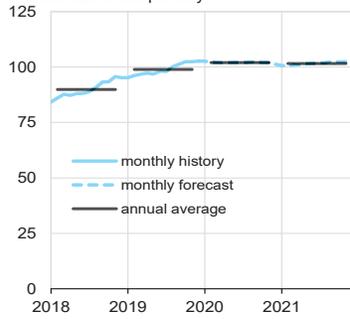


Note: Propane includes refinery propylene.

Source: Short-Term Energy Outlook, January 2020

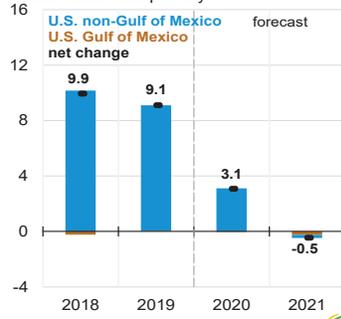


**U.S. marketed natural gas production**  
billion cubic feet per day

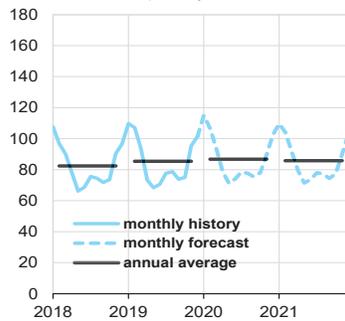


Source: Short-Term Energy Outlook, January 2020

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

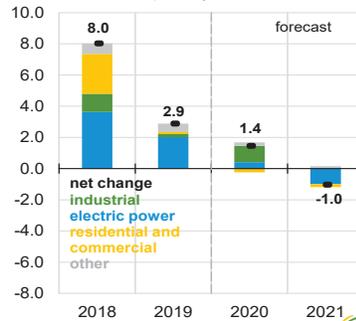


**U.S. natural gas consumption**  
billion cubic feet per day

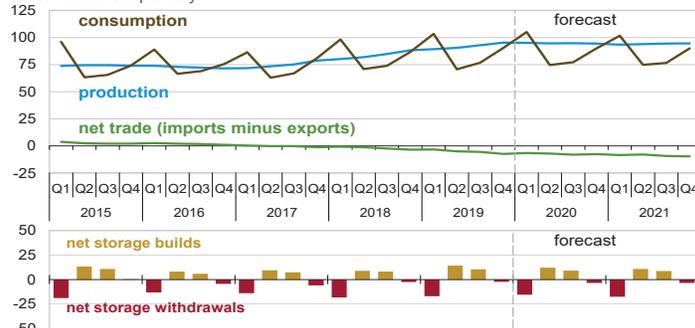


Source: Short-Term Energy Outlook, January 2020

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



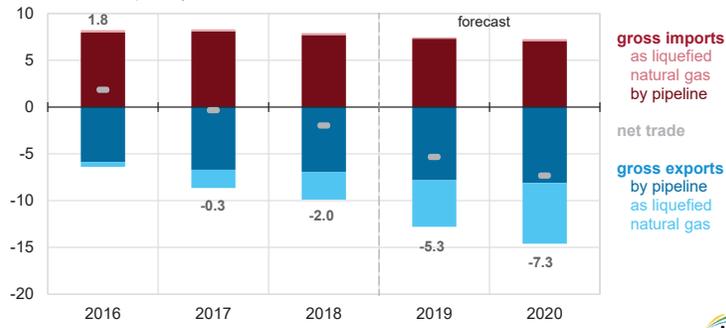
**U.S. natural gas production, consumption, and net imports**  
billion cubic feet per day



Source: Short-Term Energy Outlook, January 2020



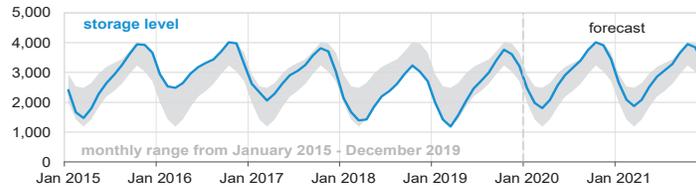
**Annual natural gas trade**  
billion cubic feet per day



Source: Short-Term Energy Outlook, January 2020



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



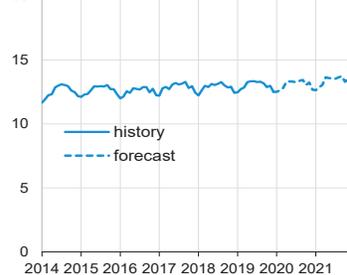
**Percent deviation from 2015 - 2019 average**



Source: Short-Term Energy Outlook, January 2020

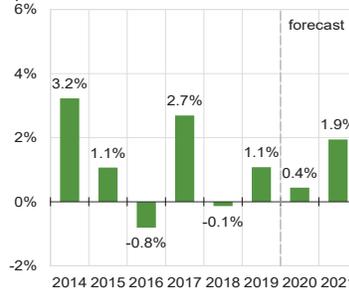


**U.S. monthly residential electricity price**  
cents per kilowatthour

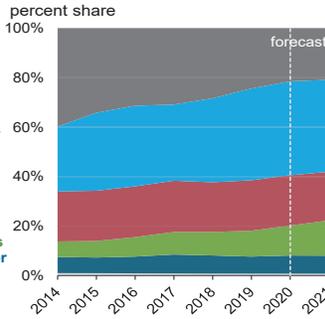
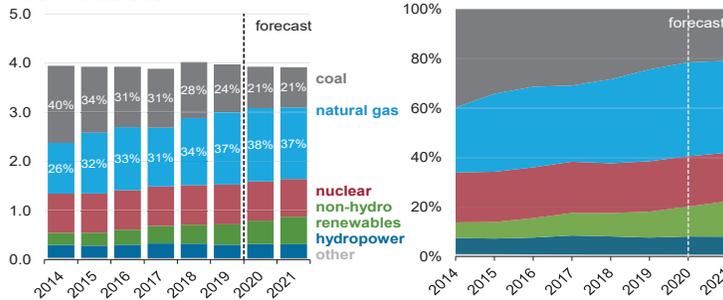


Source: Short-Term Energy Outlook, January 2020

**Annual growth in residential electricity prices**  
percent



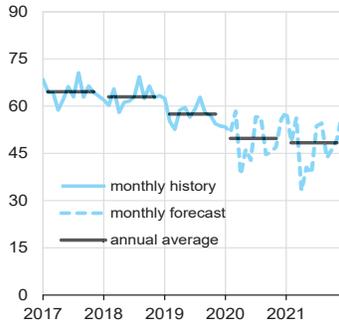
**U.S. electricity generation by fuel, all sectors**  
trillion kilowatthours



Note: Labels show percentage share of total generation provided by coal and natural gas.  
Source: Short-Term Energy Outlook, January 2020

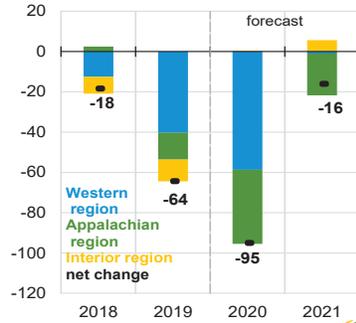


**U.S. coal production**  
million short tons

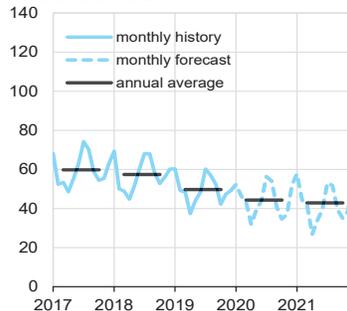


Source: Short-Term Energy Outlook, January 2020

**Components of annual change**  
million short tons

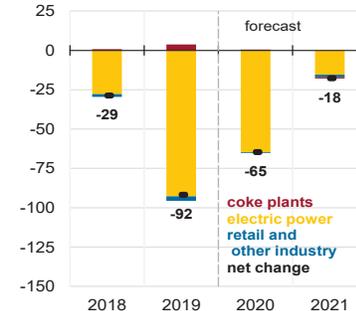


**U.S. coal consumption**  
million short tons

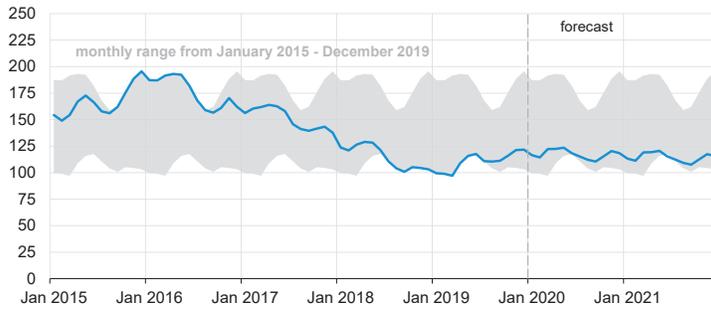


Source: Short-Term Energy Outlook, January 2020

**Components of annual change**  
million short tons



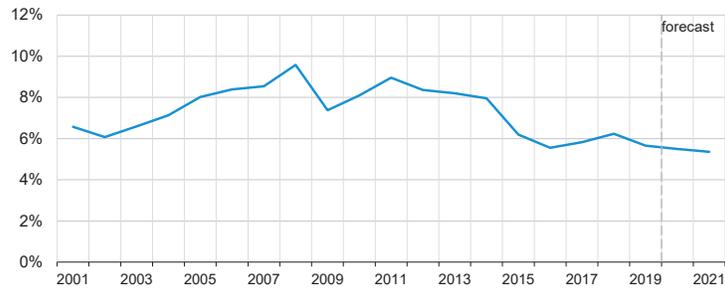
**U.S. electric power coal inventories**  
million short tons



Source: Short-Term Energy Outlook, January 2020



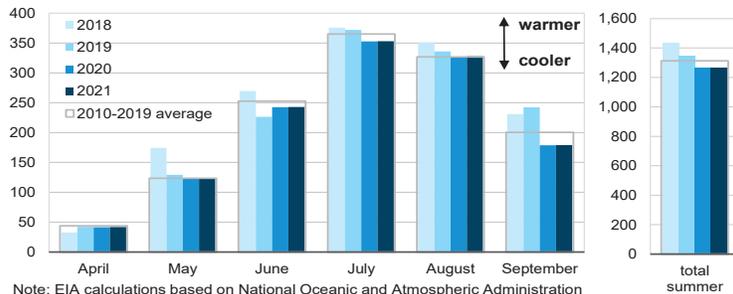
**U.S. annual energy expenditures**  
share of gross domestic product



Source: Short-Term Energy Outlook, January 2020



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

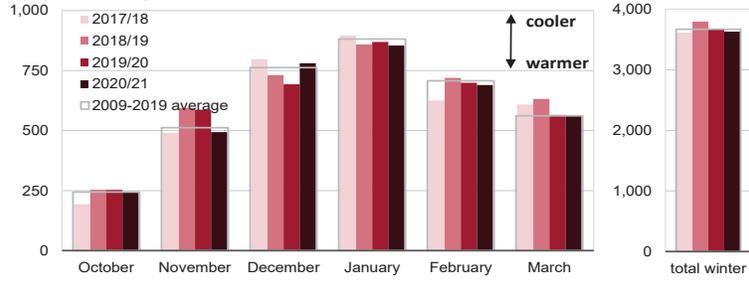


Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data. Projections reflect NOAA's 14-16 month outlook.

Source: Short-Term Energy Outlook, January 2020



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

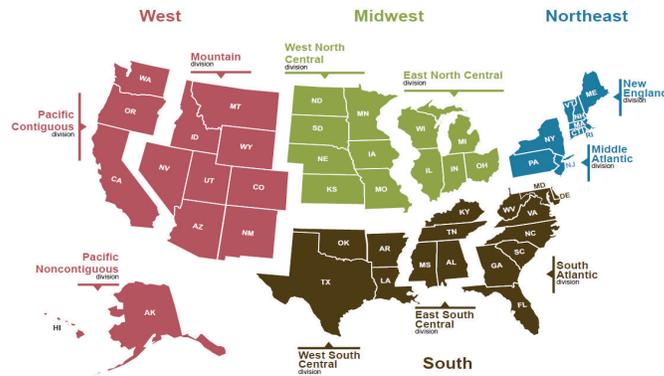


Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data. Projections reflect NOAA's 14-16 month outlook.

Source: Short-Term Energy Outlook, January 2020



**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 - January 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) .....	<b>11.81</b>	<b>12.10</b>	<b>12.23</b>	<b>12.83</b>	13.20	13.31	13.29	13.41	13.52	13.64	13.73	13.95	<b>12.24</b>	13.30	13.71
Dry Natural Gas Production (billion cubic feet per day) .....	<b>89.32</b>	<b>90.50</b>	<b>92.92</b>	<b>95.29</b>	95.05	94.69	94.82	94.39	93.39	93.95	94.49	94.59	<b>92.03</b>	94.74	94.11
Coal Production (million short tons) .....	<b>170</b>	<b>175</b>	<b>180</b>	<b>165</b>	163	127	158	148	163	112	152	153	<b>690</b>	597	581
<b>Energy Consumption</b>															
Liquid Fuels (million barrels per day) .....	<b>20.29</b>	<b>20.32</b>	<b>20.68</b>	<b>20.64</b>	20.36	20.47	20.89	20.84	20.51	20.48	20.94	20.89	<b>20.48</b>	20.64	20.71
Natural Gas (billion cubic feet per day) .....	<b>103.32</b>	<b>70.74</b>	<b>76.75</b>	<b>90.55</b>	105.05	74.70	77.19	90.05	101.61	74.84	76.57	89.99	<b>85.28</b>	86.73	85.70
Coal (b) (million short tons) .....	<b>158</b>	<b>130</b>	<b>170</b>	<b>139</b>	142	115	151	123	143	100	144	126	<b>596</b>	532	514
Electricity (billion kilowatt hours per day) .....	<b>10.53</b>	<b>10.01</b>	<b>12.07</b>	<b>10.15</b>	10.52	10.05	11.86	10.03	10.56	10.07	11.89	10.06	<b>10.69</b>	10.62	10.65
Renewables (c) (quadrillion Btu) .....	<b>2.81</b>	<b>3.08</b>	<b>2.80</b>	<b>2.77</b>	2.98	3.27	2.96	3.02	3.21	3.49	3.21	3.19	<b>11.46</b>	12.24	13.10
Total Energy Consumption (d) (quadrillion Btu) .....	<b>26.53</b>	<b>23.44</b>	<b>25.00</b>	<b>25.35</b>	26.44	23.29	24.48	25.09	26.13	23.21	24.45	25.13	<b>100.32</b>	99.30	98.92
<b>Energy Prices</b>															
Crude Oil West Texas Intermediate Spot (dollars per barrel) .....	<b>54.82</b>	<b>59.94</b>	<b>56.35</b>	<b>56.84</b>	60.15	57.88	59.50	59.50	60.50	61.50	62.50	63.50	<b>57.02</b>	59.25	62.03
Natural Gas Henry Hub Spot (dollars per million Btu) .....	<b>2.92</b>	<b>2.56</b>	<b>2.38</b>	<b>2.40</b>	2.27	2.30	2.32	2.43	2.67	2.45	2.47	2.56	<b>2.57</b>	2.33	2.54
Coal (dollars per million Btu) .....	<b>2.08</b>	<b>2.05</b>	<b>1.99</b>	<b>2.09</b>	2.11	2.11	2.09	2.09	2.11	2.11	2.09	2.10	<b>2.05</b>	2.10	2.10
<b>Macroeconomic</b>															
Real Gross Domestic Product (billion chained 2012 dollars - SAAR) .....	<b>18,927</b>	<b>19,022</b>	<b>19,122</b>	<b>19,200</b>	19,299	19,404	19,500	19,591	19,676	19,745	19,823	19,918	<b>19,068</b>	19,448	19,790
Percent change from prior year .....	<b>2.7</b>	<b>2.3</b>	<b>2.1</b>	<b>2.2</b>	2.0	2.0	2.0	2.0	2.0	1.8	1.7	1.7	<b>2.3</b>	2.0	1.8
GDP Implicit Price Deflator (Index, 2012=100) .....	<b>111.5</b>	<b>112.2</b>	<b>112.7</b>	<b>113.1</b>	113.8	114.3	115.0	115.7	116.5	117.2	117.9	118.5	<b>112.4</b>	114.7	117.5
Percent change from prior year .....	<b>2.0</b>	<b>1.8</b>	<b>1.7</b>	<b>1.7</b>	2.1	1.9	2.0	2.3	2.4	2.5	2.5	2.4	<b>1.8</b>	2.1	2.5
Real Disposable Personal Income (billion chained 2012 dollars - SAAR) .....	<b>14,878</b>	<b>14,934</b>	<b>15,042</b>	<b>15,074</b>	15,149	15,225	15,286	15,358	15,447	15,541	15,627	15,715	<b>14,982</b>	15,255	15,582
Percent change from prior year .....	<b>3.3</b>	<b>3.0</b>	<b>2.9</b>	<b>2.4</b>	1.8	1.9	1.6	1.9	2.0	2.1	2.2	2.3	<b>2.9</b>	1.8	2.1
Manufacturing Production Index (Index, 2012=100) .....	<b>106.5</b>	<b>105.7</b>	<b>105.9</b>	<b>105.7</b>	106.1	106.2	106.6	106.8	106.9	106.8	107.1	107.7	<b>105.9</b>	106.4	107.1
Percent change from prior year .....	<b>1.6</b>	<b>0.1</b>	<b>-0.6</b>	<b>-1.2</b>	-0.3	0.5	0.7	1.1	0.7	0.6	0.5	0.9	<b>0.0</b>	0.5	0.7
<b>Weather</b>															
U.S. Heating Degree-Days .....	<b>2,211</b>	<b>481</b>	<b>57</b>	<b>1,532</b>	2,132	479	72	1,520	2,106	478	72	1,518	<b>4,280</b>	4,203	4,173
U.S. Cooling Degree-Days .....	<b>45</b>	<b>398</b>	<b>951</b>	<b>104</b>	45	407	859	93	43	408	860	93	<b>1,498</b>	1,405	1,405

- = 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 - January 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 .....	<b>54.82</b>	<b>59.94</b>	<b>56.35</b>	<b>56.84</b>	<i>60.15</i>	<i>57.88</i>	<i>59.50</i>	<i>59.50</i>	<i>60.50</i>	<i>61.50</i>	<i>62.50</i>	<i>63.50</i>	<b>57.02</b>	<i>59.25</i>	<i>62.03</i>
Brent Spot Average .....	<b>63.14</b>	<b>69.07</b>	<b>61.90</b>	<b>63.27</b>	<i>65.98</i>	<i>63.38</i>	<i>65.00</i>	<i>65.00</i>	<i>66.00</i>	<i>67.00</i>	<i>68.00</i>	<i>69.00</i>	<b>64.36</b>	<i>64.83</i>	<i>67.53</i>
U.S. Imported Average .....	<b>55.25</b>	<b>62.98</b>	<b>57.31</b>	<b>54.94</b>	<i>56.48</i>	<i>54.16</i>	<i>56.43</i>	<i>56.43</i>	<i>58.01</i>	<i>59.01</i>	<i>60.01</i>	<i>61.01</i>	<b>57.82</b>	<i>55.84</i>	<i>59.48</i>
U.S. Refiner Average Acquisition Cost .....	<b>56.93</b>	<b>63.55</b>	<b>58.67</b>	<b>56.47</b>	<i>59.01</i>	<i>56.67</i>	<i>58.93</i>	<i>58.93</i>	<i>59.51</i>	<i>60.51</i>	<i>61.51</i>	<i>62.51</i>	<b>58.94</b>	<i>58.37</i>	<i>61.03</i>
<b>U.S. Liquid Fuels</b> (cents per gallon)															
<b>Refiner Prices for Resale</b>															
Gasoline .....	<b>167</b>	<b>205</b>	<b>189</b>	<b>179</b>	<i>180</i>	<i>193</i>	<i>194</i>	<i>180</i>	<i>176</i>	<i>196</i>	<i>195</i>	<i>183</i>	<b>185</b>	<i>187</i>	<i>188</i>
Diesel Fuel .....	<b>192</b>	<b>203</b>	<b>192</b>	<b>199</b>	<i>209</i>	<i>201</i>	<i>204</i>	<i>204</i>	<i>206</i>	<i>209</i>	<i>211</i>	<i>213</i>	<b>196</b>	<i>204</i>	<i>210</i>
Heating Oil .....	<b>189</b>	<b>195</b>	<b>184</b>	<b>194</b>	<i>204</i>	<i>192</i>	<i>192</i>	<i>196</i>	<i>209</i>	<i>206</i>	<i>209</i>	<i>213</i>	<b>191</b>	<i>197</i>	<i>209</i>
<b>Refiner Prices to End Users</b>															
Jet Fuel .....	<b>193</b>	<b>204</b>	<b>194</b>	<b>196</b>	<i>211</i>	<i>202</i>	<i>205</i>	<i>202</i>	<i>208</i>	<i>210</i>	<i>211</i>	<i>214</i>	<b>197</b>	<i>205</i>	<i>211</i>
No. 6 Residual Fuel Oil (a) .....	<b>153</b>	<b>163</b>	<b>155</b>	<b>134</b>	<i>164</i>	<i>161</i>	<i>172</i>	<i>176</i>	<i>147</i>	<i>145</i>	<i>145</i>	<i>148</i>	<b>150</b>	<i>169</i>	<i>146</i>
<b>Retail Prices Including Taxes</b>															
Gasoline Regular Grade (b) .....	<b>236</b>	<b>279</b>	<b>265</b>	<b>259</b>	<i>254</i>	<i>268</i>	<i>272</i>	<i>258</i>	<i>248</i>	<i>273</i>	<i>273</i>	<i>259</i>	<b>260</b>	<i>263</i>	<i>263</i>
Gasoline All Grades (b) .....	<b>245</b>	<b>288</b>	<b>274</b>	<b>269</b>	<i>265</i>	<i>279</i>	<i>284</i>	<i>270</i>	<i>261</i>	<i>285</i>	<i>286</i>	<i>273</i>	<b>269</b>	<i>275</i>	<i>276</i>
On-highway Diesel Fuel .....	<b>302</b>	<b>312</b>	<b>302</b>	<b>306</b>	<i>316</i>	<i>308</i>	<i>310</i>	<i>312</i>	<i>308</i>	<i>311</i>	<i>313</i>	<i>317</i>	<b>306</b>	<i>311</i>	<i>312</i>
Heating Oil .....	<b>300</b>	<b>305</b>	<b>290</b>	<b>308</b>	<i>318</i>	<i>303</i>	<i>294</i>	<i>306</i>	<i>311</i>	<i>306</i>	<i>309</i>	<i>323</i>	<b>302</b>	<i>310</i>	<i>314</i>
<b>Natural Gas</b>															
Henry Hub Spot (dollars per thousand cubic feet) .....	<b>3.03</b>	<b>2.66</b>	<b>2.47</b>	<b>2.49</b>	<i>2.35</i>	<i>2.39</i>	<i>2.41</i>	<i>2.52</i>	<i>2.77</i>	<i>2.55</i>	<i>2.56</i>	<i>2.66</i>	<b>2.66</b>	<i>2.42</i>	<i>2.63</i>
Henry Hub Spot (dollars per million Btu) .....	<b>2.92</b>	<b>2.56</b>	<b>2.38</b>	<b>2.40</b>	<i>2.27</i>	<i>2.30</i>	<i>2.32</i>	<i>2.43</i>	<i>2.67</i>	<i>2.45</i>	<i>2.47</i>	<i>2.56</i>	<b>2.57</b>	<i>2.33</i>	<i>2.54</i>
<b>U.S. Retail Prices</b> (dollars per thousand cubic feet)															
Industrial Sector .....	<b>4.67</b>	<b>3.74</b>	<b>3.30</b>	<b>3.72</b>	<i>3.72</i>	<i>3.32</i>	<i>3.30</i>	<i>3.66</i>	<i>4.08</i>	<i>3.52</i>	<i>3.45</i>	<i>3.80</i>	<b>3.90</b>	<i>3.52</i>	<i>3.74</i>
Commercial Sector .....	<b>7.59</b>	<b>7.97</b>	<b>8.40</b>	<b>7.43</b>	<i>7.13</i>	<i>7.59</i>	<i>8.09</i>	<i>7.33</i>	<i>7.27</i>	<i>7.80</i>	<i>8.23</i>	<i>7.45</i>	<b>7.68</b>	<i>7.37</i>	<i>7.52</i>
Residential Sector .....	<b>9.47</b>	<b>12.48</b>	<b>18.10</b>	<b>10.23</b>	<i>9.11</i>	<i>11.78</i>	<i>16.55</i>	<i>10.02</i>	<i>9.16</i>	<i>12.02</i>	<i>16.82</i>	<i>10.21</i>	<b>10.66</b>	<i>10.25</i>	<i>10.39</i>
<b>U.S. Electricity</b>															
<b>Power Generation Fuel Costs</b> (dollars per million Btu)															
Coal .....	<b>2.08</b>	<b>2.05</b>	<b>1.99</b>	<b>2.09</b>	<i>2.11</i>	<i>2.11</i>	<i>2.09</i>	<i>2.09</i>	<i>2.11</i>	<i>2.11</i>	<i>2.09</i>	<i>2.10</i>	<b>2.05</b>	<i>2.10</i>	<i>2.10</i>
Natural Gas .....	<b>3.71</b>	<b>2.73</b>	<b>2.51</b>	<b>2.57</b>	<i>2.65</i>	<i>2.39</i>	<i>2.34</i>	<i>2.64</i>	<i>3.17</i>	<i>2.55</i>	<i>2.51</i>	<i>2.80</i>	<b>2.83</b>	<i>2.49</i>	<i>2.72</i>
Residual Fuel Oil (c) .....	<b>12.21</b>	<b>13.39</b>	<b>12.79</b>	<b>11.69</b>	<i>12.72</i>	<i>13.06</i>	<i>12.33</i>	<i>12.19</i>	<i>12.59</i>	<i>13.38</i>	<i>12.82</i>	<i>12.76</i>	<b>12.53</b>	<i>12.59</i>	<i>12.85</i>
Distillate Fuel Oil .....	<b>14.88</b>	<b>15.75</b>	<b>15.01</b>	<b>15.53</b>	<i>16.21</i>	<i>15.69</i>	<i>15.77</i>	<i>15.83</i>	<i>16.02</i>	<i>16.20</i>	<i>16.27</i>	<i>16.54</i>	<b>15.28</b>	<i>15.90</i>	<i>16.24</i>
<b>Retail Prices</b> (cents per kilowatthour)															
Industrial Sector .....	<b>6.67</b>	<b>6.72</b>	<b>7.24</b>	<b>6.74</b>	<i>6.63</i>	<i>6.76</i>	<i>7.33</i>	<i>6.81</i>	<i>6.76</i>	<i>6.85</i>	<i>7.44</i>	<i>6.90</i>	<b>6.85</b>	<i>6.89</i>	<i>7.00</i>
Commercial Sector .....	<b>10.41</b>	<b>10.65</b>	<b>11.00</b>	<b>10.57</b>	<i>10.31</i>	<i>10.54</i>	<i>10.99</i>	<i>10.63</i>	<i>10.40</i>	<i>10.67</i>	<i>11.15</i>	<i>10.80</i>	<b>10.67</b>	<i>10.63</i>	<i>10.77</i>
Residential Sector .....	<b>12.67</b>	<b>13.32</b>	<b>13.25</b>	<b>12.77</b>	<i>12.64</i>	<i>13.30</i>	<i>13.34</i>	<i>12.96</i>	<i>12.83</i>	<i>13.59</i>	<i>13.62</i>	<i>13.22</i>	<b>13.01</b>	<i>13.06</i>	<i>13.32</i>

- = no data available

Prices are not adjusted for inflation.

(a) Average for all sulfur contents.

(b) Average self-service cash price.

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

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

Prices exclude taxes unless otherwise noted.

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

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

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

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

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

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

U.S. Energy Information Administration | Short-Term Energy Outlook - January 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 .....	<b>31.08</b>	<b>31.32</b>	<b>31.49</b>	<b>32.80</b>	<i>33.51</i>	<i>33.89</i>	<i>33.84</i>	<i>34.21</i>	<i>34.19</i>	<i>34.44</i>	<i>34.69</i>	<i>35.22</i>	<b>31.68</b>	<i>33.87</i>	<i>34.64</i>
U.S. (50 States) .....	<b>18.91</b>	<b>19.38</b>	<b>19.49</b>	<b>20.48</b>	<i>20.93</i>	<i>21.34</i>	<i>21.39</i>	<i>21.56</i>	<i>21.45</i>	<i>21.80</i>	<i>22.05</i>	<i>22.35</i>	<b>19.57</b>	<i>21.31</i>	<i>21.92</i>
Canada .....	<b>5.44</b>	<b>5.47</b>	<b>5.52</b>	<b>5.57</b>	<i>5.62</i>	<i>5.62</i>	<i>5.67</i>	<i>5.73</i>	<i>5.80</i>	<i>5.81</i>	<i>5.87</i>	<i>5.94</i>	<b>5.50</b>	<i>5.66</i>	<i>5.85</i>
Mexico .....	<b>1.91</b>	<b>1.91</b>	<b>1.92</b>	<b>1.89</b>	<i>1.89</i>	<i>1.89</i>	<i>1.86</i>	<i>1.81</i>	<i>1.82</i>	<i>1.80</i>	<i>1.78</i>	<i>1.77</i>	<b>1.91</b>	<i>1.86</i>	<i>1.79</i>
Other OECD .....	<b>4.82</b>	<b>4.56</b>	<b>4.57</b>	<b>4.86</b>	<i>5.06</i>	<i>5.04</i>	<i>4.93</i>	<i>5.12</i>	<i>5.12</i>	<i>5.04</i>	<i>4.98</i>	<i>5.16</i>	<b>4.70</b>	<i>5.03</i>	<i>5.07</i>
Non-OECD .....	<b>69.40</b>	<b>69.20</b>	<b>68.91</b>	<b>68.79</b>	<i>67.74</i>	<i>68.57</i>	<i>69.06</i>	<i>68.62</i>	<i>67.96</i>	<i>68.81</i>	<i>69.17</i>	<i>68.84</i>	<b>69.08</b>	<i>68.50</i>	<i>68.70</i>
OPEC .....	<b>36.05</b>	<b>35.50</b>	<b>34.57</b>	<b>34.73</b>	<i>34.26</i>	<i>34.17</i>	<i>34.32</i>	<i>34.20</i>	<i>34.34</i>	<i>34.33</i>	<i>34.32</i>	<i>34.31</i>	<b>35.21</b>	<i>34.24</i>	<i>34.33</i>
Crude Oil Portion .....	<b>30.47</b>	<b>30.00</b>	<b>29.21</b>	<b>29.47</b>	<i>29.21</i>	<i>29.14</i>	<i>29.28</i>	<i>29.15</i>	<i>29.31</i>	<i>29.28</i>	<i>29.27</i>	<i>29.26</i>	<b>29.79</b>	<i>29.19</i>	<i>29.28</i>
Other Liquids (b) .....	<b>5.58</b>	<b>5.50</b>	<b>5.36</b>	<b>5.26</b>	<i>5.06</i>	<i>5.03</i>	<i>5.04</i>	<i>5.05</i>	<i>5.04</i>	<i>5.04</i>	<i>5.05</i>	<i>5.06</i>	<b>5.42</b>	<i>5.05</i>	<i>5.05</i>
Eurasia .....	<b>14.87</b>	<b>14.47</b>	<b>14.71</b>	<b>14.65</b>	<i>14.66</i>	<i>14.56</i>	<i>14.57</i>	<i>14.64</i>	<i>14.59</i>	<i>14.45</i>	<i>14.49</i>	<i>14.56</i>	<b>14.67</b>	<i>14.61</i>	<i>14.52</i>
China .....	<b>4.94</b>	<b>4.96</b>	<b>4.93</b>	<b>4.89</b>	<i>4.94</i>	<i>4.97</i>	<i>4.97</i>	<i>5.01</i>	<i>4.97</i>	<i>5.00</i>	<i>5.00</i>	<i>5.04</i>	<b>4.93</b>	<i>4.97</i>	<i>5.00</i>
Other Non-OECD .....	<b>13.55</b>	<b>14.26</b>	<b>14.70</b>	<b>14.52</b>	<i>13.88</i>	<i>14.87</i>	<i>15.20</i>	<i>14.76</i>	<i>14.06</i>	<i>15.03</i>	<i>15.36</i>	<i>14.92</i>	<b>14.26</b>	<i>14.68</i>	<i>14.85</i>
Total World Supply .....	<b>100.48</b>	<b>100.52</b>	<b>100.41</b>	<b>101.59</b>	<i>101.25</i>	<i>102.46</i>	<i>102.91</i>	<i>102.84</i>	<i>102.15</i>	<i>103.25</i>	<i>103.86</i>	<i>104.06</i>	<b>100.75</b>	<i>102.37</i>	<i>103.34</i>
Non-OPEC Supply .....	<b>64.43</b>	<b>65.02</b>	<b>65.84</b>	<b>66.86</b>	<i>66.98</i>	<i>68.29</i>	<i>68.59</i>	<i>68.63</i>	<i>67.81</i>	<i>68.93</i>	<i>69.53</i>	<i>69.74</i>	<b>65.54</b>	<i>68.13</i>	<i>69.01</i>
<b>Consumption (million barrels per day) (c)</b>															
OECD .....	<b>47.40</b>	<b>46.69</b>	<b>47.82</b>	<b>47.76</b>	<i>47.42</i>	<i>46.79</i>	<i>47.94</i>	<i>48.07</i>	<i>47.63</i>	<i>46.87</i>	<i>48.06</i>	<i>48.19</i>	<b>47.42</b>	<i>47.56</i>	<i>47.69</i>
U.S. (50 States) .....	<b>20.29</b>	<b>20.32</b>	<b>20.68</b>	<b>20.64</b>	<i>20.36</i>	<i>20.47</i>	<i>20.89</i>	<i>20.84</i>	<i>20.51</i>	<i>20.48</i>	<i>20.94</i>	<i>20.89</i>	<b>20.48</b>	<i>20.64</i>	<i>20.71</i>
U.S. Territories .....	<b>0.12</b>	<b>0.11</b>	<b>0.12</b>	<b>0.13</b>	<i>0.12</i>	<i>0.11</i>	<i>0.12</i>	<i>0.13</i>	<i>0.16</i>	<i>0.14</i>	<i>0.14</i>	<i>0.15</i>	<b>0.12</b>	<i>0.12</i>	<i>0.15</i>
Canada .....	<b>2.45</b>	<b>2.44</b>	<b>2.60</b>	<b>2.56</b>	<i>2.53</i>	<i>2.47</i>	<i>2.58</i>	<i>2.55</i>	<i>2.55</i>	<i>2.49</i>	<i>2.60</i>	<i>2.57</i>	<b>2.51</b>	<i>2.53</i>	<i>2.55</i>
Europe .....	<b>13.91</b>	<b>14.02</b>	<b>14.51</b>	<b>14.18</b>	<i>13.79</i>	<i>13.99</i>	<i>14.50</i>	<i>14.20</i>	<i>13.78</i>	<i>13.99</i>	<i>14.49</i>	<i>14.21</i>	<b>14.16</b>	<i>14.12</i>	<i>14.12</i>
Japan .....	<b>4.09</b>	<b>3.41</b>	<b>3.44</b>	<b>3.85</b>	<i>4.08</i>	<i>3.34</i>	<i>3.42</i>	<i>3.76</i>	<i>4.02</i>	<i>3.29</i>	<i>3.37</i>	<i>3.70</i>	<b>3.70</b>	<i>3.65</i>	<i>3.59</i>
Other OECD .....	<b>6.55</b>	<b>6.39</b>	<b>6.48</b>	<b>6.40</b>	<i>6.54</i>	<i>6.41</i>	<i>6.44</i>	<i>6.59</i>	<i>6.62</i>	<i>6.49</i>	<i>6.52</i>	<i>6.67</i>	<b>6.45</b>	<i>6.50</i>	<i>6.58</i>
Non-OECD .....	<b>52.60</b>	<b>53.55</b>	<b>53.57</b>	<b>53.70</b>	<i>53.72</i>	<i>54.74</i>	<i>54.75</i>	<i>55.00</i>	<i>54.88</i>	<i>56.03</i>	<i>56.10</i>	<i>56.15</i>	<b>53.35</b>	<i>54.56</i>	<i>55.80</i>
Eurasia .....	<b>4.83</b>	<b>4.90</b>	<b>5.17</b>	<b>5.12</b>	<i>4.88</i>	<i>4.96</i>	<i>5.34</i>	<i>5.24</i>	<i>4.98</i>	<i>5.04</i>	<i>5.43</i>	<i>5.28</i>	<b>5.01</b>	<i>5.11</i>	<i>5.18</i>
Europe .....	<b>0.76</b>	<b>0.76</b>	<b>0.78</b>	<b>0.78</b>	<i>0.77</i>	<i>0.77</i>	<i>0.79</i>	<i>0.79</i>	<i>0.78</i>	<i>0.78</i>	<i>0.80</i>	<i>0.80</i>	<b>0.77</b>	<i>0.78</i>	<i>0.79</i>
China .....	<b>14.38</b>	<b>14.67</b>	<b>14.39</b>	<b>14.61</b>	<i>14.98</i>	<i>15.17</i>	<i>14.88</i>	<i>15.12</i>	<i>15.47</i>	<i>15.68</i>	<i>15.38</i>	<i>15.62</i>	<b>14.51</b>	<i>15.04</i>	<i>15.54</i>
Other Asia .....	<b>13.95</b>	<b>13.97</b>	<b>13.62</b>	<b>13.99</b>	<i>14.25</i>	<i>14.41</i>	<i>13.99</i>	<i>14.34</i>	<i>14.74</i>	<i>14.91</i>	<i>14.47</i>	<i>14.84</i>	<b>13.88</b>	<i>14.25</i>	<i>14.74</i>
Other Non-OECD .....	<b>18.68</b>	<b>19.24</b>	<b>19.61</b>	<b>19.19</b>	<i>18.85</i>	<i>19.42</i>	<i>19.75</i>	<i>19.50</i>	<i>18.91</i>	<i>19.62</i>	<i>20.02</i>	<i>19.61</i>	<b>19.18</b>	<i>19.38</i>	<i>19.54</i>
Total World Consumption .....	<b>100.00</b>	<b>100.23</b>	<b>101.39</b>	<b>101.46</b>	<i>101.14</i>	<i>101.53</i>	<i>102.69</i>	<i>103.07</i>	<i>102.51</i>	<i>102.90</i>	<i>104.16</i>	<i>104.34</i>	<b>100.77</b>	<i>102.11</i>	<i>103.49</i>
<b>Total Crude Oil and Other Liquids Inventory Net Withdrawals (million barrels per day)</b>															
U.S. (50 States) .....	<b>0.17</b>	<b>-0.62</b>	<b>0.06</b>	<b>0.42</b>	<i>0.21</i>	<i>-0.42</i>	<i>-0.16</i>	<i>0.34</i>	<i>-0.05</i>	<i>-0.35</i>	<i>-0.11</i>	<i>0.46</i>	<b>0.01</b>	<i>-0.01</i>	<i>-0.01</i>
Other OECD .....	<b>-0.24</b>	<b>-0.01</b>	<b>-0.03</b>	<b>-0.18</b>	<i>-0.11</i>	<i>-0.16</i>	<i>-0.02</i>	<i>-0.03</i>	<i>0.14</i>	<i>0.00</i>	<i>0.14</i>	<i>-0.06</i>	<b>-0.12</b>	<i>-0.08</i>	<i>0.05</i>
Other Stock Draws and Balance .....	<b>-0.41</b>	<b>0.34</b>	<b>0.95</b>	<b>-0.37</b>	<i>-0.22</i>	<i>-0.34</i>	<i>-0.04</i>	<i>-0.07</i>	<i>0.27</i>	<i>0.00</i>	<i>0.28</i>	<i>-0.11</i>	<b>0.13</b>	<i>-0.17</i>	<i>0.11</i>
Total Stock Draw .....	<b>-0.48</b>	<b>-0.29</b>	<b>0.98</b>	<b>-0.13</b>	<i>-0.11</i>	<i>-0.93</i>	<i>-0.22</i>	<i>0.24</i>	<i>0.36</i>	<i>-0.35</i>	<i>0.31</i>	<i>0.28</i>	<b>0.02</b>	<i>-0.25</i>	<i>0.15</i>
<b>End-of-period Commercial Crude Oil and Other Liquids Inventories (million barrels)</b>															
U.S. Commercial Inventory .....	<b>1,249</b>	<b>1,310</b>	<b>1,305</b>	<b>1,276</b>	<i>1,258</i>	<i>1,297</i>	<i>1,312</i>	<i>1,283</i>	<i>1,290</i>	<i>1,326</i>	<i>1,337</i>	<i>1,297</i>	<b>1,276</b>	<i>1,283</i>	<i>1,297</i>
OECD Commercial Inventory .....	<b>2,867</b>	<b>2,928</b>	<b>2,925</b>	<b>2,914</b>	<i>2,905</i>	<i>2,959</i>	<i>2,976</i>	<i>2,951</i>	<i>2,946</i>	<i>2,981</i>	<i>2,979</i>	<i>2,945</i>	<b>2,914</b>	<i>2,951</i>	<i>2,945</i>

- = no data available

OECD = Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Latvia, 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 - January 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>26.93</b>	<b>27.94</b>	<i>28.45</i>	<i>28.85</i>	<i>28.92</i>	<i>29.10</i>	<i>29.07</i>	<i>29.41</i>	<i>29.71</i>	<i>30.06</i>	<b>26.98</b>	28.83	29.56
Canada .....	<b>5.44</b>	<b>5.47</b>	<b>5.52</b>	<b>5.57</b>	<i>5.62</i>	<i>5.62</i>	<i>5.67</i>	<i>5.73</i>	<i>5.80</i>	<i>5.81</i>	<i>5.87</i>	<i>5.94</i>	<b>5.50</b>	5.66	5.85
Mexico .....	<b>1.91</b>	<b>1.91</b>	<b>1.92</b>	<b>1.89</b>	<i>1.89</i>	<i>1.89</i>	<i>1.86</i>	<i>1.81</i>	<i>1.82</i>	<i>1.80</i>	<i>1.78</i>	<i>1.77</i>	<b>1.91</b>	1.86	1.79
United States .....	<b>18.91</b>	<b>19.38</b>	<b>19.49</b>	<b>20.48</b>	<i>20.93</i>	<i>21.34</i>	<i>21.39</i>	<i>21.56</i>	<i>21.45</i>	<i>21.80</i>	<i>22.05</i>	<i>22.35</i>	<b>19.57</b>	21.31	21.92
<b>Central and South America</b> .....	<b>4.91</b>	<b>5.68</b>	<b>6.25</b>	<b>5.86</b>	<i>5.27</i>	<i>6.30</i>	<i>6.65</i>	<i>6.22</i>	<i>5.52</i>	<i>6.53</i>	<i>6.88</i>	<i>6.44</i>	<b>5.68</b>	6.11	6.35
Argentina .....	<b>0.66</b>	<b>0.70</b>	<b>0.70</b>	<b>0.67</b>	<i>0.69</i>	<i>0.71</i>	<i>0.71</i>	<i>0.69</i>	<i>0.71</i>	<i>0.72</i>	<i>0.73</i>	<i>0.70</i>	<b>0.68</b>	0.70	0.72
Brazil .....	<b>2.90</b>	<b>3.65</b>	<b>4.22</b>	<b>3.87</b>	<i>3.21</i>	<i>4.18</i>	<i>4.52</i>	<i>4.11</i>	<i>3.39</i>	<i>4.39</i>	<i>4.73</i>	<i>4.33</i>	<b>3.67</b>	4.01	4.22
Colombia .....	<b>0.92</b>	<b>0.92</b>	<b>0.91</b>	<b>0.90</b>	<i>0.91</i>	<i>0.91</i>	<i>0.90</i>	<i>0.90</i>	<i>0.91</i>	<i>0.91</i>	<i>0.89</i>	<i>0.89</i>	<b>0.91</b>	0.91	0.90
Other Central and S. America .....	<b>0.42</b>	<b>0.41</b>	<b>0.42</b>	<b>0.42</b>	<i>0.46</i>	<i>0.49</i>	<i>0.52</i>	<i>0.52</i>	<i>0.52</i>	<i>0.51</i>	<i>0.52</i>	<i>0.52</i>	<b>0.42</b>	0.50	0.52
<b>Europe</b> .....	<b>4.26</b>	<b>3.97</b>	<b>3.94</b>	<b>4.33</b>	<i>4.51</i>	<i>4.49</i>	<i>4.37</i>	<i>4.55</i>	<i>4.55</i>	<i>4.48</i>	<i>4.42</i>	<i>4.60</i>	<b>4.12</b>	4.48	4.51
Norway .....	<b>1.79</b>	<b>1.58</b>	<b>1.66</b>	<b>1.96</b>	<i>2.09</i>	<i>2.08</i>	<i>2.07</i>	<i>2.17</i>	<i>2.18</i>	<i>2.12</i>	<i>2.12</i>	<i>2.19</i>	<b>1.75</b>	2.10	2.15
United Kingdom .....	<b>1.25</b>	<b>1.18</b>	<b>1.09</b>	<b>1.16</b>	<i>1.22</i>	<i>1.22</i>	<i>1.11</i>	<i>1.18</i>	<i>1.17</i>	<i>1.18</i>	<i>1.11</i>	<i>1.22</i>	<b>1.17</b>	1.18	1.17
<b>Eurasia</b> .....	<b>14.87</b>	<b>14.47</b>	<b>14.71</b>	<b>14.65</b>	<i>14.66</i>	<i>14.56</i>	<i>14.57</i>	<i>14.64</i>	<i>14.59</i>	<i>14.45</i>	<i>14.49</i>	<i>14.56</i>	<b>14.67</b>	14.61	14.52
Azerbaijan .....	<b>0.82</b>	<b>0.79</b>	<b>0.78</b>	<b>0.77</b>	<i>0.78</i>	<i>0.77</i>	<i>0.75</i>	<i>0.76</i>	<i>0.75</i>	<i>0.74</i>	<i>0.74</i>	<i>0.74</i>	<b>0.79</b>	0.76	0.74
Kazakhstan .....	<b>2.03</b>	<b>1.85</b>	<b>1.96</b>	<b>2.00</b>	<i>2.03</i>	<i>1.99</i>	<i>2.02</i>	<i>2.06</i>	<i>2.05</i>	<i>1.93</i>	<i>1.98</i>	<i>2.02</i>	<b>1.96</b>	2.02	1.99
Russia .....	<b>11.58</b>	<b>11.41</b>	<b>11.48</b>	<b>11.48</b>	<i>11.48</i>	<i>11.43</i>	<i>11.42</i>	<i>11.45</i>	<i>11.45</i>	<i>11.42</i>	<i>11.43</i>	<i>11.45</i>	<b>11.49</b>	11.45	11.44
Turkmenistan .....	<b>0.29</b>	<b>0.27</b>	<b>0.34</b>	<b>0.25</b>	<i>0.24</i>	<i>0.24</i>	<i>0.24</i>	<i>0.24</i>	<i>0.22</i>	<i>0.22</i>	<i>0.22</i>	<i>0.22</i>	<b>0.29</b>	0.24	0.22
Other Eurasia .....	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	<i>0.14</i>	<i>0.14</i>	<i>0.14</i>	<i>0.14</i>	<i>0.13</i>	<i>0.13</i>	<i>0.13</i>	<i>0.13</i>	<b>0.15</b>	0.14	0.13
<b>Middle East</b> .....	<b>3.11</b>	<b>3.11</b>	<b>3.12</b>	<b>3.13</b>	<i>3.20</i>	<i>3.20</i>	<i>3.20</i>	<i>3.20</i>	<i>3.26</i>	<i>3.25</i>	<i>3.25</i>	<i>3.25</i>	<b>3.12</b>	3.20	3.25
Oman .....	<b>0.98</b>	<b>0.98</b>	<b>0.98</b>	<b>0.99</b>	<i>0.99</i>	<i>0.99</i>	<i>0.99</i>	<i>0.99</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<b>0.98</b>	0.99	1.00
Qatar .....	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<i>2.06</i>	<i>2.06</i>	<i>2.06</i>	<i>2.06</i>	<i>2.10</i>	<i>2.10</i>	<i>2.10</i>	<i>2.10</i>	<b>2.00</b>	2.06	2.10
<b>Asia and Oceania</b> .....	<b>9.51</b>	<b>9.49</b>	<b>9.34</b>	<b>9.37</b>	<i>9.41</i>	<i>9.41</i>	<i>9.40</i>	<i>9.45</i>	<i>9.41</i>	<i>9.40</i>	<i>9.38</i>	<i>9.42</i>	<b>9.43</b>	9.42	9.40
Australia .....	<b>0.40</b>	<b>0.44</b>	<b>0.47</b>	<b>0.48</b>	<i>0.50</i>	<i>0.50</i>	<i>0.51</i>	<i>0.52</i>	<i>0.52</i>	<i>0.51</i>	<i>0.50</i>	<i>0.50</i>	<b>0.45</b>	0.51	0.51
China .....	<b>4.94</b>	<b>4.96</b>	<b>4.93</b>	<b>4.89</b>	<i>4.94</i>	<i>4.97</i>	<i>4.97</i>	<i>5.01</i>	<i>4.97</i>	<i>5.00</i>	<i>5.00</i>	<i>5.04</i>	<b>4.93</b>	4.97	5.00
India .....	<b>1.01</b>	<b>0.99</b>	<b>0.98</b>	<b>0.94</b>	<i>0.96</i>	<i>0.94</i>	<i>0.94</i>	<i>0.95</i>	<i>0.95</i>	<i>0.94</i>	<i>0.93</i>	<i>0.94</i>	<b>0.98</b>	0.95	0.94
Indonesia .....	<b>0.94</b>	<b>0.90</b>	<b>0.88</b>	<b>0.87</b>	<i>0.87</i>	<i>0.86</i>	<i>0.86</i>	<i>0.85</i>	<i>0.85</i>	<i>0.84</i>	<i>0.84</i>	<i>0.84</i>	<b>0.90</b>	0.86	0.84
Malaysia .....	<b>0.75</b>	<b>0.73</b>	<b>0.65</b>	<b>0.72</b>	<i>0.70</i>	<i>0.70</i>	<i>0.69</i>	<i>0.68</i>	<i>0.69</i>	<i>0.68</i>	<i>0.67</i>	<i>0.66</i>	<b>0.71</b>	0.69	0.68
Vietnam .....	<b>0.25</b>	<b>0.25</b>	<b>0.23</b>	<b>0.22</b>	<i>0.22</i>	<i>0.22</i>	<i>0.22</i>	<i>0.22</i>	<i>0.22</i>	<i>0.22</i>	<i>0.21</i>	<i>0.21</i>	<b>0.24</b>	0.22	0.21
<b>Africa</b> .....	<b>1.52</b>	<b>1.54</b>	<b>1.55</b>	<b>1.57</b>	<i>1.48</i>	<i>1.48</i>	<i>1.48</i>	<i>1.48</i>	<i>1.41</i>	<i>1.41</i>	<i>1.41</i>	<i>1.41</i>	<b>1.55</b>	1.48	1.41
Egypt .....	<b>0.66</b>	<b>0.65</b>	<b>0.65</b>	<b>0.65</b>	<i>0.60</i>	<i>0.60</i>	<i>0.60</i>	<i>0.60</i>	<i>0.56</i>	<i>0.56</i>	<i>0.56</i>	<i>0.56</i>	<b>0.65</b>	0.60	0.56
South Sudan .....	<b>0.17</b>	<b>0.18</b>	<b>0.18</b>	<b>0.19</b>	<i>0.19</i>	<b>0.18</b>	0.19	0.19							
<b>Total non-OPEC liquids</b> .....	<b>64.43</b>	<b>65.02</b>	<b>65.84</b>	<b>66.86</b>	<i>66.98</i>	<i>68.29</i>	<i>68.59</i>	<i>68.63</i>	<i>67.81</i>	<i>68.93</i>	<i>69.53</i>	<i>69.74</i>	<b>65.54</b>	68.13	69.01
<b>OPEC non-crude liquids</b> .....	<b>5.58</b>	<b>5.50</b>	<b>5.36</b>	<b>5.26</b>	<i>5.06</i>	<i>5.03</i>	<i>5.04</i>	<i>5.05</i>	<i>5.04</i>	<i>5.04</i>	<i>5.05</i>	<i>5.06</i>	<b>5.42</b>	5.05	5.05
<b>Non-OPEC + OPEC non-crude</b> .....	<b>70.01</b>	<b>70.52</b>	<b>71.20</b>	<b>72.12</b>	<i>72.04</i>	<i>73.32</i>	<i>73.63</i>	<i>73.68</i>	<i>72.84</i>	<i>73.97</i>	<i>74.59</i>	<i>74.80</i>	<b>70.97</b>	73.17	74.06
<b>Unplanned non-OPEC Production Outages</b> .....	<b>0.35</b>	<b>0.26</b>	<b>0.39</b>	<b>0.25</b>	<i>n/a</i>	<b>0.31</b>	<i>n/a</i>	<i>n/a</i>							

- = no data available

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

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

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

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

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

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

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

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

U.S. Energy Information Administration | Short-Term Energy Outlook - January 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	1.72	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	29.21	29.47	29.21	29.14	29.28	29.15	29.31	29.28	29.27	29.26	29.79	29.19	29.28
<b>Other Liquids (a)</b> .....	5.58	5.50	5.36	5.26	5.06	5.03	5.04	5.05	5.04	5.04	5.05	5.06	5.42	5.05	5.05
<b>Total OPEC Supply</b> .....	36.05	35.50	34.57	34.73	34.26	34.17	34.32	34.20	34.34	34.33	34.32	34.31	35.21	34.24	34.33
<b>Crude Oil Production Capacity</b>															
Africa .....	5.66	5.89	5.92	5.87	5.68	5.65	5.65	5.66	5.64	5.64	5.66	5.67	5.84	5.66	5.65
Middle East .....	25.31	24.96	23.96	24.13	24.78	24.85	25.03	25.11	25.15	25.23	25.26	25.26	24.59	24.94	25.22
South America .....	1.58	1.32	1.28	1.19	1.14	1.03	1.00	0.97	0.94	0.91	0.88	0.85	1.34	1.03	0.89
OPEC Total .....	32.55	32.18	31.17	31.18	31.59	31.53	31.68	31.73	31.73	31.78	31.79	31.78	31.76	31.63	31.77
<b>Surplus Crude Oil Production Capacity</b>															
Africa .....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Middle East .....	2.08	2.18	1.95	1.71	2.39	2.39	2.40	2.58	2.42	2.50	2.52	2.52	1.98	2.44	2.49
South America .....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEC Total .....	2.08	2.18	1.95	1.71	2.39	2.39	2.40	2.58	2.42	2.50	2.52	2.52	1.98	2.44	2.49
<b>Unplanned OPEC Production Outages</b> .....	2.52	2.45	3.12	2.82	n/a	2.73	n/a	n/a							

- = 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 - January 2020

	2019				2020				2021				2019	2020	2021
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
<b>North America</b> .....	<b>24.68</b>	<b>24.71</b>	<b>25.20</b>	<b>25.04</b>	<i>24.78</i>	<i>24.86</i>	<i>25.39</i>	<i>25.33</i>	<i>24.96</i>	<i>24.91</i>	<i>25.48</i>	<i>25.42</i>	<b>24.91</b>	<i>25.09</i>	<i>25.20</i>
Canada .....	<b>2.45</b>	<b>2.44</b>	<b>2.60</b>	<b>2.56</b>	<i>2.53</i>	<i>2.47</i>	<i>2.58</i>	<i>2.55</i>	<i>2.55</i>	<i>2.49</i>	<i>2.60</i>	<i>2.57</i>	<b>2.51</b>	<i>2.53</i>	<i>2.55</i>
Mexico .....	<b>1.93</b>	<b>1.93</b>	<b>1.92</b>	<b>1.83</b>	<i>1.88</i>	<i>1.91</i>	<i>1.91</i>	<i>1.93</i>	<i>1.90</i>	<i>1.93</i>	<i>1.93</i>	<i>1.95</i>	<b>1.90</b>	<i>1.91</i>	<i>1.93</i>
United States .....	<b>20.29</b>	<b>20.32</b>	<b>20.68</b>	<b>20.64</b>	<i>20.36</i>	<i>20.47</i>	<i>20.89</i>	<i>20.84</i>	<i>20.51</i>	<i>20.48</i>	<i>20.94</i>	<i>20.89</i>	<b>20.48</b>	<i>20.64</i>	<i>20.71</i>
<b>Central and South America</b> .....	<b>6.60</b>	<b>6.79</b>	<b>6.85</b>	<b>6.82</b>	<i>6.66</i>	<i>6.80</i>	<i>6.93</i>	<i>6.94</i>	<i>6.74</i>	<i>6.88</i>	<i>7.01</i>	<i>7.02</i>	<b>6.77</b>	<i>6.83</i>	<i>6.91</i>
Brazil .....	<b>3.01</b>	<b>3.14</b>	<b>3.18</b>	<b>3.11</b>	<i>3.06</i>	<i>3.13</i>	<i>3.22</i>	<i>3.23</i>	<i>3.12</i>	<i>3.19</i>	<i>3.29</i>	<i>3.29</i>	<b>3.11</b>	<i>3.16</i>	<i>3.22</i>
<b>Europe</b> .....	<b>14.68</b>	<b>14.79</b>	<b>15.29</b>	<b>14.96</b>	<i>14.56</i>	<i>14.76</i>	<i>15.28</i>	<i>14.99</i>	<i>14.56</i>	<i>14.77</i>	<i>15.29</i>	<i>15.01</i>	<b>14.93</b>	<i>14.90</i>	<i>14.91</i>
<b>Eurasia</b> .....	<b>4.83</b>	<b>4.90</b>	<b>5.17</b>	<b>5.12</b>	<i>4.88</i>	<i>4.96</i>	<i>5.34</i>	<i>5.24</i>	<i>4.98</i>	<i>5.04</i>	<i>5.43</i>	<i>5.28</i>	<b>5.01</b>	<i>5.11</i>	<i>5.18</i>
Russia .....	<b>3.67</b>	<b>3.76</b>	<b>3.97</b>	<b>3.91</b>	<i>3.71</i>	<i>3.82</i>	<i>4.14</i>	<i>4.03</i>	<i>3.80</i>	<i>3.90</i>	<i>4.22</i>	<i>4.06</i>	<b>3.83</b>	<i>3.93</i>	<i>3.99</i>
<b>Middle East</b> .....	<b>8.27</b>	<b>8.63</b>	<b>9.02</b>	<b>8.46</b>	<i>8.28</i>	<i>8.71</i>	<i>9.01</i>	<i>8.54</i>	<i>8.20</i>	<i>8.75</i>	<i>9.14</i>	<i>8.49</i>	<b>8.60</b>	<i>8.64</i>	<i>8.65</i>
<b>Asia and Oceania</b> .....	<b>36.43</b>	<b>35.91</b>	<b>35.42</b>	<b>36.43</b>	<i>37.36</i>	<i>36.80</i>	<i>36.19</i>	<i>37.27</i>	<i>38.33</i>	<i>37.80</i>	<i>37.16</i>	<i>38.26</i>	<b>36.04</b>	<i>36.90</i>	<i>37.89</i>
China .....	<b>14.38</b>	<b>14.67</b>	<b>14.39</b>	<b>14.61</b>	<i>14.98</i>	<i>15.17</i>	<i>14.88</i>	<i>15.12</i>	<i>15.47</i>	<i>15.68</i>	<i>15.38</i>	<i>15.62</i>	<b>14.51</b>	<i>15.04</i>	<i>15.54</i>
Japan .....	<b>4.09</b>	<b>3.41</b>	<b>3.44</b>	<b>3.85</b>	<i>4.08</i>	<i>3.34</i>	<i>3.42</i>	<i>3.76</i>	<i>4.02</i>	<i>3.29</i>	<i>3.37</i>	<i>3.70</i>	<b>3.70</b>	<i>3.65</i>	<i>3.59</i>
India .....	<b>4.82</b>	<b>4.75</b>	<b>4.48</b>	<b>4.79</b>	<i>4.95</i>	<i>5.01</i>	<i>4.68</i>	<i>4.97</i>	<i>5.17</i>	<i>5.23</i>	<i>4.89</i>	<i>5.20</i>	<b>4.71</b>	<i>4.90</i>	<i>5.12</i>
<b>Africa</b> .....	<b>4.51</b>	<b>4.51</b>	<b>4.43</b>	<b>4.63</b>	<i>4.63</i>	<i>4.63</i>	<i>4.54</i>	<i>4.75</i>	<i>4.74</i>	<i>4.74</i>	<i>4.65</i>	<i>4.86</i>	<b>4.52</b>	<i>4.64</i>	<i>4.75</i>
<b>Total OECD Liquid Fuels Consumption</b> .....	<b>47.40</b>	<b>46.69</b>	<b>47.82</b>	<b>47.76</b>	<i>47.42</i>	<i>46.79</i>	<i>47.94</i>	<i>48.07</i>	<i>47.63</i>	<i>46.87</i>	<i>48.06</i>	<i>48.19</i>	<b>47.42</b>	<i>47.56</i>	<i>47.69</i>
<b>Total non-OECD Liquid Fuels Consumption</b> .....	<b>52.60</b>	<b>53.55</b>	<b>53.57</b>	<b>53.70</b>	<i>53.72</i>	<i>54.74</i>	<i>54.75</i>	<i>55.00</i>	<i>54.88</i>	<i>56.03</i>	<i>56.10</i>	<i>56.15</i>	<b>53.35</b>	<i>54.56</i>	<i>55.80</i>
<b>Total World Liquid Fuels Consumption</b> .....	<b>100.00</b>	<b>100.23</b>	<b>101.39</b>	<b>101.46</b>	<i>101.14</i>	<i>101.53</i>	<i>102.69</i>	<i>103.07</i>	<i>102.51</i>	<i>102.90</i>	<i>104.16</i>	<i>104.34</i>	<b>100.77</b>	<i>102.11</i>	<i>103.49</i>
<b>Oil-weighted Real Gross Domestic Product (a)</b>															
World Index, 2015 Q1 = 100 .....	<b>111.6</b>	<b>112.1</b>	<b>112.7</b>	<b>113.2</b>	<i>114.1</i>	<i>114.7</i>	<i>115.4</i>	<i>116.2</i>	<i>117.1</i>	<i>118.1</i>	<i>119.0</i>	<i>119.9</i>	<b>112.4</b>	<i>115.1</i>	<i>118.5</i>
Percent change from prior year .....	<b>2.1</b>	<b>1.9</b>	<b>1.9</b>	<b>1.9</b>	<i>2.2</i>	<i>2.4</i>	<i>2.5</i>	<i>2.6</i>	<i>2.7</i>	<i>2.9</i>	<i>3.1</i>	<i>3.1</i>	<b>1.9</b>	<i>2.4</i>	<i>3.0</i>
OECD Index, 2015 Q1 = 100 .....	<b>108.9</b>	<b>109.3</b>	<b>109.8</b>	<b>110.1</b>	<i>110.5</i>	<i>110.9</i>	<i>111.3</i>	<i>111.8</i>	<i>112.2</i>	<i>112.7</i>	<i>113.2</i>	<i>113.7</i>	<b>109.5</b>	<i>111.1</i>	<i>113.0</i>
Percent change from prior year .....	<b>1.9</b>	<b>1.7</b>	<b>1.7</b>	<b>1.7</b>	<i>1.5</i>	<i>1.4</i>	<i>1.4</i>	<i>1.5</i>	<i>1.6</i>	<i>1.6</i>	<i>1.7</i>	<i>1.7</i>	<b>1.7</b>	<i>1.4</i>	<i>1.7</i>
Non-OECD Index, 2015 Q1 = 100 .....	<b>114.2</b>	<b>114.7</b>	<b>115.4</b>	<b>116.3</b>	<i>117.6</i>	<i>118.5</i>	<i>119.4</i>	<i>120.6</i>	<i>121.9</i>	<i>123.4</i>	<i>124.7</i>	<i>126.0</i>	<b>115.2</b>	<i>119.0</i>	<i>124.0</i>
Percent change from prior year .....	<b>2.3</b>	<b>2.1</b>	<b>2.0</b>	<b>2.1</b>	<i>2.9</i>	<i>3.3</i>	<i>3.5</i>	<i>3.7</i>	<i>3.7</i>	<i>4.1</i>	<i>4.4</i>	<i>4.4</i>	<b>2.1</b>	<i>3.4</i>	<i>4.2</i>
<b>Real U.S. Dollar Exchange Rate (a)</b>															
Index, 2015 Q1 = 100 .....	<b>105.13</b>	<b>105.73</b>	<b>106.19</b>	<b>106.65</b>	<i>106.10</i>	<i>105.94</i>	<i>105.82</i>	<i>105.43</i>	<i>105.22</i>	<i>104.83</i>	<i>104.33</i>	<i>103.61</i>	<b>105.93</b>	<i>105.82</i>	<i>104.50</i>
Percent change from prior year .....	<b>4.6</b>	<b>3.1</b>	<b>0.8</b>	<b>0.6</b>	<i>0.9</i>	<i>0.2</i>	<i>-0.4</i>	<i>-1.2</i>	<i>-0.8</i>	<i>-1.1</i>	<i>-1.4</i>	<i>-1.7</i>	<b>2.2</b>	<i>-0.1</i>	<i>-1.2</i>

- = no data available

OECD = Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Latvia, 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 - January 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>															
<b>Crude Oil Supply</b>															
Domestic Production (a) .....	<b>11.81</b>	<b>12.10</b>	<b>12.23</b>	<b>12.83</b>	13.20	13.31	13.29	13.41	13.52	13.64	13.73	13.95	<b>12.24</b>	13.30	13.71
Alaska .....	<b>0.49</b>	<b>0.47</b>	<b>0.43</b>	<b>0.49</b>	0.51	0.49	0.45	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>1.96</b>	2.04	2.02	1.93	1.93	2.01	1.99	1.92	1.94	<b>1.89</b>	1.98	1.96
Lower 48 States (excl GOM) .....	<b>9.47</b>	<b>9.70</b>	<b>9.99</b>	<b>10.38</b>	10.65	10.80	10.92	10.99	10.99	11.16	11.35	11.52	<b>9.89</b>	10.84	11.26
Crude Oil Net Imports (c) .....	<b>4.25</b>	<b>4.14</b>	<b>3.95</b>	<b>2.94</b>	3.80	4.21	3.97	3.74	2.93	3.08	2.99	2.65	<b>3.82</b>	3.93	2.91
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>	-0.40	0.01	0.14	-0.07	-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>0.49</b>	0.19	0.19	0.21	0.15	0.22	0.22	0.23	0.16	<b>0.43</b>	0.19	0.21
Total Crude Oil Input to Refineries .....	<b>16.20</b>	<b>16.76</b>	<b>16.97</b>	<b>16.31</b>	16.79	17.72	17.62	17.26	16.38	17.10	17.18	16.81	<b>16.56</b>	17.35	16.87
<b>Other Supply</b>															
Refinery Processing Gain .....	<b>1.06</b>	<b>1.07</b>	<b>1.07</b>	<b>1.14</b>	1.18	1.23	1.23	1.24	1.18	1.21	1.24	1.25	<b>1.09</b>	1.22	1.22
Natural Gas Plant Liquids Production .....	<b>4.66</b>	<b>4.81</b>	<b>4.80</b>	<b>5.09</b>	5.17	5.36	5.45	5.47	5.34	5.48	5.64	5.70	<b>4.84</b>	5.36	5.54
Renewables and Oxygenate Production (e) .....	<b>1.18</b>	<b>1.23</b>	<b>1.20</b>	<b>1.21</b>	1.17	1.22	1.19	1.21	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>	1.02	1.05	1.02	1.04	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>0.21</b>	0.22	0.23	0.23	0.23	0.22	0.22	0.22	0.22	<b>0.19</b>	0.23	0.22
Product Net Imports (c) .....	<b>-3.35</b>	<b>-3.10</b>	<b>-3.20</b>	<b>-3.69</b>	-4.78	-4.85	-4.53	-4.95	-4.04	-4.26	-4.21	-4.72	<b>-3.34</b>	-4.78	-4.31
Hydrocarbon Gas Liquids .....	<b>-1.33</b>	<b>-1.65</b>	<b>-1.66</b>	<b>-1.88</b>	-2.01	-2.17	-2.14	-2.10	-1.96	-2.19	-2.21	-2.18	<b>-1.63</b>	-2.10	-2.14
Unfinished Oils .....	<b>0.21</b>	<b>0.47</b>	<b>0.47</b>	<b>0.38</b>	0.39	0.55	0.51	0.39	0.35	0.46	0.45	0.31	<b>0.38</b>	0.46	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>0.34</b>	0.24	0.63	0.49	0.23	0.54	0.67	0.50	0.19	<b>0.57</b>	0.40	0.47
Finished Motor Gasoline .....	<b>-0.82</b>	<b>-0.63</b>	<b>-0.62</b>	<b>-0.79</b>	-1.03	-1.03	-0.88	-1.00	-0.81	-0.79	-0.67	-0.82	<b>-0.72</b>	-0.99	-0.77
Jet Fuel .....	<b>-0.08</b>	<b>-0.01</b>	<b>-0.05</b>	<b>-0.07</b>	-0.07	-0.08	-0.09	-0.10	-0.02	0.01	0.04	0.00	<b>-0.05</b>	-0.08	0.01
Distillate Fuel Oil .....	<b>-0.91</b>	<b>-1.29</b>	<b>-1.30</b>	<b>-1.01</b>	-1.24	-1.63	-1.47	-1.32	-1.08	-1.37	-1.32	-1.18	<b>-1.13</b>	-1.41	-1.24
Residual Fuel Oil .....	<b>-0.08</b>	<b>-0.15</b>	<b>-0.08</b>	<b>0.02</b>	-0.04	-0.13	-0.07	-0.04	-0.04	-0.13	-0.08	-0.02	<b>-0.07</b>	-0.07	-0.07
Other Oils (g) .....	<b>-0.64</b>	<b>-0.50</b>	<b>-0.52</b>	<b>-0.60</b>	-0.92	-0.87	-0.80	-0.91	-0.92	-0.84	-0.84	-0.94	<b>-0.56</b>	-0.87	-0.88
Product Inventory Net Withdrawals .....	<b>0.35</b>	<b>-0.62</b>	<b>-0.35</b>	<b>0.36</b>	0.61	-0.44	-0.30	0.38	0.24	-0.52	-0.34	0.41	<b>-0.06</b>	0.06	-0.05
Total Supply .....	<b>20.30</b>	<b>20.32</b>	<b>20.68</b>	<b>20.64</b>	20.36	20.47	20.89	20.84	20.51	20.48	20.94	20.89	<b>20.49</b>	20.64	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>3.41</b>	3.55	3.04	3.15	3.56	3.69	3.13	3.28	3.69	<b>3.16</b>	3.33	3.45
Unfinished Oils .....	<b>-0.03</b>	<b>0.09</b>	<b>0.04</b>	<b>0.07</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.04</b>	0.00	0.00
Motor Gasoline .....	<b>8.96</b>	<b>9.48</b>	<b>9.49</b>	<b>9.20</b>	8.94	9.46	9.48	9.26	8.93	9.41	9.43	9.16	<b>9.28</b>	9.29	9.23
Fuel Ethanol blended into Motor Gasoline .....	<b>0.91</b>	<b>0.97</b>	<b>0.95</b>	<b>0.98</b>	0.90	0.97	0.96	0.95	0.91	0.97	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>1.76</b>	1.70	1.79	1.83	1.78	1.72	1.79	1.83	1.78	<b>1.75</b>	1.77	1.78
Distillate Fuel Oil .....	<b>4.28</b>	<b>4.01</b>	<b>3.94</b>	<b>4.03</b>	4.22	4.04	4.05	4.12	4.24	4.02	4.04	4.14	<b>4.06</b>	4.11	4.11
Residual Fuel Oil .....	<b>0.27</b>	<b>0.23</b>	<b>0.32</b>	<b>0.33</b>	0.27	0.23	0.30	0.27	0.28	0.22	0.29	0.27	<b>0.29</b>	0.26	0.27
Other Oils (g) .....	<b>1.68</b>	<b>1.95</b>	<b>2.14</b>	<b>1.83</b>	1.67	1.92	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>20.64</b>	20.36	20.47	20.89	20.84	20.51	20.48	20.94	20.89	<b>20.48</b>	20.64	20.71
<b>Total Petroleum and Other Liquids Net Imports .....</b>	<b>0.89</b>	<b>1.04</b>	<b>0.75</b>	<b>-0.75</b>	-0.97	-0.64	-0.55	-1.21	-1.11	-1.18	-1.22	-2.08	<b>0.48</b>	-0.84	-1.40
<b>End-of-period Inventories (million barrels)</b>															
<b>Commercial Inventory</b>															
Crude Oil (excluding SPR) .....	<b>459.3</b>	<b>464.0</b>	<b>426.5</b>	<b>431.1</b>	467.7	467.1	454.4	461.2	490.1	478.2	457.9	455.9	<b>431.1</b>	461.2	455.9
Hydrocarbon Gas Liquids .....	<b>163.0</b>	<b>228.9</b>	<b>267.1</b>	<b>214.9</b>	169.2	216.5	253.3	207.0	169.9	219.0	256.1	211.7	<b>214.9</b>	207.0	211.7
Unfinished Oils .....	<b>92.0</b>	<b>95.9</b>	<b>92.2</b>	<b>89.2</b>	94.2	92.7	90.0	83.4	93.0	91.4	91.0	84.9	<b>89.2</b>	83.4	84.9
Other HC/Oxygenates .....	<b>32.8</b>	<b>30.7</b>	<b>29.7</b>	<b>28.7</b>	30.3	29.3	28.6	29.2	31.0	30.0	29.2	29.8	<b>28.7</b>	29.2	29.8
Total Motor Gasoline .....	<b>236.1</b>	<b>229.7</b>	<b>231.9</b>	<b>251.6</b>	237.0	229.3	224.3	237.5	245.6	241.4	236.9	246.9	<b>251.6</b>	237.5	246.9
Finished Motor Gasoline .....	<b>21.7</b>	<b>21.0</b>	<b>23.0</b>	<b>26.5</b>	24.1	22.6	23.7	24.0	23.6	22.0	23.0	23.4	<b>26.5</b>	24.0	23.4
Motor Gasoline Blend Comp. ....	<b>214.4</b>	<b>208.8</b>	<b>208.9</b>	<b>225.1</b>	212.9	206.7	200.6	213.6	222.0	219.4	213.9	223.5	<b>225.1</b>	213.6	223.5
Jet Fuel .....	<b>41.6</b>	<b>40.6</b>	<b>44.4</b>	<b>40.0</b>	40.4	42.1	43.7	41.9	41.1	41.8	43.9	40.8	<b>40.0</b>	41.9	40.8
Distillate Fuel Oil .....	<b>132.4</b>	<b>130.8</b>	<b>131.7</b>	<b>139.1</b>	129.3	131.3	136.0	140.2	128.9	133.2	139.2	140.7	<b>139.1</b>	140.2	140.7
Residual Fuel Oil .....	<b>28.7</b>	<b>30.3</b>	<b>29.9</b>	<b>28.3</b>	30.7	31.0	29.3	28.8	31.1	32.3	30.1	31.8	<b>28.3</b>	28.8	31.8
Other Oils (g) .....	<b>63.2</b>	<b>59.1</b>	<b>51.2</b>	<b>53.3</b>	58.9	57.6	51.8	54.0	59.6	58.3	52.5	54.7	<b>53.3</b>	54.0	54.7
Total Commercial Inventory .....	<b>1,249</b>	<b>1,310</b>	<b>1,305</b>	<b>1,276</b>	1,258	1,297	1,312	1,283	1,290	1,326	1,337	1,297	<b>1,276</b>	1,283	1,297
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 - January 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>HGL Production</b>															
<b>Natural Gas Processing Plants</b>															
Ethane .....	1.87	1.87	1.71	1.95	2.05	2.15	2.15	2.25	2.27	2.28	2.35	2.45	1.85	2.15	2.34
Propane .....	1.50	1.56	1.61	1.67	1.69	1.71	1.74	1.72	1.65	1.70	1.74	1.73	1.58	1.71	1.70
Butanes .....	0.79	0.84	0.87	0.90	0.88	0.91	0.93	0.91	0.87	0.91	0.93	0.92	0.85	0.91	0.90
Natural Gasoline (Pentanes Plus) .....	0.49	0.55	0.60	0.57	0.56	0.59	0.62	0.60	0.56	0.60	0.63	0.60	0.55	0.59	0.60
<b>Refinery and Blender Net Production</b>															
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	0.29	0.28	0.31	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	0.28	0.29	0.28	0.29	0.28	0.29	0.28	0.29	0.28
Butanes/Butylenes .....	-0.09	0.26	0.18	-0.21	-0.08	0.26	0.19	-0.20	-0.08	0.26	0.19	-0.20	0.04	0.04	0.04
<b>Renewable Fuels and Oxygenate Plant Net Production</b>															
Natural Gasoline (Pentanes Plus) .....	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02
<b>HGL Net Imports</b>															
Ethane .....	-0.27	-0.27	-0.28	-0.33	-0.30	-0.34	-0.33	-0.35	-0.34	-0.37	-0.37	-0.40	-0.29	-0.33	-0.37
Propane/Propylene .....	-0.75	-0.99	-0.97	-1.05	-1.08	-1.22	-1.17	-1.14	-1.01	-1.20	-1.19	-1.15	-0.94	-1.15	-1.13
Butanes/Butylenes .....	-0.14	-0.26	-0.26	-0.31	-0.33	-0.32	-0.33	-0.33	-0.32	-0.33	-0.34	-0.35	-0.24	-0.33	-0.33
Natural Gasoline (Pentanes Plus) .....	-0.17	-0.14	-0.15	-0.19	-0.30	-0.28	-0.31	-0.28	-0.30	-0.29	-0.31	-0.29	-0.16	-0.29	-0.30
<b>HGL Refinery and Blender Net Inputs</b>															
Butanes/Butylenes .....	0.46	0.29	0.33	0.53	0.42	0.31	0.34	0.51	0.41	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	0.16	0.17
<b>HGL Consumption</b>															
Ethane/Ethylene .....	1.61	1.49	1.47	1.62	1.78	1.79	1.84	1.91	1.92	1.88	2.00	2.05	1.55	1.83	1.96
Propane .....	1.20	0.58	0.65	1.06	1.20	0.57	0.65	1.01	1.19	0.58	0.62	1.00	0.87	0.86	0.85
Propylene (refinery-grade) .....	0.28	0.31	0.29	0.30	0.31	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	0.25	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	0.18	0.09	0.10	0.10	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	59.25	54.93	57.19	55.49	56.33	54.40	58.35	56.69	58.35	55.04	55.99	56.96
Propane .....	47.77	71.72	95.60	80.14	49.92	67.24	85.66	71.25	45.75	64.50	83.53	70.24	80.14	71.25	70.24
Propylene (refinery-grade) .....	7.82	6.57	6.95	7.34	7.20	6.59	6.41	7.27	7.91	7.52	6.91	7.86	7.34	7.27	7.86
Butanes/Butylenes .....	39.30	70.72	85.88	48.37	37.07	62.97	81.67	49.65	38.36	64.25	82.95	50.93	48.37	49.65	50.93
Natural Gasoline (Pentanes Plus) .....	18.12	19.71	21.28	20.96	20.01	22.43	23.97	23.89	22.42	24.41	25.61	25.15	20.96	23.89	25.15
<b>Refinery and Blender Net Inputs</b>															
Crude Oil .....	16.20	16.76	16.97	16.31	16.79	17.72	17.62	17.26	16.38	17.10	17.18	16.81	16.56	17.35	16.87
Hydrocarbon Gas Liquids .....	0.59	0.46	0.51	0.72	0.58	0.47	0.51	0.68	0.57	0.47	0.50	0.68	0.57	0.56	0.56
Other Hydrocarbons/Oxygenates .....	1.16	1.21	1.22	1.22	1.22	1.28	1.24	1.25	1.25	1.31	1.26	1.27	1.20	1.25	1.27
Unfinished Oils .....	0.18	0.34	0.46	0.34	0.34	0.57	0.54	0.46	0.24	0.48	0.45	0.38	0.33	0.48	0.39
Motor Gasoline Blend Components .....	0.63	0.94	0.77	0.30	0.50	0.84	0.66	0.26	0.57	0.84	0.66	0.26	0.66	0.57	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	18.90	19.43	20.87	20.58	19.91	19.02	20.20	20.06	19.39	19.33	20.20	19.67
<b>Refinery Processing Gain</b> .....	1.06	1.07	1.07	1.14	1.18	1.23	1.23	1.24	1.18	1.21	1.24	1.25	1.09	1.22	1.22
<b>Refinery and Blender Net Production</b>															
Hydrocarbon Gas Liquids .....	0.48	0.84	0.76	0.37	0.49	0.87	0.77	0.39	0.49	0.86	0.77	0.39	0.61	0.63	0.63
Finished Motor Gasoline .....	9.84	10.15	10.20	10.11	10.04	10.59	10.45	10.40	9.83	10.29	10.17	10.12	10.08	10.37	10.10
Jet Fuel .....	1.73	1.78	1.88	1.79	1.77	1.89	1.93	1.85	1.73	1.79	1.81	1.75	1.80	1.86	1.77
Distillate Fuel .....	5.05	5.21	5.18	5.04	5.32	5.62	5.50	5.41	5.16	5.37	5.35	5.26	5.12	5.46	5.29
Residual Fuel .....	0.36	0.39	0.39	0.29	0.34	0.36	0.35	0.30	0.35	0.37	0.35	0.30	0.36	0.34	0.34
Other Oils (a) .....	2.37	2.40	2.58	2.45	2.65	2.77	2.82	2.79	2.64	2.73	2.85	2.81	2.45	2.76	2.76
Total Refinery and Blender Net Production .....	19.82	20.78	21.00	20.05	20.61	22.10	21.81	21.15	20.19	21.41	21.30	20.64	20.41	21.42	20.89
<b>Refinery Distillation Inputs</b> .....	16.48	17.14	17.44	16.80	16.97	17.80	17.79	17.42	16.60	17.26	17.39	17.01	16.96	17.50	17.07
<b>Refinery Operable Distillation Capacity</b> .....	18.78	18.80	18.81	18.82	18.82	18.82	18.82	18.85	18.85	18.85	18.85	18.87	18.80	18.83	18.85
<b>Refinery Distillation Utilization Factor</b> .....	0.88	0.91	0.93	0.89	0.90	0.95	0.95	0.92	0.88	0.92	0.92	0.90	0.90	0.93	0.91

- = 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 - January 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	179	180	193	194	180	176	196	195	183	185	187	188
<b>Gasoline Regular Grade Retail Prices Including Taxes</b>															
PADD 1 .....	233	268	256	247	248	257	263	249	243	262	266	254	251	254	256
PADD 2 .....	223	269	257	244	241	258	264	245	235	266	263	247	249	252	253
PADD 3 .....	206	246	234	224	229	243	244	229	226	246	245	231	228	236	237
PADD 4 .....	226	285	270	276	252	261	268	253	244	267	271	254	265	259	259
PADD 5 .....	297	356	331	350	313	329	330	324	304	330	331	318	334	324	321
U.S. Average .....	236	279	265	259	254	268	272	258	248	273	273	259	260	263	263
<b>Gasoline All Grades Including Taxes</b>	<b>245</b>	<b>288</b>	<b>274</b>	<b>269</b>	<b>265</b>	<b>279</b>	<b>284</b>	<b>270</b>	<b>261</b>	<b>285</b>	<b>286</b>	<b>273</b>	<b>269</b>	<b>275</b>	<b>276</b>
<b>End-of-period Inventories (million barrels)</b>															
<b>Total Gasoline Inventories</b>															
PADD 1 .....	62.4	59.7	64.9	64.6	60.0	59.9	57.9	62.0	66.5	66.5	61.7	67.3	64.6	62.0	67.3
PADD 2 .....	53.9	49.6	51.0	55.1	54.1	50.2	49.3	51.4	54.0	52.5	52.4	50.3	55.1	51.4	50.3
PADD 3 .....	82.5	82.4	81.5	91.0	84.8	83.0	81.1	85.1	87.3	86.0	86.2	89.6	91.0	85.1	89.6
PADD 4 .....	6.9	7.5	7.7	8.3	7.5	7.3	6.8	7.2	7.4	7.6	7.4	7.8	8.3	7.2	7.8
PADD 5 .....	30.4	30.6	26.8	32.6	30.6	29.0	29.2	31.8	30.4	28.8	29.2	31.9	32.6	31.8	31.9
U.S. Total .....	236.1	229.7	231.9	251.6	237.0	229.3	224.3	237.5	245.6	241.4	236.9	246.9	251.6	237.5	246.9
<b>Finished Gasoline Inventories</b>															
U.S. Total .....	21.7	21.0	23.0	26.5	24.1	22.6	23.7	24.0	23.6	22.0	23.0	23.4	26.5	24.0	23.4
<b>Gasoline Blending Components Inventories</b>															
U.S. Total .....	214.4	208.8	208.9	225.1	212.9	206.7	200.6	213.6	222.0	219.4	213.9	223.5	225.1	213.6	223.5

- = 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 - January 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 .....	<b>96.08</b>	<b>97.44</b>	<b>99.85</b>	<b>102.52</b>	<i>102.31</i>	<i>101.98</i>	<i>102.17</i>	<i>101.77</i>	<i>100.74</i>	<i>101.40</i>	<i>102.04</i>	<i>102.20</i>	<b>98.99</b>	<i>102.06</i>	<i>101.60</i>
Alaska .....	<b>0.96</b>	<b>0.93</b>	<b>0.79</b>	<b>0.93</b>	<i>1.00</i>	<i>0.85</i>	<i>0.78</i>	<i>0.94</i>	<i>1.01</i>	<i>0.87</i>	<i>0.80</i>	<i>0.95</i>	<b>0.90</b>	<i>0.89</i>	<i>0.91</i>
Federal GOM (a) .....	<b>2.80</b>	<b>2.75</b>	<b>2.51</b>	<b>2.80</b>	<i>2.85</i>	<i>2.75</i>	<i>2.58</i>	<i>2.52</i>	<i>2.56</i>	<i>2.50</i>	<i>2.36</i>	<i>2.32</i>	<b>2.71</b>	<i>2.68</i>	<i>2.43</i>
Lower 48 States (excl GOM) .....	<b>92.32</b>	<b>93.76</b>	<b>96.55</b>	<b>98.79</b>	<i>98.46</i>	<i>98.38</i>	<i>98.81</i>	<i>98.30</i>	<i>97.17</i>	<i>98.03</i>	<i>98.88</i>	<i>98.92</i>	<b>95.38</b>	<i>98.49</i>	<i>98.26</i>
Total Dry Gas Production .....	<b>89.32</b>	<b>90.50</b>	<b>92.92</b>	<b>95.29</b>	<i>95.05</i>	<i>94.69</i>	<i>94.82</i>	<i>94.39</i>	<i>93.39</i>	<i>93.95</i>	<i>94.49</i>	<i>94.59</i>	<b>92.03</b>	<i>94.74</i>	<i>94.11</i>
LNG Gross Imports .....	<b>0.28</b>	<b>0.03</b>	<b>0.06</b>	<b>0.25</b>	<i>0.32</i>	<i>0.10</i>	<i>0.18</i>	<i>0.20</i>	<i>0.32</i>	<i>0.18</i>	<i>0.18</i>	<i>0.20</i>	<b>0.16</b>	<i>0.20</i>	<i>0.22</i>
LNG Gross Exports .....	<b>4.01</b>	<b>4.55</b>	<b>4.96</b>	<b>6.38</b>	<i>6.25</i>	<i>5.76</i>	<i>6.58</i>	<i>7.35</i>	<i>8.23</i>	<i>6.88</i>	<i>7.56</i>	<i>8.20</i>	<b>4.98</b>	<i>6.49</i>	<i>7.72</i>
Pipeline Gross Imports .....	<b>8.35</b>	<b>6.73</b>	<b>7.10</b>	<b>7.06</b>	<i>7.93</i>	<i>6.53</i>	<i>6.47</i>	<i>7.33</i>	<i>7.83</i>	<i>6.46</i>	<i>6.66</i>	<i>7.54</i>	<b>7.30</b>	<i>7.06</i>	<i>7.12</i>
Pipeline Gross Exports .....	<b>7.86</b>	<b>7.18</b>	<b>7.79</b>	<b>8.40</b>	<i>8.55</i>	<i>7.91</i>	<i>8.11</i>	<i>7.83</i>	<i>8.40</i>	<i>7.72</i>	<i>8.62</i>	<i>9.24</i>	<b>7.81</b>	<i>8.10</i>	<i>8.50</i>
Supplemental Gaseous Fuels .....	<b>0.20</b>	<b>0.16</b>	<b>0.15</b>	<b>0.17</b>	<i>0.18</i>	<b>0.17</b>	<i>0.18</i>	<i>0.18</i>							
Net Inventory Withdrawals .....	<b>16.93</b>	<b>-14.18</b>	<b>-10.40</b>	<b>2.24</b>	<i>15.40</i>	<i>-12.21</i>	<i>-9.14</i>	<i>3.40</i>	<i>17.49</i>	<i>-10.83</i>	<i>-8.74</i>	<i>3.36</i>	<b>-1.42</b>	<i>-0.65</i>	<i>0.26</i>
Total Supply .....	<b>103.21</b>	<b>71.52</b>	<b>77.08</b>	<b>90.22</b>	<i>104.07</i>	<i>75.62</i>	<i>77.83</i>	<i>90.31</i>	<i>102.57</i>	<i>75.34</i>	<i>76.60</i>	<i>88.44</i>	<b>85.45</b>	<i>86.94</i>	<i>85.67</i>
Balancing Item (b) .....	<b>0.12</b>	<b>-0.78</b>	<b>-0.33</b>	<b>0.33</b>	<i>0.97</i>	<i>-0.92</i>	<i>-0.63</i>	<i>-0.27</i>	<i>-0.96</i>	<i>-0.50</i>	<i>-0.03</i>	<i>1.56</i>	<b>-0.17</b>	<i>-0.21</i>	<i>0.02</i>
Total Primary Supply .....	<b>103.32</b>	<b>70.74</b>	<b>76.75</b>	<b>90.55</b>	<i>105.05</i>	<i>74.70</i>	<i>77.19</i>	<i>90.05</i>	<i>101.61</i>	<i>74.84</i>	<i>76.57</i>	<i>89.99</i>	<b>85.28</b>	<i>86.73</i>	<i>85.70</i>
<b>Consumption (billion cubic feet per day)</b>															
Residential .....	<b>27.15</b>	<b>7.34</b>	<b>3.53</b>	<b>17.55</b>	<i>26.88</i>	<i>7.68</i>	<i>3.54</i>	<i>17.04</i>	<i>26.63</i>	<i>7.57</i>	<i>3.53</i>	<i>17.16</i>	<b>13.84</b>	<i>13.77</i>	<i>13.67</i>
Commercial .....	<b>16.19</b>	<b>6.36</b>	<b>4.68</b>	<b>11.34</b>	<i>15.63</i>	<i>6.66</i>	<i>4.91</i>	<i>10.66</i>	<i>15.33</i>	<i>6.65</i>	<i>4.90</i>	<i>10.65</i>	<b>9.62</b>	<i>9.46</i>	<i>9.36</i>
Industrial .....	<b>25.12</b>	<b>21.74</b>	<b>21.31</b>	<b>24.42</b>	<i>26.17</i>	<i>23.03</i>	<i>22.28</i>	<i>25.31</i>	<i>26.06</i>	<i>23.00</i>	<i>22.29</i>	<i>25.52</i>	<b>23.14</b>	<i>24.19</i>	<i>24.21</i>
Electric Power (c) .....	<b>26.84</b>	<b>28.14</b>	<b>39.75</b>	<b>29.29</b>	<i>28.18</i>	<i>29.78</i>	<i>38.76</i>	<i>28.99</i>	<i>25.25</i>	<i>29.94</i>	<i>38.00</i>	<i>28.48</i>	<b>31.03</b>	<i>31.44</i>	<i>30.45</i>
Lease and Plant Fuel .....	<b>4.93</b>	<b>5.00</b>	<b>5.12</b>	<b>5.26</b>	<i>5.25</i>	<i>5.23</i>	<i>5.24</i>	<i>5.22</i>	<i>5.17</i>	<i>5.20</i>	<i>5.24</i>	<i>5.24</i>	<b>5.08</b>	<i>5.24</i>	<i>5.21</i>
Pipeline and Distribution Use .....	<b>2.96</b>	<b>2.03</b>	<b>2.20</b>	<b>2.54</b>	<i>2.79</i>	<i>2.15</i>	<i>2.32</i>	<i>2.67</i>	<i>3.02</i>	<i>2.32</i>	<i>2.45</i>	<i>2.80</i>	<b>2.43</b>	<i>2.48</i>	<i>2.64</i>
Vehicle Use .....	<b>0.13</b>	<b>0.13</b>	<b>0.14</b>	<b>0.15</b>	<i>0.15</i>	<i>0.15</i>	<i>0.15</i>	<i>0.15</i>	<i>0.16</i>	<i>0.16</i>	<i>0.16</i>	<i>0.16</i>	<b>0.14</b>	<i>0.15</i>	<i>0.16</i>
Total Consumption .....	<b>103.32</b>	<b>70.74</b>	<b>76.75</b>	<b>90.55</b>	<i>105.05</i>	<i>74.70</i>	<i>77.19</i>	<i>90.05</i>	<i>101.61</i>	<i>74.84</i>	<i>76.57</i>	<i>89.99</i>	<b>85.28</b>	<i>86.73</i>	<i>85.70</i>
<b>End-of-period Inventories (billion cubic feet)</b>															
Working Gas Inventory .....	<b>1,185</b>	<b>2,461</b>	<b>3,415</b>	<b>3,208</b>	<i>1,807</i>	<i>2,918</i>	<i>3,758</i>	<i>3,445</i>	<i>1,871</i>	<i>2,856</i>	<i>3,660</i>	<i>3,351</i>	<b>3,208</b>	<i>3,445</i>	<i>3,351</i>
East Region (d) .....	<b>216</b>	<b>537</b>	<b>845</b>	<b>765</b>	<i>352</i>	<i>673</i>	<i>971</i>	<i>840</i>	<i>322</i>	<i>641</i>	<i>924</i>	<i>781</i>	<b>765</b>	<i>840</i>	<i>781</i>
Midwest Region (d) .....	<b>242</b>	<b>579</b>	<b>990</b>	<b>896</b>	<i>390</i>	<i>719</i>	<i>1,064</i>	<i>956</i>	<i>338</i>	<i>606</i>	<i>970</i>	<i>870</i>	<b>896</b>	<i>956</i>	<i>870</i>
South Central Region (d) .....	<b>519</b>	<b>917</b>	<b>1,049</b>	<b>1,095</b>	<i>761</i>	<i>1,085</i>	<i>1,203</i>	<i>1,185</i>	<i>889</i>	<i>1,142</i>	<i>1,230</i>	<i>1,240</i>	<b>1,095</b>	<i>1,185</i>	<i>1,240</i>
Mountain Region (d) .....	<b>63</b>	<b>135</b>	<b>200</b>	<b>170</b>	<i>96</i>	<i>139</i>	<i>183</i>	<i>152</i>	<i>106</i>	<i>150</i>	<i>192</i>	<i>157</i>	<b>170</b>	<i>152</i>	<i>157</i>
Pacific Region (d) .....	<b>115</b>	<b>259</b>	<b>294</b>	<b>248</b>	<i>174</i>	<i>268</i>	<i>302</i>	<i>277</i>	<i>182</i>	<i>283</i>	<i>309</i>	<i>269</i>	<b>248</b>	<i>277</i>	<i>269</i>
Alaska .....	<b>30</b>	<b>33</b>	<b>37</b>	<b>34</b>	<i>34</i>	<b>34</b>	<i>34</i>	<i>34</i>							

- = no data available

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

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

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

(d) For a list of States in each inventory region refer to *Weekly Natural Gas Storage Report, Notes and Definitions* (<http://ir.eia.gov/hgs/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 - January 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>	2.35	2.39	2.41	2.52	2.77	2.55	2.56	2.66	<b>2.66</b>	2.42	2.63
<b>Residential Retail</b>															
New England .....	<b>14.44</b>	<b>15.56</b>	<b>19.31</b>	<b>14.58</b>	<i>13.46</i>	<i>14.06</i>	<i>16.84</i>	<i>12.90</i>	<i>12.65</i>	<i>13.71</i>	<i>16.69</i>	<i>12.83</i>	<b>14.96</b>	<i>13.60</i>	<i>13.14</i>
Middle Atlantic .....	<b>10.79</b>	<b>13.08</b>	<b>18.50</b>	<b>11.68</b>	<i>9.69</i>	<i>11.65</i>	<i>16.02</i>	<i>10.18</i>	<i>9.25</i>	<i>11.69</i>	<i>16.22</i>	<i>10.44</i>	<b>11.84</b>	<i>10.55</i>	<i>10.41</i>
E. N. Central .....	<b>7.27</b>	<b>10.48</b>	<b>19.03</b>	<b>7.95</b>	<i>7.08</i>	<i>10.15</i>	<i>16.05</i>	<i>7.95</i>	<i>7.39</i>	<i>10.37</i>	<i>16.10</i>	<i>7.92</i>	<b>8.52</b>	<i>8.29</i>	<i>8.48</i>
W. N. Central .....	<b>7.93</b>	<b>10.67</b>	<b>18.16</b>	<b>7.99</b>	<i>6.99</i>	<i>10.09</i>	<i>16.43</i>	<i>8.56</i>	<i>7.57</i>	<i>10.55</i>	<i>16.64</i>	<i>8.65</i>	<b>8.77</b>	<i>8.37</i>	<i>8.80</i>
S. Atlantic .....	<b>11.63</b>	<b>18.34</b>	<b>26.03</b>	<b>15.90</b>	<i>12.53</i>	<i>16.73</i>	<i>22.36</i>	<i>12.09</i>	<i>10.67</i>	<i>15.91</i>	<i>22.07</i>	<i>12.02</i>	<b>14.68</b>	<i>13.70</i>	<i>12.57</i>
E. S. Central .....	<b>9.64</b>	<b>14.84</b>	<b>21.40</b>	<b>12.47</b>	<i>9.63</i>	<i>14.05</i>	<i>21.03</i>	<i>12.61</i>	<i>10.16</i>	<i>14.92</i>	<i>21.80</i>	<i>13.16</i>	<b>11.64</b>	<i>11.69</i>	<i>12.29</i>
W. S. Central .....	<b>8.29</b>	<b>13.38</b>	<b>21.45</b>	<b>12.15</b>	<i>8.74</i>	<i>14.07</i>	<i>20.16</i>	<i>11.54</i>	<i>8.95</i>	<i>14.74</i>	<i>20.50</i>	<i>11.73</i>	<b>10.96</b>	<i>11.26</i>	<i>11.46</i>
Mountain .....	<b>7.73</b>	<b>9.46</b>	<b>13.40</b>	<b>7.68</b>	<i>7.39</i>	<i>9.19</i>	<i>12.95</i>	<i>7.82</i>	<i>7.63</i>	<i>9.55</i>	<i>13.31</i>	<i>8.14</i>	<b>8.38</b>	<i>8.23</i>	<i>8.54</i>
Pacific .....	<b>12.44</b>	<b>12.75</b>	<b>13.50</b>	<b>11.75</b>	<i>11.96</i>	<i>12.77</i>	<i>13.53</i>	<i>12.49</i>	<i>12.80</i>	<i>13.62</i>	<i>14.31</i>	<i>13.19</i>	<b>12.42</b>	<i>12.45</i>	<i>13.25</i>
U.S. Average .....	<b>9.47</b>	<b>12.48</b>	<b>18.10</b>	<b>10.23</b>	<i>9.11</i>	<i>11.78</i>	<i>16.55</i>	<i>10.02</i>	<i>9.16</i>	<i>12.02</i>	<i>16.82</i>	<i>10.21</i>	<b>10.66</b>	<i>10.25</i>	<i>10.39</i>
<b>Commercial Retail</b>															
New England .....	<b>11.21</b>	<b>11.42</b>	<b>11.61</b>	<b>9.84</b>	<i>9.15</i>	<i>8.86</i>	<i>8.67</i>	<i>8.52</i>	<i>8.81</i>	<i>9.09</i>	<i>9.09</i>	<i>9.00</i>	<b>10.86</b>	<i>8.87</i>	<i>8.94</i>
Middle Atlantic .....	<b>8.43</b>	<b>7.72</b>	<b>6.86</b>	<b>7.56</b>	<i>7.41</i>	<i>7.23</i>	<i>6.71</i>	<i>7.27</i>	<i>7.44</i>	<i>7.31</i>	<i>6.75</i>	<i>7.28</i>	<b>7.88</b>	<i>7.26</i>	<i>7.29</i>
E. N. Central .....	<b>6.27</b>	<b>7.19</b>	<b>8.85</b>	<b>6.48</b>	<i>6.05</i>	<i>7.06</i>	<i>8.50</i>	<i>6.52</i>	<i>6.28</i>	<i>7.31</i>	<i>8.63</i>	<i>6.60</i>	<b>6.65</b>	<i>6.52</i>	<i>6.70</i>
W. N. Central .....	<b>6.79</b>	<b>7.11</b>	<b>8.20</b>	<b>6.36</b>	<i>6.52</i>	<i>7.01</i>	<i>8.14</i>	<i>6.57</i>	<i>6.83</i>	<i>7.27</i>	<i>8.39</i>	<i>6.80</i>	<b>6.81</b>	<i>6.73</i>	<i>7.00</i>
S. Atlantic .....	<b>8.85</b>	<b>9.54</b>	<b>9.64</b>	<b>8.85</b>	<i>8.37</i>	<i>9.33</i>	<i>9.87</i>	<i>8.91</i>	<i>8.71</i>	<i>9.50</i>	<i>9.83</i>	<i>8.79</i>	<b>9.06</b>	<i>8.87</i>	<i>9.00</i>
E. S. Central .....	<b>8.61</b>	<b>9.78</b>	<b>10.06</b>	<b>8.82</b>	<i>8.00</i>	<i>8.77</i>	<i>9.28</i>	<i>8.20</i>	<i>7.77</i>	<i>8.80</i>	<i>9.36</i>	<i>8.31</i>	<b>9.00</b>	<i>8.32</i>	<i>8.26</i>
W. S. Central .....	<b>6.02</b>	<b>6.57</b>	<b>7.42</b>	<b>7.11</b>	<i>6.47</i>	<i>6.89</i>	<i>7.57</i>	<i>6.96</i>	<i>6.60</i>	<i>7.12</i>	<i>7.73</i>	<i>7.10</i>	<b>6.57</b>	<i>6.84</i>	<i>6.99</i>
Mountain .....	<b>6.40</b>	<b>6.72</b>	<b>7.41</b>	<b>6.01</b>	<i>6.35</i>	<i>6.73</i>	<i>7.62</i>	<i>6.65</i>	<i>6.87</i>	<i>7.18</i>	<i>7.94</i>	<i>6.90</i>	<b>6.44</b>	<i>6.64</i>	<i>7.05</i>
Pacific .....	<b>9.08</b>	<b>8.82</b>	<b>9.14</b>	<b>8.56</b>	<i>8.31</i>	<i>8.25</i>	<i>8.47</i>	<i>8.12</i>	<i>8.32</i>	<i>8.47</i>	<i>8.70</i>	<i>8.31</i>	<b>8.89</b>	<i>8.26</i>	<i>8.41</i>
U.S. Average .....	<b>7.59</b>	<b>7.97</b>	<b>8.40</b>	<b>7.43</b>	<i>7.13</i>	<i>7.59</i>	<i>8.09</i>	<i>7.33</i>	<i>7.27</i>	<i>7.80</i>	<i>8.23</i>	<i>7.45</i>	<b>7.68</b>	<i>7.37</i>	<i>7.52</i>
<b>Industrial Retail</b>															
New England .....	<b>9.17</b>	<b>8.27</b>	<b>6.92</b>	<b>7.64</b>	<i>8.03</i>	<i>7.41</i>	<i>6.96</i>	<i>7.95</i>	<i>8.31</i>	<i>7.54</i>	<i>6.92</i>	<i>7.86</i>	<b>8.17</b>	<i>7.69</i>	<i>7.78</i>
Middle Atlantic .....	<b>8.76</b>	<b>7.65</b>	<b>6.99</b>	<b>6.65</b>	<i>7.12</i>	<i>6.61</i>	<i>6.73</i>	<i>7.00</i>	<i>7.44</i>	<i>6.87</i>	<i>6.90</i>	<i>7.13</i>	<b>7.75</b>	<i>6.95</i>	<i>7.20</i>
E. N. Central .....	<b>5.75</b>	<b>5.38</b>	<b>5.64</b>	<b>5.37</b>	<i>5.57</i>	<i>5.18</i>	<i>5.09</i>	<i>5.03</i>	<i>5.69</i>	<i>5.44</i>	<i>5.35</i>	<i>5.27</i>	<b>5.56</b>	<i>5.28</i>	<i>5.48</i>
W. N. Central .....	<b>5.16</b>	<b>3.94</b>	<b>3.37</b>	<b>4.22</b>	<i>4.56</i>	<i>3.82</i>	<i>3.65</i>	<i>4.29</i>	<i>4.83</i>	<i>4.09</i>	<i>3.95</i>	<i>4.57</i>	<b>4.25</b>	<i>4.13</i>	<i>4.41</i>
S. Atlantic .....	<b>5.52</b>	<b>4.60</b>	<b>4.40</b>	<b>4.47</b>	<i>4.63</i>	<i>4.31</i>	<i>4.35</i>	<i>4.67</i>	<i>5.03</i>	<i>4.48</i>	<i>4.44</i>	<i>4.75</i>	<b>4.79</b>	<i>4.50</i>	<i>4.70</i>
E. S. Central .....	<b>4.93</b>	<b>4.04</b>	<b>3.59</b>	<b>4.18</b>	<i>4.16</i>	<i>3.96</i>	<i>3.96</i>	<i>4.37</i>	<i>4.66</i>	<i>4.26</i>	<i>4.14</i>	<i>4.52</i>	<b>4.23</b>	<i>4.12</i>	<i>4.41</i>
W. S. Central .....	<b>3.47</b>	<b>2.88</b>	<b>2.53</b>	<b>2.77</b>	<i>2.49</i>	<i>2.50</i>	<i>2.62</i>	<i>2.70</i>	<i>2.90</i>	<i>2.66</i>	<i>2.76</i>	<i>2.84</i>	<b>2.91</b>	<i>2.58</i>	<i>2.79</i>
Mountain .....	<b>5.31</b>	<b>4.80</b>	<b>5.00</b>	<b>5.01</b>	<i>5.15</i>	<i>4.95</i>	<i>5.26</i>	<i>5.32</i>	<i>5.47</i>	<i>5.17</i>	<i>5.38</i>	<i>5.40</i>	<b>5.06</b>	<i>5.18</i>	<i>5.37</i>
Pacific .....	<b>7.68</b>	<b>6.66</b>	<b>6.49</b>	<b>6.38</b>	<i>6.39</i>	<i>5.80</i>	<i>5.95</i>	<i>6.02</i>	<i>6.52</i>	<i>6.06</i>	<i>6.17</i>	<i>6.21</i>	<b>6.83</b>	<i>6.06</i>	<i>6.25</i>
U.S. Average .....	<b>4.67</b>	<b>3.74</b>	<b>3.30</b>	<b>3.72</b>	<i>3.72</i>	<i>3.32</i>	<i>3.30</i>	<i>3.66</i>	<i>4.08</i>	<i>3.52</i>	<i>3.45</i>	<i>3.80</i>	<b>3.90</b>	<i>3.52</i>	<i>3.74</i>

- = no data available

Prices are not adjusted for inflation.

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

Regions refer to U.S. Census divisions.

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

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

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

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

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

**Table 6. U.S. Coal Supply, Consumption, and Inventories**  
U.S. Energy Information Administration | Short-Term Energy Outlook - January 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>	<i>163.3</i>	<i>127.3</i>	<i>157.8</i>	<i>148.2</i>	<i>163.1</i>	<i>112.4</i>	<i>151.9</i>	<i>153.2</i>	<b>690.1</b>	<i>596.6</i>	<i>580.6</i>
Appalachia .....	<b>47.4</b>	<b>49.3</b>	<b>46.6</b>	<b>44.3</b>	<i>42.6</i>	<i>36.0</i>	<i>38.1</i>	<i>34.2</i>	<i>36.3</i>	<i>27.9</i>	<i>33.3</i>	<i>32.6</i>	<b>187.6</b>	<i>150.9</i>	<i>130.1</i>
Interior .....	<b>31.0</b>	<b>32.2</b>	<b>32.4</b>	<b>30.6</b>	<i>34.1</i>	<i>26.5</i>	<i>32.8</i>	<i>33.1</i>	<i>37.8</i>	<i>25.5</i>	<i>33.3</i>	<i>35.6</i>	<b>126.2</b>	<i>126.5</i>	<i>132.2</i>
Western .....	<b>91.9</b>	<b>93.4</b>	<b>102.4</b>	<b>90.3</b>	<i>86.6</i>	<i>64.8</i>	<i>86.8</i>	<i>81.0</i>	<i>89.0</i>	<i>59.0</i>	<i>85.2</i>	<i>85.0</i>	<b>378.0</b>	<i>319.2</i>	<i>318.2</i>
Primary Inventory Withdrawals .....	<b>-1.5</b>	<b>1.3</b>	<b>-1.2</b>	<b>-1.5</b>	<i>-0.6</i>	<i>0.9</i>	<i>1.5</i>	<i>-2.2</i>	<i>-0.5</i>	<i>1.3</i>	<i>1.7</i>	<i>-2.3</i>	<b>-2.9</b>	<i>-0.4</i>	<i>0.2</i>
Imports .....	<b>1.7</b>	<b>1.6</b>	<b>1.7</b>	<b>2.0</b>	<i>1.4</i>	<i>1.3</i>	<i>1.5</i>	<i>1.4</i>	<i>1.2</i>	<i>1.3</i>	<i>1.5</i>	<i>1.4</i>	<b>7.0</b>	<i>5.7</i>	<i>5.4</i>
Exports .....	<b>25.2</b>	<b>25.3</b>	<b>21.9</b>	<b>20.0</b>	<i>24.1</i>	<i>20.3</i>	<i>19.4</i>	<i>18.7</i>	<i>22.0</i>	<i>20.2</i>	<i>20.4</i>	<i>20.6</i>	<b>92.4</b>	<i>82.6</i>	<i>83.2</i>
Metallurgical Coal .....	<b>13.9</b>	<b>15.1</b>	<b>13.5</b>	<b>11.1</b>	<i>13.1</i>	<i>11.2</i>	<i>11.1</i>	<i>10.7</i>	<i>13.1</i>	<i>11.9</i>	<i>12.1</i>	<i>11.9</i>	<b>53.5</b>	<i>46.2</i>	<i>49.1</i>
Steam Coal .....	<b>11.3</b>	<b>10.2</b>	<b>8.4</b>	<b>8.9</b>	<i>11.0</i>	<i>9.1</i>	<i>8.3</i>	<i>8.0</i>	<i>8.9</i>	<i>8.3</i>	<i>8.3</i>	<i>8.7</i>	<b>38.9</b>	<i>36.4</i>	<i>34.1</i>
Total Primary Supply .....	<b>145.3</b>	<b>152.4</b>	<b>158.3</b>	<b>145.8</b>	<i>140.1</i>	<i>109.1</i>	<i>141.4</i>	<i>128.7</i>	<i>141.9</i>	<i>94.8</i>	<i>134.7</i>	<i>131.8</i>	<b>601.8</b>	<i>519.3</i>	<i>503.0</i>
Secondary Inventory Withdrawals .....	<b>6.2</b>	<b>-21.0</b>	<b>6.2</b>	<b>-10.5</b>	<i>-0.4</i>	<i>3.6</i>	<i>7.6</i>	<i>-7.7</i>	<i>-0.5</i>	<i>3.5</i>	<i>7.5</i>	<i>-7.8</i>	<b>-19.1</b>	<i>3.1</i>	<i>2.7</i>
Waste Coal (a) .....	<b>2.3</b>	<b>2.3</b>	<b>2.3</b>	<b>2.3</b>	<i>2.3</i>	<i>2.3</i>	<i>2.3</i>	<i>2.3</i>	<i>2.0</i>	<i>2.0</i>	<i>2.0</i>	<i>2.0</i>	<b>9.3</b>	<i>9.2</i>	<i>8.0</i>
Total Supply .....	<b>153.8</b>	<b>133.7</b>	<b>166.8</b>	<b>137.6</b>	<i>142.0</i>	<i>115.0</i>	<i>151.3</i>	<i>123.3</i>	<i>143.3</i>	<i>100.2</i>	<i>144.2</i>	<i>126.0</i>	<b>592.0</b>	<i>531.6</i>	<i>513.7</i>
<b>Consumption (million short tons)</b>															
Coke Plants .....	<b>4.5</b>	<b>4.7</b>	<b>6.2</b>	<b>6.8</b>	<i>5.6</i>	<i>5.4</i>	<i>5.3</i>	<i>6.4</i>	<i>5.4</i>	<i>5.2</i>	<i>5.1</i>	<i>6.3</i>	<b>22.1</b>	<i>22.7</i>	<i>21.9</i>
Electric Power Sector (b) .....	<b>145.3</b>	<b>118.0</b>	<b>156.6</b>	<b>124.5</b>	<i>128.7</i>	<i>102.4</i>	<i>138.9</i>	<i>109.6</i>	<i>130.7</i>	<i>88.2</i>	<i>132.4</i>	<i>112.8</i>	<b>544.4</b>	<i>479.6</i>	<i>464.1</i>
Retail and Other Industry .....	<b>8.1</b>	<b>7.2</b>	<b>7.0</b>	<b>7.5</b>	<i>7.7</i>	<i>7.3</i>	<i>7.1</i>	<i>7.3</i>	<i>7.3</i>	<i>6.8</i>	<i>6.7</i>	<i>6.9</i>	<b>29.8</b>	<i>29.3</i>	<i>27.7</i>
Residential and Commercial .....	<b>0.3</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<i>0.2</i>	<i>0.1</i>	<i>0.1</i>	<i>0.2</i>	<i>0.2</i>	<i>0.1</i>	<i>0.1</i>	<i>0.2</i>	<b>0.9</b>	<i>0.7</i>	<i>0.7</i>
Other Industrial .....	<b>7.8</b>	<b>7.0</b>	<b>6.8</b>	<b>7.2</b>	<i>7.5</i>	<i>7.1</i>	<i>7.0</i>	<i>7.1</i>	<i>7.1</i>	<i>6.7</i>	<i>6.5</i>	<i>6.7</i>	<b>28.9</b>	<i>28.6</i>	<i>27.0</i>
Total Consumption .....	<b>157.9</b>	<b>129.9</b>	<b>169.8</b>	<b>138.8</b>	<i>142.0</i>	<i>115.0</i>	<i>151.3</i>	<i>123.3</i>	<i>143.3</i>	<i>100.2</i>	<i>144.2</i>	<i>126.0</i>	<b>596.3</b>	<i>531.6</i>	<i>513.7</i>
Discrepancy (c) .....	<b>-4.0</b>	<b>3.9</b>	<b>-3.0</b>	<b>-1.1</b>	<i>0.0</i>	<b>-4.3</b>	<i>0.0</i>	<i>0.0</i>							
<b>End-of-period Inventories (million short tons)</b>															
Primary Inventories (d) .....	<b>23.2</b>	<b>21.9</b>	<b>23.1</b>	<b>24.6</b>	<i>25.1</i>	<i>24.3</i>	<i>22.8</i>	<i>25.0</i>	<i>25.5</i>	<i>24.2</i>	<i>22.5</i>	<i>24.8</i>	<b>24.6</b>	<i>25.0</i>	<i>24.8</i>
Secondary Inventories .....	<b>102.2</b>	<b>123.2</b>	<b>117.0</b>	<b>127.5</b>	<i>127.8</i>	<i>124.3</i>	<i>116.7</i>	<i>124.4</i>	<i>124.9</i>	<i>121.4</i>	<i>113.9</i>	<i>121.7</i>	<b>127.5</b>	<i>124.4</i>	<i>121.7</i>
Electric Power Sector .....	<b>97.1</b>	<b>117.7</b>	<b>111.2</b>	<b>121.8</b>	<i>122.2</i>	<i>118.3</i>	<i>110.5</i>	<i>118.4</i>	<i>119.1</i>	<i>115.2</i>	<i>107.6</i>	<i>115.5</i>	<b>121.8</b>	<i>118.4</i>	<i>115.5</i>
Retail and General Industry .....	<b>2.8</b>	<b>3.0</b>	<b>3.6</b>	<b>3.4</b>	<i>3.7</i>	<i>3.6</i>	<i>3.7</i>	<i>3.5</i>	<i>3.8</i>	<i>3.7</i>	<i>3.7</i>	<i>3.6</i>	<b>3.4</b>	<i>3.5</i>	<i>3.6</i>
Coke Plants .....	<b>2.0</b>	<b>2.3</b>	<b>2.0</b>	<b>2.1</b>	<i>1.7</i>	<i>2.1</i>	<i>2.3</i>	<i>2.3</i>	<i>1.9</i>	<i>2.3</i>	<i>2.4</i>	<i>2.4</i>	<b>2.1</b>	<i>2.3</i>	<i>2.4</i>
<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>	<i>6.37</i>	<i>6.37</i>	<i>6.37</i>	<i>6.37</i>	<i>6.32</i>	<i>6.32</i>	<i>6.32</i>	<i>6.32</i>	<b>6.37</b>	<i>6.37</i>	<i>6.32</i>
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>	<i>0.261</i>	<i>0.263</i>	<i>0.256</i>	<i>0.257</i>	<i>0.255</i>	<i>0.252</i>	<i>0.245</i>	<i>0.253</i>	<b>0.268</b>	<i>0.259</i>	<i>0.251</i>
Cost of Coal to Electric Utilities															
(Dollars per million Btu) .....	<b>2.08</b>	<b>2.05</b>	<b>1.99</b>	<b>2.09</b>	<i>2.11</i>	<i>2.11</i>	<i>2.09</i>	<i>2.09</i>	<i>2.11</i>	<i>2.11</i>	<i>2.09</i>	<i>2.10</i>	<b>2.05</b>	<i>2.10</i>	<i>2.10</i>

- = no data available

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

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

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

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

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

**Historical data:** Latest data available from Energy Information Administration databases supporting the following reports: *Quarterly Coal Report*, DOE/EIA-0121; and *Electric Power Monthly*, DOE/EIA-0226.

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

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

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

U.S. Energy Information Administration | Short-Term Energy Outlook - January 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	979	1,000	973	1,140	971	988	974	1,142	974	4,121	4,084	4,078
Electric Power Sector (a) .....	955	936	1,130	938	959	933	1,097	930	946	933	1,098	931	3,959	3,919	3,909
Industrial Sector (b) .....	37	36	38	37	37	37	39	38	38	38	40	39	148	151	156
Commercial Sector (b) .....	3	3	4	3	3	3	4	3	3	3	4	3	14	14	14
Net Imports .....	9	9	11	9	11	12	15	11	13	13	15	12	38	49	52
Total Supply .....	1,004	983	1,184	993	1,011	985	1,154	983	1,000	987	1,157	986	4,163	4,133	4,130
Losses and Unaccounted for (c) .....	57	72	73	53	53	71	63	60	50	71	63	60	255	248	245
<b>Electricity Consumption (billion kilowatthours unless noted)</b>															
Retail Sales .....	911	876	1072	895	921	878	1053	885	913	879	1054	887	3756	3737	3733
Residential Sector .....	361	309	434	331	368	313	423	325	368	315	426	327	1436	1429	1435
Commercial Sector .....	320	328	382	326	325	330	376	324	321	330	377	324	1356	1355	1353
Industrial Sector .....	228	237	255	237	226	234	252	234	221	232	250	234	956	946	938
Transportation Sector .....	2	2	2	2	2	2	2	2	2	2	2	2	8	7	7
Direct Use (d) .....	36	35	38	37	37	36	38	37	38	37	39	38	145	148	153
Total Consumption .....	948	911	1110	934	958	914	1091	923	951	916	1094	925	3903	3885	3886
Average residential electricity usage per customer (kWh) .....	2,677	2,290	3,213	2,469	2,701	2,294	3,102	2,383	2,675	2,286	3,092	2,375	10,649	10,480	10,429
<b>Prices</b>															
<b>Power Generation Fuel Costs (dollars per million Btu)</b>															
Coal .....	2.08	2.05	1.99	2.09	2.11	2.11	2.09	2.09	2.11	2.11	2.09	2.10	2.05	2.10	2.10
Natural Gas .....	3.71	2.73	2.51	2.57	2.65	2.39	2.34	2.64	3.17	2.55	2.51	2.80	2.83	2.49	2.72
Residual Fuel Oil .....	12.21	13.39	12.79	11.69	12.72	13.06	12.33	12.19	12.59	13.38	12.82	12.76	12.53	12.59	12.85
Distillate Fuel Oil .....	14.88	15.75	15.01	15.53	16.21	15.69	15.77	15.83	16.02	16.20	16.27	16.54	15.28	15.90	16.24
<b>Retail Prices (cents per kilowatthour)</b>															
Residential Sector .....	12.67	13.32	13.25	12.77	12.64	13.30	13.34	12.96	12.83	13.59	13.62	13.22	13.01	13.06	13.32
Commercial Sector .....	10.41	10.65	11.00	10.57	10.31	10.54	10.99	10.63	10.40	10.67	11.15	10.80	10.67	10.63	10.77
Industrial Sector .....	6.67	6.72	7.24	6.74	6.63	6.76	7.33	6.81	6.76	6.85	7.44	6.90	6.85	6.89	7.00
<b>Wholesale Electricity Prices (dollars per megawatthour)</b>															
ERCOT North hub .....	28.41	28.34	139.81	28.40	25.26	28.85	32.48	27.09	28.30	27.97	29.53	26.79	56.24	28.42	28.15
CAISO SP15 zone .....	50.42	23.30	37.32	41.57	36.49	32.69	35.35	38.45	37.47	33.17	38.18	39.54	38.15	35.74	37.09
ISO-NE Internal hub .....	47.40	27.15	29.52	35.48	42.18	30.02	29.83	33.27	42.85	30.12	30.86	34.66	34.89	33.82	34.62
NYISO Hudson Valley zone .....	41.77	25.68	27.76	27.04	31.24	27.48	28.12	27.44	32.39	27.89	28.87	28.00	30.56	28.57	29.29
PJM Western hub .....	33.79	28.54	31.17	29.89	31.33	29.00	31.90	29.79	32.96	29.59	32.62	30.35	30.85	30.50	31.38
Midcontinent ISO Illinois hub .....	31.44	27.81	30.71	28.09	29.66	27.52	30.78	28.93	29.44	27.60	30.96	28.78	29.51	29.22	29.19
SPP ISO South hub .....	29.15	27.14	31.51	23.64	28.65	26.88	31.58	28.13	27.59	27.00	32.29	28.51	27.86	28.81	28.85
SERC index, Into Southern .....	30.74	29.87	31.08	29.31	30.25	29.75	32.07	28.97	30.19	28.94	31.97	29.20	30.25	30.26	30.08
FRCC index, Florida Reliability .....	30.71	29.57	30.64	29.47	28.65	28.82	29.44	28.94	30.67	29.94	29.89	29.66	30.10	28.96	30.04
Northwest index, Mid-Columbia .....	55.74	18.55	32.74	37.47	34.30	26.62	31.81	34.82	32.66	27.12	34.14	35.43	36.12	31.89	32.34
Southwest index, Palo Verde .....	44.23	18.45	42.00	36.37	37.68	34.93	39.24	36.90	39.22	34.60	40.60	38.52	35.26	37.19	38.24

**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 collocated 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 - January 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	11.1	12.8	9.9	12.9	10.9	12.6	9.9	12.9	10.9	46.4	46.5	46.4
Middle Atlantic .....	35.3	27.7	40.3	30.5	36.0	28.1	38.8	29.7	35.3	28.1	38.7	29.7	133.8	132.5	131.8
E. N. Central .....	50.0	38.1	54.3	43.9	50.2	38.9	51.6	42.8	49.8	38.9	51.8	43.0	186.4	183.5	183.5
W. N. Central .....	29.9	21.6	29.0	25.4	29.6	22.1	28.9	24.7	29.5	22.3	29.2	25.0	105.9	105.3	106.0
S. Atlantic .....	88.3	84.5	111.5	85.7	92.2	83.2	108.3	81.7	92.5	83.7	109.0	82.2	370.0	365.5	367.5
E. S. Central .....	30.6	25.9	36.9	27.9	32.3	25.7	35.8	26.0	32.7	25.8	35.9	26.0	121.3	119.8	120.4
W. S. Central .....	51.7	49.0	75.7	50.5	52.2	50.9	73.8	49.9	53.0	51.6	74.7	50.5	226.9	226.8	229.8
Mountain .....	23.1	22.0	33.0	22.0	23.3	23.3	32.8	22.3	23.2	23.5	33.2	22.5	100.1	101.6	102.5
Pacific contiguous .....	39.0	29.6	38.7	35.1	38.6	29.6	38.9	35.6	38.4	29.7	39.0	35.8	142.4	142.7	142.9
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	4.6	4.6
Total .....	361.4	309.2	433.8	333.3	368.3	312.8	422.9	325.0	368.2	314.6	425.6	326.9	1,437.7	1,429.0	1,435.3
<b>Commercial Sector</b>															
New England .....	12.8	12.1	13.9	12.3	12.8	11.9	13.5	11.9	12.2	11.4	12.9	11.3	51.1	50.0	47.7
Middle Atlantic .....	38.6	36.3	41.9	36.5	38.6	35.9	40.8	36.1	38.0	35.8	40.7	35.9	153.2	151.4	150.3
E. N. Central .....	44.6	43.1	50.4	43.8	44.8	43.3	49.4	43.2	44.3	43.3	49.3	43.1	181.8	180.7	180.1
W. N. Central .....	25.6	24.2	27.9	24.9	25.8	24.5	27.8	24.8	25.6	24.6	28.0	25.0	102.6	102.9	103.2
S. Atlantic .....	72.1	79.4	90.2	75.8	73.2	78.3	88.4	73.7	72.2	78.4	88.5	73.7	317.4	313.6	312.9
E. S. Central .....	21.0	22.5	27.0	21.9	21.3	22.4	26.3	21.4	21.1	22.5	26.4	21.4	92.4	91.4	91.4
W. S. Central .....	43.8	47.5	57.8	47.8	45.2	49.0	57.4	48.6	45.5	49.7	58.3	49.4	196.8	200.3	203.0
Mountain .....	22.6	23.9	28.3	23.4	23.1	24.7	28.3	23.9	23.0	24.9	28.5	24.0	98.3	99.9	100.3
Pacific contiguous .....	38.0	37.9	42.9	39.1	38.5	38.2	43.0	39.3	38.1	38.2	43.0	39.2	157.9	158.9	158.5
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	326.8	324.7	329.5	376.4	324.2	321.3	330.2	377.0	324.5	1,357.1	1,354.9	1,353.0
<b>Industrial Sector</b>															
New England .....	3.8	3.8	4.0	4.0	3.9	3.8	4.0	4.0	3.9	3.8	4.0	4.0	15.6	15.8	15.6
Middle Atlantic .....	17.7	17.5	19.8	18.4	17.5	17.3	19.6	18.0	17.1	17.1	19.4	17.9	73.4	72.3	71.5
E. N. Central .....	44.8	45.4	47.7	44.9	44.1	44.4	46.6	44.2	42.9	43.7	45.9	43.8	182.8	179.3	176.3
W. N. Central .....	21.1	22.0	23.4	22.1	21.3	22.0	23.5	22.4	21.1	22.1	23.7	22.7	88.6	89.2	89.8
S. Atlantic .....	33.0	34.7	36.2	33.3	32.0	33.6	35.0	31.7	30.6	32.5	33.9	31.0	137.3	132.3	128.1
E. S. Central .....	23.4	23.9	24.5	23.0	22.5	22.9	23.5	22.3	21.4	22.1	22.8	21.8	94.8	91.2	88.2
W. S. Central .....	44.2	47.4	50.8	47.3	45.0	47.7	51.2	48.6	45.0	48.1	51.7	49.3	189.7	192.3	194.2
Mountain .....	19.2	21.1	23.5	20.4	19.4	21.2	23.7	20.6	19.4	21.4	23.8	20.8	84.3	85.0	85.3
Pacific contiguous .....	19.1	20.4	23.4	20.7	19.1	20.2	23.3	21.1	19.0	20.3	23.4	21.2	83.5	83.7	83.9
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	4.8	4.9	4.9
Total .....	227.5	237.3	254.7	235.4	226.0	234.3	251.5	234.2	221.5	232.3	250.0	233.8	954.9	946.0	937.6
<b>Total All Sectors (a)</b>															
New England .....	29.1	25.6	31.3	27.6	29.7	25.7	30.6	26.9	28.8	25.3	30.0	26.3	113.6	112.9	110.3
Middle Atlantic .....	92.6	82.4	103.0	86.3	93.1	82.2	100.1	84.6	91.4	81.8	99.7	84.4	364.2	360.0	357.2
E. N. Central .....	139.6	126.7	152.6	132.7	139.3	126.8	147.7	130.4	137.1	126.1	147.1	130.1	551.6	544.1	540.4
W. N. Central .....	76.7	67.7	80.4	72.3	76.7	68.6	80.2	72.0	76.2	69.1	80.9	72.8	297.1	297.6	299.0
S. Atlantic .....	193.7	198.9	238.4	195.1	197.8	195.5	232.0	187.4	195.7	195.0	231.8	187.2	826.1	812.7	809.7
E. S. Central .....	75.0	72.3	88.3	72.8	76.0	70.9	85.7	69.8	75.2	70.3	85.2	69.3	308.4	302.4	300.0
W. S. Central .....	139.8	143.9	184.3	145.6	142.4	147.6	182.4	147.1	143.5	149.5	184.8	149.3	613.6	619.6	627.2
Mountain .....	65.0	67.1	84.8	65.9	65.8	69.2	84.7	66.9	65.6	69.8	85.5	67.4	282.9	286.6	288.3
Pacific contiguous .....	96.3	88.1	105.2	95.1	96.4	88.2	105.3	96.2	95.7	88.4	105.6	96.4	384.7	386.2	386.1
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	15.1	15.0
Total .....	911.5	876.4	1,072.3	897.3	920.9	878.3	1,052.7	885.2	912.9	878.9	1,054.4	887.0	3,757.4	3,737.2	3,733.2

- = 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 - January 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 .....	<b>21.53</b>	<b>21.56</b>	<b>20.70</b>	<b>20.42</b>	21.34	21.22	20.37	20.13	21.31	21.61	21.14	21.12	<b>21.04</b>	20.76	21.28
Middle Atlantic .....	<b>15.20</b>	<b>16.06</b>	<b>16.16</b>	<b>15.38</b>	14.76	15.68	16.06	15.58	15.01	16.00	16.39	15.80	<b>15.71</b>	15.52	15.81
E. N. Central .....	<b>12.92</b>	<b>13.86</b>	<b>13.27</b>	<b>13.36</b>	13.04	14.06	13.72	13.87	13.48	14.47	14.06	14.20	<b>13.32</b>	13.64	14.02
W. N. Central .....	<b>10.71</b>	<b>12.78</b>	<b>12.93</b>	<b>11.53</b>	11.00	13.12	13.46	12.08	11.43	13.55	13.84	12.40	<b>11.94</b>	12.37	12.77
S. Atlantic .....	<b>11.70</b>	<b>12.17</b>	<b>12.10</b>	<b>11.58</b>	11.55	11.99	11.94	11.53	11.60	12.14	12.10	11.69	<b>11.90</b>	11.76	11.89
E. S. Central .....	<b>11.11</b>	<b>11.70</b>	<b>11.37</b>	<b>11.28</b>	11.08	11.97	11.82	11.70	11.25	12.10	11.94	12.01	<b>11.36</b>	11.63	11.80
W. S. Central .....	<b>10.79</b>	<b>11.41</b>	<b>11.26</b>	<b>10.89</b>	10.70	11.12	11.13	10.85	10.69	11.23	11.29	11.01	<b>11.10</b>	10.97	11.08
Mountain .....	<b>11.51</b>	<b>12.18</b>	<b>12.23</b>	<b>11.75</b>	11.56	12.29	12.43	12.05	11.88	12.61	12.73	12.30	<b>11.95</b>	12.12	12.41
Pacific .....	<b>14.87</b>	<b>15.87</b>	<b>17.31</b>	<b>15.09</b>	15.20	16.34	17.47	15.24	15.62	17.13	18.06	15.60	<b>15.79</b>	16.07	16.60
U.S. Average .....	<b>12.67</b>	<b>13.32</b>	<b>13.25</b>	<b>12.77</b>	12.64	13.30	13.34	12.96	12.83	13.59	13.62	13.22	<b>13.01</b>	13.06	13.32
<b>Commercial Sector</b>															
New England .....	<b>16.83</b>	<b>16.24</b>	<b>15.93</b>	<b>15.95</b>	16.45	15.94	15.72	15.86	16.54	16.24	16.16	16.37	<b>16.23</b>	15.99	16.32
Middle Atlantic .....	<b>11.56</b>	<b>12.17</b>	<b>13.02</b>	<b>11.78</b>	11.11	11.70	12.66	11.72	11.13	11.76	12.75	11.71	<b>12.16</b>	11.81	11.86
E. N. Central .....	<b>10.15</b>	<b>10.29</b>	<b>10.08</b>	<b>10.13</b>	10.10	10.27	10.17	10.30	10.28	10.45	10.34	10.46	<b>10.16</b>	10.21	10.38
W. N. Central .....	<b>8.98</b>	<b>10.04</b>	<b>10.42</b>	<b>9.37</b>	9.12	10.27	10.85	9.82	9.50	10.63	11.18	10.09	<b>9.72</b>	10.03	10.37
S. Atlantic .....	<b>9.44</b>	<b>9.37</b>	<b>9.33</b>	<b>9.26</b>	9.29	9.18	9.17	9.14	9.26	9.22	9.25	9.25	<b>9.35</b>	9.19	9.24
E. S. Central .....	<b>10.70</b>	<b>10.70</b>	<b>10.64</b>	<b>10.66</b>	10.76	10.95	11.09	11.06	11.00	11.08	11.21	11.36	<b>10.68</b>	10.97	11.16
W. S. Central .....	<b>8.04</b>	<b>8.05</b>	<b>8.31</b>	<b>8.10</b>	7.91	7.83	8.20	8.08	7.90	7.84	8.22	8.05	<b>8.14</b>	8.02	8.01
Mountain .....	<b>9.20</b>	<b>9.71</b>	<b>10.01</b>	<b>9.32</b>	9.22	9.74	10.09	9.45	9.37	9.91	10.27	9.60	<b>9.59</b>	9.65	9.82
Pacific .....	<b>12.98</b>	<b>14.15</b>	<b>16.37</b>	<b>14.68</b>	13.20	14.24	16.40	14.76	13.40	14.63	17.01	15.37	<b>14.60</b>	14.70	15.16
U.S. Average .....	<b>10.41</b>	<b>10.65</b>	<b>11.00</b>	<b>10.57</b>	10.31	10.54	10.99	10.63	10.40	10.67	11.15	10.80	<b>10.67</b>	10.63	10.77
<b>Industrial Sector</b>															
New England .....	<b>13.44</b>	<b>12.89</b>	<b>12.66</b>	<b>12.71</b>	13.15	12.76	12.56	12.76	13.34	12.85	12.66	12.84	<b>12.92</b>	12.81	12.92
Middle Atlantic .....	<b>6.72</b>	<b>6.51</b>	<b>6.54</b>	<b>6.30</b>	6.35	6.33	6.41	6.25	6.42	6.31	6.39	6.22	<b>6.52</b>	6.34	6.34
E. N. Central .....	<b>7.03</b>	<b>6.88</b>	<b>6.90</b>	<b>6.95</b>	6.95	6.92	6.98	7.04	7.11	7.02	7.09	7.14	<b>6.94</b>	6.97	7.09
W. N. Central .....	<b>7.13</b>	<b>7.33</b>	<b>8.02</b>	<b>7.03</b>	7.34	7.56	8.29	7.25	7.58	7.79	8.55	7.47	<b>7.39</b>	7.62	7.86
S. Atlantic .....	<b>6.22</b>	<b>6.29</b>	<b>6.72</b>	<b>6.20</b>	6.05	6.20	6.65	6.19	6.10	6.21	6.66	6.19	<b>6.37</b>	6.28	6.30
E. S. Central .....	<b>5.69</b>	<b>5.78</b>	<b>5.95</b>	<b>5.77</b>	5.63	5.77	5.98	5.82	5.73	5.83	6.04	5.87	<b>5.80</b>	5.80	5.87
W. S. Central .....	<b>5.26</b>	<b>5.25</b>	<b>5.99</b>	<b>5.35</b>	5.26	5.31	6.10	5.37	5.36	5.34	6.14	5.41	<b>5.47</b>	5.52	5.58
Mountain .....	<b>6.14</b>	<b>6.25</b>	<b>6.77</b>	<b>5.93</b>	6.04	6.23	6.78	5.97	6.13	6.29	6.85	6.03	<b>6.29</b>	6.28	6.34
Pacific .....	<b>8.65</b>	<b>9.45</b>	<b>11.26</b>	<b>9.93</b>	8.89	9.76	11.66	10.22	9.18	10.05	12.01	10.53	<b>9.89</b>	10.20	10.52
U.S. Average .....	<b>6.67</b>	<b>6.72</b>	<b>7.24</b>	<b>6.74</b>	6.63	6.76	7.33	6.81	6.76	6.85	7.44	6.90	<b>6.85</b>	6.89	7.00
<b>All Sectors (a)</b>															
New England .....	<b>18.36</b>	<b>17.73</b>	<b>17.48</b>	<b>17.25</b>	18.08	17.46	17.23	17.09	18.16	17.80	17.80	17.77	<b>17.70</b>	17.48	17.89
Middle Atlantic .....	<b>12.02</b>	<b>12.27</b>	<b>12.99</b>	<b>11.93</b>	11.62	11.93	12.75	11.91	11.74	12.08	12.92	11.98	<b>12.33</b>	12.07	12.20
E. N. Central .....	<b>10.14</b>	<b>10.14</b>	<b>10.22</b>	<b>10.12</b>	10.16	10.25	10.40	10.36	10.45	10.50	10.63	10.57	<b>10.16</b>	10.30	10.54
W. N. Central .....	<b>9.15</b>	<b>10.03</b>	<b>10.63</b>	<b>9.41</b>	9.35	10.32	11.04	9.80	9.71	10.66	11.37	10.07	<b>9.81</b>	10.14	10.47
S. Atlantic .....	<b>9.92</b>	<b>10.02</b>	<b>10.23</b>	<b>9.76</b>	9.81	9.86	10.08	9.68	9.87	9.97	10.21	9.82	<b>10.00</b>	9.87	9.98
E. S. Central .....	<b>9.30</b>	<b>9.44</b>	<b>9.65</b>	<b>9.34</b>	9.38	9.65	9.99	9.62	9.61	9.80	10.13	9.87	<b>9.44</b>	9.67	9.86
W. S. Central .....	<b>8.17</b>	<b>8.27</b>	<b>8.88</b>	<b>8.16</b>	8.09	8.15	8.80	8.13	8.13	8.21	8.88	8.18	<b>8.40</b>	8.32	8.38
Mountain .....	<b>9.12</b>	<b>9.43</b>	<b>9.97</b>	<b>9.08</b>	9.11	9.52	10.07	9.24	9.30	9.71	10.27	9.40	<b>9.44</b>	9.52	9.71
Pacific .....	<b>12.88</b>	<b>13.63</b>	<b>15.57</b>	<b>13.77</b>	13.14	13.90	15.74	13.93	13.44	14.40	16.28	14.38	<b>14.00</b>	14.22	14.67
U.S. Average .....	<b>10.37</b>	<b>10.52</b>	<b>11.01</b>	<b>10.38</b>	10.34	10.51	11.06	10.47	10.50	10.70	11.27	10.66	<b>10.59</b>	10.61	10.80

- = 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 - January 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	349.2	329.9	349.9	465.1	345.4	298.3	355.0	461.3	341.5	1,471.0	1,490.4	1,456.1
Coal .....	257.9	209.0	279.4	219.3	227.7	179.5	244.9	190.1	231.6	155.1	233.6	195.2	965.5	842.2	815.5
Nuclear .....	203.5	196.5	210.0	198.8	205.8	186.0	205.0	200.7	199.4	185.7	198.7	185.4	808.8	797.4	769.3
Renewable Energy Sources: .....	169.8	192.8	161.0	165.3	188.5	211.2	176.4	188.0	210.1	230.9	199.2	203.2	688.9	764.1	843.4
Conventional Hydropower .....	71.2	81.7	60.6	59.8	77.7	82.2	63.6	64.1	78.5	79.3	63.7	63.7	273.3	287.5	285.2
Wind .....	74.2	78.5	66.1	82.0	85.0	91.3	72.7	96.4	101.2	103.5	83.5	105.7	300.8	345.4	393.9
Solar (a) .....	13.2	21.8	22.5	13.9	15.8	26.7	28.5	18.2	20.9	37.2	40.2	24.4	71.4	89.1	122.8
Biomass .....	7.2	7.0	7.6	5.5	6.1	7.0	7.5	5.5	6.1	7.0	7.5	5.6	27.3	26.1	26.2
Geothermal .....	4.0	3.8	4.1	4.1	4.0	4.0	4.1	3.8	3.4	4.0	4.2	3.9	16.1	16.0	15.4
Pumped Storage Hydropower .....	-1.1	-0.9	-1.9	-1.3	-1.0	-0.7	-1.8	-1.2	-1.1	-0.8	-1.8	-1.2	-5.1	-4.6	-4.9
Petroleum (b) .....	4.9	4.2	4.8	4.0	5.2	4.3	4.4	3.8	4.4	4.1	4.3	4.3	17.9	17.6	17.2
Other Gases .....	1.1	1.0	1.2	1.1	1.1	1.1	1.1	1.1	1.3	1.1	1.1	0.9	4.4	4.5	4.4
Other Nonrenewable Fuels (c) .....	1.9	1.9	2.0	1.9	2.0	1.9	1.9	1.8	1.9	1.9	1.9	1.8	7.7	7.6	7.5
Total Generation .....	955.1	935.6	1,130.2	938.3	959.2	933.2	1,097.2	929.8	946.0	933.0	1,098.3	931.3	3,959.1	3,919.3	3,908.5
<b>New England (ISO-NE)</b>															
Natural Gas .....	10.6	10.0	14.8	11.2	11.9	10.9	14.8	11.8	11.7	9.8	14.6	12.3	46.6	49.5	48.4
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	7.1	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	1.9	2.1	1.9	1.5	1.8	2.0	1.8	1.5	1.8	7.3	7.3	7.1
Nonhydro renewables (d) .....	2.6	2.7	2.5	2.5	2.4	2.8	2.7	2.7	2.6	3.0	2.8	2.8	10.2	10.6	11.2
Other energy sources (e) .....	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.3	1.4	1.4	1.4
Total generation .....	24.5	21.7	26.5	23.1	24.3	21.4	26.6	23.2	24.0	22.1	26.5	23.0	95.8	95.5	95.6
Net energy for load (f) .....	29.5	25.8	31.8	27.9	29.9	26.7	31.8	28.2	29.5	26.8	31.8	28.1	115.0	116.7	116.3
<b>New York (NYISO)</b>															
Natural Gas .....	11.9	11.1	18.4	12.1	13.2	17.2	22.4	15.7	14.3	17.4	23.4	17.4	53.4	68.5	72.5
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	11.7	8.7	9.1	9.6	8.9	7.8	7.4	7.3	44.7	39.2	31.4
Conventional hydropower .....	7.4	7.3	7.4	7.1	7.5	7.3	7.4	7.2	6.9	6.8	7.4	7.2	29.2	29.5	28.4
Nonhydro renewables (d) .....	1.6	1.8	1.5	1.7	1.6	1.9	1.6	1.9	2.2	2.4	2.2	3.0	6.6	7.2	9.7
Other energy sources (e) .....	0.4	0.1	0.2	0.1	0.5	0.1	0.2	0.1	0.4	0.1	0.2	0.1	0.8	0.9	0.9
Total generation .....	32.1	31.1	39.1	32.8	34.5	35.3	40.8	34.7	32.8	34.7	40.6	35.0	135.2	145.3	143.1
Net energy for load (f) .....	37.4	34.3	43.3	35.6	37.4	35.5	42.8	36.3	37.2	35.8	43.0	36.4	150.6	152.0	152.5
<b>Mid-Atlantic (PJM)</b>															
Natural Gas .....	69.3	64.2	90.9	68.7	72.8	75.2	96.8	71.4	64.2	79.2	99.8	73.9	293.0	316.2	317.1
Coal .....	53.5	40.0	52.0	43.1	53.0	26.4	38.8	33.4	57.4	23.9	37.8	34.4	188.6	151.7	153.5
Nuclear .....	69.6	68.5	71.7	68.1	69.4	65.8	69.7	70.1	68.7	63.7	68.3	65.9	277.9	275.0	266.5
Conventional hydropower .....	3.4	3.0	1.9	2.4	3.0	2.5	1.7	2.3	2.8	2.3	1.7	2.3	10.7	9.5	9.2
Nonhydro renewables (d) .....	8.8	9.2	7.0	8.6	9.6	10.0	7.8	9.7	11.0	11.6	9.0	10.6	33.7	37.0	42.1
Other energy sources (e) .....	0.9	0.7	0.5	0.6	1.0	0.9	0.4	0.6	1.0	0.8	0.4	0.6	2.7	2.9	2.8
Total generation .....	205.4	185.6	224.0	191.4	208.7	180.8	215.2	187.7	205.1	181.4	217.0	187.7	806.4	792.4	791.2
Net energy for load (f) .....	195.1	173.1	212.3	182.5	194.8	171.1	203.6	179.5	193.6	172.5	204.4	180.0	763.0	749.0	750.5
<b>Southeast (SERC)</b>															
Natural Gas .....	56.3	59.2	77.8	58.0	59.0	65.1	75.8	59.3	55.4	63.9	75.0	60.1	251.3	259.2	254.4
Coal .....	35.1	38.0	53.3	37.1	40.5	37.4	43.8	30.4	34.1	31.1	41.7	30.3	163.5	152.2	137.1
Nuclear .....	52.3	52.8	53.7	52.0	52.1	49.5	54.1	53.2	52.7	52.1	53.5	51.0	210.8	208.8	209.4
Conventional hydropower .....	10.9	9.3	7.1	8.3	10.1	8.1	6.3	8.3	9.4	7.5	6.3	8.3	35.6	32.9	31.5
Nonhydro renewables (d) .....	2.6	3.8	3.9	2.1	2.9	4.8	4.7	2.5	3.6	5.9	5.8	3.1	12.4	15.0	18.4
Other energy sources (e) .....	0.0	-0.2	-0.6	-0.1	0.1	-0.1	-0.6	-0.1	0.0	-0.2	-0.6	-0.1	-1.0	-0.7	-0.9
Total generation .....	157.2	162.9	195.1	157.3	164.7	164.9	184.3	153.6	155.1	160.4	181.7	152.7	672.6	667.4	649.8
Net energy for load (f) .....	168.0	162.2	200.3	164.1	177.8	164.8	189.7	157.1	163.9	158.2	185.8	154.7	694.6	689.4	662.6
<b>Florida (FRCC)</b>															
Natural Gas .....	35.5	46.4	52.6	39.7	35.3	43.2	49.4	36.7	33.5	42.9	50.9	38.8	174.3	164.6	166.1
Coal .....	3.7	4.8	5.3	4.9	3.0	2.8	3.6	4.0	2.7	2.4	1.7	2.4	18.7	13.4	9.3
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	2.2	1.8	2.2	2.9	2.7	2.1	6.1	8.0	9.9
Other energy sources (e) .....	0.8	0.9	0.8	0.6	0.8	0.8	0.7	0.6	0.8	0.8	0.7	0.6	3.0	2.9	2.9
Total generation .....	49.3	60.2	68.1	53.8	48.1	55.9	63.3	50.9	47.2	56.0	63.0	50.8	231.4	218.2	217.0
Net energy for load (f) .....	50.3	61.8	70.8	54.1	47.8	57.2	66.0	51.2	47.6	57.7	66.4	51.4	237.0	222.1	223.1

**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 - January 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 .....	35.9	41.0	58.1	44.9	42.2	44.1	56.8	48.6	38.1	46.3	55.6	46.6	179.8	191.8	186.6
Coal .....	77.5	61.2	76.2	57.0	62.0	55.3	70.8	50.6	65.7	50.0	71.2	54.0	271.9	238.7	241.0
Nuclear .....	25.3	23.2	27.1	26.6	26.9	22.2	26.8	24.9	25.2	24.2	26.0	21.9	102.1	100.7	97.2
Conventional hydropower .....	2.2	2.3	1.6	2.0	2.3	2.3	1.6	2.0	2.1	2.1	1.6	2.0	8.1	8.2	7.8
Nonhydro renewables (d) .....	16.7	17.3	13.5	19.1	19.8	20.5	16.5	23.2	22.7	23.2	18.3	24.7	66.7	80.0	88.9
Other energy sources (e) .....	2.0	1.4	1.7	1.6	2.2	1.8	1.7	1.6	1.6	1.6	1.6	2.0	6.7	7.2	6.8
Total generation .....	159.5	146.4	178.2	151.2	155.3	146.1	174.2	150.9	155.5	147.4	174.3	151.1	635.3	626.5	628.3
Net energy for load (f) .....	159.6	151.6	180.6	154.1	156.6	150.7	174.9	154.4	156.4	152.2	175.9	155.1	645.8	636.6	639.6
<b>Central (Southwest Power Pool)</b>															
Natural Gas .....	14.0	15.8	26.1	14.2	15.3	15.5	23.9	14.3	13.5	17.3	23.3	13.4	70.1	69.1	67.4
Coal .....	27.3	19.1	27.3	22.0	25.7	15.1	27.7	19.6	26.5	14.6	28.2	20.5	95.7	88.2	89.9
Nuclear .....	4.4	4.4	4.1	3.4	4.1	4.2	4.4	3.6	2.2	1.0	2.6	2.7	16.2	16.3	8.5
Conventional hydropower .....	4.0	4.1	2.6	2.9	3.4	3.8	2.4	2.9	3.1	3.5	2.4	2.9	13.6	12.6	11.8
Nonhydro renewables (d) .....	18.1	18.5	17.5	21.1	19.2	20.9	17.4	23.3	22.6	23.7	20.0	24.9	75.1	80.9	91.3
Other energy sources (e) .....	0.2	0.3	0.1	0.2	0.3	0.3	0.1	0.2	0.3	0.2	0.1	0.2	0.9	0.7	0.7
Total generation .....	68.0	62.1	77.7	63.7	68.1	59.8	75.9	63.9	68.1	60.5	76.5	64.5	271.5	267.8	269.7
Net energy for load (f) .....	56.2	61.3	69.7	58.6	59.5	58.2	71.4	58.2	59.6	59.2	72.3	59.0	245.8	247.3	250.0
<b>Texas (ERCOT)</b>															
Natural Gas .....	34.7	43.1	62.3	37.8	33.0	42.4	55.1	33.5	27.4	37.9	49.2	29.7	177.9	164.0	144.1
Coal .....	18.1	18.3	21.6	17.4	12.6	14.4	19.3	15.1	13.9	11.2	16.6	16.0	75.4	61.4	57.7
Nuclear .....	10.4	9.8	11.0	10.2	11.2	8.8	11.0	10.4	11.1	9.8	11.0	9.2	41.3	41.5	41.1
Conventional hydropower .....	0.3	0.2	0.1	0.3	0.4	0.2	0.1	0.2	0.3	0.2	0.1	0.2	0.9	0.9	0.8
Nonhydro renewables (d) .....	19.3	21.4	19.4	21.2	24.4	28.0	24.6	28.1	30.4	35.6	34.3	33.3	81.3	105.1	133.6
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	0.4	1.6	1.6	1.6
Total generation .....	83.2	93.2	114.8	87.2	82.1	94.2	110.5	87.7	83.5	95.1	111.6	88.7	378.4	374.5	379.0
Net energy for load (f) .....	83.2	93.2	114.8	87.2	82.1	94.2	110.5	87.7	83.5	95.1	111.6	88.7	378.4	374.5	379.0
<b>Northwest</b>															
Natural Gas .....	20.1	16.7	29.4	21.2	17.8	13.4	25.6	18.3	15.0	17.1	26.9	16.4	87.4	75.1	75.4
Coal .....	29.7	18.0	29.4	24.6	20.3	19.7	31.6	24.9	21.7	15.1	28.4	25.4	101.7	96.6	90.6
Nuclear .....	2.5	1.3	2.5	2.6	2.5	2.3	2.3	2.5	2.4	1.2	2.3	2.5	8.9	9.6	8.5
Conventional hydropower .....	30.5	36.5	24.4	28.6	39.2	39.2	28.7	32.7	43.2	39.1	29.0	32.5	120.1	139.8	143.9
Nonhydro renewables (d) .....	11.2	13.4	12.0	12.7	13.3	14.8	12.7	14.5	17.4	18.5	15.9	17.5	49.4	55.3	69.4
Other energy sources (e) .....	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.9	0.8	0.8
Total generation .....	94.3	86.2	97.9	89.8	93.4	89.6	101.2	93.1	99.9	91.4	102.9	94.4	368.3	377.3	388.5
Net energy for load (f) .....	89.6	81.5	89.6	84.8	87.2	80.3	90.5	86.5	88.2	80.8	91.0	86.9	345.5	344.5	346.9
<b>Southwest</b>															
Natural Gas .....	10.4	12.7	19.1	14.0	9.2	13.6	18.9	12.8	8.7	14.1	20.0	11.8	56.2	54.5	54.7
Coal .....	9.7	7.9	11.8	10.1	7.8	4.9	6.8	8.8	6.6	3.3	5.4	9.0	39.4	28.2	24.3
Nuclear .....	8.6	7.6	8.6	7.2	8.7	7.4	8.6	7.7	8.6	7.5	8.6	7.7	31.9	32.4	32.4
Conventional hydropower .....	3.0	4.3	3.9	2.2	2.8	4.2	3.9	2.2	2.5	3.8	3.9	2.2	13.5	13.1	12.4
Nonhydro renewables (d) .....	2.1	2.8	2.7	2.4	2.4	3.0	2.7	2.7	3.5	3.8	3.5	3.6	9.9	10.7	14.4
Other energy sources (e) .....	0.0	0.0	0.1	0.0	-0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Total generation .....	33.8	35.3	46.1	35.8	30.8	33.0	40.9	34.2	29.9	32.5	41.5	34.2	151.0	138.9	138.1
Net energy for load (f) .....	22.5	26.2	35.5	23.2	22.7	27.3	34.8	23.7	22.9	27.5	35.0	23.9	107.4	108.4	109.3
<b>California</b>															
Natural Gas .....	17.7	10.2	23.4	23.8	19.3	8.7	24.7	22.1	15.8	8.4	22.0	20.4	75.1	74.9	66.6
Coal .....	2.2	1.2	1.9	2.6	2.0	2.9	1.9	2.6	2.2	3.0	1.9	2.6	7.8	9.5	9.6
Nuclear .....	3.8	4.9	4.7	2.8	4.8	4.9	4.3	4.4	4.5	4.2	4.9	4.9	16.2	18.5	18.5
Conventional hydropower .....	7.1	12.4	9.6	3.8	6.4	12.2	9.6	3.9	5.7	11.5	9.5	3.8	32.9	32.0	30.5
Nonhydro renewables (d) .....	13.8	18.3	18.5	12.4	13.2	19.5	19.4	13.0	13.2	20.6	20.3	13.6	62.9	65.1	67.7
Other energy sources (e) .....	-0.2	0.2	0.2	0.0	-0.1	0.2	0.2	0.0	-0.1	0.2	0.2	0.0	0.3	0.4	0.3
Total generation .....	44.4	47.2	58.3	45.3	45.6	48.5	60.2	46.0	41.3	47.9	58.7	45.3	195.2	200.4	193.2
Net energy for load (f) .....	59.2	64.5	77.4	63.1	59.9	63.6	77.1	63.1	60.0	63.5	77.1	63.1	264.2	263.7	263.6

**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) 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 - January 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>0.038</b>	<i>0.037</i>	<i>0.037</i>	<i>0.038</i>	<i>0.035</i>	<i>0.031</i>	<i>0.036</i>	<i>0.038</i>	<i>0.036</i>	<b>0.148</b>	<i>0.147</i>	<i>0.141</i>
Hydroelectric Power (a) .....	<b>0.650</b>	<b>0.745</b>	<b>0.552</b>	<b>0.549</b>	<i>0.716</i>	<i>0.757</i>	<i>0.586</i>	<i>0.590</i>	<i>0.723</i>	<i>0.730</i>	<i>0.587</i>	<i>0.587</i>	<b>2.496</b>	<i>2.649</i>	<i>2.627</i>
Solar (b) .....	<b>0.122</b>	<b>0.200</b>	<b>0.207</b>	<b>0.128</b>	<i>0.145</i>	<i>0.246</i>	<i>0.262</i>	<i>0.167</i>	<i>0.193</i>	<i>0.343</i>	<i>0.371</i>	<i>0.225</i>	<b>0.658</b>	<i>0.821</i>	<i>1.131</i>
Waste Biomass (c) .....	<b>0.059</b>	<b>0.058</b>	<b>0.059</b>	<b>0.059</b>	<i>0.055</i>	<i>0.058</i>	<i>0.060</i>	<i>0.058</i>	<i>0.054</i>	<i>0.059</i>	<i>0.060</i>	<i>0.058</i>	<b>0.235</b>	<i>0.231</i>	<i>0.231</i>
Wood Biomass .....	<b>0.053</b>	<b>0.052</b>	<b>0.058</b>	<b>0.025</b>	<i>0.040</i>	<i>0.051</i>	<i>0.056</i>	<i>0.027</i>	<i>0.040</i>	<i>0.050</i>	<i>0.056</i>	<i>0.028</i>	<b>0.189</b>	<i>0.174</i>	<i>0.175</i>
Wind .....	<b>0.683</b>	<b>0.724</b>	<b>0.609</b>	<b>0.756</b>	<i>0.783</i>	<i>0.841</i>	<i>0.670</i>	<i>0.888</i>	<i>0.933</i>	<i>0.953</i>	<i>0.770</i>	<i>0.973</i>	<b>2.772</b>	<i>3.182</i>	<i>3.629</i>
Subtotal .....	<b>1.604</b>	<b>1.814</b>	<b>1.524</b>	<b>1.555</b>	<i>1.775</i>	<i>1.990</i>	<i>1.673</i>	<i>1.766</i>	<i>1.974</i>	<i>2.172</i>	<i>1.882</i>	<i>1.907</i>	<b>6.497</b>	<i>7.203</i>	<i>7.935</i>
<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>	<i>0.198</i>	<i>0.204</i>	<i>0.201</i>	<i>0.204</i>	<i>0.196</i>	<i>0.201</i>	<i>0.202</i>	<i>0.204</i>	<b>0.805</b>	<i>0.807</i>	<i>0.804</i>
Geothermal .....	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>	<i>0.001</i>	<b>0.004</b>	<i>0.004</i>	<i>0.004</i>							
Hydroelectric Power (a) .....	<b>0.003</b>	<b>0.003</b>	<b>0.002</b>	<b>0.003</b>	<i>0.003</i>	<i>0.003</i>	<i>0.002</i>	<i>0.003</i>	<i>0.003</i>	<i>0.003</i>	<i>0.002</i>	<i>0.003</i>	<b>0.011</b>	<i>0.011</i>	<i>0.011</i>
Solar (b) .....	<b>0.006</b>	<b>0.008</b>	<b>0.009</b>	<b>0.006</b>	<i>0.006</i>	<i>0.010</i>	<i>0.010</i>	<i>0.007</i>	<i>0.008</i>	<i>0.011</i>	<i>0.011</i>	<i>0.008</i>	<b>0.029</b>	<i>0.033</i>	<i>0.038</i>
Waste Biomass (c) .....	<b>0.042</b>	<b>0.038</b>	<b>0.037</b>	<b>0.042</b>	<i>0.040</i>	<i>0.039</i>	<i>0.038</i>	<i>0.041</i>	<i>0.040</i>	<i>0.039</i>	<i>0.039</i>	<i>0.041</i>	<b>0.159</b>	<i>0.158</i>	<i>0.158</i>
Wood Biomass .....	<b>0.373</b>	<b>0.363</b>	<b>0.369</b>	<b>0.360</b>	<i>0.344</i>	<i>0.339</i>	<i>0.350</i>	<i>0.351</i>	<i>0.339</i>	<i>0.336</i>	<i>0.347</i>	<i>0.349</i>	<b>1.465</b>	<i>1.385</i>	<i>1.371</i>
Subtotal .....	<b>0.617</b>	<b>0.613</b>	<b>0.614</b>	<b>0.620</b>	<i>0.591</i>	<i>0.590</i>	<i>0.597</i>	<i>0.605</i>	<i>0.583</i>	<i>0.584</i>	<i>0.596</i>	<i>0.603</i>	<b>2.463</b>	<i>2.383</i>	<i>2.366</i>
<b>Commercial Sector</b>															
Geothermal .....	<b>0.006</b>	<b>0.006</b>	<b>0.006</b>	<b>0.006</b>	<i>0.006</i>	<b>0.023</b>	<i>0.023</i>	<i>0.023</i>							
Solar (b) .....	<b>0.022</b>	<b>0.032</b>	<b>0.032</b>	<b>0.023</b>	<i>0.027</i>	<i>0.039</i>	<i>0.039</i>	<i>0.028</i>	<i>0.032</i>	<i>0.046</i>	<i>0.047</i>	<i>0.034</i>	<b>0.109</b>	<i>0.132</i>	<i>0.159</i>
Waste Biomass (c) .....	<b>0.010</b>	<b>0.008</b>	<b>0.009</b>	<b>0.011</b>	<i>0.010</i>	<i>0.009</i>	<i>0.009</i>	<i>0.011</i>	<i>0.010</i>	<i>0.009</i>	<i>0.009</i>	<i>0.011</i>	<b>0.039</b>	<i>0.039</i>	<i>0.039</i>
Wood Biomass .....	<b>0.021</b>	<b>0.021</b>	<b>0.021</b>	<b>0.021</b>	<i>0.021</i>	<i>0.020</i>	<i>0.022</i>	<i>0.021</i>	<i>0.021</i>	<i>0.020</i>	<i>0.022</i>	<i>0.021</i>	<b>0.084</b>	<i>0.083</i>	<i>0.083</i>
Subtotal .....	<b>0.065</b>	<b>0.074</b>	<b>0.075</b>	<b>0.068</b>	<i>0.070</i>	<i>0.080</i>	<i>0.083</i>	<i>0.072</i>	<i>0.075</i>	<i>0.088</i>	<i>0.091</i>	<i>0.078</i>	<b>0.282</b>	<i>0.305</i>	<i>0.332</i>
<b>Residential Sector</b>															
Geothermal .....	<b>0.010</b>	<b>0.010</b>	<b>0.010</b>	<b>0.010</b>	<i>0.010</i>	<b>0.040</b>	<i>0.040</i>	<i>0.040</i>							
Solar (e) .....	<b>0.050</b>	<b>0.076</b>	<b>0.078</b>	<b>0.054</b>	<i>0.058</i>	<i>0.090</i>	<i>0.092</i>	<i>0.064</i>	<i>0.070</i>	<i>0.108</i>	<i>0.110</i>	<i>0.077</i>	<b>0.258</b>	<i>0.304</i>	<i>0.365</i>
Wood Biomass .....	<b>0.131</b>	<b>0.132</b>	<b>0.134</b>	<b>0.130</b>	<i>0.131</i>	<i>0.132</i>	<i>0.134</i>	<i>0.130</i>	<i>0.131</i>	<i>0.132</i>	<i>0.134</i>	<i>0.130</i>	<b>0.527</b>	<i>0.527</i>	<i>0.527</i>
Subtotal .....	<b>0.190</b>	<b>0.218</b>	<b>0.221</b>	<b>0.194</b>	<i>0.198</i>	<i>0.232</i>	<i>0.235</i>	<i>0.205</i>	<i>0.210</i>	<i>0.250</i>	<i>0.254</i>	<i>0.218</i>	<b>0.824</b>	<i>0.871</i>	<i>0.932</i>
<b>Transportation Sector</b>															
Biomass-based Diesel (f) .....	<b>0.058</b>	<b>0.071</b>	<b>0.070</b>	<b>0.079</b>	<i>0.077</i>	<i>0.086</i>	<i>0.076</i>	<i>0.082</i>	<i>0.094</i>	<i>0.103</i>	<i>0.090</i>	<i>0.098</i>	<b>0.278</b>	<i>0.321</i>	<i>0.385</i>
Ethanol (f) .....	<b>0.275</b>	<b>0.293</b>	<b>0.291</b>	<b>0.299</b>	<i>0.274</i>	<i>0.294</i>	<i>0.296</i>	<i>0.292</i>	<i>0.272</i>	<i>0.293</i>	<i>0.295</i>	<i>0.290</i>	<b>1.158</b>	<i>1.156</i>	<i>1.151</i>
Subtotal .....	<b>0.333</b>	<b>0.365</b>	<b>0.361</b>	<b>0.379</b>	<i>0.351</i>	<i>0.380</i>	<i>0.372</i>	<i>0.374</i>	<i>0.366</i>	<i>0.397</i>	<i>0.385</i>	<i>0.388</i>	<b>1.438</b>	<i>1.477</i>	<i>1.536</i>
<b>All Sectors Total</b>															
Biomass-based Diesel (f) .....	<b>0.058</b>	<b>0.071</b>	<b>0.070</b>	<b>0.079</b>	<i>0.077</i>	<i>0.086</i>	<i>0.076</i>	<i>0.082</i>	<i>0.094</i>	<i>0.103</i>	<i>0.090</i>	<i>0.098</i>	<b>0.278</b>	<i>0.321</i>	<i>0.385</i>
Biofuel Losses and Co-products (d) .....	<b>0.194</b>	<b>0.203</b>	<b>0.199</b>	<b>0.209</b>	<i>0.198</i>	<i>0.204</i>	<i>0.201</i>	<i>0.204</i>	<i>0.196</i>	<i>0.201</i>	<i>0.202</i>	<i>0.204</i>	<b>0.805</b>	<i>0.807</i>	<i>0.804</i>
Ethanol (f) .....	<b>0.285</b>	<b>0.305</b>	<b>0.302</b>	<b>0.311</b>	<i>0.284</i>	<i>0.305</i>	<i>0.307</i>	<i>0.303</i>	<i>0.283</i>	<i>0.304</i>	<i>0.306</i>	<i>0.301</i>	<b>1.202</b>	<i>1.200</i>	<i>1.194</i>
Geothermal .....	<b>0.054</b>	<b>0.052</b>	<b>0.054</b>	<b>0.056</b>	<i>0.054</i>	<i>0.054</i>	<i>0.055</i>	<i>0.052</i>	<i>0.048</i>	<i>0.053</i>	<i>0.055</i>	<i>0.052</i>	<b>0.215</b>	<i>0.214</i>	<i>0.209</i>
Hydroelectric Power (a) .....	<b>0.653</b>	<b>0.748</b>	<b>0.555</b>	<b>0.553</b>	<i>0.719</i>	<i>0.760</i>	<i>0.589</i>	<i>0.594</i>	<i>0.726</i>	<i>0.734</i>	<i>0.590</i>	<i>0.590</i>	<b>2.509</b>	<i>2.662</i>	<i>2.640</i>
Solar (b)(e) .....	<b>0.197</b>	<b>0.315</b>	<b>0.324</b>	<b>0.207</b>	<i>0.236</i>	<i>0.384</i>	<i>0.403</i>	<i>0.267</i>	<i>0.302</i>	<i>0.508</i>	<i>0.539</i>	<i>0.344</i>	<b>1.043</b>	<i>1.291</i>	<i>1.693</i>
Waste Biomass (c) .....	<b>0.111</b>	<b>0.105</b>	<b>0.105</b>	<b>0.112</b>	<i>0.105</i>	<i>0.106</i>	<i>0.108</i>	<i>0.109</i>	<i>0.104</i>	<i>0.107</i>	<i>0.108</i>	<i>0.109</i>	<b>0.433</b>	<i>0.428</i>	<i>0.428</i>
Wood Biomass .....	<b>0.578</b>	<b>0.568</b>	<b>0.582</b>	<b>0.537</b>	<i>0.536</i>	<i>0.542</i>	<i>0.561</i>	<i>0.529</i>	<i>0.531</i>	<i>0.538</i>	<i>0.558</i>	<i>0.529</i>	<b>2.264</b>	<i>2.168</i>	<i>2.156</i>
Wind .....	<b>0.683</b>	<b>0.724</b>	<b>0.609</b>	<b>0.756</b>	<i>0.783</i>	<i>0.841</i>	<i>0.670</i>	<i>0.888</i>	<i>0.933</i>	<i>0.953</i>	<i>0.770</i>	<i>0.973</i>	<b>2.772</b>	<i>3.182</i>	<i>3.629</i>
<b>Total Consumption</b> .....	<b>2.809</b>	<b>3.084</b>	<b>2.795</b>	<b>2.773</b>	<i>2.985</i>	<i>3.273</i>	<i>2.961</i>	<i>3.021</i>	<i>3.209</i>	<i>3.490</i>	<i>3.208</i>	<i>3.193</i>	<b>11.462</b>	<i>12.239</i>	<i>13.100</i>

- = no data available

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

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

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

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

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

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

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

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

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

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

**Table 8b. U.S. Renewable Electricity Generation and Capacity**  
 U.S. Energy Information Administration | Short-Term Energy Outlook - January 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 .....	<b>6,968</b>	<b>6,934</b>	<b>6,831</b>	<b>6,946</b>	<i>6,945</i>	<i>6,911</i>	<i>6,913</i>	<i>6,957</i>	<i>6,957</i>	<i>6,976</i>	<i>6,976</i>	<i>6,976</i>	<b>6,946</b>	<i>6,957</i>	<i>6,976</i>
Waste .....	<b>4,133</b>	<b>4,114</b>	<b>4,100</b>	<b>4,099</b>	<i>4,098</i>	<i>4,064</i>	<i>4,066</i>	<i>4,068</i>	<i>4,068</i>	<i>4,087</i>	<i>4,087</i>	<i>4,087</i>	<b>4,099</b>	<i>4,068</i>	<i>4,087</i>
Wood .....	<b>2,835</b>	<b>2,820</b>	<b>2,731</b>	<b>2,847</b>	<i>2,847</i>	<i>2,847</i>	<i>2,847</i>	<i>2,889</i>	<i>2,889</i>	<i>2,889</i>	<i>2,889</i>	<i>2,889</i>	<b>2,847</b>	<i>2,889</i>	<i>2,889</i>
Conventional Hydroelectric .....	<b>79,471</b>	<b>79,587</b>	<b>79,478</b>	<b>79,395</b>	<i>79,551</i>	<i>79,564</i>	<i>79,682</i>	<i>79,778</i>	<i>79,787</i>	<i>79,793</i>	<i>79,793</i>	<i>79,821</i>	<b>79,395</b>	<i>79,778</i>	<i>79,821</i>
Geothermal .....	<b>2,398</b>	<b>2,406</b>	<b>2,406</b>	<b>2,406</b>	<i>2,406</i>	<i>2,406</i>	<i>2,406</i>	<i>2,431</i>	<i>2,431</i>	<i>2,431</i>	<i>2,431</i>	<i>2,431</i>	<b>2,406</b>	<i>2,431</i>	<i>2,431</i>
Large-Scale Solar (b) .....	<b>32,653</b>	<b>33,133</b>	<b>33,771</b>	<b>37,417</b>	<i>39,175</i>	<i>41,786</i>	<i>43,086</i>	<i>50,892</i>	<i>52,209</i>	<i>59,186</i>	<i>59,399</i>	<i>64,380</i>	<b>37,417</b>	<i>50,892</i>	<i>64,380</i>
Wind .....	<b>96,538</b>	<b>98,089</b>	<b>99,443</b>	<b>106,104</b>	<i>108,397</i>	<i>109,601</i>	<i>111,962</i>	<i>124,254</i>	<i>125,019</i>	<i>126,056</i>	<i>126,436</i>	<i>129,205</i>	<b>106,104</b>	<i>124,254</i>	<i>129,205</i>
<b>Other Sectors (c)</b>															
Biomass .....	<b>6,589</b>	<b>6,538</b>	<b>6,538</b>	<b>6,514</b>	<i>6,568</i>	<i>6,568</i>	<i>6,568</i>	<i>6,560</i>	<i>6,572</i>	<i>6,571</i>	<i>6,571</i>	<i>6,571</i>	<b>6,514</b>	<i>6,560</i>	<i>6,571</i>
Waste .....	<b>845</b>	<b>846</b>	<b>846</b>	<b>846</b>	<i>862</i>	<i>862</i>	<i>862</i>	<i>862</i>	<i>874</i>	<i>873</i>	<i>873</i>	<i>873</i>	<b>846</b>	<i>862</i>	<i>873</i>
Wood .....	<b>5,744</b>	<b>5,692</b>	<b>5,692</b>	<b>5,668</b>	<i>5,706</i>	<i>5,706</i>	<i>5,706</i>	<i>5,698</i>	<i>5,698</i>	<i>5,698</i>	<i>5,698</i>	<i>5,698</i>	<b>5,668</b>	<i>5,698</i>	<i>5,698</i>
Conventional Hydroelectric .....	<b>290</b>	<b>290</b>	<b>290</b>	<b>290</b>	<i>290</i>	<i>290</i>	<i>290</i>	<i>290</i>	<i>290</i>	<i>291</i>	<i>289</i>	<i>289</i>	<b>290</b>	<i>290</i>	<i>289</i>
Large-Scale Solar (b) .....	<b>387</b>	<b>392</b>	<b>402</b>	<b>407</b>	<i>407</i>	<i>409</i>	<i>411</i>	<i>412</i>	<i>412</i>	<i>412</i>	<i>412</i>	<i>412</i>	<b>407</b>	<i>412</i>	<i>412</i>
Small-Scale Solar (d) .....	<b>20,327</b>	<b>21,181</b>	<b>22,148</b>	<b>23,202</b>	<i>24,355</i>	<i>25,583</i>	<i>26,890</i>	<i>28,275</i>	<i>29,743</i>	<i>31,300</i>	<i>32,951</i>	<i>34,701</i>	<b>23,202</b>	<i>28,275</i>	<i>34,701</i>
Residential Sector .....	<b>12,271</b>	<b>12,840</b>	<b>13,526</b>	<b>14,235</b>	<i>14,984</i>	<i>15,789</i>	<i>16,654</i>	<i>17,578</i>	<i>18,563</i>	<i>19,615</i>	<i>20,740</i>	<i>21,939</i>	<b>14,235</b>	<i>17,578</i>	<i>21,939</i>
Commercial Sector .....	<b>6,446</b>	<b>6,652</b>	<b>6,885</b>	<b>7,176</b>	<i>7,517</i>	<i>7,874</i>	<i>8,249</i>	<i>8,643</i>	<i>9,056</i>	<i>9,488</i>	<i>9,942</i>	<i>10,417</i>	<b>7,176</b>	<i>8,643</i>	<i>10,417</i>
Industrial Sector .....	<b>1,611</b>	<b>1,689</b>	<b>1,737</b>	<b>1,791</b>	<i>1,855</i>	<i>1,920</i>	<i>1,986</i>	<i>2,055</i>	<i>2,124</i>	<i>2,196</i>	<i>2,270</i>	<i>2,345</i>	<b>1,791</b>	<i>2,055</i>	<i>2,345</i>
Wind .....	<b>118</b>	<b>118</b>	<b>118</b>	<b>127</b>	<i>127</i>	<i>353</i>	<b>127</b>	<i>353</i>	<i>353</i>						
<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>5.5</b>	<i>6.1</i>	<i>7.0</i>	<i>7.5</i>	<i>5.5</i>	<i>6.1</i>	<i>7.0</i>	<i>7.5</i>	<i>5.6</i>	<b>27.3</b>	<i>26.1</i>	<i>26.2</i>
Waste .....	<b>3.9</b>	<b>3.9</b>	<b>4.0</b>	<b>3.8</b>	<i>3.6</i>	<i>3.9</i>	<i>4.0</i>	<i>3.8</i>	<i>3.6</i>	<i>3.9</i>	<i>4.0</i>	<i>3.8</i>	<b>15.6</b>	<i>15.4</i>	<i>15.4</i>
Wood .....	<b>3.3</b>	<b>3.1</b>	<b>3.6</b>	<b>1.6</b>	<i>2.4</i>	<i>3.1</i>	<i>3.5</i>	<i>1.7</i>	<i>2.5</i>	<i>3.1</i>	<i>3.5</i>	<i>1.8</i>	<b>11.7</b>	<i>10.8</i>	<i>10.8</i>
Conventional Hydroelectric .....	<b>71.2</b>	<b>81.7</b>	<b>60.6</b>	<b>59.8</b>	<i>77.7</i>	<i>82.2</i>	<i>63.6</i>	<i>64.1</i>	<i>78.5</i>	<i>79.3</i>	<i>63.7</i>	<i>63.7</i>	<b>273.3</b>	<i>287.5</i>	<i>285.2</i>
Geothermal .....	<b>4.0</b>	<b>3.8</b>	<b>4.1</b>	<b>4.1</b>	<i>4.0</i>	<i>4.0</i>	<i>4.1</i>	<i>3.8</i>	<i>3.4</i>	<i>4.0</i>	<i>4.2</i>	<i>3.9</i>	<b>16.1</b>	<i>16.0</i>	<i>15.4</i>
Large-Scale Solar (b) .....	<b>13.2</b>	<b>21.8</b>	<b>22.5</b>	<b>13.9</b>	<i>15.8</i>	<i>26.7</i>	<i>28.5</i>	<i>18.2</i>	<i>20.9</i>	<i>37.2</i>	<i>40.2</i>	<i>24.4</i>	<b>71.4</b>	<i>89.1</i>	<i>122.8</i>
Wind .....	<b>74.2</b>	<b>78.5</b>	<b>66.1</b>	<b>82.0</b>	<i>85.0</i>	<i>91.3</i>	<i>72.7</i>	<i>96.4</i>	<i>101.2</i>	<i>103.5</i>	<i>83.5</i>	<i>105.7</i>	<b>300.8</b>	<i>345.4</i>	<i>393.9</i>
<b>Other Sectors (c)</b>															
Biomass .....	<b>7.4</b>	<b>7.3</b>	<b>7.6</b>	<b>7.6</b>	<i>7.5</i>	<i>7.3</i>	<i>7.6</i>	<i>7.6</i>	<i>7.4</i>	<i>7.3</i>	<i>7.6</i>	<i>7.6</i>	<b>29.9</b>	<i>29.9</i>	<i>29.9</i>
Waste .....	<b>0.8</b>	<b>0.7</b>	<b>0.7</b>	<b>0.8</b>	<i>0.8</i>	<i>0.7</i>	<i>0.7</i>	<i>0.8</i>	<i>0.8</i>	<i>0.7</i>	<i>0.7</i>	<i>0.8</i>	<b>2.9</b>	<i>2.9</i>	<i>2.9</i>
Wood .....	<b>6.7</b>	<b>6.6</b>	<b>7.0</b>	<b>6.8</b>	<i>6.7</i>	<i>6.6</i>	<i>7.0</i>	<i>6.8</i>	<i>6.7</i>	<i>6.6</i>	<i>7.0</i>	<i>6.8</i>	<b>27.0</b>	<i>27.0</i>	<i>27.0</i>
Conventional Hydroelectric .....	<b>0.3</b>	<b>0.4</b>	<b>0.3</b>	<b>0.4</b>	<i>0.4</i>	<i>0.4</i>	<i>0.3</i>	<i>0.4</i>	<i>0.3</i>	<i>0.4</i>	<i>0.3</i>	<i>0.4</i>	<b>1.4</b>	<i>1.4</i>	<i>1.4</i>
Large-Scale Solar (b) .....	<b>0.1</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<i>0.2</i>	<i>0.3</i>	<b>0.7</b>	<i>1.1</i>	<i>1.3</i>						
Small-Scale Solar (d) .....	<b>6.9</b>	<b>10.4</b>	<b>10.6</b>	<b>7.3</b>	<i>8.2</i>	<i>12.5</i>	<i>12.8</i>	<i>9.0</i>	<i>10.2</i>	<i>15.4</i>	<i>15.7</i>	<i>11.1</i>	<b>35.2</b>	<i>42.6</i>	<i>52.3</i>
Residential Sector .....	<b>4.0</b>	<b>6.2</b>	<b>6.4</b>	<b>4.3</b>	<i>4.9</i>	<i>7.6</i>	<i>7.8</i>	<i>5.5</i>	<i>6.1</i>	<i>9.5</i>	<i>9.8</i>	<i>6.9</i>	<b>21.0</b>	<i>25.8</i>	<i>32.2</i>
Commercial Sector .....	<b>2.3</b>	<b>3.3</b>	<b>3.3</b>	<b>2.3</b>	<i>2.7</i>	<i>3.9</i>	<i>4.0</i>	<i>2.8</i>	<i>3.2</i>	<i>4.7</i>	<i>4.8</i>	<i>3.3</i>	<b>11.2</b>	<i>13.3</i>	<i>16.1</i>
Industrial Sector .....	<b>0.6</b>	<b>0.9</b>	<b>0.9</b>	<b>0.6</b>	<i>0.7</i>	<i>1.0</i>	<i>1.0</i>	<i>0.7</i>	<i>0.8</i>	<i>1.2</i>	<i>1.2</i>	<i>0.9</i>	<b>3.0</b>	<i>3.5</i>	<i>4.0</i>
Wind .....	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<i>0.1</i>	<b>0.3</b>	<i>0.4</i>	<i>0.4</i>							

-- = no data available

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

- (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 - January 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	19,122	19,200	19,299	19,404	19,500	19,591	19,676	19,745	19,823	19,918	19,068	19,448	19,790
Real Personal Consumption Expend. (billion chained 2012 dollars - SAAR) .....	13,103	13,250	13,346	13,421	13,512	13,603	13,693	13,769	13,840	13,903	13,974	14,046	13,280	13,644	13,941
Real Private Fixed Investment (billion chained 2012 dollars - SAAR) .....	3,349	3,337	3,329	3,343	3,360	3,385	3,402	3,424	3,445	3,460	3,464	3,482	3,340	3,393	3,463
Business Inventory Change (billion chained 2012 dollars - SAAR) .....	113	75	77	58	51	8	12	20	23	23	35	40	81	23	31
Real Government Expenditures (billion chained 2012 dollars - SAAR) .....	3,258	3,297	3,310	3,315	3,330	3,363	3,370	3,375	3,381	3,386	3,389	3,391	3,295	3,359	3,387
Real Exports of Goods & Services (billion chained 2012 dollars - SAAR) .....	2,554	2,517	2,523	2,502	2,508	2,548	2,579	2,605	2,622	2,639	2,648	2,669	2,524	2,560	2,644
Real Imports of Goods & Services (billion chained 2012 dollars - SAAR) .....	3,498	3,498	3,511	3,489	3,512	3,557	3,616	3,666	3,704	3,737	3,760	3,783	3,499	3,588	3,746
Real Disposable Personal Income (billion chained 2012 dollars - SAAR) .....	14,878	14,934	15,042	15,074	15,149	15,225	15,286	15,358	15,447	15,541	15,627	15,715	14,982	15,255	15,582
Non-Farm Employment (millions) .....	150.7	151.1	151.6	152.2	152.6	153.2	153.3	153.5	153.8	154.0	154.2	154.4	151.4	153.1	154.1
Civilian Unemployment Rate (percent) .....	3.9	3.6	3.6	3.5	3.5	3.4	3.5	3.5	3.5	3.6	3.7	3.8	3.7	3.5	3.6
Housing Starts (millions - SAAR) .....	1.21	1.26	1.28	1.33	1.30	1.29	1.29	1.28	1.26	1.25	1.24	1.24	1.27	1.29	1.25
<b>Industrial Production Indices (Index, 2012=100)</b>															
Total Industrial Production .....	109.8	109.2	109.5	109.2	109.7	109.5	109.9	110.1	110.4	110.5	110.8	111.4	109.4	109.8	110.8
Manufacturing .....	106.5	105.7	105.9	105.7	106.1	106.2	106.6	106.8	106.9	106.8	107.1	107.7	105.9	106.4	107.1
Food .....	115.1	115.3	114.6	115.5	114.9	115.2	115.6	116.0	116.5	116.9	117.5	118.1	115.1	115.5	117.2
Paper .....	94.2	91.8	92.5	92.7	91.0	90.1	89.6	89.0	88.5	88.1	88.0	88.2	92.8	89.9	88.2
Petroleum and Coal Products .....	106.3	104.9	106.8	105.8	106.6	106.8	106.9	106.7	106.4	106.1	105.9	105.5	105.9	106.7	106.0
Chemicals .....	101.4	99.9	100.7	99.8	100.7	100.8	101.4	101.9	102.4	102.9	103.5	104.4	100.4	101.2	103.3
Nonmetallic Mineral Products .....	119.7	119.0	119.8	120.2	119.3	118.8	118.5	118.3	118.2	118.1	118.3	118.7	119.7	118.7	118.3
Primary Metals .....	97.9	96.7	96.6	96.2	94.6	93.0	92.1	90.7	89.5	88.3	88.4	89.1	96.9	92.6	88.8
Coal-weighted Manufacturing (a) .....	106.9	105.6	106.1	105.8	105.6	105.3	105.5	105.5	105.6	105.6	106.1	106.9	106.1	105.5	106.1
Distillate-weighted Manufacturing (a) .....	98.5	97.9	98.3	98.4	97.9	97.5	97.4	97.3	97.1	96.9	97.1	97.5	98.3	97.5	97.2
Electricity-weighted Manufacturing (a) .....	106.5	105.3	105.7	105.2	104.9	104.5	104.5	104.2	104.0	103.8	104.3	105.0	105.7	104.5	104.3
Natural Gas-weighted Manufacturing (a) .....	108.7	107.7	108.1	107.5	107.3	107.0	107.2	107.1	107.0	107.0	107.6	108.5	108.0	107.1	107.5
<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	2.61	2.62	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	1.99	2.00	2.01	2.01	2.02	2.03	2.04	2.04	2.05	2.06	2.00	2.02	2.05
Producer Price Index: Petroleum (index, 1982=1.00) .....	1.81	2.08	1.96	1.94	2.00	2.04	2.08	2.03	1.94	2.03	2.04	1.99	1.95	2.04	2.00
GDP Implicit Price Deflator (index, 2012=100) .....	111.5	112.2	112.7	113.1	113.8	114.3	115.0	115.7	116.5	117.2	117.9	118.5	112.4	114.7	117.5
<b>Miscellaneous</b>															
Vehicle Miles Traveled (b) (million miles/day) .....	8,240	9,288	9,241	8,932	8,357	9,366	9,317	9,018	8,452	9,461	9,402	9,086	8,928	9,015	9,103
Air Travel Capacity (Available ton-miles/day, thousands) .....	643	685	707	657	638	673	684	661	642	676	685	663	673	664	666
Aircraft Utilization (Revenue ton-miles/day, thousands) .....	380	426	427	410	397	433	440	419	400	435	441	421	411	422	424
Airline Ticket Price Index (index, 1982-1984=100) .....	255.7	278.3	263.8	264.4	263.1	289.0	284.2	287.3	285.8	312.6	306.3	308.8	265.6	280.9	303.4
Raw Steel Production (million short tons per day) .....	0.273	0.271	0.264	0.265	0.261	0.263	0.256	0.257	0.255	0.252	0.245	0.253	0.268	0.259	0.251
<b>Carbon Dioxide (CO2) Emissions (million metric tons)</b>															
Petroleum .....	575	587	597	596	576	579	595	594	570	575	592	591	2,354	2,344	2,329
Natural Gas .....	507	350	384	464	521	369	386	451	498	370	383	451	1,704	1,727	1,702
Coal .....	290	239	312	259	262	213	278	229	264	186	265	234	1,100	982	949
Total Energy (c) .....	1,374	1,178	1,296	1,321	1,362	1,164	1,262	1,277	1,335	1,134	1,243	1,278	5,169	5,064	4,990

- = 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 - January 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	1,010	1,015	1,020	1,024	1,028	1,032	1,035	1,039	1,043	1,003	1,022	1,037
Middle Atlantic .....	2,772	2,782	2,793	2,806	2,819	2,830	2,840	2,851	2,861	2,866	2,874	2,885	2,788	2,835	2,871
E. N. Central .....	2,528	2,535	2,542	2,547	2,563	2,574	2,581	2,590	2,598	2,603	2,609	2,619	2,538	2,577	2,607
W. N. Central .....	1,181	1,187	1,191	1,195	1,199	1,203	1,209	1,214	1,219	1,223	1,228	1,234	1,189	1,206	1,226
S. Atlantic .....	3,353	3,367	3,387	3,403	3,418	3,441	3,463	3,485	3,505	3,519	3,535	3,555	3,378	3,452	3,529
E. S. Central .....	832	835	839	841	844	848	852	856	860	862	865	869	837	850	864
W. S. Central .....	2,347	2,370	2,386	2,400	2,412	2,423	2,436	2,447	2,455	2,469	2,482	2,496	2,376	2,429	2,476
Mountain .....	1,252	1,261	1,272	1,278	1,285	1,292	1,301	1,309	1,315	1,322	1,328	1,334	1,266	1,296	1,325
Pacific .....	3,700	3,719	3,740	3,753	3,779	3,807	3,829	3,848	3,866	3,881	3,899	3,919	3,728	3,816	3,891
<b>Industrial Output, Manufacturing (Index, Year 2012=100)</b>															
New England .....	98.9	97.7	97.0	97.0	97.2	97.0	97.3	97.3	97.3	97.1	97.3	97.9	97.6	97.2	97.4
Middle Atlantic .....	98.8	97.5	97.0	96.8	97.1	96.9	97.1	97.2	97.0	96.9	97.1	97.5	97.5	97.1	97.1
E. N. Central .....	108.7	107.4	106.8	106.0	106.8	106.9	107.1	107.3	107.3	107.1	107.4	107.9	107.2	107.0	107.4
W. N. Central .....	106.1	105.1	105.2	105.0	105.5	105.5	106.0	106.3	106.4	106.4	106.8	107.5	105.4	105.8	106.8
S. Atlantic .....	110.6	109.9	110.3	110.1	110.5	110.5	111.0	111.1	111.1	111.0	111.3	111.9	110.2	110.8	111.3
E. S. Central .....	111.4	110.4	110.6	110.2	110.7	110.8	111.3	111.5	111.5	111.4	111.8	112.4	110.6	111.1	111.8
W. S. Central .....	101.5	100.6	101.7	101.5	102.0	101.9	102.3	102.4	102.5	102.4	102.8	103.5	101.4	102.2	102.8
Mountain .....	116.1	116.3	117.6	117.6	118.2	118.5	119.3	119.7	119.9	119.9	120.3	121.1	116.9	118.9	120.3
Pacific .....	105.9	105.2	105.9	105.7	106.1	106.1	106.7	107.0	107.1	107.1	107.5	108.3	105.7	106.4	107.5
<b>Real Personal Income (Billion \$2009)</b>															
New England .....	903	905	909	912	917	921	924	928	932	937	941	945	907	922	938
Middle Atlantic .....	2,301	2,313	2,320	2,326	2,338	2,347	2,354	2,362	2,372	2,382	2,391	2,399	2,315	2,350	2,386
E. N. Central .....	2,428	2,435	2,440	2,448	2,460	2,471	2,478	2,487	2,497	2,508	2,519	2,530	2,438	2,474	2,513
W. N. Central .....	1,147	1,148	1,161	1,162	1,164	1,167	1,170	1,175	1,181	1,189	1,197	1,206	1,155	1,169	1,194
S. Atlantic .....	3,214	3,231	3,251	3,263	3,283	3,304	3,321	3,341	3,363	3,386	3,408	3,429	3,240	3,312	3,397
E. S. Central .....	887	890	895	897	901	905	909	912	917	921	925	930	892	907	923
W. S. Central .....	1,984	1,999	2,012	2,020	2,032	2,044	2,053	2,064	2,078	2,092	2,103	2,116	2,004	2,049	2,097
Mountain .....	1,168	1,175	1,184	1,187	1,194	1,203	1,209	1,217	1,225	1,234	1,242	1,250	1,178	1,206	1,238
Pacific .....	2,809	2,827	2,843	2,845	2,857	2,875	2,889	2,904	2,919	2,939	2,957	2,975	2,831	2,881	2,947
<b>Households (Thousands)</b>															
New England .....	5,943	5,951	5,967	5,975	5,983	5,989	5,997	6,005	6,012	6,020	6,027	6,035	5,975	6,005	6,035
Middle Atlantic .....	16,258	16,285	16,331	16,352	16,370	16,384	16,404	16,421	16,440	16,460	16,478	16,498	16,352	16,421	16,498
E. N. Central .....	19,092	19,122	19,174	19,198	19,218	19,240	19,270	19,298	19,324	19,353	19,379	19,404	19,198	19,298	19,404
W. N. Central .....	8,692	8,714	8,746	8,763	8,780	8,794	8,812	8,829	8,845	8,863	8,880	8,897	8,763	8,829	8,897
S. Atlantic .....	25,709	25,788	25,902	25,981	26,060	26,134	26,219	26,299	26,379	26,466	26,546	26,629	25,981	26,299	26,629
E. S. Central .....	7,651	7,664	7,688	7,702	7,715	7,727	7,743	7,758	7,773	7,789	7,805	7,821	7,702	7,758	7,821
W. S. Central .....	14,812	14,858	14,924	14,970	15,017	15,061	15,112	15,160	15,210	15,262	15,314	15,366	14,970	15,160	15,366
Mountain .....	9,403	9,445	9,499	9,538	9,575	9,610	9,649	9,687	9,723	9,760	9,795	9,831	9,538	9,687	9,831
Pacific .....	18,939	18,984	19,055	19,100	19,145	19,187	19,238	19,287	19,336	19,384	19,431	19,479	19,100	19,287	19,479
<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	20.1	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.1	20.2	20.2
E. N. Central .....	22.4	22.4	22.4	22.4	22.5	22.5	22.5	22.5	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	29.7	29.8	29.9	30.0	30.0	29.2	29.6	29.9
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	18.2
Mountain .....	11.0	11.1	11.1	11.2	11.2	11.3	11.3	11.4	11.4	11.4	11.5	11.5	11.1	11.3	11.5
Pacific .....	23.7	23.9	24.0	24.1	24.1	24.2	24.3	24.3	24.3	24.4	24.4	24.5	23.9	24.2	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 - January 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 .....	3,219	893	135	2,253	3,214	874	127	2,163	3,115	874	127	2,163	6,499	6,378	6,279
Middle Atlantic .....	2,988	634	68	2,040	2,970	702	76	1,990	2,916	702	76	1,990	5,730	5,738	5,684
E. N. Central .....	3,328	762	65	2,266	3,195	740	122	2,237	3,156	740	122	2,237	6,421	6,294	6,255
W. N. Central .....	3,647	772	107	2,527	3,291	707	159	2,414	3,233	707	159	2,414	7,053	6,571	6,514
South Atlantic .....	1,334	128	2	907	1,416	190	12	966	1,416	190	12	965	2,371	2,584	2,582
E. S. Central .....	1,716	194	1	1,265	1,842	243	19	1,305	1,837	244	19	1,305	3,177	3,409	3,405
W. S. Central .....	1,210	90	0	828	1,152	75	4	799	1,148	75	4	798	2,128	2,031	2,026
Mountain .....	2,430	787	126	1,923	2,207	661	144	1,804	2,182	661	144	1,803	5,266	4,817	4,789
Pacific .....	1,689	577	96	1,125	1,501	542	85	1,183	1,496	542	85	1,184	3,487	3,311	3,306
U.S. Average .....	2,211	481	57	1,532	2,132	479	72	1,520	2,106	478	72	1,518	4,280	4,203	4,173
<b>Heating Degree Days, Prior 10-year Average</b>															
New England .....	3,165	820	111	2,122	3,152	822	105	2,125	3,180	845	108	2,113	6,218	6,203	6,247
Middle Atlantic .....	2,956	650	76	1,941	2,949	644	69	1,942	2,963	664	71	1,925	5,623	5,604	5,622
E. N. Central .....	3,196	697	112	2,198	3,198	698	102	2,196	3,198	720	104	2,182	6,203	6,194	6,205
W. N. Central .....	3,255	702	140	2,380	3,287	702	131	2,377	3,272	719	132	2,375	6,477	6,498	6,498
South Atlantic .....	1,480	176	11	963	1,459	169	10	950	1,423	174	10	922	2,631	2,587	2,530
E. S. Central .....	1,862	222	17	1,292	1,850	215	15	1,277	1,808	222	16	1,256	3,392	3,356	3,302
W. S. Central .....	1,183	85	4	807	1,199	83	3	791	1,158	83	3	790	2,079	2,076	2,034
Mountain .....	2,164	714	139	1,855	2,192	718	135	1,839	2,181	700	135	1,842	4,873	4,885	4,859
Pacific .....	1,444	582	83	1,175	1,456	580	85	1,156	1,459	554	82	1,151	3,283	3,278	3,246
U.S. Average .....	2,150	475	68	1,518	2,149	472	64	1,506	2,134	475	65	1,492	4,211	4,191	4,165
<b>Cooling Degree Days</b>															
New England .....	0	66	467	0	0	84	419	1	0	84	419	1	534	504	504
Middle Atlantic .....	0	145	630	8	0	154	549	4	0	154	549	4	782	707	707
E. N. Central .....	0	175	649	6	0	212	532	7	0	211	532	7	830	751	751
W. N. Central .....	0	222	728	2	3	262	659	10	3	261	659	10	952	934	933
South Atlantic .....	153	755	1,298	307	132	665	1,175	232	120	666	1,176	233	2,513	2,205	2,195
E. S. Central .....	28	549	1,215	82	27	518	1,052	66	27	518	1,052	66	1,873	1,664	1,663
W. S. Central .....	72	818	1,688	166	90	900	1,507	199	89	901	1,507	199	2,743	2,696	2,696
Mountain .....	10	342	985	60	18	440	939	79	18	440	941	79	1,397	1,476	1,478
Pacific .....	21	164	587	66	27	173	591	58	27	172	591	58	839	849	848
U.S. Average .....	45	398	951	104	45	407	859	93	43	408	860	93	1,498	1,405	1,405
<b>Cooling Degree Days, Prior 10-year Average</b>															
New England .....	0	79	455	1	0	83	470	1	0	79	461	1	536	554	541
Middle Atlantic .....	0	165	588	6	0	170	609	6	0	163	596	6	760	785	765
E. N. Central .....	3	242	548	7	3	240	579	8	3	233	564	7	800	829	808
W. N. Central .....	7	298	669	11	7	296	696	11	7	291	686	11	985	1,011	994
South Atlantic .....	120	684	1,180	239	127	696	1,202	247	137	684	1,190	254	2,224	2,272	2,265
E. S. Central .....	36	555	1,049	67	36	557	1,082	72	38	541	1,064	73	1,707	1,746	1,715
W. S. Central .....	103	897	1,552	205	100	892	1,575	207	106	886	1,567	209	2,758	2,774	2,768
Mountain .....	25	438	932	81	24	433	939	81	25	442	939	82	1,476	1,477	1,489
Pacific .....	31	185	631	76	31	185	624	78	31	190	635	79	923	917	935
U.S. Average .....	46	417	873	97	47	420	892	100	50	416	886	102	1,433	1,459	1,453

- = 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>).