Independent Statistics & Analysis
U.S. Energy Information Administration

December 2020

Short-Term Energy Outlook

Forecast highlights

Global liquid fuels

- The December *Short-Term Energy Outlook* (STEO) remains subject to heightened levels of uncertainty because responses to COVID-19 continue to evolve. Reduced economic activity related to the COVID-19 pandemic has caused changes in energy demand and supply patterns in 2020 and will continue to affect these patterns in the future. U.S. gross domestic product (GDP) declined by 4.4% in the first half of 2020 from the same period a year ago. GDP began rising in the third quarter of 2020, and this STEO assumes it will grow by 3.1% annually in 2021 from 2020. The U.S. macroeconomic assumptions in this outlook are based on forecasts by IHS Markit completed in early November.

- Brent crude oil spot prices averaged $43 per barrel (b) in November, up $3/b from the average in October. Brent prices increased in November in part because of news about the viability of multiple COVID-19 vaccines, along with market expectations that the Organization of the Petroleum Exporting Countries (OPEC) and partner countries (OPEC+) would delay or limit production increases planned for January 2021.

- The U.S. Energy Information Administration (EIA) expects that Brent prices will average $49/b in 2021, up from an expected average of $43/b in the fourth quarter of 2020. The forecast for higher crude oil prices next year reflects EIA's expectation that while inventories will remain high, they will decline with rising global oil demand and restrained OPEC+ oil production. EIA forecasts Brent prices will average $47/b in the first quarter of 2021 and rise to an average of $50/b by the fourth quarter. The first quarter 2021 average is $5/b more than forecast in last month's STEO, and the fourth quarter average is $1/b more. The higher expected first quarter prices reflect steeper expected global oil inventory draws as a result of the December 3 OPEC+ decision to limit its previously planned production increases in January 2021. EIA expects high global oil inventory levels and surplus crude oil production capacity will limit upward pressure on oil prices through much of 2021.

- EIA forecasts OPEC crude oil production will average 27.5 million barrels per day (b/d) in 2021, up from an estimated 25.6 million b/d in 2020. The increase reflects OPEC's announced potential increases to production targets and production increases in Libya. At the December 3 meeting, OPEC and OPEC+ participants decided to limit oil production increases planned for January 2021. OPEC+ announced it will increase its

production target by 0.5 million b/d in January 2021. The group had initially planned to increase its target by 2.0 million b/d. The group will also assess the state of global oil markets and petroleum demand monthly, adjusting targets based on market conditions. EIA now forecasts OPEC crude oil production will average 25.7 million b/d in the first quarter of 2021, which is 1.7 million b/d lower than forecast in the November STEO and reflects the announced changes to OPEC+ targets and more effective assumed compliance with targets.

- EIA estimates that the world consumed 95.6 million b/d of petroleum and liquid fuels in November, which is down 6.3 million b/d from November 2019 but up from the third-quarter 2020 average of 93.5 million b/d. EIA forecasts that global consumption of petroleum and liquid fuels will average 92.4 million b/d for all of 2020, which is down by 8.8 million b/d from 2019, before increasing by 5.8 million b/d in 2021.

- EIA estimates that U.S. crude oil production was 11.2 million b/d in November, which is up from 10.9 million b/d in September (the most recent month for which historical data are available). The increase mostly reflects greater production in the U.S. Federal Gulf of Mexico after hurricane-related disruptions. EIA expects that U.S. crude oil production will decline to less than 11.0 million b/d in March 2021 mostly because of falling production in the Lower 48 states, where EIA expects declining production rates at existing wells will outpace production from newly drilled wells in the coming months. EIA expects crude oil production in the Lower 48 states will increase from 8.7 million b/d in February 2021 to 9.1 million b/d in December 2021, as drilling increases in response to rising oil prices. This increase contributes to total U.S. crude oil production reaching 11.4 million b/d in December 2021. On an annual average basis, EIA expects U.S. crude oil production to fall from 12.2 million b/d in 2019 to 11.3 million b/d in 2020 and 11.1 million b/d in 2021.

Natural Gas

- In November, the Henry Hub natural gas spot price averaged $2.61 per million British thermal units (MMBtu), up from the October average of $2.39/MMBtu. Price increases last month were moderated by significantly warmer-than-normal temperatures, which reduced residential space heating demand for natural gas despite many remaining at home in response to the pandemic. EIA expects Henry Hub spot prices to reach a monthly average of $3.10/MMBtu in January 2021, which is down from the forecast January average price of $3.42/MMBtu in last month's STEO. Although EIA still expects prices to increase in the coming months because of rising space heating demand and rising U.S. liquefied natural gas (LNG) exports amid declining U.S. natural gas production, the lower January price forecast reflects higher forecast storage levels this winter compared with last month's forecast. EIA expects that monthly average spot prices will average $3.01/MMBtu in 2021, which is up from the forecast average of $2.07/MMBtu for 2020.

- U.S. working natural gas in storage ended October at almost 4.0 trillion cubic feet (Tcf), 5% more than the five-year (2015–19) average and the second-highest end-of-October level on record. EIA estimates that inventories fell by 20 billion cubic feet (Bcf) in November, compared with a five-year average November withdrawal of 103 Bcf and a forecast withdrawal of 222 Bcf in last month's STEO. The lower-than-expected withdrawal is the result of warmer-than-normal November temperatures that reduced natural gas use for space heating. However, EIA forecasts that declines in U.S. natural gas production this winter compared with last winter will more than offset the declines in natural gas consumption, which will contribute to inventory withdrawals outpacing the five-year average during the remainder of the winter season that ends in March. Forecast natural gas inventories end March 2021 at 1.6 Tcf, 15% lower than the 2016–20 average.

- EIA expects that total U.S. consumption of natural gas will average 83.4 billion cubic feet per day (Bcf/d) in 2020, down 2.0% from 2019. The decline in total U.S. consumption reflects warmer temperatures in 2020 compared with 2019 that lowered residential space heating demand for natural gas despite many staying home in response to the pandemic. EIA expects residential demand in 2020 to average 12.9 Bcf/d (down 0.8 Bcf/d from 2019) and commercial demand in 2020 to average 8.6 Bcf/d (down 1.0 Bcf/d from 2019). EIA forecasts industrial consumption will average 22.5 Bcf/d in 2020 (down 0.5 Bcf/d from 2019) as a result of reduced manufacturing activity. EIA expects total U.S. natural gas consumption will average 79.4 Bcf/d in 2021, a 4.8% decline from 2020. The forecast decline in 2021 results from rising natural gas prices that lower forecast natural gas demand in the electric power sector.

- EIA forecasts U.S. dry natural gas production will average 90.9 Bcf/d in 2020, which is down from an average of 93.1 Bcf/d in 2019. In the forecast, monthly average production falls from a record 97.0 Bcf/d in December 2019 to 87.1 Bcf/d in April 2021 before increasing slightly. EIA forecasts dry natural gas production in the United States to average 87.9 Bcf/d in 2021. EIA expects production to begin rising in the second quarter of 2021 in response to higher natural gas and crude oil prices. The increase in crude oil prices is expected to raise associated gas production from oil-directed wells in late-2021, especially in the Permian region.

- EIA estimates that the United States exported 9.4 Bcf/d of LNG in November—the most for any month on record. International spot and forward LNG prices continued to increase in late November, supported by reduced global LNG supply because of outages at LNG export plants in several countries and reported congestion at the Panama Canal, which affected westbound U.S. LNG exports to Asia. EIA expects LNG demand to continue increasing. The primary drivers of this increase are forecasts of colder-than-normal winter weather in Northern Asia and Europe and coal plant closures in South Korea that could increase demand for natural gas for power generation. EIA forecasts that U.S. LNG exports will exceed 9.5 Bcf/d from December through February and will average 8.5 Bcf/d in 2021, a 30% increase from 2020.

Electricity, coal, renewables, and emissions

- EIA forecasts that consumption of electricity in the United States will decrease by 3.9% in 2020. EIA expects retail sales of electricity in the commercial sector to fall this year by 5.9% and by 8.8% in the industrial sector. EIA forecasts residential sector retail sales will rise by 1.5% in 2020. Milder winter temperatures in early 2020 led to less residential consumption for space heating, but this effect was offset by increased summer cooling demand and increased electricity use by more people staying home in response to the pandemic. EIA forecasts total U.S. electricity consumption will rise by 1.3% in 2021. The increase in electricity consumption next year is a result of forecast colder temperatures in the first quarter compared with the same period last year, in addition to continued higher consumption as many people will still be at home more because of the pandemic.

- EIA expects the share of U.S. electric power sector generation from natural gas will increase from 37% in 2019 to 39% this year. In 2021, the forecast natural gas share declines to 34% in response to a forecast increase in the price of natural gas delivered to electricity generators from an average of $2.44/MMBtu in 2020 to $3.38/MMBtu in 2021 (an increase of 39%). Coal's forecast share of electricity generation falls from 24% in 2019 to 20% in 2020 and then returns to 24% in 2021. Electricity generation from renewable energy sources rises from 18% in 2019 to 20% in 2020 and to 21% in 2021. The nuclear share of U.S. generation remains close to 20% through the forecast period.

- In 2020, EIA expects U.S. residential electricity prices to average 13.1 cents per kilowatthour, which is 0.8% higher than the average electricity price in 2019. Annual changes in regional residential electricity prices this year range from 0.4% lower in the South Atlantic region to 3.7% higher in the Pacific region.

- EIA forecasts that planned additions to wind and solar generating capacity in 2020 and 2021 will contribute to increasing electricity generation from those sources. EIA expects the U.S. electric power sector will add 23.0 gigawatts (GW) of new wind capacity in 2020 and 9.5 GW of new capacity in 2021. Expected utility-scale solar capacity rises by 12.8 GW in 2020 and by 14.0 GW in 2021.

- EIA forecasts U.S. coal production to total 521 million short tons (MMst) in 2020, a 26% decline from 2019. Forecast coal production rises to 624 MMst in 2021, a 20% increase from 2020 levels. EIA expects coal production to grow because of increased coal demand from the electric power sector amid higher natural gas prices in 2021.

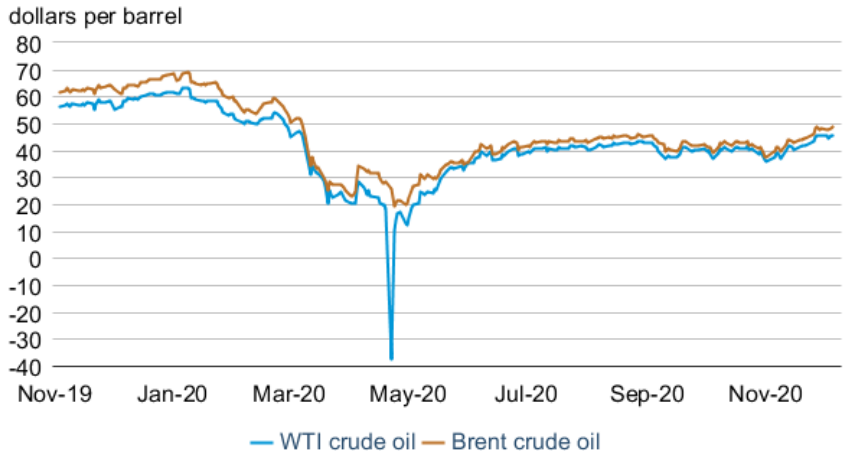
- EIA expects that U.S. energy-related carbon dioxide (CO_2) emissions, after decreasing by almost 3% in 2019 from the previous year's level, will decrease by 11% in 2020. This decline in emissions is the result of less energy consumption related to slowing economic growth in response to the COVID-19 pandemic. EIA expects emissions from coal will be down 19% from 2019 and emissions from petroleum will be down 13% from 2019. In 2021, EIA forecasts that energy-related CO_2 emissions will increase by 6% from the 2020 level as the economy recovers and energy use increases.

Petroleum and natural gas markets review

Crude oil

Prices: The front-month futures price for Brent crude oil settled at $48.71 per barrel (b) on December 3, 2020, an increase of $9.74/b from November 2, 2020. The front-month futures price for West Texas Intermediate (WTI) crude oil for delivery at Cushing, Oklahoma, increased by $8.83/b during the same period, settling at $45.64/b on December 3 **(Figure 1)**.

Figure 1. Crude oil front-month futures prices



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

In late November, crude oil prices reached their highest levels since early March, before responses to COVID-19 affected worldwide economies. Prices for crude oil as well as other risk assets such as equities and industrial metals all increased in response to optimism following the announcement of the efficacy of several COVID-19 vaccine candidates, and the price increase likely reflects solidified market expectations for economic recovery during 2021. This optimism came despite record highs in daily cases of COVID-19 during November, which is slowing the recovery in transportation demand in the near term, particularly in Europe and regions of the United States.

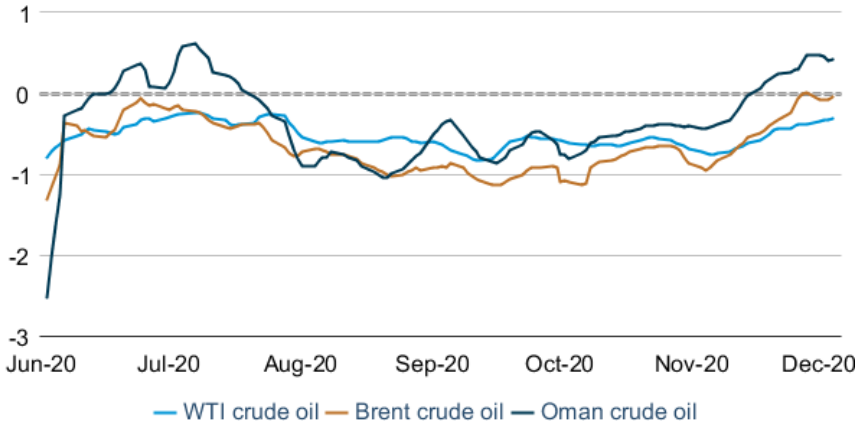
The meeting on December 3 between members of the Organization of the Petroleum Exporting Countries (OPEC) and partner countries (OPEC+) resulted in a change to their production cuts beginning in January 2021. The group had initially planned to raise production by 2.0 million barrels per day (b/d) in January 2021 but will instead raise production by 0.5 million b/d. In addition, the group will assess the state of global oil markets and petroleum demand monthly, adjusting production targets based on prevailing oil market conditions. The U.S. Energy Information Administration (EIA) assumes the OPEC+ group will be highly compliant with this agreement in early 2021. EIA forecasts crude oil production from OPEC to average 25.7 million b/d in the first quarter of 2021, a 1.7 million b/d reduction from the November STEO. Partly because of EIA's forecast of more restrained OPEC+ production in 2021, EIA forecasts tighter oil markets next year, particularly in the first quarter. EIA now forecasts first-quarter 2021 global oil

inventory draws to average 1.8 million b/d, which is 1.0 million b/d more than previously forecast.

The combined effect of lower supply expectations from OPEC+ countries as well as firmer market expectations for a recovery in global oil demand is contributing to higher prices for near-term oil deliveries relative to prices for delivery further in the future. The five-day moving averages for the Oman crude oil 1st–3rd spread approached 50 cents/b in late November, and Brent's spread settled at -4 cents/b on December 3. The WTI spread also increased, but by less than the other crude oils **(Figure 2)**.

Figure 2. Crude oil front-month to 3rd month futures price spread

dollars per barrel, five-day moving average



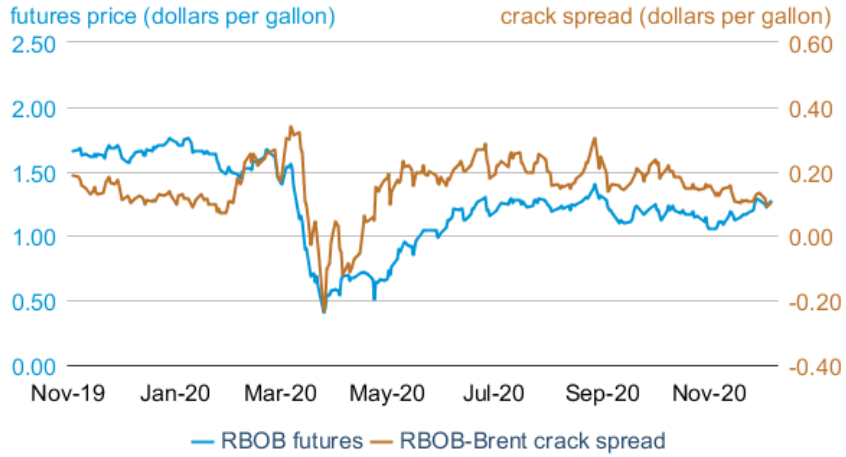
Sources: CME Group, Dubai Mercantile Exchange, and Intercontinental Exchange, as compiled by Bloomberg L.P.
Note: WTI=West Texas Intermediate.

The increasing crude oil price spreads reflect both the global oil inventory drawdown since June 2020 as well as expectations for increasing demand and continued stock draws in the coming months. Higher Oman crude oil price spreads, which generally reflect Middle Eastern crude oil exported to Asia, could reflect increasing demand and refinery runs from China, India, or other Asian countries. China's National Bureau of Statistics reported that crude oil refinery runs in China reached an all-time high of 14.1 million b/d in October. Based on data from India's Ministry of Petroleum & Natural Gas, EIA estimates that India's total petroleum consumption was 4.6 million b/d in October 2020, the most of any month since February.

Petroleum products

Gasoline prices: The front-month futures price of reformulated blendstock for oxygenate blending (RBOB, the petroleum component of gasoline used in many parts of the country) settled at $1.26 per gallon (gal) on December 3, up 21 cents/gal from November 2, 2020 **(Figure 3)**. The RBOB–Brent crack spread (the difference between the price of RBOB and the price of Brent crude oil) decreased by 2 cents/gal to settle at 10 cents/gal during the same period.

Figure 3. Historical RBOB front-month futures prices and crack spread

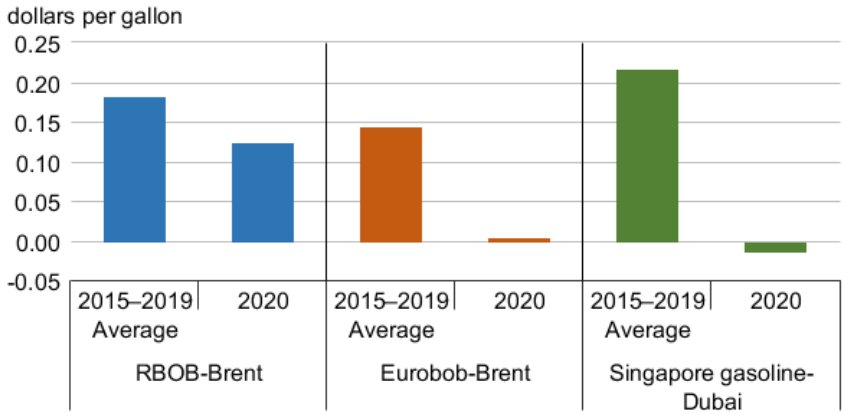


Source: CME Group, as compiled by Bloomberg L.P.
Note: RBOB=reformulated blendstock for oxygenate blending

The gasoline crack spread started November at a six-month low of 12 cents/gal and traded within a 5-cent range during the month, the narrowest range for any month in 2020. The month's average crack spread of 12 cents/gal was within the five-year (2015–2019) range and was down 5 cents/gal from October 2020. The crack spread decrease likely reflects higher inventories and lower consumption than in October. In this STEO, the U.S. Energy Information Administration (EIA) estimates gasoline inventories increased by 7.4 million barrels (3.3%) from October, which is slightly higher than the average five-year increase of 2.7% from October to November. EIA estimates November gasoline consumption averaged 8.2 million barrels per day (b/d), a decrease of 3.2% from October.

International gasoline crack spreads: Gasoline crack spreads in both Europe and Asia declined to historically low levels, based on the Eurobob–Brent crack spread for Europe and the Singapore gasoline–Dubai crack spread for Singapore. The European monthly average gasoline crack spread was less than 1 cent/gal, and Singapore's was -1 cent/gal in November. Meanwhile, the RBOB–Brent crack spread averaged 12 cents/gal for the month. Although the RBOB–Brent crack spread was 6 cents/gal less than the five-year average, it remained high relative to the crack spreads for Europe and Singapore, which were 14 cents/gal and 22 cents/gal less than their five-year averages, respectively **(Figure 4)**.

Figure 4. November gasoline crack spreads

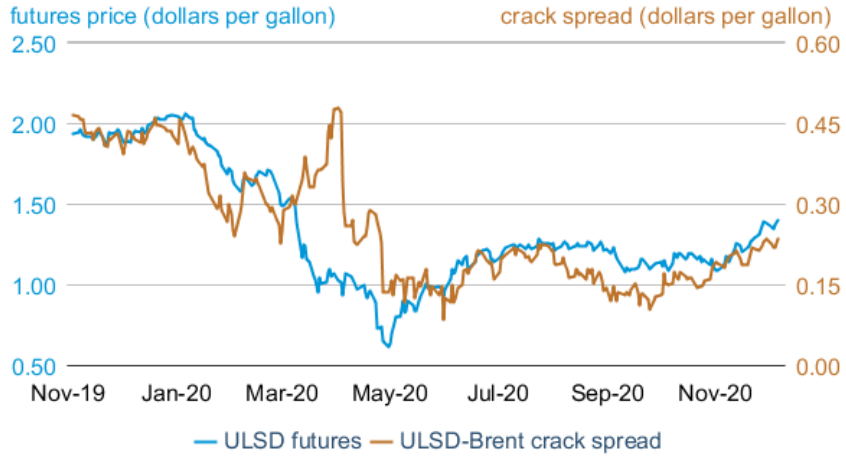


Source: CME Group, as compiled by Bloomberg L.P.
Note: RBOB=reformulated blendstock for oxygenate blending

Although U.S. gasoline crack spreads are less than their five-year average, gasoline crack spreads in Europe and Singapore have decreased more relative to their five-year averages. In Europe, especially high gasoline inventories likely explain the greater decrease. Gasoline inventories at the Amsterdam-Rotterdam-Antwerp hub for the week ending November 19 were at their highest November level in more than 10 years and were 68% higher than the same week a year ago. In Asia, crack spreads have decreased more than U.S. crack spreads because China increased refinery runs to 14.1 million b/d in October, up 5% from a year ago. In contrast to China, U.S. refiners have maintained low refinery runs and gasoline production levels. Furthermore, according to trade press, China exported record levels of gasoline in October, increasing product supplies throughout Asian markets.

Ultra-low sulfur diesel prices: The ultra-low sulfur diesel (ULSD) front-month futures price for delivery in New York Harbor settled at $1.39/gal on December 3, 2020, up 28 cents/gal from November 2, 2020 **(Figure 5)**. The ULSD–Brent crack spread (the difference between the price of ULSD and the price of Brent crude oil) increased by 5 cents/gal to settle at 23 cents/gal during the same period.

Figure 5. Historical ULSD front-month futures price and crack spread

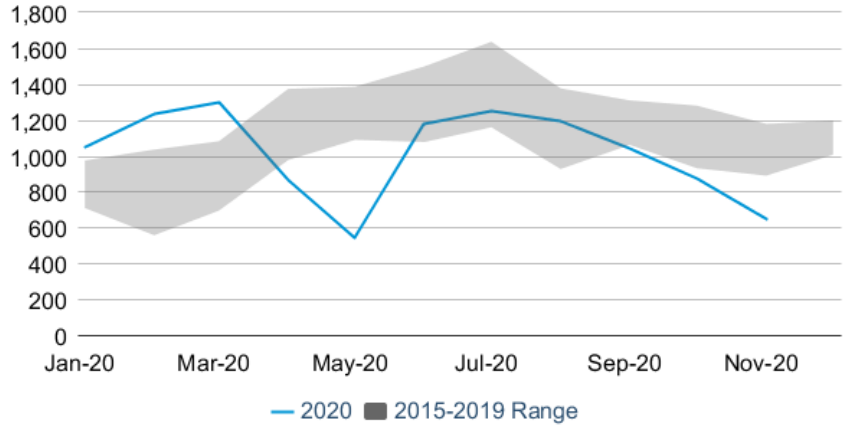


Source: CME Group, as compiled by Bloomberg L.P.
Note: ULSD=ultra-low sulfur diesel

The average ULSD–Brent crack spread in November increased to 21 cents/gal, up 4 cents/gal from October 2020 but down 23 cents/gal from last November. EIA estimates that distillate consumption increased from October to November by 0.1 million b/d (2.6%) to 4.0 million b/d. If confirmed by monthly data, it will mark the fifth consecutive month of distillate consumption increases. In addition, since August, distillate consumption has increased by 0.4 million b/d. As distillate production has decreased to their lowest levels since 2009 in October and November, according to EIA estimates, demand has been increasingly met by distillate inventories, which have fallen by 32.8 million barrels since August 2020, the largest three-month decrease since March 2003.

Reduced net exports of distillate have provided an additional supply source. EIA estimates net exports of distillate fuel were 0.6 million b/d in November, the lowest level for November since 2010 **(Figure 6)**. EIA data for the week ending November 27 show that four-week average distillate imports were 60% higher than the five-year average and four-week average exports were 20% lower than the five-year average. In addition to increased distillate consumption, the widening spread between the ULSD front-month futures price and European distillate spot price is likely contributing to the increase in net imports. The spread in November averaged 13 cents/gal, the highest monthly average since December 2017. The high spread has facilitated imports of distillate on the East Coast (Petroleum Administration for Defense District–PADD–1). Weekly EIA estimates the week ending November 27 showed East Coast distillate imports of 575,000 b/d, the highest for any week since the week ending February 5, 2010.

Figure 6. Monthly distillate net exports

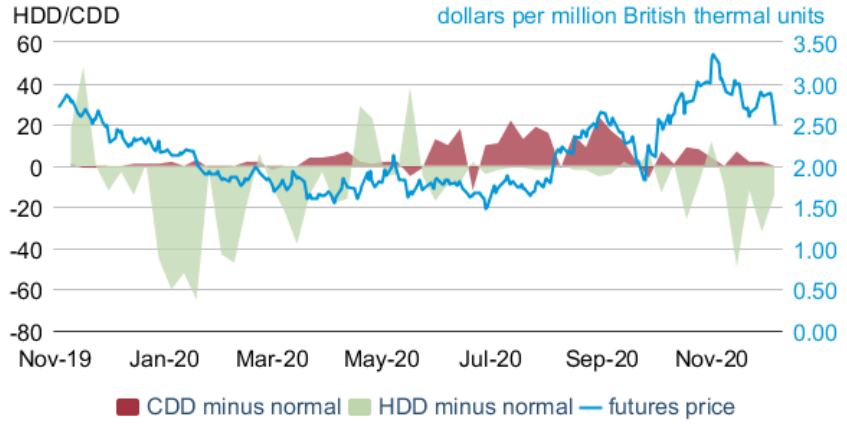


Source: U.S. Energy Information Administration

Natural Gas

Prices: The front-month natural gas futures contract for delivery at the Henry Hub settled at $2.51 per million British thermal units (MMBtu) on December 3, which is down 74 cents/MMBtu from November 2 **(Figure 7)**. The warmest November since 2001 lessened concerns of a tight natural gas market this winter and helped lower prices.

Figure 7. Natural gas front-month futures prices and actual minus historical average HDD and CDD



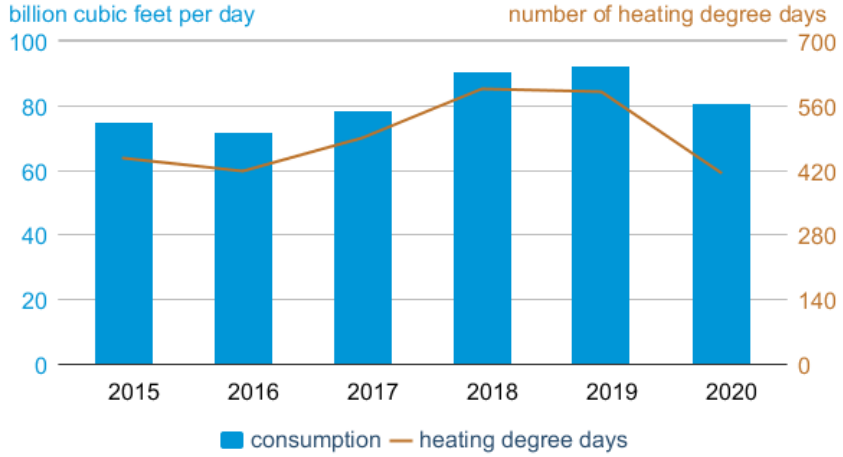
Sources: CME Group and National Oceanic and Atmospheric Administration, as compiled by Bloomberg L.P.
Note: HDD=heating degree days, CDD=cooling degree days.

The U.S. Energy Information Administration (EIA) estimates that natural gas inventories declined by 20 billion cubic feet (Bcf) in November, the smallest November draw since 2015. Compared with November 2019, lower natural gas consumption because of warmer temperatures helped to moderate the seasonal decline in inventories in November, even with lower natural gas production and higher liquefied natural gas (LNG) exports. Natural gas production decreased 7.1 Bcf per day (Bcf/d) from November 2019, and U.S. LNG exports rose to a record high in

November, up 3.0 Bcf/d from November 2019. Despite lower production and higher LNG exports, natural gas inventories remain 281 Bcf (8%) higher than the five-year (2015–19) average.

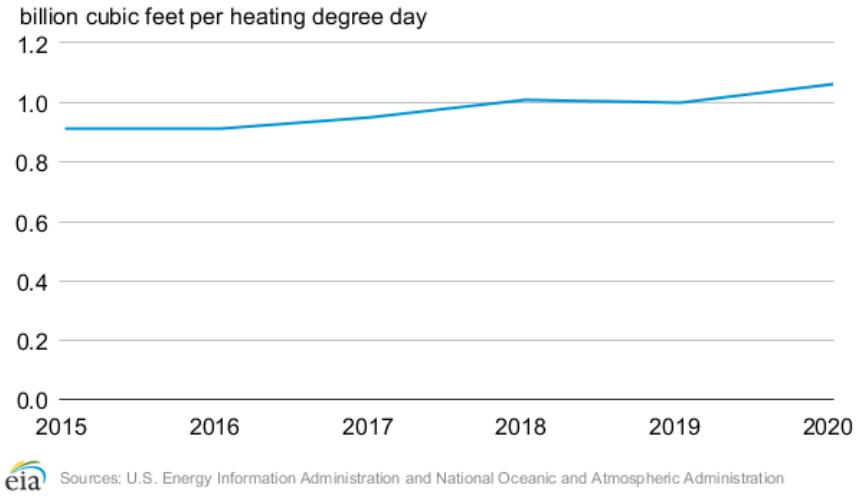
Natural gas consumption and heating degree days: U.S. heating degree days (HDD) in November were 21% less than the 2010–19 average (and 30% less than in November 2019), which contributed to an estimate of the lowest natural gas consumption in November since 2017 **(Figure 8)**. EIA forecasts that consumption in the commercial sector fell 29% from November 2019, in the residential sector by 25%, and in the power generation sector by 6%. Even though temperatures in November 2020 were the warmest since 2001, estimated consumption in 2020 still remained higher than in any previous November except 2018 and 2019 because the size of the overall natural gas market in the United States has increased. Much of this growth has been in the industrial and electric power sectors. Considering the longer-term trends, EIA estimates that U.S. natural gas consumption for the full year 2020 increased 56% compared with 2010 in the electric power sector and 21% in the industrial sector. In addition, responses to COVID-19 in 2020 that have resulted in more people working, attending school, and spending more time at home have likely contributed to greater residential consumption relative to the level of HDD. Compared with the five-year average, residential consumption per HDD increased 11% in November 2020 **(Figure 9)**.

Figure 8. November natural gas consumption and heating degree days



eia Sources: U.S. Energy Information Administration and National Oceanic and Atmospheric Administration

Figure 9. November residential natural gas consumption per heating degree day



Notable forecast changes

- The U.S. Energy Information Administration (EIA) updated its *International Energy Statistics* (IES) database during November to include 2018 data for petroleum consumption from countries outside of the Organization for Economic Cooperation and Development. The *Short-Term Energy Outlook* (STEO) uses IES for its historical global liquid fuels consumption and production data. Based on this IES update, EIA reports that global liquid fuels consumption averaged 100.4 million barrels per day (b/d) in 2018, 0.2 million b/d lower than estimated in the November STEO. This lower historical baseline for 2018 carries through to estimates and forecasts for 2019 through 2021. EIA now estimates global liquid fuels consumption averaged 101.2 million b/d in 2019, which is 0.3 million b/d less than estimated in the November STEO. EIA forecasts global liquid fuels consumption will average 92.4 million b/d in 2020 and 98.2 million b/d in 2021.

- EIA forecasts OPEC crude oil production will average 27.5 million b/d in 2021, which is 1.0 million b/d lower than previously forecast. The reduction in the forecast reflects EIA's updated assumptions about OPEC production and compliance following the group's December 3 meeting at which OPEC and partner countries announced they were limiting production increases planned for January 2021 to 0.5 million b/d from the previously announced 2.0 million b/d.

- EIA forecasts Henry Hub natural gas spot prices will average $3.01 per million British thermal units (MMBtu) in 2021, which is down from a forecast of $3.14/MMBtu in the November STEO. The lower forecast reflects EIA's expectation of higher inventory levels during 2021 compared with last month's forecast.

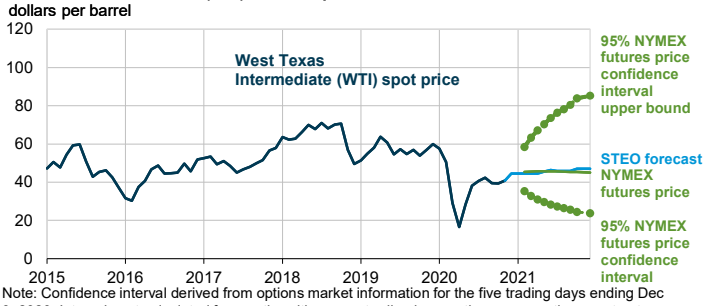
This report was prepared by the U.S. Energy Information Administration (EIA), the statistical and analytical agency within the U.S. Department of Energy. By law, EIA's data, analyses, and forecasts are independent of approval by any other officer or employee of the United States Government. The views 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

December 8, 2020

eia | U.S. Energy Information Administration — *Independent Statistics & Analysis* | www.eia.gov

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

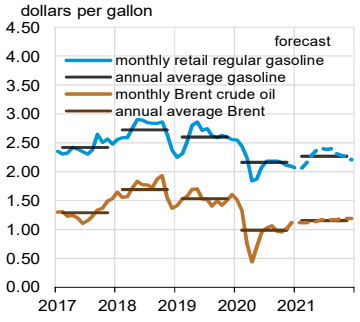


Note: Confidence interval derived from options market information for the five trading days ending Dec 3, 2020. Intervals not calculated for months with sparse trading in near-the-money options contracts.

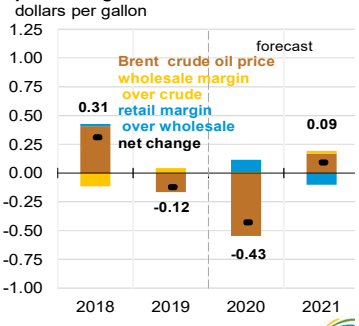
Sources: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020, CME Group, and Bloomberg, L.P.

eia

U.S. gasoline and crude oil prices
dollars per gallon



Components of annual gasoline price changes
dollars per gallon



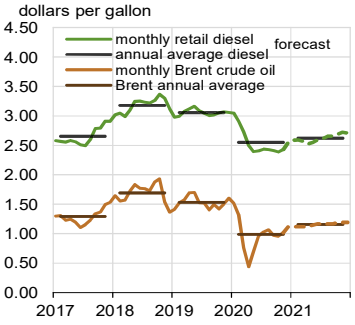
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

eia

FPL 054280
20210015-EI

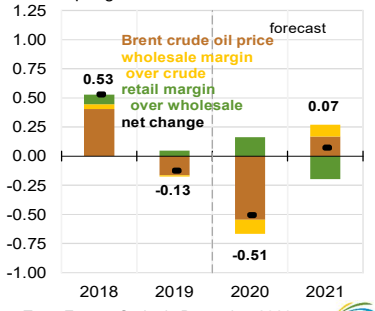
U.S. diesel and crude oil prices

dollars per gallon



Components of annual diesel prices changes

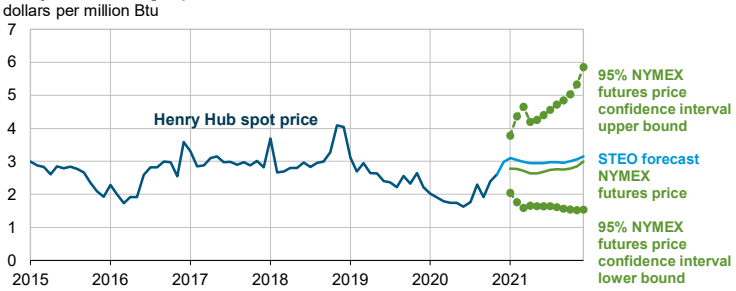
dollars per gallon



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

Henry Hub natural gas price and NYMEX confidence intervals

dollars per million Btu

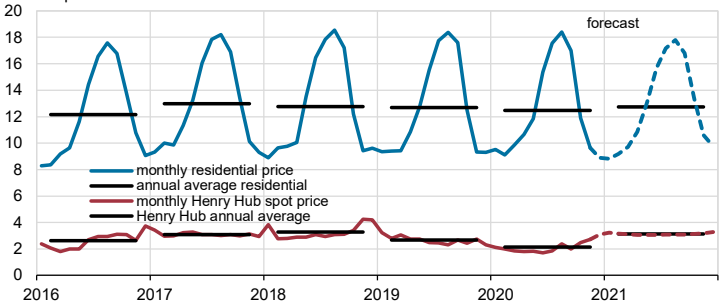


Note: Confidence interval derived from options market information for the five trading days ending Dec 3, 2020. Intervals not calculated for months with sparse trading in near-the-money options contracts.

Sources: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020, and CME Group

U.S. natural gas prices

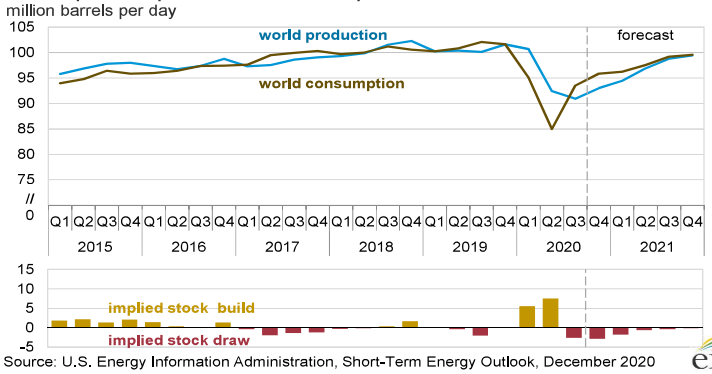
dollars per thousand cubic feet



Sources: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020, and Refinitiv

World liquid fuels production and consumption balance

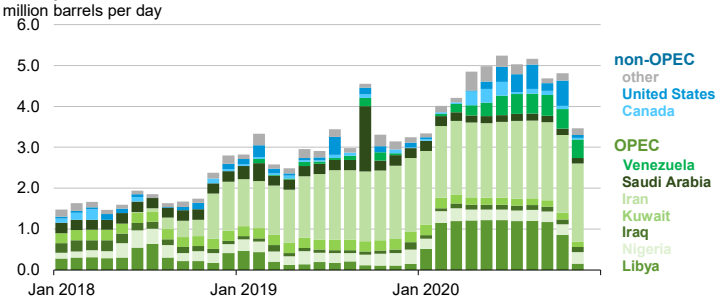
million barrels per day



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

Estimated unplanned liquid fuels production outages among OPEC and non-OPEC producers

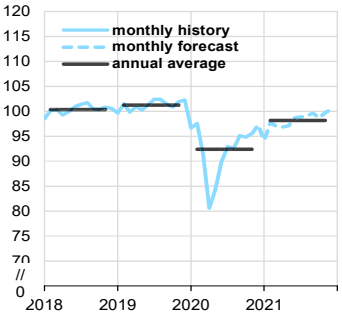
million barrels per day



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

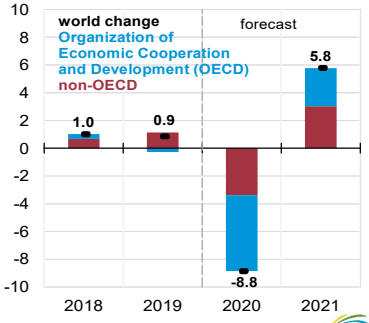
World liquid fuels consumption

million barrels per day

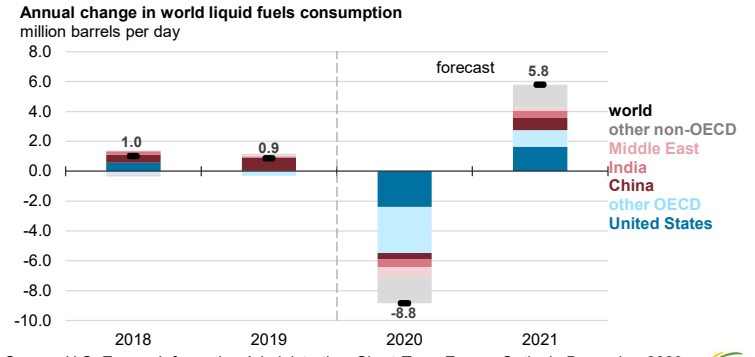


Components of annual change

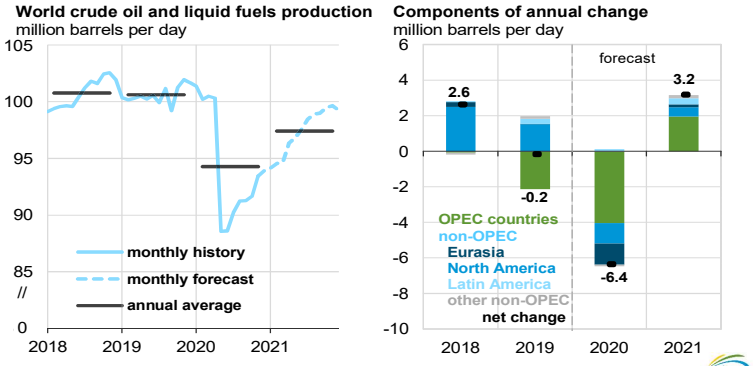
million barrels per day



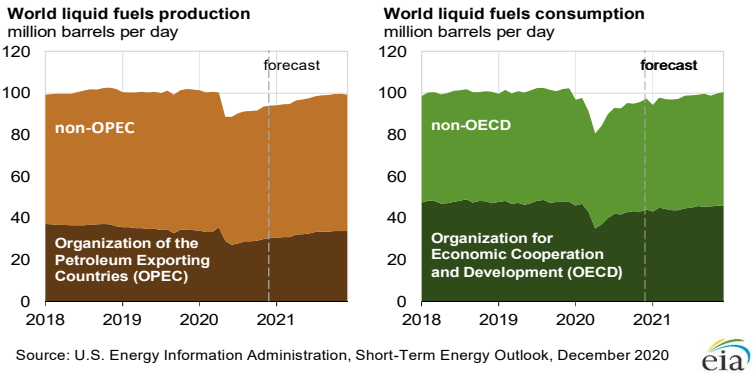
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

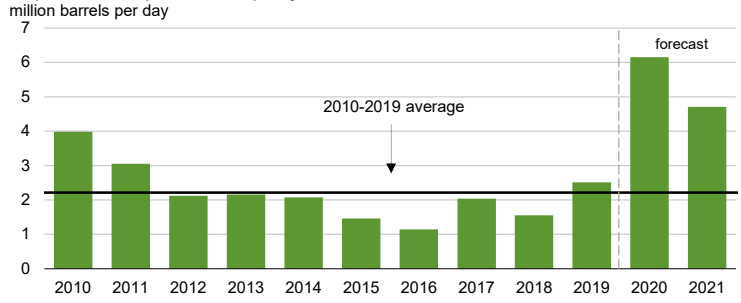


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020



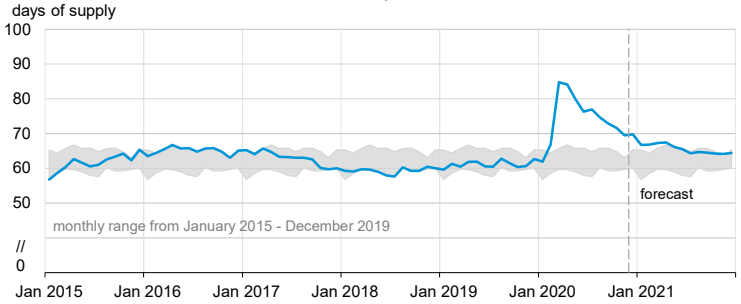
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

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



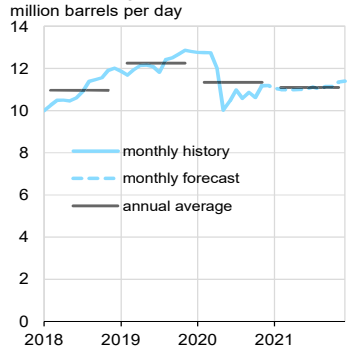
Note: Black line represents 2010-2019 average (2.2 million barrels per day).
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

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

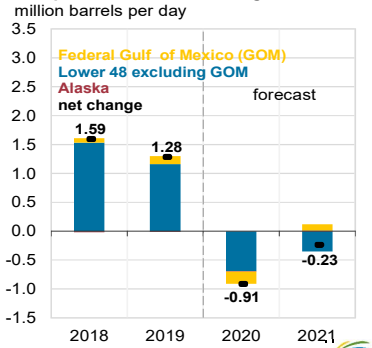


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

U.S. crude oil production
million barrels per day

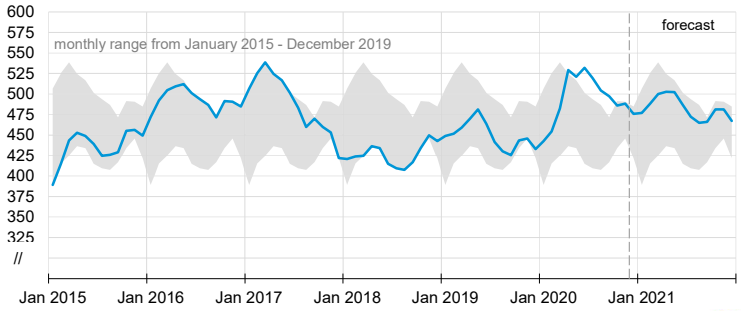


Components of annual change
million barrels per day



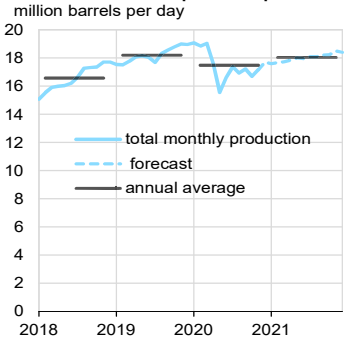
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

U.S. commercial crude oil inventories
million barrels

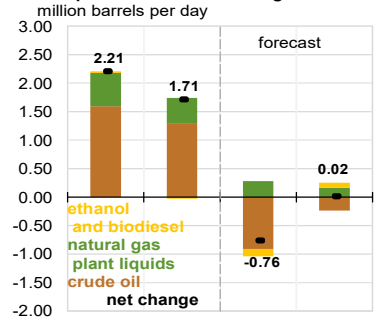


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

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

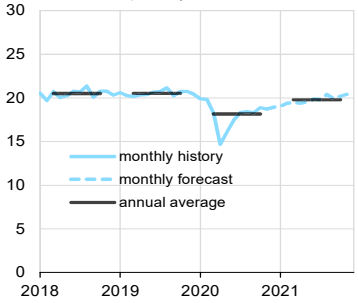


Components of annual change
million barrels per day

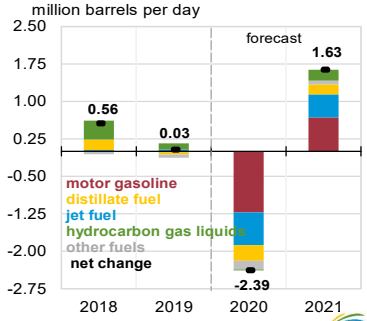


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

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

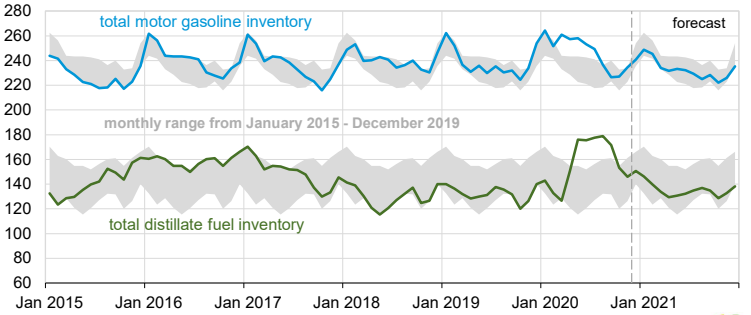


Components of annual change
million barrels per day



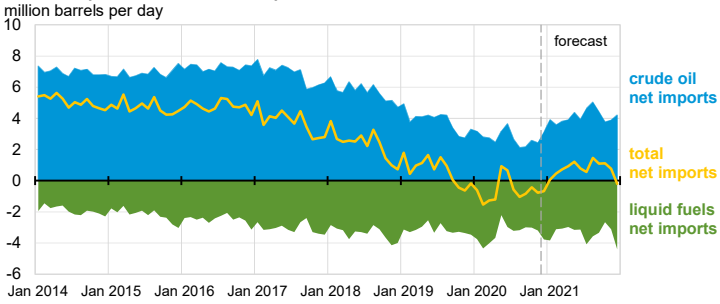
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

U.S. gasoline and distillate inventories
million barrels



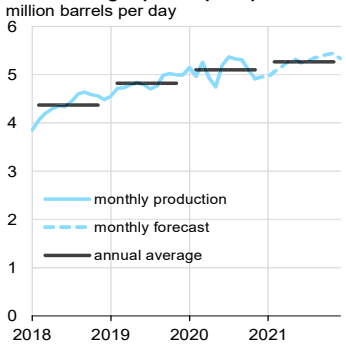
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

U.S. net imports of crude oil and liquid fuels
million barrels per day

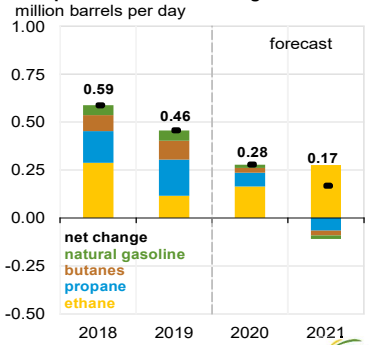


Note: Liquids fuels include: gasoline, distillate fuels, hydrocarbon gas liquids, jet fuel, residual fuel oil, unfinished oils, other hydrocarbons/oxygenates, and other oils.
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

U.S. natural gas plant liquids production
million barrels per day

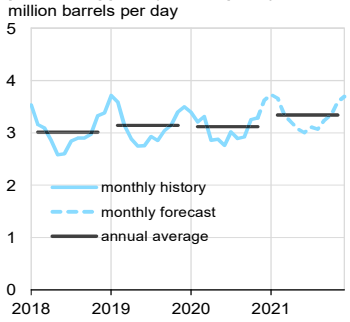


Components of annual change
million barrels per day

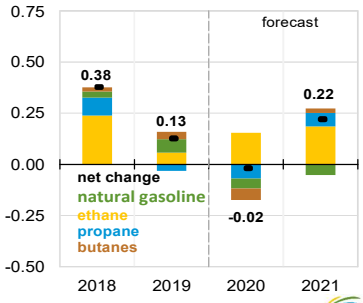


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

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

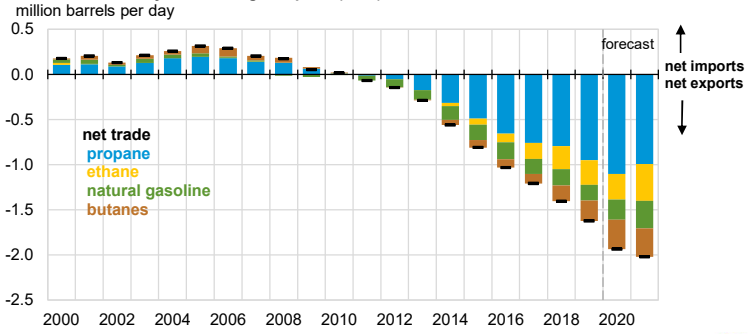


Components of annual change
million barrels per day



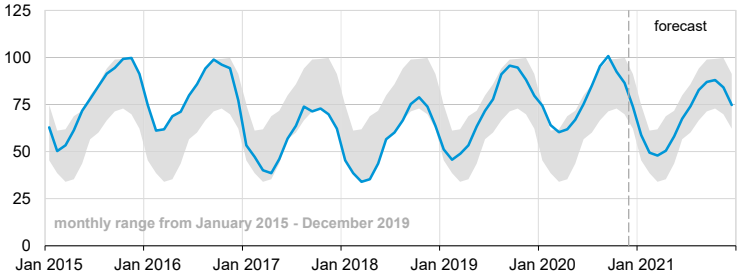
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

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



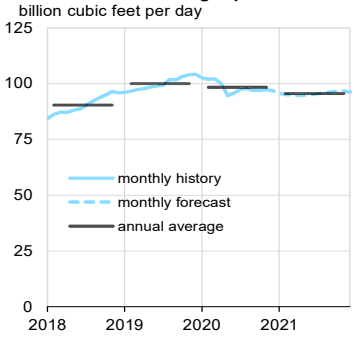
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

U.S. commercial propane inventories
million barrels

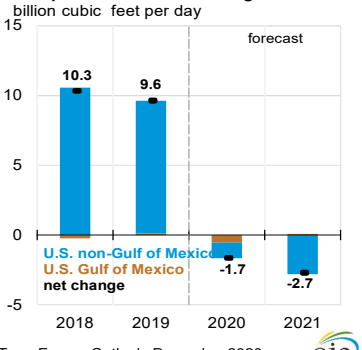


Note: Excludes propylene.
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

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

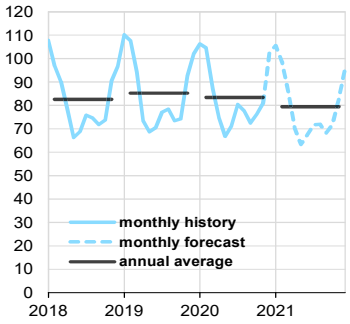


Components of annual change
billion cubic feet per day

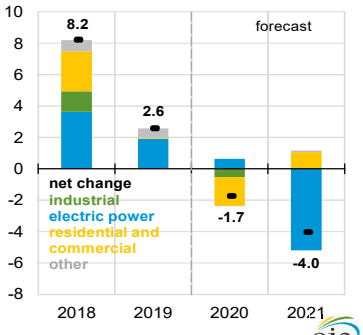


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

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

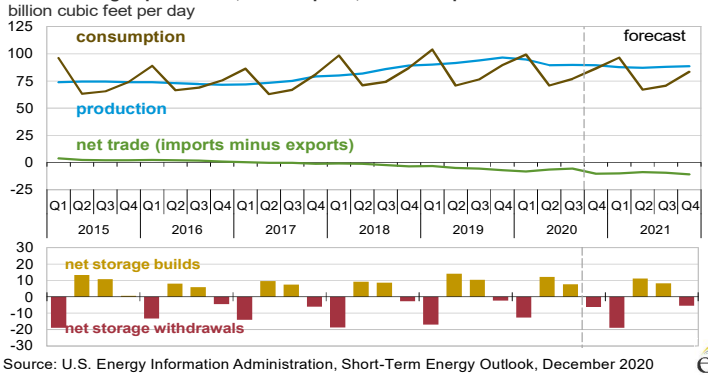


Components of annual change
billion cubic feet per day



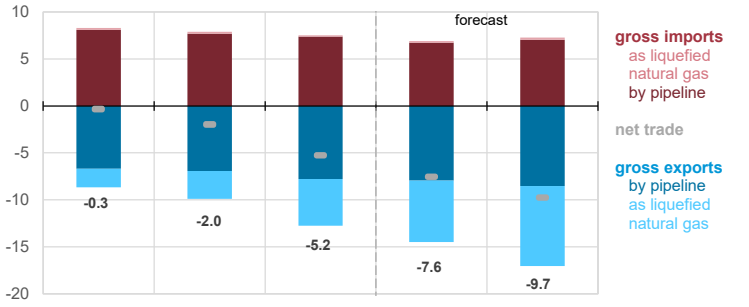
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

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



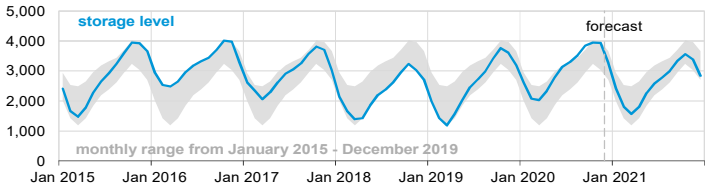
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

U.S. annual natural gas trade
billion cubic feet per day

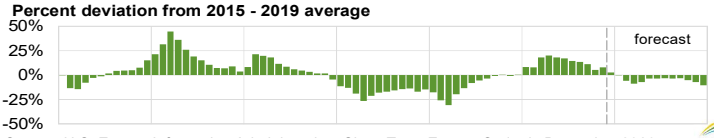


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

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

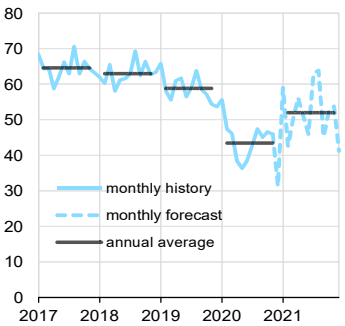


Percent deviation from 2015 - 2019 average

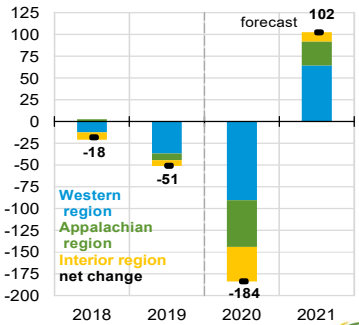


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

U.S. coal production
million short tons

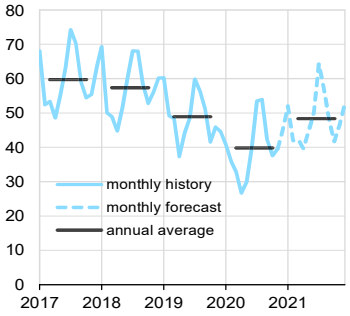


Components of annual change
million short tons

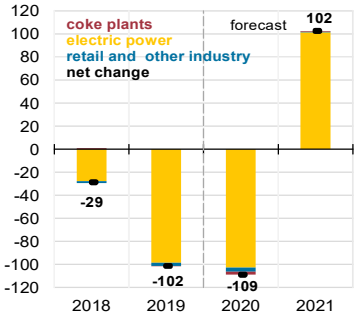


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

U.S. coal consumption
million short tons

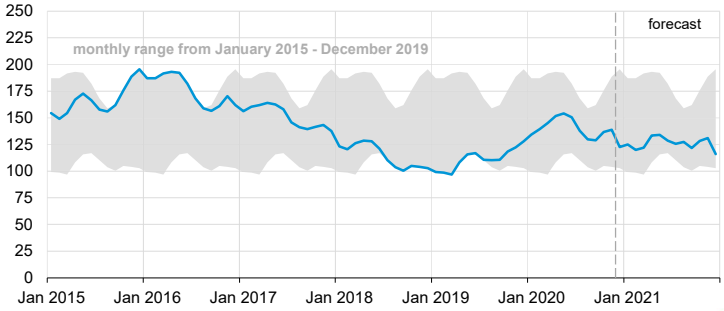


Components of annual change
million short tons



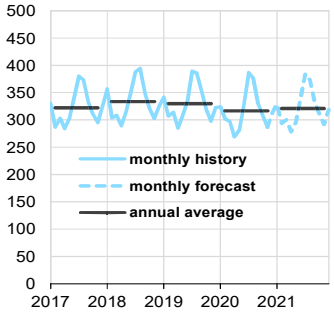
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

U.S. electric power coal inventories
million short tons

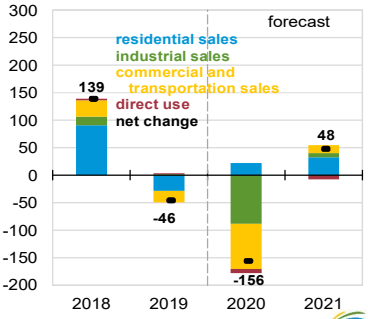


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

U.S. electricity consumption
billion kilowatthours



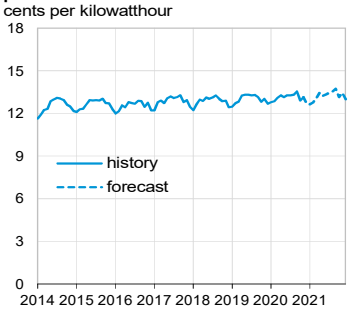
Components of annual change
billion kilowatthours



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

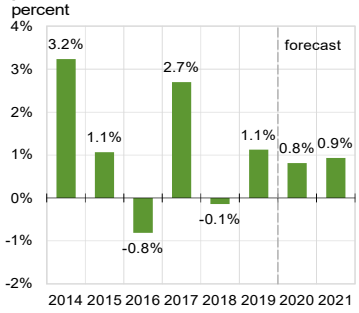
U.S. monthly residential electricity price

cents per kilowatthour



Annual growth in residential electricity prices

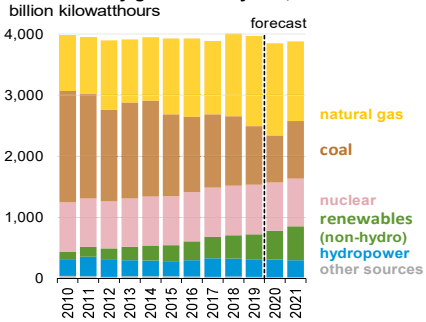
percent



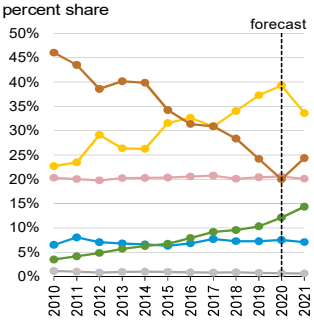
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

U.S. electricity generation by fuel, all sectors

billion kilowatthours



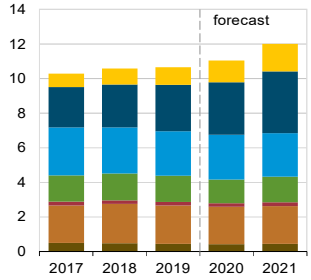
percent share



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

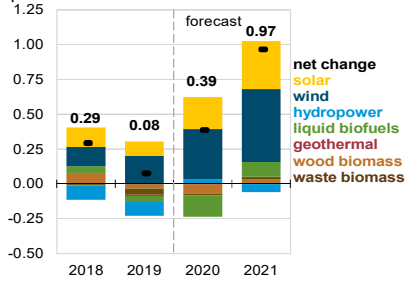
U.S. renewable energy supply

quadrillion British thermal units



Components of annual change

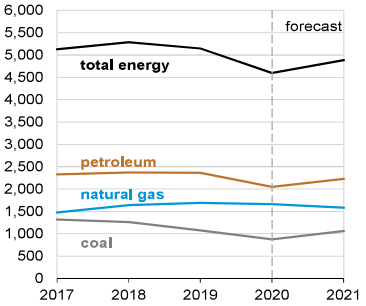
quadrillion British thermal units



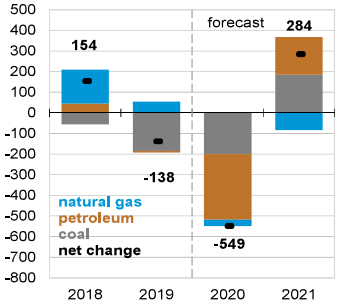
Note: Hydropower excludes pumped storage generation. Liquid biofuels include ethanol and biodiesel. Other biomass includes municipal waste from biogenic sources, landfill gas, and other non-wood waste.

Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

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

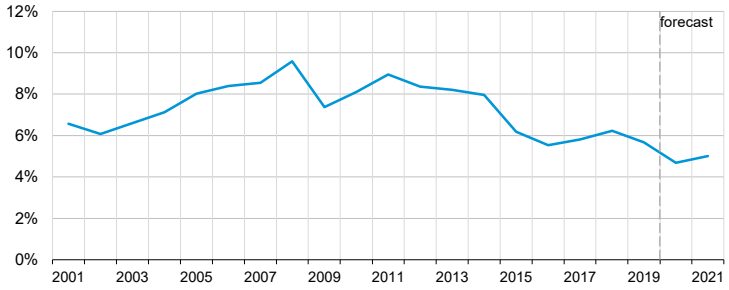


Components of annual change
million metric tons



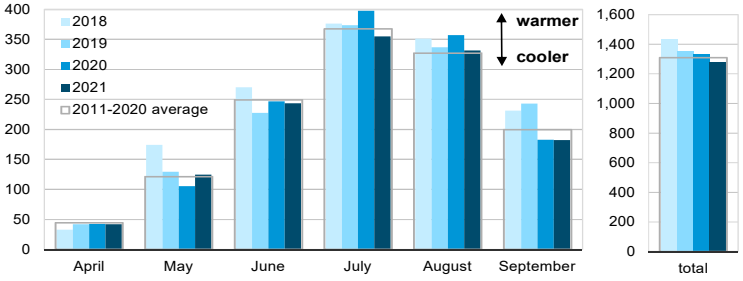
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

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



Source: U.U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

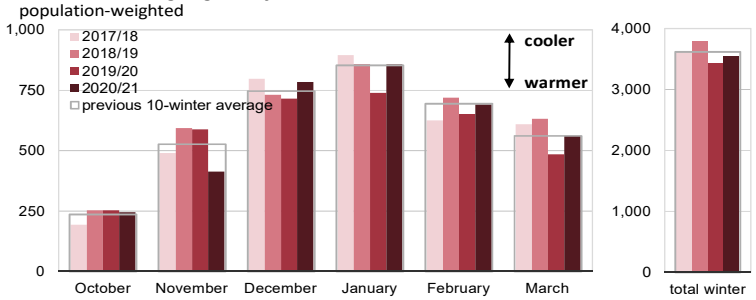
U.S. summer cooling degree days
population-weighted



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

Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 2020

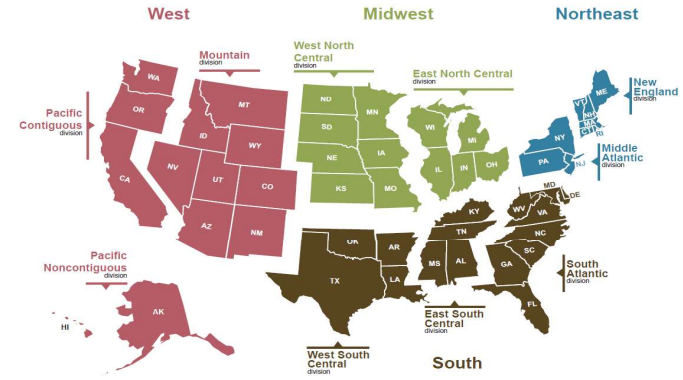
U.S. winter heating degree days
population-weighted



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

Source: U.S. Energy Information Administration, Short-Term Energy Outlook, December 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 - December 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
Energy Supply															
Crude Oil Production (a)															
(million barrels per day)	**11.83**	**12.13**	**12.24**	**12.78**	**12.75**	**10.81**	**10.80**	*10.99*	*11.02*	*11.00*	*11.09*	*11.29*	**12.25**	*11.34*	*11.10*
Dry Natural Gas Production															
(billion cubic feet per day)	**90.01**	**91.57**	**94.00**	**96.58**	**94.79**	**89.67**	**89.72**	*89.36*	*87.65*	*87.25*	*88.13*	*88.61*	**93.06**	*90.88*	*87.91*
Coal Production															
(million short tons)	**180**	**179**	**181**	**165**	**149**	**113**	**135**	*124*	*152*	*153*	*172*	*147*	**705**	*521*	*624*
Energy Consumption															
Liquid Fuels															
(million barrels per day)	**20.36**	**20.46**	**20.72**	**20.63**	**19.33**	**16.08**	**18.36**	*18.85*	*19.30*	*19.61*	*20.03*	*20.21*	**20.54**	*18.16*	*19.79*
Natural Gas															
(billion cubic feet per day)	**103.92**	**70.95**	**76.35**	**89.62**	**99.31**	**70.89**	**76.89**	*86.59*	*96.56*	*67.00*	*70.67*	*83.48*	**85.15**	*83.41*	*79.37*
Coal (b)															
(million short tons)	**158**	**130**	**167**	**132**	**109**	**96**	**149**	*122*	*136*	*134*	*168*	*141*	**587**	*478*	*580*
Electricity															
(billion kilowatt hours per day)	**10.69**	**10.19**	**12.26**	**10.22**	**10.15**	**9.64**	**11.87**	*9.87*	*10.26*	*10.03*	*11.86*	*10.02*	**10.84**	*10.39*	*10.54*
Renewables (c)															
(quadrillion Btu)	**2.77**	**3.07**	**2.81**	**2.75**	**2.93**	**3.01**	**2.85**	*2.88*	*3.15*	*3.34*	*3.07*	*3.10*	**11.39**	*11.67*	*12.66*
Total Energy Consumption (d)															
(quadrillion Btu)	**26.60**	**23.50**	**24.95**	**25.23**	**25.12**	**20.66**	**23.37**	*23.58*	*24.89*	*22.61*	*23.87*	*24.41*	**100.27**	*92.72*	*95.78*
Energy Prices															
Crude Oil West Texas Intermediate Spot															
(dollars per barrel)	**54.82**	**59.88**	**56.35**	**56.86**	**45.34**	**27.96**	**40.89**	*41.63*	*44.50*	*45.52*	*46.00*	*47.00*	**56.99**	*38.96*	*45.78*
Natural Gas Henry Hub Spot															
(dollars per million Btu)	**2.92**	**2.56**	**2.38**	**2.40**	**1.91**	**1.71**	**2.00**	*2.66*	*3.05*	*2.95*	*2.97*	*3.07*	**2.57**	*2.07*	*3.01*
Coal															
(dollars per million Btu)	**2.07**	**2.04**	**1.99**	**1.93**	**1.92**	**1.90**	**1.91**	*2.01*	*2.05*	*2.06*	*2.04*	*2.04*	**2.01**	*1.94*	*2.05*
Macroeconomic															
Real Gross Domestic Product															
(billion chained 2012 dollars - SAAR)	**18,950**	**19,021**	**19,142**	**19,254**	**19,011**	**17,303**	**18,584**	*18,749*	*18,872*	*18,923*	*19,014*	*19,109*	**19,092**	*18,412*	*18,979*
Percent change from prior year	**2.3**	**2.0**	**2.1**	**2.3**	**0.3**	**-9.0**	**-2.9**	*-2.6*	*-0.7*	*9.4*	*2.3*	*1.9*	**2.2**	*-3.6*	*3.1*
GDP Implicit Price Deflator															
(Index, 2012=100)	**111.5**	**112.2**	**112.6**	**113.0**	**113.4**	**112.9**	**113.9**	*114.3*	*114.8*	*115.4*	*115.9*	*116.5*	**112.3**	*113.6*	*115.7*
Percent change from prior year	**2.0**	**1.8**	**1.7**	**1.6**	**1.7**	**0.6**	**1.1**	*1.2*	*1.2*	*2.3*	*1.8*	*1.9*	**1.8**	*1.1*	*1.8*
Real Disposable Personal Income															
(billion chained 2012 dollars - SAAR)	**14,854**	**14,818**	**14,895**	**14,965**	**15,061**	**16,576**	**15,852**	*15,283*	*15,079*	*15,054*	*15,071*	*15,074*	**14,883**	*15,693*	*15,070*
Percent change from prior year	**3.2**	**2.1**	**1.8**	**1.6**	**1.4**	**11.9**	**6.4**	*2.1*	*0.1*	*-9.2*	*-4.9*	*-1.4*	**2.2**	*5.4*	*-4.0*
Manufacturing Production Index															
(Index, 2012=100)	**106.5**	**105.7**	**105.9**	**105.8**	**104.4**	**89.2**	**99.8**	*100.9*	*101.2*	*100.8*	*100.5*	*100.7*	**106.0**	*98.6*	*100.8*
Percent change from prior year	**1.6**	**0.1**	**-0.6**	**-1.1**	**-2.0**	**-15.5**	**-5.8**	*-4.6*	*-3.1*	*12.9*	*0.7*	*-0.2*	**0.0**	*-7.0*	*2.2*
Weather															
U.S. Heating Degree-Days	**2,209**	**480**	**56**	**1,557**	**1,875**	**541**	**70**	*1,443*	*2,109*	*483*	*70*	*1,494*	**4,302**	*3,929*	*4,157*
U.S. Cooling Degree-Days	**45**	**399**	**954**	**105**	**70**	**395**	**937**	*127*	*45*	*410*	*869*	*99*	**1,503**	*1,529*	*1,424*

- = 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 - December 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
Crude Oil (dollars per barrel)															
West Texas Intermediate Spot Average	**54.82**	**59.88**	**56.35**	**56.86**	**45.34**	**27.96**	**40.89**	*41.63*	*44.50*	*45.52*	*46.00*	*47.00*	**56.99**	*38.96*	*45.78*
Brent Spot Average	**63.14**	**69.04**	**61.90**	**63.30**	**49.97**	**29.52**	**42.97**	*43.31*	*47.00*	*48.02*	*49.00*	*50.00*	**64.34**	*41.43*	*48.53*
U.S. Imported Average	**55.39**	**62.93**	**57.31**	**55.60**	**43.76**	**26.33**	**39.58**	*39.66*	*42.05*	*42.90*	*43.25*	*44.00*	**57.95**	*37.01*	*43.07*
U.S. Refiner Average Acquisition Cost	**57.08**	**63.54**	**58.67**	**58.05**	**47.48**	**26.88**	**41.26**	*42.04*	*43.55*	*43.92*	*44.25*	*45.00*	**59.36**	*39.87*	*44.19*
U.S. Liquid Fuels (cents per gallon)															
Refiner Prices for Resale															
Gasoline	**167**	**205**	**189**	**182**	**153**	**104**	**137**	*129*	*139*	*159*	*159*	*148*	**186**	*132*	*151*
Diesel Fuel	**192**	**203**	**192**	**197**	**160**	**97**	**124**	*133*	*148*	*154*	*159*	*162*	**196**	*129*	*156*
Fuel Oil	**189**	**195**	**184**	**191**	**160**	**87**	**113**	*126*	*143*	*145*	*152*	*158*	**190**	*126*	*150*
Refiner Prices to End Users															
Jet Fuel	**193**	**204**	**194**	**197**	**165**	**85**	**116**	*128*	*144*	*146*	*153*	*157*	**197**	*132*	*150*
No. 6 Residual Fuel Oil (a)	**153**	**163**	**155**	**163**	**176**	**93**	**116**	*133*	*109*	*106*	*105*	*107*	**158**	*129*	*106*
Retail Prices Including Taxes															
Gasoline Regular Grade (b)	**236**	**279**	**265**	**259**	**241**	**194**	**218**	*212*	*209*	*235*	*236*	*225*	**260**	*217*	*227*
Gasoline All Grades (b)	**245**	**288**	**274**	**269**	**251**	**203**	**227**	*222*	*221*	*248*	*250*	*238*	**269**	*227*	*240*
On-highway Diesel Fuel	**302**	**312**	**302**	**306**	**289**	**243**	**243**	*245*	*258*	*256*	*264*	*271*	**306**	*255*	*262*
Heating Oil	**300**	**305**	**290**	**301**	**280**	**200**	**214**	*237*	*256*	*258*	*268*	*289*	**300**	*247*	*268*
Natural Gas															
Henry Hub Spot (dollars per thousand cubic feet)	**3.03**	**2.66**	**2.47**	**2.49**	**1.98**	**1.77**	**2.07**	*2.76*	*3.17*	*3.07*	*3.08*	*3.19*	**2.67**	*2.15*	*3.13*
Henry Hub Spot (dollars per million Btu)	**2.92**	**2.56**	**2.38**	**2.40**	**1.91**	**1.71**	**2.00**	*2.66*	*3.05*	*2.95*	*2.97*	*3.07*	**2.57**	*2.07*	*3.01*
U.S. Retail Prices (dollars per thousand cubic feet)															
Industrial Sector	**4.66**	**3.73**	**3.29**	**3.74**	**3.52**	**2.85**	**2.88**	*3.68*	*4.43*	*3.99*	*3.98*	*4.30*	**3.90**	*3.27*	*4.19*
Commercial Sector	**7.55**	**7.95**	**8.41**	**7.20**	**7.13**	**7.63**	**8.48**	*7.51*	*7.52*	*8.19*	*8.81*	*7.91*	**7.59**	*7.47*	*7.89*
Residential Sector	**9.39**	**12.36**	**17.90**	**9.78**	**9.46**	**11.89**	**17.62**	*9.65*	*9.18*	*12.47*	*17.23*	*10.66*	**10.46**	*10.51*	*10.65*
U.S. Electricity															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	**2.07**	**2.04**	**1.99**	**1.93**	**1.92**	**1.90**	**1.91**	*2.01*	*2.05*	*2.06*	*2.04*	*2.04*	**2.01**	*1.94*	*2.05*
Natural Gas	**3.72**	**2.73**	**2.51**	**2.79**	**2.41**	**2.10**	**2.27**	*3.08*	*3.69*	*3.24*	*3.22*	*3.48*	**2.89**	*2.44*	*3.38*
Residual Fuel Oil (c)	**12.22**	**13.39**	**12.80**	**12.53**	**12.15**	**6.65**	**8.51**	*7.87*	*8.90*	*9.81*	*9.44*	*9.37*	**12.73**	*8.81*	*9.37*
Distillate Fuel Oil	**14.85**	**15.76**	**14.99**	**15.11**	**13.27**	**8.39**	**10.31**	*10.59*	*11.70*	*12.17*	*12.48*	*12.80*	**15.16**	*10.73*	*12.31*
Retail Prices (cents per kilowatthour)															
Industrial Sector	**6.67**	**6.69**	**7.20**	**6.65**	**6.37**	**6.63**	**7.09**	*6.71*	*6.44*	*6.72*	*7.10*	*6.74*	**6.81**	*6.71*	*6.76*
Commercial Sector	**10.43**	**10.66**	**11.00**	**10.55**	**10.33**	**10.63**	**10.97**	*10.47*	*10.27*	*10.76*	*11.20*	*10.64*	**10.67**	*10.61*	*10.74*
Residential Sector	**12.67**	**13.30**	**13.24**	**12.83**	**12.90**	**13.24**	**13.36**	*12.90*	*12.82*	*13.34*	*13.57*	*13.18*	**13.01**	*13.12*	*13.24*

- = 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 - December 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
Supply (million barrels per day) (a)															
OECD	**31.06**	**31.32**	**31.48**	**32.76**	**32.90**	**29.42**	**29.87**	*30.33*	*30.90*	*30.95*	*31.21*	*31.69*	**31.66**	*30.63*	*31.19*
U.S. (50 States)	**18.87**	**19.35**	**19.45**	**20.20**	**20.22**	**17.58**	**18.30**	*18.23*	*18.37*	*18.64*	*18.82*	*19.06*	**19.47**	*18.58*	*18.72*
Canada	**5.44**	**5.47**	**5.47**	**5.63**	**5.65**	**4.94**	**4.89**	*5.42*	*5.71*	*5.69*	*5.70*	*5.71*	**5.50**	*5.22*	*5.70*
Mexico	**1.91**	**1.91**	**1.93**	**1.93**	**2.00**	**1.94**	**1.91**	*1.87*	*1.84*	*1.85*	*1.82*	*1.82*	**1.92**	*1.93*	*1.83*
Other OECD	**4.85**	**4.59**	**4.63**	**4.99**	**5.03**	**4.96**	**4.77**	*4.82*	*4.97*	*4.78*	*4.88*	*5.10*	**4.77**	*4.89*	*4.93*
Non-OECD	**69.21**	**69.09**	**68.62**	**68.87**	**67.79**	**63.03**	**61.04**	*62.67*	*63.56*	*65.96*	*67.58*	*67.76*	**68.95**	*63.62*	*66.23*
OPEC	**35.38**	**34.91**	**33.89**	**34.33**	**33.49**	**30.59**	**28.45**	*29.85*	*30.72*	*32.24*	*33.41*	*33.69*	**34.63**	*30.58*	*32.53*
Crude Oil Portion	**29.94**	**29.47**	**28.66**	**29.02**	**28.28**	**25.64**	**23.61**	*24.95*	*25.68*	*27.27*	*28.45*	*28.73*	**29.27**	*25.61*	*27.54*
Other Liquids (b)	**5.44**	**5.44**	**5.24**	**5.31**	**5.21**	**4.95**	**4.84**	*4.90*	*5.04*	*4.97*	*4.96*	*4.96*	**5.36**	*4.97*	*4.98*
Eurasia	**14.85**	**14.42**	**14.58**	**14.66**	**14.76**	**13.20**	**12.74**	*13.09*	*13.31*	*13.54*	*13.69*	*13.81*	**14.63**	*13.44*	*13.59*
China	**4.89**	**4.92**	**4.89**	**4.88**	**4.94**	**4.90**	**4.95**	*4.96*	*4.95*	*4.99*	*5.00*	*5.05*	**4.89**	*4.94*	*5.00*
Other Non-OECD	**14.09**	**14.84**	**15.26**	**15.00**	**14.61**	**14.34**	**14.90**	*14.77*	*14.57*	*15.19*	*15.47*	*15.21*	**14.80**	*14.66*	*15.11*
Total World Supply	**100.28**	**100.42**	**100.10**	**101.63**	**100.69**	**92.45**	**90.91**	*93.00*	*94.46*	*96.91*	*98.79*	*99.45*	**100.61**	*94.25*	*97.42*
Non-OPEC Supply	**64.89**	**65.51**	**66.21**	**67.30**	**67.21**	**61.86**	**62.47**	*63.16*	*63.73*	*64.68*	*65.37*	*65.76*	**65.98**	*63.67*	*64.89*
Consumption (million barrels per day) (c)															
OECD	**47.51**	**46.94**	**48.07**	**47.69**	**45.24**	**37.37**	**42.20**	*43.51*	*44.13*	*44.04*	*45.39*	*45.75*	**47.55**	*42.08*	*44.83*
U.S. (50 States)	**20.36**	**20.46**	**20.72**	**20.63**	**19.33**	**16.08**	**18.36**	*18.85*	*19.30*	*19.61*	*20.03*	*20.21*	**20.54**	*18.16*	*19.79*
U.S. Territories	**0.16**	**0.14**	**0.15**	**0.15**	**0.13**	**0.12**	**0.12**	*0.13*	*0.14*	*0.12*	*0.13*	*0.14*	**0.15**	*0.13*	*0.13*
Canada	**2.30**	**2.31**	**2.57**	**2.49**	**2.33**	**1.88**	**2.15**	*2.24*	*2.24*	*2.21*	*2.34*	*2.33*	**2.42**	*2.15*	*2.28*
Europe	**14.03**	**14.18**	**14.66**	**14.06**	**13.35**	**10.98**	**12.90**	*12.76*	*12.66*	*13.04*	*13.68*	*13.41*	**14.24**	*12.50*	*13.20*
Japan	**4.05**	**3.39**	**3.43**	**3.74**	**3.69**	**2.89**	**3.01**	*3.36*	*3.63*	*2.99*	*3.07*	*3.38*	**3.65**	*3.24*	*3.27*
Other OECD	**6.61**	**6.46**	**6.54**	**6.62**	**6.42**	**5.43**	**5.66**	*6.17*	*6.16*	*6.07*	*6.13*	*6.28*	**6.56**	*5.92*	*6.16*
Non-OECD	**52.76**	**53.90**	**54.04**	**53.98**	**49.87**	**47.58**	**51.33**	*52.38*	*52.13*	*53.51*	*53.80*	*53.85*	**53.67**	*50.30*	*53.33*
Eurasia	**5.01**	**5.08**	**5.47**	**5.31**	**4.87**	**4.50**	**5.30**	*5.18*	*4.90*	*5.00*	*5.44*	*5.31*	**5.22**	*4.96*	*5.17*
Europe	**0.75**	**0.75**	**0.76**	**0.77**	**0.71**	**0.69**	**0.72**	*0.72*	*0.72*	*0.72*	*0.73*	*0.74*	**0.76**	*0.71*	*0.73*
China	**14.70**	**14.90**	**14.61**	**14.83**	**13.76**	**13.97**	**14.56**	*15.03*	*15.06*	*15.29*	*15.00*	*15.22*	**14.76**	*14.33*	*15.14*
Other Asia	**13.97**	**14.15**	**13.76**	**14.11**	**13.25**	**11.72**	**12.71**	*13.54*	*13.90*	*14.18*	*13.82*	*14.18*	**14.00**	*12.81*	*14.02*
Other Non-OECD	**18.33**	**19.03**	**19.43**	**18.96**	**17.28**	**16.69**	**18.04**	*17.91*	*17.55*	*18.31*	*18.80*	*18.40*	**18.94**	*17.48*	*18.27*
Total World Consumption	**100.28**	**100.84**	**102.10**	**101.68**	**95.11**	**84.94**	**93.53**	*95.89*	*96.26*	*97.56*	*99.19*	*99.61*	**101.23**	*92.38*	*98.16*
Total Crude Oil and Other Liquids Inventory Net Withdrawals (million barrels per day)															
U.S. (50 States)	**0.15**	**-0.60**	**0.06**	**0.29**	**-0.43**	**-1.68**	**0.49**	*1.16*	*0.29*	*-0.23*	*-0.05*	*0.44*	**-0.02**	*-0.11*	*0.11*
Other OECD	**-0.20**	**0.01**	**-0.16**	**0.39**	**-0.54**	**-1.15**	**0.18**	*0.55*	*0.49*	*0.27*	*0.14*	*-0.09*	**0.01**	*-0.24*	*0.20*
Other Stock Draws and Balance	**0.05**	**1.01**	**2.10**	**-0.63**	**-4.61**	**-4.67**	**1.95**	*1.17*	*1.02*	*0.60*	*0.31*	*-0.19*	**0.63**	*-1.52*	*0.43*
Total Stock Draw	**0.00**	**0.42**	**2.00**	**0.05**	**-5.58**	**-7.51**	**2.62**	*2.88*	*1.80*	*0.64*	*0.41*	*0.16*	**0.62**	*-1.87*	*0.75*
End-of-period Commercial Crude Oil and Other Liquids Inventories (million barrels)															
U.S. Commercial Inventory	**1,245**	**1,304**	**1,298**	**1,282**	**1,321**	**1,453**	**1,422**	*1,322*	*1,304*	*1,332*	*1,339*	*1,301*	**1,282**	*1,322*	*1,301*
OECD Commercial Inventory	**2,864**	**2,922**	**2,931**	**2,879**	**2,967**	**3,204**	**3,156**	*3,006*	*2,943*	*2,946*	*2,940*	*2,910*	**2,879**	*3,006*	*2,910*

- = 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), 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 Production (million barrels per day)

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

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
North America	**26.21**	**26.73**	**26.85**	**27.77**	**27.87**	**24.46**	**25.10**	*25.52*	*25.93*	*26.18*	*26.33*	*26.59*	**26.89**	*25.73*	*26.26*
Canada	**5.44**	**5.47**	**5.47**	**5.63**	**5.65**	**4.94**	**4.89**	*5.42*	*5.71*	*5.69*	*5.70*	*5.71*	**5.50**	*5.22*	*5.70*
Mexico	**1.91**	**1.91**	**1.93**	**1.93**	**2.00**	**1.94**	**1.91**	*1.87*	*1.84*	*1.85*	*1.82*	*1.82*	**1.92**	*1.93*	*1.83*
United States	**18.87**	**19.35**	**19.45**	**20.20**	**20.22**	**17.58**	**18.30**	*18.23*	*18.37*	*18.64*	*18.82*	*19.06*	**19.47**	*18.58*	*18.72*
Central and South America	**5.44**	**6.22**	**6.80**	**6.45**	**6.05**	**6.09**	**6.64**	*6.42*	*6.14*	*6.77*	*7.05*	*6.82*	**6.23**	*6.30*	*6.70*
Argentina	**0.66**	**0.70**	**0.70**	**0.70**	**0.69**	**0.58**	**0.57**	*0.63*	*0.66*	*0.63*	*0.62*	*0.67*	**0.69**	*0.62*	*0.65*
Brazil	**2.90**	**3.65**	**4.23**	**3.89**	**3.44**	**3.89**	**4.32**	*3.93*	*3.57*	*4.34*	*4.67*	*4.29*	**3.67**	*3.90*	*4.22*
Colombia	**0.92**	**0.92**	**0.91**	**0.91**	**0.90**	**0.78**	**0.77**	*0.84*	*0.87*	*0.78*	*0.75*	*0.82*	**0.92**	*0.82*	*0.80*
Ecuador	**0.53**	**0.53**	**0.55**	**0.52**	**0.54**	**0.35**	**0.52**	*0.52*	*0.53*	*0.53*	*0.52*	*0.53*	**0.53**	*0.48*	*0.53*
Other Central and S. America	**0.42**	**0.41**	**0.42**	**0.43**	**0.48**	**0.48**	**0.46**	*0.48*	*0.51*	*0.50*	*0.49*	*0.51*	**0.42**	*0.48*	*0.50*
Europe	**4.27**	**3.97**	**3.96**	**4.29**	**4.39**	**4.31**	**4.15**	*4.28*	*4.43*	*4.24*	*4.34*	*4.57*	**4.12**	*4.28*	*4.40*
Norway	**1.79**	**1.58**	**1.66**	**1.96**	**2.06**	**2.01**	**1.96**	*2.02*	*2.16*	*2.09*	*2.13*	*2.26*	**1.75**	*2.01*	*2.16*
United Kingdom	**1.25**	**1.17**	**1.11**	**1.15**	**1.17**	**1.16**	**1.03**	*1.10*	*1.11*	*1.00*	*1.05*	*1.14*	**1.17**	*1.11*	*1.08*
Eurasia	**14.85**	**14.42**	**14.58**	**14.66**	**14.76**	**13.20**	**12.74**	*13.09*	*13.31*	*13.54*	*13.69*	*13.81*	**14.63**	*13.44*	*13.59*
Azerbaijan	**0.81**	**0.78**	**0.77**	**0.76**	**0.77**	**0.70**	**0.67**	*0.68*	*0.69*	*0.72*	*0.73*	*0.74*	**0.78**	*0.70*	*0.72*
Kazakhstan	**2.03**	**1.85**	**1.96**	**2.02**	**2.06**	**1.86**	**1.71**	*1.79*	*1.83*	*1.81*	*1.86*	*1.89*	**1.97**	*1.85*	*1.85*
Russia	**11.58**	**11.41**	**11.48**	**11.50**	**11.55**	**10.25**	**9.98**	*10.23*	*10.42*	*10.65*	*10.74*	*10.82*	**11.49**	*10.50*	*10.66*
Turkmenistan	**0.29**	**0.23**	**0.22**	**0.23**	**0.24**	**0.24**	**0.24**	*0.25*	*0.24*	*0.24*	*0.24*	*0.24*	**0.24**	*0.24*	*0.24*
Other Eurasia	**0.15**	**0.15**	**0.15**	**0.15**	**0.15**	**0.15**	**0.14**	*0.14*	*0.13*	*0.13*	*0.13*	*0.13*	**0.15**	*0.14*	*0.13*
Middle East	**3.14**	**3.14**	**3.14**	**3.14**	**3.24**	**3.18**	**3.15**	*3.16*	*3.23*	*3.27*	*3.29*	*3.29*	**3.14**	*3.18*	*3.27*
Oman	**0.98**	**0.98**	**0.98**	**0.99**	**1.01**	**0.95**	**0.92**	*0.92*	*0.96*	*1.00*	*1.02*	*1.02*	**0.98**	*0.95*	*1.00*
Qatar	**2.00**	**2.00**	**2.00**	**2.00**	**2.06**	**2.06**	**2.06**	*2.06*	*2.10*	*2.10*	*2.10*	*2.10*	**2.00**	*2.06*	*2.10*
Asia and Oceania	**9.50**	**9.53**	**9.38**	**9.49**	**9.44**	**9.17**	**9.26**	*9.26*	*9.28*	*9.27*	*9.27*	*9.28*	**9.48**	*9.28*	*9.28*
Australia	**0.42**	**0.47**	**0.51**	**0.54**	**0.49**	**0.50**	**0.50**	*0.50*	*0.50*	*0.49*	*0.49*	*0.48*	**0.49**	*0.49*	*0.49*
China	**4.89**	**4.92**	**4.89**	**4.88**	**4.94**	**4.90**	**4.95**	*4.96*	*4.95*	*4.99*	*5.00*	*5.05*	**4.89**	*4.94*	*5.00*
India	**1.01**	**0.99**	**0.97**	**0.98**	**0.96**	**0.90**	**0.92**	*0.90*	*0.91*	*0.89*	*0.89*	*0.88*	**0.99**	*0.92*	*0.89*
Indonesia	**0.93**	**0.93**	**0.91**	**0.91**	**0.91**	**0.89**	**0.88**	*0.88*	*0.87*	*0.86*	*0.85*	*0.84*	**0.92**	*0.89*	*0.85*
Malaysia	**0.75**	**0.73**	**0.65**	**0.72**	**0.72**	**0.61**	**0.63**	*0.61*	*0.63*	*0.62*	*0.62*	*0.61*	**0.71**	*0.64*	*0.62*
Vietnam	**0.27**	**0.27**	**0.25**	**0.24**	**0.24**	**0.23**	**0.22**	*0.22*	*0.22*	*0.22*	*0.22*	*0.21*	**0.26**	*0.23*	*0.22*
Africa	**1.48**	**1.50**	**1.50**	**1.49**	**1.46**	**1.45**	**1.43**	*1.43*	*1.40*	*1.40*	*1.40*	*1.40*	**1.49**	*1.44*	*1.40*
Egypt	**0.65**	**0.64**	**0.64**	**0.63**	**0.62**	**0.61**	**0.59**	*0.60*	*0.57*	*0.57*	*0.57*	*0.57*	**0.64**	*0.60*	*0.57*
South Sudan	**0.15**	**0.16**	**0.16**	**0.16**	**0.15**	**0.15**	**0.17**	*0.16*	*0.17*	*0.17*	*0.18*	*0.18*	**0.16**	*0.16*	*0.17*
Total non-OPEC liquids	**64.89**	**65.51**	**66.21**	**67.30**	**67.21**	**61.86**	**62.47**	*63.16*	*63.73*	*64.68*	*65.37*	*65.76*	**65.98**	*63.67*	*64.89*
OPEC non-crude liquids	**5.44**	**5.44**	**5.24**	**5.31**	**5.21**	**4.95**	**4.84**	*4.90*	*5.04*	*4.97*	*4.96*	*4.96*	**5.36**	*4.97*	*4.98*
Non-OPEC + OPEC non-crude	**70.33**	**70.95**	**71.45**	**72.61**	**72.41**	**66.81**	**67.30**	*68.06*	*68.77*	*69.64*	*70.34*	*70.72*	**71.34**	*68.64*	*69.87*
Unplanned non-OPEC Production Outages	**0.38**	**0.28**	**0.41**	**0.33**	**0.18**	**0.90**	**0.66**	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	**0.35**	*n/a*	*n/a*

- = no data available

OPEC = Organization of the Petroleum Exporting Countries: Algeria, Angola, Congo (Brazzaville), 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) Production (million barrels per day)

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

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
Crude Oil															
Algeria	**1.01**	**1.02**	**1.02**	**1.02**	**1.02**	**0.90**	**0.84**	-	-	-	-	-	**1.02**	-	-
Angola	**1.50**	**1.43**	**1.40**	**1.36**	**1.36**	**1.26**	**1.17**	-	-	-	-	-	**1.42**	-	-
Congo (Brazzaville)	**0.33**	**0.33**	**0.33**	**0.32**	**0.29**	**0.29**	**0.28**	-	-	-	-	-	**0.32**	-	-
Equatorial Guinea	**0.11**	**0.11**	**0.13**	**0.13**	**0.13**	**0.12**	**0.11**	-	-	-	-	-	**0.12**	-	-
Gabon	**0.20**	**0.20**	**0.20**	**0.20**	**0.19**	**0.18**	**0.15**	-	-	-	-	-	**0.20**	-	-
Iran	**2.63**	**2.33**	**2.10**	**2.03**	**2.02**	**1.97**	**1.90**	-	-	-	-	-	**2.27**	-	-
Iraq	**4.75**	**4.70**	**4.70**	**4.65**	**4.56**	**4.16**	**3.70**	-	-	-	-	-	**4.70**	-	-
Kuwait	**2.74**	**2.72**	**2.70**	**2.70**	**2.77**	**2.48**	**2.25**	-	-	-	-	-	**2.72**	-	-
Libya	**0.93**	**1.14**	**1.13**	**1.17**	**0.35**	**0.08**	**0.11**	-	-	-	-	-	**1.09**	-	-
Nigeria	**1.58**	**1.65**	**1.71**	**1.67**	**1.72**	**1.55**	**1.44**	-	-	-	-	-	**1.65**	-	-
Saudi Arabia	**10.00**	**9.92**	**9.38**	**9.83**	**9.80**	**9.28**	**8.77**	-	-	-	-	-	**9.78**	-	-
United Arab Emirates	**3.12**	**3.12**	**3.13**	**3.20**	**3.30**	**2.88**	**2.55**	-	-	-	-	-	**3.14**	-	-
Venezuela	**1.05**	**0.79**	**0.73**	**0.73**	**0.77**	**0.50**	**0.35**	-	-	-	-	-	**0.83**	-	-
OPEC Total	**29.94**	**29.47**	**28.66**	**29.02**	**28.28**	**25.64**	**23.61**	*24.95*	*25.68*	*27.27*	*28.45*	*28.73*	**29.27**	*25.61*	*27.54*
Other Liquids (a)	**5.44**	**5.44**	**5.24**	**5.31**	**5.21**	**4.95**	**4.84**	*4.90*	*5.04*	*4.97*	*4.96*	*4.96*	**5.36**	*4.97*	*4.98*
Total OPEC Supply	**35.38**	**34.91**	**33.89**	**34.33**	**33.49**	**30.59**	**28.45**	*29.85*	*30.72*	*32.24*	*33.41*	*33.69*	**34.63**	*30.58*	*32.53*
Crude Oil Production Capacity															
Middle East	**25.66**	**25.53**	**24.58**	**24.74**	**25.61**	**26.02**	**26.06**	*26.17*	*26.27*	*26.29*	*26.28*	*26.28*	**25.12**	*25.97*	*26.28*
Other	**6.71**	**6.68**	**6.65**	**6.60**	**5.82**	**5.60**	**5.48**	*6.27*	*5.88*	*6.00*	*6.01*	*6.02*	**6.66**	*5.79*	*5.98*
OPEC Total	**32.37**	**32.22**	**31.22**	**31.34**	**31.43**	**31.63**	**31.54**	*32.44*	*32.14*	*32.29*	*32.29*	*32.30*	**31.78**	*31.76*	*32.25*
Surplus Crude Oil Production Capacity															
Middle East	**2.43**	**2.75**	**2.57**	**2.32**	**3.15**	**5.27**	**6.90**	*6.56*	*6.33*	*4.92*	*3.75*	*3.48*	**2.52**	*5.48*	*4.61*
Other	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.72**	**1.04**	*0.93*	*0.13*	*0.10*	*0.09*	*0.09*	**0.00**	*0.67*	*0.10*
OPEC Total	**2.43**	**2.75**	**2.57**	**2.32**	**3.15**	**5.99**	**7.94**	*7.49*	*6.46*	*5.02*	*3.84*	*3.57*	**2.52**	*6.15*	*4.71*
Unplanned OPEC Production Outages	**2.52**	**2.51**	**3.24**	**2.91**	**3.67**	**4.13**	**4.30**	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	**2.80**	*n/a*	*n/a*

- = no data available

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

(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 - December 2020

	2019				2020				2021						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
North America	**24.74**	**24.85**	**25.36**	**25.13**	**23.65**	**19.46**	**22.18**	*22.95*	*23.37*	*23.70*	*24.25*	*24.42*	**25.02**	*22.06*	*23.94*
Canada	**2.30**	**2.31**	**2.57**	**2.49**	**2.33**	**1.88**	**2.15**	*2.24*	*2.24*	*2.21*	*2.34*	*2.33*	**2.42**	*2.15*	*2.28*
Mexico	**2.07**	**2.07**	**2.06**	**2.00**	**1.98**	**1.50**	**1.66**	*1.84*	*1.82*	*1.87*	*1.86*	*1.87*	**2.05**	*1.75*	*1.86*
United States	**20.36**	**20.46**	**20.72**	**20.63**	**19.33**	**16.08**	**18.36**	*18.85*	*19.30*	*19.61*	*20.03*	*20.21*	**20.54**	*18.16*	*19.79*
Central and South America	**6.63**	**6.75**	**6.85**	**6.86**	**6.26**	**5.72**	**6.21**	*6.42*	*6.30*	*6.48*	*6.62*	*6.63*	**6.78**	*6.15*	*6.51*
Brazil	**3.09**	**3.16**	**3.25**	**3.24**	**2.88**	**2.65**	**2.97**	*3.07*	*2.94*	*3.05*	*3.15*	*3.16*	**3.18**	*2.89*	*3.08*
Europe	**14.78**	**14.93**	**15.43**	**14.83**	**14.05**	**11.67**	**13.62**	*13.48*	*13.38*	*13.76*	*14.42*	*14.15*	**14.99**	*13.21*	*13.93*
Eurasia	**5.01**	**5.08**	**5.47**	**5.31**	**4.87**	**4.50**	**5.30**	*5.18*	*4.90*	*5.00*	*5.44*	*5.31*	**5.22**	*4.96*	*5.17*
Russia	**3.77**	**3.86**	**4.18**	**4.02**	**3.66**	**3.34**	**4.06**	*3.93*	*3.67*	*3.80*	*4.17*	*4.04*	**3.96**	*3.75*	*3.92*
Middle East	**8.11**	**8.67**	**9.05**	**8.39**	**7.59**	**7.52**	**8.41**	*7.89*	*7.58*	*8.14*	*8.58*	*7.97*	**8.56**	*7.85*	*8.07*
Asia and Oceania	**36.69**	**36.24**	**35.72**	**36.74**	**34.57**	**32.08**	**33.78**	*35.73*	*36.38*	*36.12*	*35.60*	*36.66*	**36.35**	*34.04*	*36.19*
China	**14.70**	**14.90**	**14.61**	**14.83**	**13.76**	**13.97**	**14.56**	*15.03*	*15.06*	*15.29*	*15.00*	*15.22*	**14.76**	*14.33*	*15.14*
Japan	**4.05**	**3.39**	**3.43**	**3.74**	**3.69**	**2.89**	**3.01**	*3.36*	*3.63*	*2.99*	*3.07*	*3.38*	**3.65**	*3.24*	*3.27*
India	**4.89**	**4.95**	**4.66**	**4.94**	**4.63**	**3.77**	**4.17**	*4.70*	*4.86*	*4.91*	*4.59*	*4.86*	**4.86**	*4.32*	*4.81*
Africa	**4.30**	**4.31**	**4.23**	**4.41**	**4.13**	**3.99**	**4.03**	*4.24*	*4.34*	*4.35*	*4.28*	*4.46*	**4.31**	*4.10*	*4.36*
Total OECD Liquid Fuels Consumption	**47.51**	**46.94**	**48.07**	**47.69**	**45.24**	**37.37**	**42.20**	*43.51*	*44.13*	*44.04*	*45.39*	*45.75*	**47.55**	*42.08*	*44.83*
Total non-OECD Liquid Fuels Consumption	**52.76**	**53.90**	**54.04**	**53.98**	**49.87**	**47.58**	**51.33**	*52.38*	*52.13*	*53.51*	*53.80*	*53.85*	**53.67**	*50.30*	*53.33*
Total World Liquid Fuels Consumption	**100.28**	**100.84**	**102.10**	**101.68**	**95.11**	**84.94**	**93.53**	*95.89*	*96.26*	*97.56*	*99.19*	*99.61*	**101.23**	*92.38*	*98.16*
Oil-weighted Real Gross Domestic Product (a)															
World Index, 2015 Q1 = 100	**112.0**	**112.9**	**112.8**	**112.4**	**109.0**	**102.2**	**107.9**	*108.4*	*110.3*	*111.6*	*112.7*	*113.7*	**112.5**	*106.9*	*112.1*
Percent change from prior year	**2.3**	**2.2**	**1.9**	**1.5**	**-2.7**	**-9.5**	**-4.3**	*-3.6*	*1.2*	*9.1*	*4.4*	*4.9*	**2.0**	*-5.0*	*4.8*
OECD Index, 2015 Q1 = 100	**108.9**	**109.8**	**110.0**	**109.5**	**108.1**	**97.6**	**105.3**	*104.8*	*106.2*	*107.6*	*108.6*	*109.2*	**109.6**	*103.9*	*107.9*
Percent change from prior year	**1.8**	**1.7**	**1.7**	**1.5**	**-0.8**	**-11.1**	**-4.3**	*-4.3*	*-1.7*	*10.2*	*3.2*	*4.3*	**1.7**	*-5.1*	*3.8*
Non-OECD Index, 2015 Q1 = 100	**115.0**	**115.9**	**115.5**	**115.3**	**109.9**	**106.7**	**110.5**	*111.9*	*114.3*	*115.4*	*116.6*	*118.0*	**115.4**	*109.7*	*116.1*
Percent change from prior year	**2.9**	**2.8**	**2.1**	**1.5**	**-4.4**	**-7.9**	**-4.4**	*-3.0*	*4.0*	*8.1*	*5.5*	*5.5*	**2.3**	*-4.9*	*5.8*
Real U.S. Dollar Exchange Rate (a)															
Index, 2015 Q1 = 100	**105.52**	**106.10**	**106.55**	**106.28**	**106.53**	**108.29**	**106.91**	*106.76*	*106.01*	*105.72*	*105.30*	*104.94*	**106.11**	*107.12*	*105.49*
Percent change from prior year	**4.7**	**3.1**	**0.8**	**-0.1**	**1.0**	**2.1**	**0.3**	*0.4*	*-0.5*	*-2.4*	*-1.5*	*-1.7*	**2.1**	*1.0*	*-1.5*

- = 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 - December 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
Supply (million barrels per day)															
Crude Oil Supply															
Domestic Production (a)	**11.83**	**12.13**	**12.24**	**12.78**	**12.75**	**10.81**	**10.80**	*10.99*	*11.02*	*11.00*	*11.09*	*11.29*	**12.25**	*11.34*	*11.10*
Alaska	**0.49**	**0.47**	**0.43**	**0.48**	**0.48**	**0.41**	**0.44**	*0.48*	*0.49*	*0.44*	*0.44*	*0.48*	**0.47**	*0.45*	*0.46*
Federal Gulf of Mexico (b)	**1.86**	**1.93**	**1.83**	**1.96**	**1.96**	**1.69**	**1.45**	*1.64*	*1.86*	*1.82*	*1.74*	*1.76*	**1.90**	*1.69*	*1.79*
Lower 48 States (excl GOM)	**9.48**	**9.73**	**9.99**	**10.33**	**10.31**	**8.71**	**8.91**	*8.88*	*8.67*	*8.74*	*8.91*	*9.05*	**9.89**	*9.20*	*8.84*
Crude Oil Net Imports (c)	**4.28**	**4.11**	**3.94**	**2.96**	**2.90**	**3.08**	**2.31**	*2.70*	*3.77*	*4.07*	*4.70*	*3.95*	**3.82**	*2.75*	*4.12*
SPR Net Withdrawals	**0.00**	**0.05**	**0.00**	**0.11**	**0.00**	**-0.23**	**0.15**	*0.07*	*0.08*	*0.08*	*0.03*	*0.03*	**0.04**	*0.00*	*0.05*
Commercial Inventory Net Withdrawals	**-0.18**	**-0.05**	**0.41**	**-0.08**	**-0.55**	**-0.54**	**0.38**	*0.23*	*-0.27*	*0.15*	*0.23*	*-0.02*	**0.03**	*-0.12*	*0.02*
Crude Oil Adjustment (d)	**0.27**	**0.53**	**0.37**	**0.55**	**0.67**	**0.03**	**0.38**	*0.09*	*0.22*	*0.22*	*0.23*	*0.16*	**0.43**	*0.29*	*0.21*
Total Crude Oil Input to Refineries	**16.20**	**16.76**	**16.96**	**16.32**	**15.77**	**13.16**	**14.03**	*14.10*	*14.82*	*15.52*	*16.27*	*15.41*	**16.56**	*14.26*	*15.51*
Other Supply															
Refinery Processing Gain	**1.05**	**1.07**	**1.06**	**1.09**	**1.02**	**0.82**	**0.94**	*1.02*	*1.05*	*1.08*	*1.09*	*1.06*	**1.07**	*0.95*	*1.07*
Natural Gas Plant Liquids Production	**4.66**	**4.81**	**4.82**	**5.00**	**5.12**	**4.96**	**5.33**	*4.99*	*5.06*	*5.28*	*5.33*	*5.40*	**4.82**	*5.10*	*5.27*
Renewables and Oxygenate Production (e)	**1.10**	**1.14**	**1.12**	**1.12**	**1.11**	**0.80**	**1.03**	*1.02*	*1.06*	*1.06*	*1.10*	*1.10*	**1.12**	*0.99*	*1.08*
Fuel Ethanol Production	**1.01**	**1.05**	**1.02**	**1.04**	**1.02**	**0.70**	**0.92**	*0.94*	*0.96*	*0.96*	*0.99*	*0.99*	**1.03**	*0.90*	*0.98*
Petroleum Products Adjustment (f)	**0.22**	**0.20**	**0.21**	**0.21**	**0.22**	**0.19**	**0.20**	*0.21*	*0.20*	*0.21*	*0.21*	*0.21*	**0.21**	*0.20*	*0.21*
Product Net Imports (c)	**-3.19**	**-2.93**	**-3.10**	**-3.37**	**-4.03**	**-2.94**	**-3.12**	*-3.33*	*-3.35*	*-3.08*	*-3.67*	*-3.39*	**-3.15**	*-3.36*	*-3.37*
Hydrocarbon Gas Liquids	**-1.31**	**-1.67**	**-1.69**	**-1.81**	**-1.99**	**-1.86**	**-1.86**	*-2.03*	*-1.89*	*-2.07*	*-2.08*	*-2.04*	**-1.62**	*-1.94*	*-2.02*
Unfinished Oils	**0.25**	**0.47**	**0.47**	**0.52**	**0.31**	**0.25**	**0.34**	*0.41*	*0.40*	*0.46*	*0.44*	*0.30*	**0.43**	*0.33*	*0.40*
Other HC/Oxygenates	**-0.08**	**-0.07**	**-0.05**	**-0.05**	**-0.10**	**-0.05**	**-0.04**	*-0.05*	*-0.10*	*-0.08*	*-0.08*	*-0.09*	**-0.06**	*-0.06*	*-0.09*
Motor Gasoline Blend Comp.	**0.46**	**0.81**	**0.71**	**0.47**	**0.39**	**0.36**	**0.48**	*0.19*	*0.38*	*0.69*	*0.51*	*0.16*	**0.61**	*0.36*	*0.44*
Finished Motor Gasoline	**-0.80**	**-0.61**	**-0.60**	**-0.87**	**-0.72**	**-0.40**	**-0.58**	*-0.64*	*-0.69*	*-0.71*	*-0.78*	*-0.58*	**-0.72**	*-0.59*	*-0.69*
Jet Fuel	**-0.08**	**-0.01**	**-0.04**	**-0.08**	**-0.07**	**0.09**	**0.12**	*-0.01*	*-0.13*	*-0.03*	*0.00*	*0.00*	**-0.06**	*0.03*	*-0.04*
Distillate Fuel Oil	**-0.93**	**-1.22**	**-1.30**	**-0.97**	**-1.19**	**-0.86**	**-1.15**	*-0.70*	*-0.69*	*-0.78*	*-1.01*	*-0.56*	**-1.10**	*-0.97*	*-0.76*
Residual Fuel Oil	**-0.07**	**-0.15**	**-0.07**	**-0.02**	**-0.02**	**0.02**	**0.05**	*0.04*	*-0.05*	*-0.08*	*-0.06*	*0.00*	**-0.08**	*0.02*	*-0.05*
Other Oils (g)	**-0.63**	**-0.49**	**-0.52**	**-0.54**	**-0.65**	**-0.49**	**-0.49**	*-0.54*	*-0.60*	*-0.48*	*-0.61*	*-0.59*	**-0.55**	*-0.54*	*-0.57*
Product Inventory Net Withdrawals	**0.33**	**-0.60**	**-0.35**	**0.26**	**0.12**	**-0.91**	**-0.04**	*0.85*	*0.47*	*-0.46*	*-0.30*	*0.43*	**-0.09**	*0.01*	*0.03*
Total Supply	**20.38**	**20.46**	**20.72**	**20.63**	**19.33**	**16.08**	**18.36**	*18.86*	*19.30*	*19.61*	*20.03*	*20.21*	**20.55**	*18.16*	*19.79*
Consumption (million barrels per day)															
Hydrocarbon Gas Liquids	**3.48**	**2.79**	**2.94**	**3.35**	**3.31**	**2.83**	**2.95**	*3.39*	*3.57*	*3.10*	*3.14*	*3.54*	**3.14**	*3.12*	*3.34*
Unfinished Oils	**0.00**	**0.09**	**0.05**	**0.11**	**0.14**	**0.11**	**0.01**	*0.01*	*0.00*	*0.00*	*0.00*	*0.00*	**0.06**	*0.07*	*0.00*
Motor Gasoline	**9.01**	**9.54**	**9.52**	**9.16**	**8.49**	**7.11**	**8.50**	*8.23*	*8.41*	*8.84*	*8.97*	*8.84*	**9.31**	*8.09*	*8.76*
Fuel Ethanol blended into Motor Gasoline	**0.91**	**0.97**	**0.95**	**0.97**	**0.85**	**0.72**	**0.87**	*0.85*	*0.85*	*0.89*	*0.91*	*0.90*	**0.95**	*0.82*	*0.89*
Jet Fuel	**1.65**	**1.78**	**1.80**	**1.75**	**1.56**	**0.69**	**0.97**	*1.12*	*1.38*	*1.55*	*1.65*	*1.60*	**1.74**	*1.09*	*1.54*
Distillate Fuel Oil	**4.27**	**4.07**	**3.95**	**4.12**	**3.97**	**3.51**	**3.70**	*3.98*	*4.01*	*3.96*	*3.91*	*4.10*	**4.10**	*3.79*	*3.99*
Residual Fuel Oil	**0.27**	**0.23**	**0.33**	**0.27**	**0.17**	**0.15**	**0.32**	*0.26*	*0.24*	*0.23*	*0.28*	*0.25*	**0.28**	*0.23*	*0.25*
Other Oils (g)	**1.68**	**1.95**	**2.13**	**1.87**	**1.68**	**1.68**	**1.91**	*1.86*	*1.68*	*1.95*	*2.10*	*1.88*	**1.91**	*1.78*	*1.90*
Total Consumption	**20.36**	**20.46**	**20.72**	**20.63**	**19.33**	**16.08**	**18.36**	*18.85*	*19.30*	*19.61*	*20.03*	*20.21*	**20.54**	*18.16*	*19.79*
Total Petroleum and Other Liquids Net Imports	**1.09**	**1.18**	**0.84**	**-0.41**	**-1.13**	**0.14**	**-0.81**	*-0.63*	*0.41*	*0.99*	*1.03*	*0.55*	**0.67**	*-0.61*	*0.75*
End-of-period Inventories (million barrels)															
Commercial Inventory															
Crude Oil (excluding SPR)	**458.9**	**463.4**	**425.6**	**432.8**	**482.5**	**531.9**	**497.3**	*475.9*	*499.9*	*486.7*	*465.9*	*467.4*	**432.8**	*475.9*	*467.4*
Hydrocarbon Gas Liquids	**160.3**	**224.5**	**262.8**	**211.7**	**180.8**	**233.9**	**299.1**	*234.5*	*192.1*	*237.0*	*271.2*	*227.6*	**211.7**	*234.5*	*227.6*
Unfinished Oils	**92.2**	**95.9**	**92.3**	**89.8**	**100.1**	**91.9**	**81.4**	*77.3*	*92.1*	*90.9*	*90.1*	*82.9*	**89.8**	*77.3*	*82.9*
Other HC/Oxygenates	**30.9**	**29.1**	**28.3**	**27.8**	**33.6**	**26.2**	**25.2**	*26.4*	*27.3*	*26.2*	*26.0*	*26.2*	**27.8**	*26.4*	*26.2*
Total Motor Gasoline	**236.6**	**229.9**	**232.0**	**254.1**	**260.8**	**253.3**	**226.5**	*240.8*	*233.9*	*232.2*	*228.3*	*235.2*	**254.1**	*240.8*	*235.2*
Finished Motor Gasoline	**20.9**	**21.5**	**23.0**	**26.1**	**22.6**	**23.5**	**22.4**	*24.4*	*23.0*	*21.5*	*22.4*	*22.6*	**26.1**	*24.4*	*22.6*
Motor Gasoline Blend Comp.	**215.7**	**208.4**	**209.0**	**228.0**	**238.3**	**229.8**	**204.1**	*216.4*	*210.9*	*210.6*	*205.9*	*212.6*	**228.0**	*216.4*	*212.6*
Jet Fuel	**41.6**	**40.5**	**44.3**	**40.5**	**39.9**	**41.5**	**40.1**	*37.7*	*37.9*	*39.3*	*41.8*	*38.9*	**40.5**	*37.7*	*38.9*
Distillate Fuel Oil	**132.2**	**131.1**	**131.8**	**140.1**	**126.7**	**175.4**	**171.7**	*150.7*	*133.8*	*132.4*	*134.9*	*138.2*	**140.1**	*150.7*	*138.2*
Residual Fuel Oil	**29.2**	**30.5**	**30.0**	**30.5**	**34.4**	**39.6**	**32.1**	*28.4*	*30.4*	*32.3*	*30.8*	*32.2*	**30.5**	*28.4*	*32.2*
Other Oils (g)	**63.3**	**59.2**	**51.2**	**54.6**	**62.0**	**59.2**	**48.6**	*50.6*	*56.5*	*55.5*	*50.0*	*52.4*	**54.6**	*50.6*	*52.4*
Total Commercial Inventory	**1,245**	**1,304**	**1,298**	**1,282**	**1,321**	**1,453**	**1,422**	*1,322*	*1,304*	*1,332*	*1,339*	*1,301*	**1,282**	*1,322*	*1,301*
Crude Oil in SPR	**649**	**645**	**645**	**635**	**635**	**656**	**642**	*635*	*628*	*620*	*618*	*616*	**635**	*635*	*616*

- = 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" inludes 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 - December 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
HGL Production															
Natural Gas Processing Plants															
Ethane	**1.88**	**1.87**	**1.72**	**1.85**	**1.93**	**1.92**	**2.14**	*1.98*	*2.17*	*2.28*	*2.26*	*2.36*	**1.83**	*1.99*	*2.27*
Propane	**1.50**	**1.56**	**1.61**	**1.68**	**1.72**	**1.61**	**1.68**	*1.63*	*1.54*	*1.60*	*1.62*	*1.62*	**1.59**	*1.66*	*1.60*
Butanes	**0.79**	**0.84**	**0.87**	**0.89**	**0.91**	**0.86**	**0.90**	*0.83*	*0.82*	*0.84*	*0.87*	*0.86*	**0.85**	*0.87*	*0.85*
Natural Gasoline (Pentanes Plus)	**0.49**	**0.55**	**0.61**	**0.58**	**0.56**	**0.57**	**0.62**	*0.54*	*0.52*	*0.56*	*0.59*	*0.56*	**0.56**	*0.57*	*0.55*
Refinery and Blender Net Production															
Ethane/Ethylene	**0.00**	**0.00**	**0.01**	**0.00**	**0.01**	**0.01**	**0.01**	*0.00*	*0.00*	*0.00*	*0.01*	*0.01*	**0.01**	*0.01*	*0.00*
Propane	**0.28**	**0.30**	**0.29**	**0.29**	**0.29**	**0.24**	**0.27**	*0.27*	*0.26*	*0.29*	*0.30*	*0.30*	**0.29**	*0.27*	*0.29*
Propylene (refinery-grade)	**0.28**	**0.28**	**0.28**	**0.28**	**0.25**	**0.26**	**0.26**	*0.27*	*0.28*	*0.29*	*0.28*	*0.28*	**0.28**	*0.26*	*0.28*
Butanes/Butylenes	**-0.09**	**0.26**	**0.18**	**-0.23**	**-0.08**	**0.18**	**0.13**	*-0.20*	*-0.09*	*0.26*	*0.18*	*-0.20*	**0.03**	*0.01*	*0.04*
Renewable Fuels and Oxygenate Plant Net Production															
Natural Gasoline (Pentanes Plus)	**-0.02**	**-0.02**	**-0.02**	**-0.02**	**-0.02**	**-0.01**	**-0.02**	*-0.02*	*-0.02*	*-0.02*	*-0.02*	*-0.02*	**-0.02**	*-0.02*	*-0.02*
HGL Net Imports															
Ethane	**-0.26**	**-0.27**	**-0.28**	**-0.30**	**-0.30**	**-0.28**	**-0.27**	*-0.28*	*-0.37*	*-0.41*	*-0.42*	*-0.44*	**-0.28**	*-0.28*	*-0.41*
Propane/Propylene	**-0.75**	**-1.00**	**-0.99**	**-1.05**	**-1.12**	**-1.08**	**-1.08**	*-1.14*	*-0.88*	*-1.04*	*-1.03*	*-1.02*	**-0.95**	*-1.10*	*-0.99*
Butanes/Butylenes	**-0.14**	**-0.25**	**-0.26**	**-0.25**	**-0.30**	**-0.31**	**-0.36**	*-0.33*	*-0.31*	*-0.33*	*-0.34*	*-0.29*	**-0.23**	*-0.32*	*-0.32*
Natural Gasoline (Pentanes Plus)	**-0.17**	**-0.15**	**-0.16**	**-0.21**	**-0.27**	**-0.19**	**-0.16**	*-0.29*	*-0.33*	*-0.30*	*-0.30*	*-0.29*	**-0.17**	*-0.23*	*-0.30*
HGL Refinery and Blender Net Inputs															
Butanes/Butylenes	**0.46**	**0.29**	**0.33**	**0.54**	**0.46**	**0.25**	**0.32**	*0.46*	*0.38*	*0.27*	*0.31*	*0.49*	**0.40**	*0.37*	*0.36*
Natural Gasoline (Pentanes Plus)	**0.14**	**0.17**	**0.18**	**0.18**	**0.15**	**0.10**	**0.15**	*0.14*	*0.12*	*0.16*	*0.17*	*0.16*	**0.17**	*0.14*	*0.15*
HGL Consumption															
Ethane/Ethylene	**1.61**	**1.50**	**1.48**	**1.56**	**1.70**	**1.65**	**1.66**	*1.76*	*1.84*	*1.85*	*1.88*	*1.93*	**1.54**	*1.69*	*1.88*
Propane	**1.19**	**0.58**	**0.63**	**1.08**	**1.09**	**0.59**	**0.58**	*1.04*	*1.20*	*0.62*	*0.65*	*1.01*	**0.87**	*0.82*	*0.87*
Propylene (refinery-grade)	**0.29**	**0.30**	**0.29**	**0.31**	**0.26**	**0.27**	**0.27**	*0.28*	*0.30*	*0.30*	*0.29*	*0.29*	**0.30**	*0.27*	*0.30*
Butanes/Butylenes	**0.19**	**0.22**	**0.30**	**0.24**	**0.17**	**0.20**	**0.17**	*0.18*	*0.16*	*0.23*	*0.21*	*0.21*	**0.24**	*0.18*	*0.20*
Natural Gasoline (Pentanes Plus)	**0.19**	**0.20**	**0.23**	**0.17**	**0.09**	**0.13**	**0.26**	*0.12*	*0.08*	*0.09*	*0.11*	*0.10*	**0.20**	*0.15*	*0.10*
HGL Inventories (million barrels)															
Ethane	**49.14**	**56.54**	**56.84**	**58.84**	**52.57**	**49.54**	**62.45**	*71.44*	*64.93*	*66.93*	*64.61*	*65.43*	**55.37**	*59.05*	*65.48*
Propane	**48.94**	**71.71**	**95.61**	**79.67**	**60.28**	**75.31**	**100.71**	*73.82*	*47.90*	*67.41*	*87.09*	*74.68*	**79.67**	*73.82*	*74.68*
Propylene (at refineries only)	**1.68**	**1.76**	**2.65**	**1.66**	**1.41**	**1.50**	**1.51**	*1.97*	*1.88*	*2.26*	*2.64*	*3.06*	**1.66**	*1.97*	*3.06*
Butanes/Butylenes	**39.84**	**70.72**	**85.87**	**52.18**	**43.58**	**69.33**	**86.03**	*54.72*	*44.54*	*68.66*	*86.12*	*56.50*	**52.18**	*54.72*	*56.50*
Natural Gasoline (Pentanes Plus)	**18.43**	**19.72**	**21.26**	**20.90**	**23.99**	**35.67**	**38.63**	*36.27*	*32.76*	*31.81*	*30.85*	*29.02*	**20.90**	*36.27*	*29.02*
Refinery and Blender Net Inputs															
Crude Oil	**16.20**	**16.76**	**16.96**	**16.32**	**15.77**	**13.16**	**14.03**	*14.10*	*14.82*	*15.52*	*16.27*	*15.41*	**16.56**	*14.26*	*15.51*
Hydrocarbon Gas Liquids	**0.59**	**0.46**	**0.51**	**0.72**	**0.61**	**0.35**	**0.47**	*0.60*	*0.50*	*0.43*	*0.48*	*0.65*	**0.57**	*0.51*	*0.52*
Other Hydrocarbons/Oxygenates	**1.16**	**1.21**	**1.22**	**1.19**	**1.12**	**0.95**	**1.11**	*1.08*	*1.11*	*1.15*	*1.17*	*1.15*	**1.19**	*1.06*	*1.15*
Unfinished Oils	**0.18**	**0.34**	**0.46**	**0.43**	**0.05**	**0.23**	**0.44**	*0.45*	*0.24*	*0.47*	*0.45*	*0.38*	**0.35**	*0.29*	*0.38*
Motor Gasoline Blend Components	**0.64**	**0.94**	**0.77**	**0.40**	**0.41**	**0.48**	**0.85**	*0.15*	*0.57*	*0.84*	*0.66*	*0.26*	**0.69**	*0.47*	*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	**18.77**	**19.71**	**19.93**	**19.06**	**17.97**	**15.17**	**16.90**	*16.37*	*17.24*	*18.40*	*19.03*	*17.85*	**19.37**	*16.60*	*18.14*
Refinery Processing Gain	**1.05**	**1.07**	**1.06**	**1.09**	**1.02**	**0.82**	**0.94**	*1.02*	*1.05*	*1.08*	*1.09*	*1.06*	**1.07**	*0.95*	*1.07*
Refinery and Blender Net Production															
Hydrocarbon Gas Liquids	**0.48**	**0.84**	**0.76**	**0.34**	**0.47**	**0.69**	**0.67**	*0.35*	*0.46*	*0.84*	*0.77*	*0.38*	**0.61**	*0.54*	*0.61*
Finished Motor Gasoline	**9.85**	**10.16**	**10.20**	**10.16**	**9.30**	**7.52**	**9.14**	*8.96*	*9.19*	*9.66*	*9.84*	*9.58*	**10.10**	*8.74*	*9.57*
Jet Fuel	**1.73**	**1.78**	**1.88**	**1.79**	**1.63**	**0.62**	**0.83**	*1.11*	*1.52*	*1.59*	*1.67*	*1.56*	**1.80**	*1.04*	*1.59*
Distillate Fuel	**5.05**	**5.21**	**5.18**	**5.11**	**4.95**	**4.83**	**4.72**	*4.38*	*4.47*	*4.65*	*4.87*	*4.63*	**5.14**	*4.72*	*4.66*
Residual Fuel	**0.36**	**0.39**	**0.39**	**0.30**	**0.23**	**0.18**	**0.19**	*0.18*	*0.30*	*0.33*	*0.32*	*0.26*	**0.36**	*0.20*	*0.30*
Other Oils (a)	**2.36**	**2.40**	**2.57**	**2.45**	**2.41**	**2.14**	**2.28**	*2.41*	*2.35*	*2.42*	*2.65*	*2.49*	**2.44**	*2.31*	*2.48*
Total Refinery and Blender Net Production	**19.82**	**20.78**	**20.99**	**20.15**	**18.99**	**15.99**	**17.84**	*17.39*	*18.29*	*19.49*	*20.12*	*18.91*	**20.44**	*17.55*	*19.21*
Refinery Distillation Inputs	**16.54**	**17.14**	**17.42**	**16.85**	**16.36**	**13.65**	**14.55**	*14.58*	*15.23*	*15.86*	*16.59*	*15.79*	**16.99**	*14.78*	*15.87*
Refinery Operable Distillation Capacity	**18.81**	**18.81**	**18.81**	**18.81**	**18.98**	**18.75**	**18.55**	*18.39*	*18.39*	*18.39*	*18.39*	*18.39*	**18.81**	*18.66*	*18.39*
Refinery Distillation Utilization Factor	**0.88**	**0.91**	**0.93**	**0.90**	**0.86**	**0.73**	**0.78**	*0.79*	*0.83*	*0.86*	*0.90*	*0.86*	**0.90**	*0.79*	*0.86*

- = 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 - December 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
Prices (cents per gallon)															
Refiner Wholesale Price	**167**	**205**	**189**	**182**	**153**	**104**	**137**	*129*	*139*	*159*	*159*	*148*	**186**	*132*	*151*
Gasoline Regular Grade Retail Prices Including Taxes															
PADD 1	**233**	**268**	**256**	**247**	**236**	**191**	**211**	*204*	*195*	*216*	*222*	*211*	**251**	*212*	*211*
PADD 2	**223**	**269**	**257**	**244**	**226**	**179**	**207**	*198*	*189*	*222*	*218*	*205*	**249**	*203*	*209*
PADD 3	**205**	**245**	**234**	**224**	**210**	**162**	**186**	*179*	*182*	*203*	*203*	*192*	**228**	*186*	*195*
PADD 4	**226**	**285**	**270**	**276**	**247**	**201**	**233**	*221*	*214*	*241*	*245*	*230*	**265**	*226*	*233*
PADD 5	**297**	**356**	**331**	**350**	**311**	**258**	**283**	*284*	*296*	*327*	*326*	*318*	**334**	*285*	*317*
U.S. Average	**236**	**279**	**265**	**259**	**241**	**194**	**218**	*212*	*209*	*235*	*236*	*225*	**260**	*217*	*227*
Gasoline All Grades Including Taxes	**245**	**288**	**274**	**269**	**251**	**203**	**227**	*222*	*221*	*248*	*250*	*238*	**269**	*227*	*240*
End-of-period Inventories (million barrels)															
Total Gasoline Inventories															
PADD 1	**62.5**	**59.8**	**65.0**	**65.6**	**71.0**	**73.0**	**61.6**	*63.5*	*59.7*	*60.9*	*58.1*	*59.3*	**65.6**	*63.5*	*59.3*
PADD 2	**54.5**	**49.6**	**51.0**	**55.0**	**60.2**	**52.6**	**46.2**	*52.6*	*54.6*	*53.9*	*52.8*	*50.6*	**55.0**	*52.6*	*50.6*
PADD 3	**82.3**	**82.6**	**81.6**	**92.0**	**84.8**	**90.5**	**79.7**	*86.0*	*82.0*	*80.4*	*80.6*	*85.3*	**92.0**	*86.0*	*85.3*
PADD 4	**6.9**	**7.5**	**7.7**	**8.3**	**9.2**	**7.7**	**7.6**	*7.7*	*7.7*	*7.8*	*7.5*	*8.0*	**8.3**	*7.7*	*8.0*
PADD 5	**30.4**	**30.6**	**26.8**	**33.2**	**35.6**	**29.4**	**31.5**	*30.9*	*30.0*	*29.1*	*29.3*	*32.1*	**33.2**	*30.9*	*32.1*
U.S. Total	**236.6**	**229.9**	**232.0**	**254.1**	**260.8**	**253.3**	**226.5**	*240.8*	*233.9*	*232.2*	*228.3*	*235.2*	**254.1**	*240.8*	*235.2*
Finished Gasoline Inventories															
U.S. Total	**20.9**	**21.5**	**23.0**	**26.1**	**22.6**	**23.5**	**22.4**	*24.4*	*23.0*	*21.5*	*22.4*	*22.6*	**26.1**	*24.4*	*22.6*
Gasoline Blending Components Inventories															
U.S. Total	**215.7**	**208.4**	**209.0**	**228.0**	**238.3**	**229.8**	**204.1**	*216.4*	*210.9*	*210.6*	*205.9*	*212.6*	**228.0**	*216.4*	*212.6*

- = 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 - December 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
Supply (billion cubic feet per day)															
Total Marketed Production	**96.76**	**98.44**	**101.05**	**103.83**	**102.27**	**96.83**	**97.43**	*97.08*	*95.27*	*94.90*	*95.90*	*96.48*	**100.04**	*98.40*	*95.64*
Alaska	**0.96**	**0.93**	**0.79**	**0.93**	**0.96**	**0.88**	**0.88**	*0.93*	*0.98*	*0.81*	*0.77*	*0.93*	**0.90**	*0.91*	*0.87*
Federal GOM (a)	**2.88**	**2.82**	**2.63**	**2.80**	**2.72**	**2.22**	**1.71**	*2.29*	*2.44*	*2.37*	*2.25*	*2.23*	**2.78**	*2.23*	*2.32*
Lower 48 States (excl GOM)	**92.92**	**94.69**	**97.63**	**100.10**	**98.58**	**93.74**	**94.84**	*93.87*	*91.85*	*91.72*	*92.88*	*93.33*	**96.36**	*95.25*	*92.45*
Total Dry Gas Production	**90.01**	**91.57**	**94.00**	**96.58**	**94.79**	**89.67**	**89.72**	*89.36*	*87.65*	*87.25*	*88.13*	*88.61*	**93.06**	*90.88*	*87.91*
LNG Gross Imports	**0.28**	**0.03**	**0.06**	**0.20**	**0.24**	**0.12**	**0.09**	*0.20*	*0.32*	*0.18*	*0.18*	*0.20*	**0.14**	*0.16*	*0.22*
LNG Gross Exports	**4.01**	**4.55**	**4.95**	**6.40**	**7.92**	**5.51**	**3.91**	*8.77*	*9.49*	*7.59*	*7.66*	*9.26*	**4.98**	*6.53*	*8.50*
Pipeline Gross Imports	**8.35**	**6.73**	**7.10**	**7.30**	**7.64**	**6.17**	**6.45**	*6.77*	*7.75*	*6.52*	*6.85*	*7.13*	**7.37**	*6.76*	*7.06*
Pipeline Gross Exports	**7.86**	**7.18**	**7.80**	**8.25**	**8.15**	**7.17**	**8.07**	*8.37*	*8.49*	*7.91*	*8.78*	*8.93*	**7.77**	*7.94*	*8.53*
Supplemental Gaseous Fuels	**0.16**	**0.17**	**0.17**	**0.18**	**0.19**	**0.17**	**0.15**	*0.17*	*0.16*	*0.16*	*0.16*	*0.17*	**0.17**	*0.17*	*0.16*
Net Inventory Withdrawals	**16.93**	**-14.18**	**-10.41**	**2.45**	**12.74**	**-12.24**	**-7.68**	*6.29*	*18.86*	*-11.19*	*-8.25*	*5.44*	**-1.37**	*-0.23*	*1.15*
Total Supply	**103.87**	**72.60**	**78.18**	**92.05**	**99.53**	**71.22**	**76.74**	*85.64*	*96.76*	*67.43*	*70.63*	*83.35*	**86.62**	*83.27*	*79.48*
Balancing Item (b)	**0.05**	**-1.65**	**-1.83**	**-2.43**	**-0.23**	**-0.33**	**0.15**	*0.95*	*-0.20*	*-0.43*	*0.03*	*0.13*	**-1.47**	*0.14*	*-0.11*
Total Primary Supply	**103.92**	**70.95**	**76.35**	**89.62**	**99.31**	**70.89**	**76.89**	*86.59*	*96.56*	*67.00*	*70.67*	*83.48*	**85.15**	*83.41*	*79.37*
Consumption (billion cubic feet per day)															
Residential	**27.22**	**7.36**	**3.51**	**17.09**	**22.83**	**8.20**	**3.84**	*16.92*	*25.81*	*7.13*	*3.63*	*16.93*	**13.74**	*12.93*	*13.32*
Commercial	**16.11**	**6.33**	**4.62**	**11.53**	**13.93**	**5.82**	**4.37**	*10.29*	*15.20*	*6.66*	*4.72*	*10.61*	**9.62**	*8.59*	*9.27*
Industrial	**25.24**	**21.82**	**21.38**	**23.89**	**24.65**	**20.62**	**21.15**	*23.76*	*24.27*	*21.61*	*20.77*	*23.47*	**23.07**	*22.54*	*22.52*
Electric Power (c)	**27.12**	**28.20**	**39.27**	**28.99**	**29.55**	**29.04**	**40.12**	*27.49*	*22.90*	*24.18*	*33.98*	*24.37*	**30.92**	*31.56*	*26.38*
Lease and Plant Fuel	**4.89**	**4.98**	**5.11**	**5.25**	**5.17**	**4.90**	**4.93**	*4.91*	*4.82*	*4.80*	*4.85*	*4.88*	**5.06**	*4.98*	*4.84*
Pipeline and Distribution Use	**3.19**	**2.13**	**2.31**	**2.73**	**3.02**	**2.15**	**2.33**	*3.05*	*3.38*	*2.46*	*2.55*	*3.06*	**2.59**	*2.64*	*2.86*
Vehicle Use	**0.14**	**0.14**	**0.14**	**0.14**	**0.16**	**0.16**	**0.16**	*0.17*	*0.17*	*0.18*	*0.18*	*0.18*	**0.14**	*0.16*	*0.17*
Total Consumption	**103.92**	**70.95**	**76.35**	**89.62**	**99.31**	**70.89**	**76.89**	*86.59*	*96.56*	*67.00*	*70.67*	*83.48*	**85.15**	*83.41*	*79.37*
End-of-period Inventories (billion cubic feet)															
Working Gas Inventory	**1,185**	**2,461**	**3,415**	**3,188**	**2,030**	**3,133**	**3,840**	*3,262*	*1,564*	*2,582*	*3,342*	*2,842*	**3,188**	*3,262*	*2,842*
East Region (d)	**216**	**537**	**845**	**764**	**385**	**655**	**890**	*712*	*190*	*478*	*742*	*542*	**764**	*712*	*542*
Midwest Region (d)	**242**	**579**	**990**	**885**	**472**	**747**	**1,053**	*894*	*290*	*575*	*918*	*772*	**885**	*894*	*772*
South Central Region (d)	**519**	**917**	**1,049**	**1,095**	**857**	**1,221**	**1,313**	*1,159*	*739*	*1,046*	*1,126*	*1,054*	**1,095**	*1,159*	*1,054*
Mountain Region (d)	**63**	**135**	**200**	**167**	**92**	**177**	**235**	*195*	*134*	*169*	*208*	*170*	**167**	*195*	*170*
Pacific Region (d)	**115**	**259**	**294**	**245**	**200**	**308**	**318**	*272*	*181*	*284*	*318*	*273*	**245**	*272*	*273*
Alaska	**30**	**33**	**37**	**33**	**23**	**25**	**31**	*30*	*30*	*30*	*30*	*30*	**33**	*30*	*30*

- = no data available

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

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

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

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

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

LNG: liquefied natural gas.

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

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

Projections: EIA Regional Short-Term Energy Model.

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

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

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
Wholesale/Spot															
Henry Hub Spot Price	**3.03**	**2.66**	**2.47**	**2.49**	**1.98**	**1.77**	**2.07**	*2.76*	*3.17*	*3.07*	*3.08*	*3.19*	**2.67**	*2.15*	*3.13*
Residential Retail															
New England	**14.42**	**15.46**	**19.05**	**14.02**	**13.77**	**14.50**	**18.28**	*13.75*	*13.13*	*14.01*	*16.98*	*13.12*	**14.72**	*14.22*	*13.50*
Middle Atlantic	**10.70**	**12.97**	**18.34**	**11.29**	**10.77**	**11.85**	**17.85**	*11.24*	*9.90*	*12.13*	*16.88*	*11.10*	**11.64**	*11.62*	*11.03*
E. N. Central	**7.26**	**10.47**	**19.05**	**7.67**	**6.99**	**9.50**	**18.15**	*6.68*	*7.00*	*10.60*	*16.48*	*8.27*	**8.39**	*7.96*	*8.41*
W. N. Central	**7.88**	**10.61**	**18.10**	**8.06**	**6.85**	**9.89**	**17.36**	*7.43*	*7.23*	*10.63*	*16.95*	*8.95*	**8.75**	*8.09*	*8.69*
S. Atlantic	**11.42**	**17.86**	**25.10**	**12.62**	**12.12**	**15.52**	**24.11**	*13.15*	*11.35*	*16.42*	*22.58*	*12.56*	**13.52**	*13.91*	*13.20*
E. S. Central	**9.68**	**14.93**	**21.63**	**10.45**	**9.69**	**13.34**	**20.92**	*10.42*	*9.68*	*14.97*	*22.19*	*13.52*	**11.09**	*11.10*	*12.04*
W. S. Central	**8.24**	**13.34**	**21.45**	**10.46**	**8.52**	**14.22**	**20.58**	*9.97*	*8.73*	*14.72*	*20.71*	*11.89*	**10.46**	*10.83*	*11.35*
Mountain	**7.64**	**9.36**	**13.16**	**7.66**	**7.55**	**9.37**	**12.56**	*7.51*	*7.45*	*9.56*	*13.57*	*8.43*	**8.25**	*8.26*	*8.54*
Pacific	**12.17**	**12.47**	**13.20**	**11.81**	**13.41**	**14.47**	**14.50**	*13.20*	*13.26*	*13.99*	*14.74*	*13.67*	**12.23**	*13.69*	*13.69*
U.S. Average	**9.39**	**12.36**	**17.90**	**9.78**	**9.46**	**11.89**	**17.62**	*9.65*	*9.18*	*12.47*	*17.23*	*10.66*	**10.46**	*10.51*	*10.65*
Commercial Retail															
New England	**10.81**	**11.05**	**11.37**	**9.85**	**9.93**	**10.40**	**10.99**	*10.38*	*10.08*	*10.33*	*10.79*	*10.23*	**10.60**	*10.25*	*10.24*
Middle Atlantic	**8.31**	**7.66**	**6.81**	**7.43**	**7.91**	**7.00**	**6.78**	*7.30*	*7.51*	*7.39*	*6.93*	*7.47*	**7.71**	*7.43*	*7.41*
E. N. Central	**6.23**	**7.14**	**8.79**	**6.00**	**5.75**	**6.73**	**8.79**	*6.55*	*6.60*	*7.89*	*9.37*	*7.07*	**6.46**	*6.39*	*7.14*
W. N. Central	**6.75**	**7.07**	**8.17**	**6.05**	**5.43**	**6.53**	**8.14**	*6.72*	*7.10*	*7.78*	*9.00*	*7.29*	**6.66**	*6.19*	*7.39*
S. Atlantic	**8.80**	**9.50**	**9.73**	**8.72**	**8.51**	**9.21**	**9.53**	*8.59*	*8.44*	*9.44*	*9.83*	*8.78*	**9.00**	*8.77*	*8.87*
E. S. Central	**8.63**	**9.82**	**10.13**	**8.47**	**8.38**	**9.20**	**10.10**	*8.71*	*8.31*	*9.50*	*10.30*	*9.13*	**8.90**	*8.79*	*8.96*
W. S. Central	**6.30**	**6.93**	**7.85**	**6.66**	**5.99**	**7.18**	**8.05**	*7.61*	*7.26*	*7.92*	*8.74*	*8.03*	**6.71**	*6.94*	*7.80*
Mountain	**6.40**	**6.73**	**7.33**	**6.15**	**6.09**	**6.85**	**7.41**	*6.15*	*6.47*	*7.00*	*8.07*	*7.08*	**6.46**	*6.36*	*6.91*
Pacific	**9.07**	**8.82**	**9.14**	**9.01**	**9.58**	**9.30**	**9.59**	*9.02*	*9.05*	*9.19*	*9.69*	*9.19*	**9.01**	*9.36*	*9.21*
U.S. Average	**7.55**	**7.95**	**8.41**	**7.20**	**7.13**	**7.63**	**8.48**	*7.51*	*7.52*	*8.19*	*8.81*	*7.91*	**7.59**	*7.47*	*7.89*
Industrial Retail															
New England	**9.24**	**8.32**	**6.96**	**7.34**	**8.15**	**7.41**	**6.16**	*7.41*	*8.25*	*7.44*	*6.68*	*7.63*	**8.14**	*7.47*	*7.64*
Middle Atlantic	**8.80**	**7.49**	**6.72**	**7.04**	**7.43**	**6.76**	**7.00**	*7.13*	*7.64*	*7.34*	*7.44*	*7.67*	**7.83**	*7.17*	*7.56*
E. N. Central	**5.66**	**5.31**	**5.56**	**5.05**	**4.84**	**5.10**	**4.15**	*4.91*	*5.82*	*5.72*	*5.74*	*5.62*	**5.41**	*4.81*	*5.73*
W. N. Central	**5.24**	**4.01**	**3.48**	**4.32**	**3.97**	**3.30**	**3.15**	*4.23*	*5.04*	*4.47*	*4.51*	*5.02*	**4.34**	*3.72*	*4.80*
S. Atlantic	**5.43**	**4.54**	**4.35**	**4.45**	**4.15**	**3.70**	**3.72**	*4.58*	*5.42*	*4.89*	*4.89*	*5.15*	**4.73**	*4.06*	*5.11*
E. S. Central	**4.99**	**4.09**	**3.62**	**4.12**	**3.92**	**3.24**	**3.23**	*4.28*	*5.01*	*4.56*	*4.54*	*4.93*	**4.25**	*3.72*	*4.78*
W. S. Central	**3.49**	**2.89**	**2.54**	**2.65**	**2.19**	**1.92**	**2.19**	*2.80*	*3.33*	*3.25*	*3.34*	*3.39*	**2.91**	*2.31*	*3.33*
Mountain	**5.23**	**4.71**	**4.88**	**4.64**	**4.40**	**4.59**	**4.67**	*4.83*	*5.31*	*5.49*	*5.95*	*5.92*	**4.88**	*4.61*	*5.64*
Pacific	**7.61**	**6.58**	**6.37**	**6.88**	**7.46**	**6.28**	**6.18**	*6.28*	*6.97*	*6.48*	*6.89*	*7.02*	**6.91**	*6.58*	*6.85*
U.S. Average	**4.66**	**3.73**	**3.29**	**3.74**	**3.52**	**2.85**	**2.88**	*3.68*	*4.43*	*3.99*	*3.98*	*4.30*	**3.90**	*3.27*	*4.19*

- = 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 - December 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
Supply (million short tons)															
Production	**179.5**	**179.2**	**181.4**	**165.2**	**149.1**	**113.1**	**135.5**	*123.8*	*151.7*	*153.0*	*172.1*	*147.0*	**705.3**	*521.5*	*623.8*
Appalachia	**49.6**	**52.5**	**46.6**	**44.3**	**39.7**	**32.0**	**36.0**	*31.7*	*39.0*	*42.3*	*47.8*	*37.3*	**193.0**	*139.4*	*166.5*
Interior	**35.4**	**32.3**	**32.4**	**30.6**	**25.8**	**20.2**	**22.6**	*22.3*	*22.9*	*23.5*	*27.5*	*27.6*	**130.7**	*90.9*	*101.5*
Western	**94.5**	**94.4**	**102.4**	**90.3**	**83.6**	**60.9**	**76.8**	*69.8*	*89.7*	*87.2*	*96.8*	*82.1*	**381.7**	*291.2*	*355.8*
Primary Inventory Withdrawals	**-2.5**	**-0.4**	**-3.2**	**-3.6**	**0.5**	**1.3**	**2.0**	*-1.0*	*0.4*	*2.0*	*2.5*	*-0.7*	**-9.6**	*2.8*	*4.3*
Imports	**1.7**	**1.6**	**1.7**	**1.7**	**1.3**	**1.1**	**1.3**	*1.4*	*1.1*	*1.1*	*1.3*	*1.3*	**6.7**	*5.2*	*4.7*
Exports	**25.2**	**25.3**	**21.9**	**20.4**	**20.0**	**14.8**	**15.3**	*13.9*	*19.7*	*17.0*	*16.0*	*14.8*	**92.9**	*63.9*	*67.5*
Metallurgical Coal	**13.9**	**15.1**	**13.5**	**12.6**	**11.7**	**9.0**	**9.8**	*10.2*	*12.1*	*11.1*	*10.5*	*10.1*	**55.1**	*40.7*	*43.8*
Steam Coal	**11.3**	**10.2**	**8.4**	**7.8**	**8.3**	**5.8**	**4.9**	*3.6*	*7.6*	*5.9*	*5.5*	*4.6*	**37.7**	*22.7*	*23.6*
Total Primary Supply	**153.5**	**155.1**	**157.9**	**142.9**	**130.9**	**100.8**	**123.5**	*110.4*	*133.5*	*139.1*	*159.9*	*132.9*	**609.5**	*465.6*	*565.4*
Secondary Inventory Withdrawals	**6.1**	**-20.4**	**5.9**	**-17.5**	**-16.6**	**-5.0**	**20.5**	*6.8*	*0.7*	*-6.7*	*6.5*	*6.1*	**-25.9**	*5.6*	*6.7*
Waste Coal (a)	**2.3**	**2.3**	**2.3**	**2.3**	**2.3**	**2.3**	**2.3**	*2.3*	*2.0*	*2.0*	*2.0*	*2.0*	**9.3**	*9.2*	*8.0*
Total Supply	**162.0**	**137.1**	**166.1**	**127.7**	**116.6**	**98.1**	**146.3**	*119.4*	*136.2*	*134.3*	*168.5*	*141.0*	**592.9**	*480.4*	*580.0*
Consumption (million short tons)															
Coke Plants	**4.5**	**4.7**	**4.5**	**4.4**	**4.3**	**3.5**	**3.9**	*3.8*	*4.0*	*3.9*	*4.1*	*4.0*	**18.0**	*15.4*	*16.0*
Electric Power Sector (b)	**145.2**	**117.8**	**155.6**	**120.0**	**97.8**	**87.2**	**139.2**	*111.5*	*125.2*	*123.7*	*157.9*	*130.3*	**538.6**	*435.6*	*537.0*
Retail and Other Industry	**8.1**	**7.2**	**7.2**	**7.5**	**7.4**	**5.7**	**6.4**	*7.0*	*7.0*	*6.7*	*6.5*	*6.8*	**30.0**	*26.5*	*27.0*
Residential and Commercial	**0.3**	**0.2**	**0.2**	**0.2**	**0.3**	**0.1**	**0.2**	*0.3*	*0.2*	*0.2*	*0.2*	*0.2*	**0.9**	*0.9*	*0.8*
Other Industrial	**7.8**	**7.0**	**7.0**	**7.3**	**7.1**	**5.6**	**6.2**	*6.7*	*6.8*	*6.5*	*6.4*	*6.5*	**29.1**	*25.6*	*26.2*
Total Consumption	**157.7**	**129.6**	**167.2**	**132.0**	**109.5**	**96.4**	**149.5**	*122.3*	*136.2*	*134.3*	*168.5*	*141.0*	**586.5**	*477.6*	*580.0*
Discrepancy (c)	**4.2**	**7.5**	**-1.1**	**-4.2**	**7.1**	**1.7**	**-3.1**	*-2.8*	*0.0*	*0.0*	*0.0*	*0.0*	**6.4**	*2.8*	*0.0*
End-of-period Inventories (million short tons)															
Primary Inventories (d)	**24.2**	**24.5**	**27.7**	**31.3**	**30.8**	**29.5**	**27.5**	*28.5*	*28.1*	*26.1*	*23.5*	*24.2*	**31.3**	*28.5*	*24.2*
Secondary Inventories	**102.0**	**122.4**	**116.5**	**134.0**	**150.6**	**155.7**	**135.1**	*128.4*	*127.6*	*134.4*	*127.8*	*121.7*	**134.0**	*128.4*	*121.7*
Electric Power Sector	**96.9**	**116.9**	**110.6**	**128.2**	**145.2**	**150.4**	**129.1**	*122.6*	*122.1*	*128.5*	*121.8*	*116.0*	**128.2**	*122.6*	*116.0*
Retail and General Industry	**2.8**	**3.0**	**3.2**	**3.3**	**3.0**	**3.0**	**3.7**	*3.5*	*3.8*	*3.7*	*3.8*	*3.6*	**3.3**	*3.5*	*3.6*
Coke Plants	**2.0**	**2.3**	**2.5**	**2.3**	**2.1**	**2.0**	**2.2**	*2.1*	*1.6*	*2.0*	*2.1*	*2.0*	**2.3**	*2.1*	*2.0*
Coal Market Indicators															
Coal Miner Productivity (Tons per hour)	**6.37**	**6.37**	**6.37**	**6.37**	**6.37**	**6.37**	**6.37**	*6.37*	*6.32*	*6.32*	*6.32*	*6.32*	**6.37**	*6.37*	*6.32*
Total Raw Steel Production (Million short tons per day)	**0.273**	**0.271**	**0.264**	**0.265**	**0.268**	**0.174**	**0.196**	*0.219*	*0.270*	*0.240*	*0.241*	*0.282*	**0.268**	*0.214*	*0.258*
Cost of Coal to Electric Utilities (Dollars per million Btu)	**2.07**	**2.04**	**1.99**	**1.93**	**1.92**	**1.90**	**1.91**	*2.01*	*2.05*	*2.06*	*2.04*	*2.04*	**2.01**	*1.94*	*2.05*

- = no data available

(a) Waste coal includes waste coal and cloal 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 - December 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
Electricity Supply (billion kilowatthours)															
Electricity Generation	**1,001**	**980**	**1,172**	**974**	**965**	**933**	**1,149**	*950*	*955*	*967*	*1,134*	*965*	**4,127**	*3,997*	*4,021*
Electric Power Sector (a)	**961**	**941**	**1,129**	**933**	**924**	**896**	**1,109**	*914*	*919*	*931*	*1,097*	*928*	**3,965**	*3,843*	*3,876*
Industrial Sector (b)	**36**	**35**	**39**	**38**	**38**	**34**	**36**	*33*	*33*	*32*	*33*	*34*	**149**	*141*	*132*
Commercial Sector (b)	**3**	**3**	**4**	**3**	**3**	**3**	**4**	*3*	*3*	*3*	*4*	*3*	**14**	*13*	*13*
Net Imports	**11**	**12**	**15**	**11**	**13**	**13**	**15**	*12*	*12*	*13*	*15*	*11*	**49**	*53*	*51*
Total Supply	**1,012**	**992**	**1,186**	**985**	**978**	**946**	**1,164**	*962*	*967*	*980*	*1,149*	*976*	**4,176**	*4,050*	*4,072*
Losses and Unaccounted for (c)	**50**	**65**	**59**	**45**	**55**	**69**	**72**	*54*	*44*	*67*	*58*	*54*	**219**	*249*	*223*
Electricity Consumption (billion kilowatthours unless noted)															
Retail Sales	**926**	**892**	**1089**	**904**	**887**	**844**	**1057**	*875*	*891*	*881*	*1058*	*889*	**3811**	*3663*	*3718*
Residential Sector	**363**	**311**	**435**	**332**	**340**	**334**	**453**	*335*	*365*	*344*	*446*	*340*	**1440**	*1462*	*1495*
Commercial Sector	**322**	**329**	**384**	**326**	**314**	**293**	**360**	*313*	*302*	*308*	*366*	*319*	**1361**	*1280*	*1295*
Industrial Sector	**240**	**250**	**268**	**244**	**231**	**216**	**241**	*226*	*222*	*227*	*245*	*228*	**1002**	*914*	*921*
Transportation Sector	**2**	**2**	**2**	**2**	**2**	**1**	**2**	*2*	*2*	*2*	*2*	*2*	**8**	*6*	*6*
Direct Use (d)	**36**	**35**	**38**	**37**	**37**	**33**	**35**	*33*	*32*	*32*	*33*	*33*	**146**	*139*	*131*
Total Consumption	**962**	**927**	**1128**	**941**	**924**	**878**	**1092**	*908*	*923*	*913*	*1091*	*922*	**3957**	*3801*	*3849*
Average residential electricity usage per customer (kWh)	**2,680**	**2,298**	**3,219**	**2,451**	**2,518**	**2,472**	**3,353**	*2,475*	*2,661*	*2,509*	*3,250*	*2,481*	**10,649**	*10,818*	*10,901*
Prices															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	**2.07**	**2.04**	**1.99**	**1.93**	**1.92**	**1.90**	**1.91**	*2.01*	*2.05*	*2.06*	*2.04*	*2.04*	**2.01**	*1.94*	*2.05*
Natural Gas	**3.72**	**2.73**	**2.51**	**2.79**	**2.41**	**2.10**	**2.27**	*3.08*	*3.69*	*3.24*	*3.22*	*3.48*	**2.89**	*2.44*	*3.38*
Residual Fuel Oil	**12.22**	**13.39**	**12.80**	**12.53**	**12.15**	**6.65**	**8.51**	*7.87*	*8.90*	*9.81*	*9.44*	*9.37*	**12.73**	*8.81*	*9.37*
Distillate Fuel Oil	**14.85**	**15.76**	**14.99**	**15.11**	**13.27**	**8.39**	**10.31**	*10.59*	*11.70*	*12.17*	*12.48*	*12.80*	**15.16**	*10.73*	*12.31*
Retail Prices (cents per kilowatthour)															
Residential Sector	**12.67**	**13.30**	**13.24**	**12.83**	**12.90**	**13.24**	**13.36**	*12.90*	*12.82*	*13.34*	*13.57*	*13.18*	**13.01**	*13.12*	*13.24*
Commercial Sector	**10.43**	**10.66**	**11.00**	**10.55**	**10.33**	**10.63**	**10.97**	*10.47*	*10.27*	*10.76*	*11.20*	*10.64*	**10.67**	*10.61*	*10.74*
Industrial Sector	**6.67**	**6.69**	**7.20**	**6.65**	**6.37**	**6.63**	**7.09**	*6.71*	*6.44*	*6.72*	*7.10*	*6.74*	**6.81**	*6.71*	*6.76*
Wholesale Electricity Prices (dollars per megawatthour)															
ERCOT North hub	**28.41**	**28.34**	**139.81**	**28.40**	**23.41**	**24.03**	**34.12**	*27.61*	*28.95*	*31.83*	*33.95*	*30.01*	**56.24**	*27.29*	*31.18*
CAISO SP15 zone	**50.42**	**23.30**	**37.32**	**41.57**	**28.64**	**19.21**	**61.94**	*40.99*	*32.75*	*33.18*	*36.89*	*33.98*	**38.15**	*37.70*	*34.20*
ISO-NE Internal hub	**47.40**	**27.15**	**29.52**	**35.48**	**24.61**	**20.25**	**27.20**	*35.67*	*50.52*	*31.73*	*33.19*	*35.95*	**34.89**	*26.93*	*37.85*
NYISO Hudson Valley zone	**41.77**	**25.68**	**27.76**	**27.04**	**21.82**	**18.13**	**24.38**	*23.53*	*25.95*	*26.44*	*27.63*	*25.94*	**30.56**	*21.97*	*26.49*
PJM Western hub	**33.79**	**28.54**	**31.17**	**29.89**	**22.47**	**20.79**	**28.24**	*25.31*	*27.30*	*27.30*	*30.47*	*27.34*	**30.85**	*24.20*	*28.10*
Midcontinent ISO Illinois hub	**31.44**	**27.81**	**30.71**	**28.09**	**24.43**	**23.00**	**29.35**	*24.97*	*27.21*	*26.86*	*30.22*	*28.87*	**29.51**	*25.44*	*28.29*
SPP ISO South hub	**29.15**	**27.14**	**31.51**	**23.64**	**20.06**	**19.54**	**26.27**	*24.27*	*23.27*	*23.94*	*28.72*	*24.61*	**27.86**	*22.54*	*25.14*
SERC index, Into Southern	**30.74**	**29.87**	**31.08**	**29.31**	**23.58**	**18.23**	**23.47**	*24.49*	*24.24*	*24.43*	*26.93*	*25.71*	**30.25**	*22.44*	*25.33*
FRCC index, Florida Reliability	**30.71**	**29.57**	**30.64**	**29.47**	**26.24**	**18.53**	**23.75**	*25.01*	*26.01*	*27.02*	*27.89*	*26.95*	**30.10**	*23.38*	*26.97*
Northwest index, Mid-Columbia	**55.74**	**18.55**	**32.74**	**37.47**	**22.77**	**14.49**	**33.56**	*29.28*	*24.53*	*24.33*	*24.72*	*25.76*	**36.12**	*25.03*	*24.84*
Southwest index, Palo Verde	**44.23**	**18.45**	**42.00**	**36.37**	**22.07**	**19.60**	**80.81**	*35.53*	*27.93*	*28.26*	*28.28*	*29.07*	**35.26**	*39.50*	*28.39*

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

kWh = kilowatthours. Btu = British thermal units.

Prices are not adjusted for inflation.

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

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

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

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

Historical data sources:

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

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

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

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

Projections: EIA Regional Short-Term Energy Model.

Table 7b. U.S. Regional Electricity Retail Sales (billion kilowatthours)

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

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
Residential Sector															
New England	**12.5**	**9.7**	**13.1**	**10.8**	**11.7**	**10.9**	**14.6**	*11.4*	*12.9*	*11.4*	*13.8*	*11.6*	**46.2**	*48.6*	*49.7*
Middle Atlantic	**35.3**	**27.7**	**40.4**	**29.8**	**32.2**	**30.6**	**43.5**	*30.1*	*34.8*	*31.0*	*40.5*	*30.8*	**133.1**	*136.3*	*137.2*
E. N. Central	**50.0**	**38.3**	**54.4**	**43.4**	**46.4**	**43.7**	**56.5**	*43.9*	*49.5*	*44.6*	*54.6*	*44.9*	**186.2**	*190.4*	*193.8*
W. N. Central	**30.3**	**21.9**	**29.3**	**25.1**	**27.6**	**23.7**	**30.0**	*25.2*	*29.1*	*25.7*	*31.7*	*26.9*	**106.6**	*106.5*	*113.3*
S. Atlantic	**88.7**	**84.9**	**112.0**	**84.7**	**84.3**	**86.3**	**114.7**	*82.6*	*92.5*	*89.0*	*113.5*	*83.1*	**370.4**	*367.9*	*378.1*
E. S. Central	**30.3**	**25.9**	**36.7**	**27.5**	**29.0**	**26.0**	**37.2**	*26.3*	*32.5*	*27.3*	*38.0*	*27.2*	**120.3**	*118.6*	*125.1*
W. S. Central	**52.1**	**49.4**	**76.5**	**51.0**	**48.8**	**52.9**	**76.3**	*52.3*	*51.4*	*54.7*	*77.2*	*54.1*	**229.0**	*230.2*	*237.5*
Mountain	**23.2**	**22.2**	**33.0**	**22.1**	**22.5**	**25.7**	**36.2**	*23.0*	*22.9*	*25.6*	*33.9*	*22.7*	**100.5**	*107.4*	*105.1*
Pacific contiguous	**39.1**	**29.7**	**38.7**	**35.8**	**36.7**	**33.2**	**43.0**	*38.8*	*37.9*	*33.5*	*41.3*	*37.6*	**143.3**	*151.7*	*150.4*
AK and HI	**1.2**	**1.1**	**1.2**	**1.2**	**1.3**	**1.1**	**1.2**	*1.3*	*1.3*	*1.1*	*1.2*	*1.3*	**4.7**	*4.9*	*4.8*
Total	**362.5**	**310.8**	**435.4**	**331.5**	**340.4**	**334.1**	**453.3**	*334.7*	*364.8*	*344.1*	*445.7*	*340.2*	**1,440.3**	*1,462.5*	*1,494.9*
Commercial Sector															
New England	**12.8**	**12.1**	**14.0**	**12.6**	**12.3**	**10.6**	**13.2**	*11.7*	*11.7*	*10.8*	*12.9*	*11.8*	**51.5**	*47.7*	*47.1*
Middle Atlantic	**38.7**	**36.4**	**42.0**	**36.0**	**35.9**	**31.0**	**38.9**	*33.3*	*33.5*	*34.2*	*39.5*	*34.6*	**153.2**	*139.0*	*141.8*
E. N. Central	**44.2**	**42.8**	**50.0**	**43.2**	**43.1**	**38.3**	**47.3**	*42.4*	*42.0*	*41.3*	*48.5*	*43.8*	**180.2**	*171.1*	*175.5*
W. N. Central	**25.6**	**24.2**	**27.9**	**24.8**	**24.7**	**21.6**	**26.3**	*23.8*	*24.1*	*22.1*	*26.9*	*24.3*	**102.6**	*96.5*	*97.3*
S. Atlantic	**72.3**	**79.7**	**90.4**	**75.8**	**72.0**	**70.0**	**85.7**	*72.3*	*69.5*	*73.6*	*87.3*	*73.3*	**318.1**	*300.0*	*303.6*
E. S. Central	**21.2**	**22.7**	**27.2**	**21.9**	**20.7**	**19.4**	**25.3**	*20.7*	*20.3*	*20.5*	*25.9*	*21.1*	**93.1**	*86.1*	*87.8*
W. S. Central	**44.0**	**47.8**	**58.9**	**47.6**	**44.3**	**44.6**	**55.0**	*47.4*	*43.6*	*46.6*	*56.6*	*49.1*	**198.3**	*191.4*	*195.9*
Mountain	**22.7**	**23.8**	**28.2**	**23.3**	**22.4**	**22.1**	**27.4**	*23.1*	*22.0*	*23.2*	*27.3*	*23.5*	**98.1**	*95.1*	*96.0*
Pacific contiguous	**38.4**	**38.4**	**43.6**	**39.5**	**37.0**	**33.9**	**39.8**	*37.1*	*34.4*	*34.3*	*39.4*	*36.3*	**160.0**	*147.8*	*144.4*
AK and HI	**1.4**	**1.4**	**1.5**	**1.5**	**1.4**	**1.2**	**1.3**	*1.3*	*1.3*	*1.4*	*1.5*	*1.5*	**5.7**	*5.1*	*5.6*
Total	**321.6**	**329.4**	**383.8**	**326.1**	**313.7**	**292.7**	**360.2**	*313.3*	*302.4*	*307.9*	*365.6*	*319.2*	**1,360.9**	*1,279.9*	*1,295.2*
Industrial Sector															
New England	**4.0**	**4.0**	**4.3**	**4.0**	**3.7**	**3.5**	**3.9**	*3.8*	*3.5*	*3.6*	*3.9*	*3.7*	**16.2**	*14.9*	*14.6*
Middle Atlantic	**18.1**	**17.9**	**20.3**	**18.6**	**18.0**	**16.2**	**18.6**	*17.7*	*17.3*	*17.0*	*18.8*	*17.8*	**75.0**	*70.5*	*70.8*
E. N. Central	**47.5**	**47.9**	**50.6**	**46.3**	**44.0**	**37.7**	**44.5**	*40.4*	*42.1*	*40.1*	*45.4*	*40.7*	**192.3**	*166.5*	*168.3*
W. N. Central	**22.4**	**23.3**	**24.8**	**23.0**	**21.7**	**20.3**	**23.2**	*22.0*	*20.9*	*22.0*	*23.7*	*22.4*	**93.6**	*87.3*	*88.9*
S. Atlantic	**33.9**	**35.7**	**37.2**	**34.4**	**32.8**	**31.0**	**34.2**	*33.1*	*31.7*	*32.7*	*34.6*	*33.2*	**141.2**	*131.2*	*132.2*
E. S. Central	**24.5**	**24.9**	**25.5**	**23.9**	**23.3**	**21.4**	**23.4**	*22.5*	*21.9*	*22.6*	*23.5*	*22.5*	**98.9**	*90.6*	*90.4*
W. S. Central	**49.1**	**52.4**	**55.5**	**50.9**	**46.7**	**44.9**	**47.7**	*45.5*	*45.6*	*47.6*	*48.6*	*46.3*	**207.8**	*184.9*	*188.2*
Mountain	**19.4**	**21.3**	**23.7**	**20.4**	**20.0**	**20.3**	**22.6**	*19.9*	*19.6*	*21.1*	*23.0*	*20.2*	**84.8**	*82.8*	*83.8*
Pacific contiguous	**20.2**	**21.5**	**24.7**	**21.3**	**19.2**	**19.7**	**22.1**	*19.8*	*18.2*	*19.7*	*22.0*	*19.6*	**87.6**	*80.8*	*79.4*
AK and HI	**1.1**	**1.2**	**1.3**	**1.3**	**1.2**	**1.0**	**1.2**	*1.2*	*1.1*	*1.1*	*1.2*	*1.2*	**4.9**	*4.6*	*4.6*
Total	**240.1**	**250.1**	**268.0**	**244.1**	**230.6**	**216.0**	**241.4**	*225.9*	*221.8*	*227.3*	*244.6*	*227.5*	**1,002.4**	*913.9*	*921.3*
Total All Sectors (a)															
New England	**29.5**	**26.0**	**31.5**	**27.5**	**27.8**	**25.1**	**31.8**	*27.0*	*28.2*	*25.8*	*30.6*	*27.2*	**114.5**	*111.6*	*111.9*
Middle Atlantic	**93.1**	**83.0**	**103.6**	**85.4**	**86.9**	**78.5**	**101.8**	*81.9*	*86.5*	*82.9*	*99.5*	*84.0*	**365.1**	*349.0*	*352.9*
E. N. Central	**141.9**	**129.1**	**155.2**	**133.0**	**133.7**	**119.7**	**148.4**	*126.8*	*133.7*	*126.2*	*148.6*	*129.5*	**559.4**	*528.6*	*538.1*
W. N. Central	**78.3**	**69.4**	**82.1**	**73.0**	**74.0**	**65.7**	**79.5**	*71.1*	*74.0*	*69.7*	*82.3*	*73.6*	**302.8**	*290.3*	*299.6*
S. Atlantic	**195.3**	**200.7**	**240.1**	**195.2**	**189.4**	**187.6**	**235.0**	*188.3*	*194.0*	*195.5*	*235.7*	*189.9*	**831.2**	*800.3*	*815.1*
E. S. Central	**76.0**	**73.5**	**89.4**	**73.3**	**73.0**	**66.8**	**85.9**	*69.5*	*74.7*	*70.5*	*87.4*	*70.7*	**312.2**	*295.3*	*303.3*
W. S. Central	**145.2**	**149.7**	**190.9**	**149.5**	**139.8**	**142.4**	**179.1**	*145.3*	*140.7*	*149.0*	*182.4*	*149.6*	**635.4**	*606.6*	*621.7*
Mountain	**65.4**	**67.3**	**85.0**	**65.8**	**64.9**	**68.2**	**86.3**	*66.0*	*64.4*	*69.9*	*84.3*	*66.4*	**283.5**	*285.4*	*285.0*
Pacific contiguous	**97.9**	**89.8**	**107.2**	**96.9**	**93.1**	**87.0**	**105.1**	*95.9*	*90.8*	*87.7*	*102.9*	*93.7*	**391.8**	*381.1*	*375.0*
AK and HI	**3.7**	**3.6**	**4.0**	**4.0**	**3.8**	**3.4**	**3.6**	*3.7*	*3.7*	*3.6*	*3.8*	*3.9*	**15.3**	*14.5*	*15.0*
Total	**926.3**	**892.2**	**1,089.1**	**903.6**	**886.6**	**844.3**	**1,056.5**	*875.4*	*890.7*	*880.8*	*1,057.6*	*888.5*	**3,811.2**	*3,662.7*	*3,717.7*

- = 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 - December 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
Residential Sector															
New England	**21.34**	**21.52**	**20.70**	**20.93**	**21.76**	**21.33**	*20.96*	*20.91*	*21.79*	*21.82*	*22.04*	*22.48*	**21.10**	*21.22*	*22.03*
Middle Atlantic	**15.20**	**16.05**	**16.16**	**15.79**	**15.47**	**15.97**	*16.18*	*15.79*	*15.41*	*16.15*	*16.59*	*16.18*	**15.80**	*15.88*	*16.10*
E. N. Central	**13.00**	**13.93**	**13.37**	**13.38**	**13.13**	**13.75**	*13.33*	*13.47*	*13.10*	*13.89*	*13.60*	*13.68*	**13.39**	*13.41*	*13.56*
W. N. Central	**10.69**	**12.76**	**12.93**	**11.24**	**10.99**	**12.59**	*12.89*	*11.43*	*11.09*	*12.62*	*13.09*	*11.52*	**11.86**	*11.98*	*12.10*
S. Atlantic	**11.68**	**12.12**	**12.07**	**11.82**	**11.80**	**11.81**	*12.06*	*11.77*	*11.48*	*11.72*	*12.17*	*12.00*	**11.93**	*11.88*	*11.86*
E. S. Central	**11.14**	**11.70**	**11.38**	**11.28**	**11.25**	**11.56**	*11.29*	*11.36*	*11.06*	*11.59*	*11.48*	*11.58*	**11.36**	*11.36*	*11.42*
W. S. Central	**10.80**	**11.42**	**11.28**	**11.16**	**11.04**	**11.43**	*11.30*	*10.87*	*10.67*	*11.26*	*11.42*	*11.13*	**11.17**	*11.18*	*11.15*
Mountain	**11.44**	**12.06**	**12.11**	**11.51**	**11.42**	**12.08**	*12.19*	*11.69*	*11.54*	*12.22*	*12.37*	*11.83*	**11.81**	*11.89*	*12.04*
Pacific	**14.86**	**15.85**	**17.24**	**14.63**	**15.69**	**16.18**	*17.79*	*15.07*	*16.32*	*17.05*	*18.35*	*15.48*	**15.65**	*16.23*	*16.83*
U.S. Average	**12.67**	**13.30**	**13.24**	**12.83**	**12.90**	**13.24**	*13.36*	*12.90*	*12.82*	*13.34*	*13.57*	*13.18*	**13.01**	*13.12*	*13.24*
Commercial Sector															
New England	**16.91**	**16.37**	**16.10**	**15.97**	**16.24**	**15.66**	*15.96*	*15.79*	*16.24*	*15.92*	*16.64*	*16.62*	**16.33**	*15.92*	*16.37*
Middle Atlantic	**11.57**	**12.17**	**13.02**	**11.97**	**11.69**	**12.53**	*13.22*	*11.74*	*11.43*	*12.68*	*13.43*	*11.98*	**12.21**	*12.32*	*12.42*
E. N. Central	**10.19**	**10.33**	**10.16**	**10.11**	**9.95**	**10.37**	*10.19*	*10.14*	*10.00*	*10.51*	*10.38*	*10.35*	**10.20**	*10.16*	*10.31*
W. N. Central	**8.97**	**10.05**	**10.42**	**9.12**	**9.07**	**10.12**	*10.33*	*9.32*	*9.31*	*10.32*	*10.67*	*9.52*	**9.66**	*9.71*	*9.96*
S. Atlantic	**9.43**	**9.35**	**9.33**	**9.32**	**9.24**	**9.02**	*9.09*	*9.02*	*8.98*	*8.91*	*9.16*	*9.20*	**9.36**	*9.09*	*9.07*
E. S. Central	**10.78**	**10.77**	**10.72**	**10.70**	**10.75**	**10.83**	*10.60*	*10.68*	*10.73*	*10.81*	*10.76*	*10.90*	**10.74**	*10.70*	*10.80*
W. S. Central	**8.13**	**8.13**	**8.33**	**8.17**	**7.84**	**7.87**	*7.90*	*8.26*	*8.03*	*8.22*	*8.26*	*8.24*	**8.20**	*7.97*	*8.19*
Mountain	**9.18**	**9.74**	**10.01**	**9.20**	**9.01**	**9.82**	*10.09*	*9.33*	*9.11*	*9.96*	*10.26*	*9.35*	**9.56**	*9.59*	*9.70*
Pacific	**12.92**	**14.05**	**16.16**	**14.32**	**13.50**	**14.79**	*17.20*	*14.54*	*13.50*	*15.15*	*17.74*	*14.76*	**14.42**	*15.05*	*15.37*
U.S. Average	**10.43**	**10.66**	**11.00**	**10.55**	**10.33**	**10.63**	*10.97*	*10.47*	*10.27*	*10.76*	*11.20*	*10.64*	**10.67**	*10.61*	*10.74*
Industrial Sector															
New England	**13.63**	**12.97**	**12.80**	**12.91**	**12.29**	**12.23**	*12.51*	*12.65*	*12.25*	*12.40*	*12.79*	*12.98*	**13.07**	*12.43*	*12.62*
Middle Atlantic	**6.75**	**6.54**	**6.57**	**6.43**	**6.36**	**6.36**	*6.42*	*6.24*	*6.33*	*6.37*	*6.32*	*6.14*	**6.57**	*6.34*	*6.29*
E. N. Central	**7.10**	**6.92**	**6.85**	**6.78**	**6.51**	**6.78**	*6.75*	*6.78*	*6.62*	*6.91*	*6.82*	*6.88*	**6.91**	*6.70*	*6.81*
W. N. Central	**7.05**	**7.23**	**7.96**	**6.78**	**6.94**	**7.32**	*7.89*	*6.94*	*7.15*	*7.41*	*8.03*	*7.09*	**7.27**	*7.28*	*7.43*
S. Atlantic	**6.37**	**6.40**	**6.86**	**6.32**	**5.99**	**6.10**	*6.50*	*6.21*	*5.98*	*6.30*	*6.59*	*6.25*	**6.50**	*6.20*	*6.29*
E. S. Central	**5.71**	**5.77**	**5.95**	**5.61**	**5.45**	**5.51**	*5.70*	*5.46*	*5.43*	*5.59*	*5.73*	*5.46*	**5.76**	*5.53*	*5.56*
W. S. Central	**5.23**	**5.21**	**5.92**	**5.30**	**5.04**	**4.98**	*5.23*	*5.43*	*5.06*	*4.89*	*5.13*	*5.33*	**5.43**	*5.17*	*5.10*
Mountain	**6.17**	**6.30**	**6.82**	**5.95**	**5.73**	**6.16**	*6.91*	*5.98*	*5.79*	*6.28*	*6.80*	*5.99*	**6.33**	*6.22*	*6.24*
Pacific	**8.42**	**9.21**	**10.91**	**9.87**	**8.97**	**10.34**	*12.37*	*10.57*	*9.37*	*10.82*	*12.51*	*10.85*	**9.67**	*10.63*	*10.96*
U.S. Average	**6.67**	**6.69**	**7.20**	**6.65**	**6.37**	**6.63**	*7.09*	*6.71*	*6.44*	*6.72*	*7.10*	*6.74*	**6.81**	*6.71*	*6.76*
All Sectors (a)															
New England	**18.32**	**17.74**	**17.53**	**17.44**	**18.01**	**17.61**	*17.80*	*17.48*	*18.26*	*18.01*	*18.55*	*18.59*	**17.76**	*17.73*	*18.36*
Middle Atlantic	**12.00**	**12.24**	**12.97**	**12.09**	**11.97**	**12.58**	*13.23*	*12.03*	*12.01*	*12.69*	*13.37*	*12.29*	**12.35**	*12.49*	*12.62*
E. N. Central	**10.14**	**10.13**	**10.20**	**10.01**	**9.92**	**10.47**	*10.35*	*10.22*	*10.08*	*10.56*	*10.47*	*10.41*	**10.13**	*10.24*	*10.38*
W. N. Central	**9.09**	**9.96**	**10.58**	**9.11**	**9.16**	**10.15**	*10.58*	*9.33*	*9.40*	*10.25*	*10.84*	*9.51*	**9.70**	*9.81*	*10.02*
S. Atlantic	**9.92**	**9.99**	**10.23**	**9.88**	**9.81**	**9.82**	*10.16*	*9.73*	*9.68*	*9.75*	*10.23*	*9.91*	**10.02**	*9.90*	*9.91*
E. S. Central	**9.29**	**9.40**	**9.63**	**9.25**	**9.26**	**9.41**	*9.56*	*9.25*	*9.32*	*9.44*	*9.72*	*9.44*	**9.40**	*9.38*	*9.49*
W. S. Central	**8.11**	**8.19**	**8.81**	**8.21**	**8.02**	**8.28**	*8.63*	*8.31*	*8.03*	*8.27*	*8.76*	*8.38*	**8.36**	*8.33*	*8.39*
Mountain	**9.09**	**9.42**	**9.93**	**8.97**	**8.84**	**9.58**	*10.14*	*9.14*	*8.96*	*9.68*	*10.17*	*9.18*	**9.39**	*9.48*	*9.54*
Pacific	**12.75**	**13.47**	**15.33**	**13.45**	**13.41**	**14.30**	*16.42*	*13.93*	*13.84*	*14.89*	*16.86*	*14.22*	**13.79**	*14.57*	*15.01*
U.S. Average	**10.32**	**10.47**	**10.96**	**10.33**	**10.29**	**10.64**	*11.11*	*10.43*	*10.36*	*10.72*	*11.25*	*10.61*	**10.54**	*10.64*	*10.76*

- = 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 - December 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
United States															
Natural Gas	**323.2**	**333.2**	**467.8**	**352.8**	**354.7**	**342.5**	**474.4**	*337.9*	*283.8*	*298.2*	*415.3*	*305.3*	**1,477.0**	*1,509.5*	*1,302.5*
Coal	**257.5**	**208.9**	**279.0**	**213.4**	**170.3**	**151.1**	**248.0**	*198.3*	*219.1*	*213.2*	*280.4*	*230.6*	**958.7**	*767.7*	*943.2*
Nuclear	**203.5**	**196.5**	**210.2**	**199.2**	**204.1**	**190.7**	**204.1**	*191.9*	*197.9*	*188.6*	*205.1*	*187.9*	**809.4**	*790.8*	*779.5*
Renewable Energy Sources:	**170.3**	**196.6**	**166.2**	**162.6**	**189.1**	**206.5**	**177.4**	*181.5*	*212.4*	*226.7*	*191.9*	*200.0*	**695.7**	*754.4*	*831.0*
Conventional Hydropower	**73.6**	**87.5**	**65.8**	**59.7**	**74.9**	**81.3**	**70.9**	*60.6*	*74.1*	*75.4*	*63.0*	*61.8*	**286.7**	*287.7*	*274.2*
Wind	**72.4**	**76.9**	**66.4**	**79.0**	**86.4**	**87.2**	**68.1**	*92.7*	*103.6*	*103.8*	*80.7*	*103.9*	**294.6**	*334.4*	*392.0*
Solar (a)	**13.2**	**21.7**	**22.6**	**13.8**	**16.7**	**27.1**	**27.3**	*18.0*	*22.4*	*35.6*	*36.1*	*23.7*	**71.3**	*89.0*	*117.8*
Biomass	**7.1**	**6.7**	**7.4**	**6.9**	**7.2**	**6.7**	**7.0**	*6.9*	*8.4*	*7.7*	*7.8*	*7.4*	**28.1**	*27.7*	*31.3*
Geothermal	**4.0**	**3.8**	**4.0**	**3.2**	**3.9**	**4.2**	**4.2**	*3.3*	*3.9*	*4.3*	*4.2*	*3.2*	**15.0**	*15.6*	*15.6*
Pumped Storage Hydropower	**-1.1**	**-0.9**	**-1.9**	**-1.4**	**-1.0**	**-1.2**	**-2.0**	*-1.3*	*-1.0*	*-1.2*	*-2.1*	*-1.3*	**-5.3**	*-5.5*	*-5.6*
Petroleum (b)	**4.9**	**4.1**	**4.7**	**3.6**	**4.0**	**4.0**	**4.6**	*3.0*	*4.0*	*3.9*	*4.5*	*2.8*	**17.3**	*15.6*	*15.2*
Other Gases	**1.1**	**1.0**	**1.1**	**0.9**	**1.0**	**0.4**	**0.8**	*0.8*	*1.0*	*0.3*	*0.6*	*0.8*	**4.0**	*3.0*	*2.7*
Other Nonrenewable Fuels (c)	**1.8**	**1.9**	**2.0**	**1.9**	**1.9**	**1.8**	**1.9**	*1.8*	*1.7*	*1.8*	*1.7*	*1.8*	**7.7**	*7.4*	*7.0*
Total Generation	**961.3**	**941.4**	**1,129.3**	**933.1**	**924.1**	**895.8**	**1,109.2**	*913.8*	*918.8*	*931.5*	*1,097.3*	*928.0*	**3,965.1**	*3,842.9*	*3,875.6*
New England (ISO-NE)															
Natural Gas	**10.3**	**9.8**	**15.3**	**11.3**	**10.8**	**10.0**	**16.1**	*12.0*	*9.1*	*9.2*	*16.1*	*12.5*	**46.7**	*48.9*	*47.0*
Coal	**0.3**	**0.0**	**0.1**	**0.1**	**0.1**	**0.0**	**0.0**	*0.1*	*0.1*	*0.0*	*0.0*	*0.1*	**0.5**	*0.1*	*0.1*
Nuclear	**8.6**	**6.8**	**7.3**	**7.1**	**7.3**	**4.9**	**7.3**	*6.1*	*7.0*	*7.1*	*7.2*	*5.6*	**29.8**	*25.6*	*27.0*
Conventional hydropower	**2.5**	**2.5**	**0.9**	**1.7**	**2.2**	**2.1**	**1.8**	*1.5*	*2.1*	*2.1*	*1.5*	*1.4*	**7.6**	*7.5*	*7.2*
Nonhydro renewables (d)	**2.7**	**2.3**	**2.2**	**2.5**	**2.6**	**2.7**	**2.4**	*2.6*	*3.4*	*3.0*	*2.6*	*2.8*	**9.8**	*10.4*	*11.8*
Other energy sources (e)	**0.3**	**0.3**	**0.3**	**0.4**	**0.3**	**0.3**	**0.4**	*0.4*	*0.4*	*0.4*	*0.3*	*0.4*	**1.4**	*1.4*	*1.5*
Total generation	**24.7**	**21.8**	**26.1**	**23.2**	**23.3**	**20.1**	**28.0**	*22.6*	*22.2*	*21.8*	*27.8*	*22.8*	**95.7**	*94.0*	*94.6*
Net energy for load (f)	**29.7**	**25.9**	**31.6**	**28.1**	**27.8**	**25.3**	**32.3**	*27.6*	*28.9*	*26.8*	*31.8*	*28.3*	**115.2**	*113.0*	*115.9*
New York (NYISO)															
Natural Gas	**11.9**	**10.7**	**17.8**	**12.0**	**12.4**	**11.4**	**20.6**	*14.1*	*14.1*	*14.8*	*21.7*	*17.2*	**52.4**	*58.5*	*67.8*
Coal	**0.3**	**0.0**	**0.1**	**0.0**	**0.1**	**0.0**	**0.0**	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	**0.4**	*0.1*	*0.0*
Nuclear	**10.4**	**10.8**	**11.8**	**11.8**	**10.7**	**9.2**	**9.0**	*9.6*	*8.8*	*7.5*	*7.1*	*6.8*	**44.9**	*38.5*	*30.2*
Conventional hydropower	**7.4**	**7.4**	**7.9**	**7.8**	**8.0**	**8.0**	**7.8**	*7.3*	*7.9*	*7.9*	*7.3*	*7.0*	**30.5**	*31.1*	*30.2*
Nonhydro renewables (d)	**1.8**	**1.6**	**1.4**	**1.8**	**2.0**	**2.0**	**1.7**	*1.8*	*2.1*	*2.2*	*2.0*	*2.4*	**6.5**	*7.5*	*8.7*
Other energy sources (e)	**0.5**	**0.1**	**0.1**	**0.2**	**0.2**	**0.1**	**0.1**	*0.2*	*0.2*	*0.2*	*0.1*	*0.2*	**0.9**	*0.6*	*0.6*
Total generation	**32.5**	**30.6**	**39.1**	**33.5**	**33.4**	**30.7**	**39.2**	*33.0*	*33.1*	*32.6*	*38.3*	*33.5*	**135.6**	*136.3*	*137.6*
Net energy for load (f)	**37.7**	**34.4**	**42.8**	**35.8**	**35.2**	**32.6**	**43.0**	*35.2*	*36.4*	*35.9*	*43.0*	*36.4*	**150.6**	*146.0*	*151.7*
Mid-Atlantic (PJM)															
Natural Gas	**70.1**	**65.0**	**90.6**	**70.9**	**78.4**	**69.9**	**97.6**	*65.8*	*70.6*	*69.8*	*90.0*	*61.5*	**296.6**	*311.7*	*291.9*
Coal	**53.3**	**39.7**	**51.6**	**38.6**	**33.7**	**29.6**	**46.6**	*36.6*	*50.0*	*41.4*	*49.7*	*46.4*	**183.3**	*146.6*	*187.5*
Nuclear	**69.6**	**68.5**	**71.7**	**68.1**	**68.9**	**67.1**	**70.9**	*68.4*	*67.5*	*65.7*	*72.3*	*62.3*	**277.9**	*275.2*	*267.9*
Conventional hydropower	**3.2**	**2.9**	**2.0**	**2.1**	**3.1**	**2.9**	**2.1**	*2.2*	*3.2*	*3.1*	*1.8*	*2.1*	**10.2**	*10.2*	*10.2*
Nonhydro renewables (d)	**9.6**	**9.2**	**6.6**	**9.3**	**10.3**	**10.2**	**7.8**	*10.8*	*11.8*	*11.9*	*9.0*	*11.7*	**34.7**	*39.2*	*44.4*
Other energy sources (e)	**0.7**	**0.6**	**0.5**	**0.4**	**0.6**	**0.5**	**0.4**	*0.5*	*0.7*	*0.5*	*0.3*	*0.4*	**2.3**	*2.0*	*2.0*
Total generation	**206.5**	**186.0**	**223.0**	**189.5**	**195.0**	**180.2**	**225.4**	*184.3*	*203.9*	*192.4*	*223.2*	*184.4*	**805.0**	*784.9*	*803.9*
Net energy for load (f)	**196.6**	**173.4**	**210.0**	**181.0**	**182.2**	**164.2**	**209.6**	*174.5*	*188.7*	*174.4*	*206.1*	*180.4*	**760.9**	*730.6*	*749.5*
Southeast (SERC)															
Natural Gas	**57.5**	**59.1**	**75.9**	**59.8**	**61.9**	**59.1**	**74.7**	*59.1*	*56.6*	*55.5*	*69.6*	*55.9*	**252.4**	*254.8*	*237.6*
Coal	**35.1**	**38.0**	**53.3**	**33.5**	**23.8**	**22.1**	**44.4**	*32.0*	*30.9*	*32.5*	*50.4*	*36.1*	**159.8**	*122.3*	*149.8*
Nuclear	**52.3**	**52.8**	**53.7**	**52.2**	**53.0**	**50.5**	**54.1**	*52.4*	*52.0*	*52.1*	*55.2*	*53.4*	**211.0**	*210.0*	*212.7*
Conventional hydropower	**10.8**	**10.8**	**7.5**	**7.9**	**11.1**	**10.2**	**8.8**	*8.0*	*11.2*	*10.5*	*7.1*	*7.6*	**37.0**	*38.1*	*36.5*
Nonhydro renewables (d)	**2.7**	**3.8**	**3.9**	**3.0**	**3.5**	**5.0**	**5.0**	*3.5*	*4.0*	*6.0*	*6.1*	*4.1*	**13.4**	*16.9*	*20.1*
Other energy sources (e)	**0.0**	**-0.2**	**-0.6**	**-0.4**	**-0.1**	**-0.3**	**-0.6**	*-0.4*	*-0.1*	*-0.4*	*-0.7*	*-0.4*	**-1.3**	*-1.4*	*-1.5*
Total generation	**158.4**	**164.3**	**193.6**	**155.9**	**153.2**	**146.7**	**186.4**	*154.6*	*154.7*	*156.1*	*187.8*	*156.6*	**672.3**	*640.9*	*655.2*
Net energy for load (f)	**163.2**	**166.6**	**193.3**	**157.0**	**160.3**	**150.1**	**185.9**	*155.4*	*161.5*	*159.5*	*189.0*	*155.8*	**680.1**	*651.7*	*665.9*
Florida (FRCC)															
Natural Gas	**35.7**	**46.7**	**52.6**	**40.0**	**40.0**	**45.7**	**52.8**	*40.3*	*31.7*	*36.5*	*45.0*	*37.1*	**174.9**	*178.7*	*150.4*
Coal	**3.7**	**4.8**	**5.3**	**4.8**	**2.1**	**3.5**	**5.7**	*5.0*	*7.6*	*9.6*	*8.4*	*5.8*	**18.6**	*16.2*	*31.5*
Nuclear	**7.6**	**6.4**	**7.7**	**7.3**	**7.3**	**7.6**	**7.6**	*7.0*	*7.8*	*6.9*	*7.8*	*6.7*	**29.1**	*29.5*	*29.2*
Conventional hydropower	**0.1**	**0.1**	**0.0**	**0.0**	**0.1**	**0.1**	**0.0**	*0.1*	*0.1*	*0.1*	*0.0*	*0.0*	**0.2**	*0.2*	*0.2*
Nonhydro renewables (d)	**1.5**	**1.7**	**1.6**	**1.4**	**1.8**	**2.4**	**2.3**	*2.0*	*2.6*	*3.5*	*3.0*	*2.7*	**6.1**	*8.5*	*11.8*
Other energy sources (e)	**0.8**	**0.9**	**0.8**	**0.7**	**0.9**	**0.8**	**0.9**	*0.7*	*0.9*	*0.7*	*0.8*	*0.7*	**3.1**	*3.3*	*3.0*
Total generation	**49.4**	**60.5**	**68.1**	**54.2**	**52.1**	**60.0**	**69.3**	*54.9*	*50.6*	*57.3*	*65.2*	*53.1*	**232.1**	*236.4*	*226.1*
Net energy for load (f)	**47.8**	**61.3**	**67.8**	**53.0**	**48.5**	**60.4**	**70.8**	*53.9*	*47.1*	*57.8*	*67.0*	*52.1*	**230.0**	*233.6*	*224.0*

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 - December 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
Midwest (MISO)															
Natural Gas	**37.2**	**42.2**	**54.7**	**42.7**	**43.9**	**43.2**	**53.4**	*37.9*	*33.9*	*33.3*	*44.6*	*32.0*	**176.8**	*178.4*	*143.7*
Coal	**77.3**	**61.2**	**76.1**	**61.3**	**51.0**	**41.1**	**68.5**	*60.9*	*57.8*	*56.8*	*76.5*	*72.3*	**275.9**	*221.7*	*263.4*
Nuclear	**25.3**	**23.2**	**27.1**	**26.7**	**26.6**	**22.9**	**24.4**	*21.9*	*24.8*	*23.3*	*24.9*	*24.3*	**102.3**	*95.8*	*97.3*
Conventional hydropower	**2.9**	**3.1**	**2.5**	**2.4**	**3.1**	**3.2**	**2.9**	*1.8*	*2.4*	*2.6*	*2.2*	*1.7*	**10.9**	*10.8*	*8.9*
Nonhydro renewables (d)	**16.4**	**15.9**	**12.5**	**18.7**	**20.3**	**20.1**	**16.3**	*23.4*	*24.7*	*24.7*	*19.4*	*25.5*	**63.5**	*80.1*	*94.4*
Other energy sources (e)	**2.0**	**1.5**	**1.7**	**1.0**	**1.5**	**1.3**	**1.4**	*0.4*	*1.4*	*1.1*	*1.3*	*0.3*	**6.2**	*4.6*	*4.1*
Total generation	**161.0**	**147.0**	**174.7**	**152.8**	**146.4**	**131.7**	**166.8**	*146.3*	*145.0*	*141.8*	*168.9*	*156.1*	**635.5**	*591.2*	*611.8*
Net energy for load (f)	**160.8**	**151.8**	**178.7**	**154.3**	**152.8**	**140.4**	**174.7**	*147.9*	*150.9*	*151.3*	*175.8*	*154.4*	**645.6**	*615.8*	*632.4*
Central (Southwest Power Pool)															
Natural Gas	**14.4**	**16.0**	**24.3**	**14.7**	**17.5**	**16.3**	**24.2**	*15.0*	*11.4*	*11.0*	*20.7*	*13.8*	**69.4**	*72.9*	*57.0*
Coal	**24.7**	**17.2**	**24.9**	**17.2**	**17.0**	**15.7**	**26.7**	*11.0*	*16.4*	*18.1*	*25.8*	*10.8*	**83.9**	*70.4*	*71.1*
Nuclear	**4.4**	**4.4**	**4.1**	**3.4**	**4.4**	**4.4**	**4.2**	*3.8*	*3.9*	*3.3*	*4.4*	*4.4*	**16.2**	*16.8*	*16.0*
Conventional hydropower	**5.8**	**6.7**	**4.2**	**3.8**	**5.9**	**6.0**	**5.2**	*3.1*	*4.3*	*4.5*	*3.6*	*3.0*	**20.5**	*20.1*	*15.3*
Nonhydro renewables (d)	**18.3**	**18.8**	**18.2**	**22.0**	**20.3**	**21.4**	**16.6**	*25.2*	*26.0*	*26.9*	*21.0*	*29.3*	**77.2**	*83.4*	*103.2*
Other energy sources (e)	**0.4**	**0.4**	**0.2**	**0.2**	**0.1**	**0.1**	**0.1**	*0.2*	*0.1*	*0.1*	*0.1*	*0.2*	**1.3**	*0.5*	*0.5*
Total generation	**68.0**	**63.6**	**75.8**	**61.2**	**65.1**	**63.8**	**77.0**	*58.3*	*62.2*	*63.9*	*75.6*	*61.5*	**268.6**	*264.2*	*263.1*
Net energy for load (f)	**64.6**	**60.3**	**76.2**	**61.3**	**61.6**	**60.0**	**74.5**	*59.1*	*58.1*	*60.3*	*73.9*	*60.6*	**262.4**	*255.2*	*252.9*
Texas (ERCOT)															
Natural Gas	**35.0**	**43.4**	**63.8**	**39.7**	**37.2**	**42.1**	**59.3**	*34.2*	*21.5*	*27.1*	*40.6*	*26.1*	**181.7**	*172.8*	*115.3*
Coal	**17.6**	**17.8**	**20.9**	**16.6**	**13.1**	**15.8**	**20.3**	*16.3*	*18.4*	*23.2*	*28.2*	*20.8*	**72.8**	*65.6*	*90.6*
Nuclear	**10.4**	**9.8**	**11.0**	**10.2**	**10.4**	**9.7**	**11.0**	*10.2*	*10.7*	*9.9*	*10.3*	*9.6*	**41.3**	*41.3*	*40.5*
Conventional hydropower	**0.3**	**0.3**	**0.2**	**0.1**	**0.3**	**0.3**	**0.3**	*0.1*	*0.2*	*0.2*	*0.2*	*0.1*	**0.9**	*1.0*	*0.7*
Nonhydro renewables (d)	**18.9**	**21.0**	**18.9**	**20.1**	**22.5**	**24.8**	**20.8**	*24.4*	*27.5*	*31.3*	*27.7*	*29.2*	**78.9**	*92.5*	*115.7*
Other energy sources (e)	**0.4**	**0.4**	**0.4**	**0.4**	**0.4**	**0.3**	**0.4**	*0.4*	*0.4*	*0.3*	*0.4*	*0.4*	**1.6**	*1.5*	*1.5*
Total generation	**82.5**	**92.6**	**115.2**	**87.1**	**84.1**	**93.0**	**112.1**	*85.6*	*78.8*	*91.9*	*107.4*	*86.1*	**377.2**	*374.8*	*364.2*
Net energy for load (f)	**82.5**	**92.6**	**115.2**	**87.1**	**84.1**	**93.0**	**112.1**	*85.6*	*78.8*	*91.9*	*107.4*	*86.1*	**377.2**	*374.8*	*364.2*
Northwest															
Natural Gas	**21.9**	**16.8**	**30.2**	**23.9**	**23.7**	**17.1**	**27.5**	*23.3*	*12.3*	*16.1*	*24.7*	*16.6*	**92.9**	*91.6*	*69.6*
Coal	**32.3**	**20.1**	**31.9**	**30.6**	**22.2**	**16.1**	**24.5**	*27.0*	*29.6*	*23.1*	*28.8*	*29.5*	**114.9**	*89.9*	*111.1*
Nuclear	**2.5**	**1.3**	**2.5**	**2.6**	**2.4**	**2.0**	**2.4**	*2.5*	*2.4*	*1.2*	*2.4*	*2.4*	**8.9**	*9.4*	*8.4*
Conventional hydropower	**30.5**	**37.1**	**27.1**	**26.2**	**35.0**	**38.7**	**32.6**	*28.6*	*36.5*	*34.7*	*30.2*	*31.0*	**120.8**	*134.9*	*132.4*
Nonhydro renewables (d)	**9.7**	**13.1**	**13.1**	**10.1**	**13.7**	**14.4**	**12.7**	*12.1*	*17.3*	*17.3*	*15.0*	*13.7*	**46.1**	*52.8*	*63.3*
Other energy sources (e)	**0.1**	**0.1**	**0.1**	**0.1**	**0.2**	**0.2**	**0.1**	*0.1*	*0.2*	*0.2*	*0.1*	*0.1*	**0.6**	*0.6*	*0.6*
Total generation	**97.1**	**88.6**	**104.9**	**93.5**	**97.2**	**88.5**	**99.9**	*93.6*	*98.3*	*92.6*	*101.3*	*93.3*	**384.1**	*379.2*	*385.5*
Net energy for load (f)	**95.6**	**84.5**	**95.5**	**87.8**	**88.2**	**78.9**	**88.5**	*85.2*	*86.0*	*81.1*	*89.9*	*85.6*	**363.4**	*340.8*	*342.7*
Southwest															
Natural Gas	**10.4**	**12.7**	**18.9**	**14.1**	**11.8**	**14.7**	**20.4**	*13.4*	*6.8*	*12.2*	*17.5*	*11.2*	**56.1**	*60.2*	*47.7*
Coal	**10.2**	**8.5**	**12.4**	**8.0**	**5.3**	**5.3**	**8.8**	*6.6*	*5.3*	*5.9*	*9.8*	*6.3*	**39.1**	*26.0*	*27.3*
Nuclear	**8.6**	**7.6**	**8.6**	**7.2**	**8.3**	**7.6**	**8.7**	*7.1*	*8.4*	*7.6*	*8.6*	*7.7*	**31.9**	*31.7*	*32.3*
Conventional hydropower	**3.0**	**4.3**	**4.1**	**2.6**	**2.7**	**4.0**	**3.7**	*2.8*	*2.4*	*3.7*	*3.5*	*2.6*	**14.0**	*13.1*	*12.2*
Nonhydro renewables (d)	**2.1**	**2.8**	**2.7**	**2.5**	**2.5**	**3.1**	**2.5**	*2.9*	*3.1*	*3.9*	*3.2*	*3.8*	**10.1**	*11.0*	*13.9*
Other energy sources (e)	**0.0**	**0.1**	**0.1**	**0.0**	**0.0**	**0.1**	**0.1**	*0.0*	*0.0*	*0.1*	*0.1*	*0.0*	**0.2**	*0.2*	*0.2*
Total generation	**34.4**	**35.9**	**46.7**	**34.4**	**30.5**	**34.8**	**44.2**	*32.8*	*26.1*	*33.4*	*42.6*	*31.6*	**151.4**	*142.3*	*133.7*
Net energy for load (f)	**18.4**	**23.5**	**35.2**	**22.3**	**21.9**	**26.5**	**35.5**	*23.6*	*22.0*	*27.1*	*34.3*	*23.3*	**99.4**	*107.5*	*106.7*
California															
Natural Gas	**18.0**	**10.2**	**23.1**	**22.8**	**16.7**	**12.6**	**27.0**	*22.6*	*14.9*	*12.0*	*24.2*	*20.5*	**74.1**	*78.9*	*71.5*
Coal	**2.2**	**1.2**	**1.9**	**2.2**	**1.4**	**1.2**	**2.1**	*2.3*	*2.5*	*2.2*	*2.2*	*2.2*	**7.5**	*7.0*	*9.1*
Nuclear	**3.8**	**4.9**	**4.7**	**2.8**	**4.8**	**4.9**	**4.5**	*2.8*	*4.4*	*4.0*	*4.8*	*4.8*	**16.2**	*17.0*	*18.0*
Conventional hydropower	**6.8**	**11.7**	**9.1**	**4.8**	**3.1**	**5.6**	**5.4**	*4.8*	*3.3*	*5.7*	*5.2*	*4.7*	**32.4**	*18.9*	*18.8*
Nonhydro renewables (d)	**12.6**	**18.7**	**19.2**	**11.3**	**14.3**	**18.9**	**18.0**	*11.9*	*15.4*	*20.2*	*19.3*	*12.7*	**61.7**	*63.1*	*67.7*
Other energy sources (e)	**-0.2**	**0.2**	**0.2**	**0.0**	**0.0**	**0.1**	**0.1**	*0.0*	*-0.1*	*0.1*	*0.1*	*0.1*	**0.2**	*0.2*	*0.2*
Total generation	**43.2**	**46.9**	**58.2**	**43.9**	**40.3**	**43.2**	**57.1**	*44.5*	*40.3*	*44.2*	*55.8*	*45.1*	**192.2**	*185.1*	*185.3*
Net energy for load (f)	**60.6**	**63.5**	**79.1**	**61.7**	**57.9**	**61.0**	**77.2**	*62.2*	*56.7*	*61.9*	*75.4*	*61.0*	**265.0**	*258.2*	*255.0*

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 - December 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
Electric Power Sector															
Geothermal	**0.035**	**0.034**	**0.036**	**0.028**	**0.036**	**0.038**	**0.038**	*0.030*	*0.036*	*0.039*	*0.038*	*0.029*	**0.134**	*0.141*	*0.142*
Hydroelectric Power (a)	**0.656**	**0.779**	**0.585**	**0.532**	**0.667**	**0.724**	**0.635**	*0.554*	*0.675*	*0.691*	*0.592*	*0.562*	**2.552**	*2.580*	*2.520*
Solar (b)	**0.120**	**0.197**	**0.206**	**0.126**	**0.152**	**0.246**	**0.248**	*0.164*	*0.204*	*0.324*	*0.329*	*0.215*	**0.649**	*0.810*	*1.072*
Waste Biomass (c)	**0.062**	**0.061**	**0.062**	**0.062**	**0.062**	**0.058**	**0.059**	*0.059*	*0.066*	*0.065*	*0.062*	*0.061*	**0.248**	*0.238*	*0.254*
Wood Biomass	**0.052**	**0.046**	**0.055**	**0.048**	**0.049**	**0.043**	**0.048**	*0.048*	*0.063*	*0.053*	*0.058*	*0.054*	**0.201**	*0.187*	*0.228*
Wind	**0.659**	**0.700**	**0.604**	**0.719**	**0.786**	**0.794**	**0.620**	*0.844*	*0.943*	*0.945*	*0.735*	*0.946*	**2.682**	*3.045*	*3.569*
Subtotal	**1.584**	**1.817**	**1.548**	**1.515**	**1.752**	**1.904**	**1.647**	*1.698*	*1.987*	*2.117*	*1.814*	*1.867*	**6.465**	*7.001*	*7.784*
Industrial Sector															
Biofuel Losses and Co-products (d)	**0.194**	**0.203**	**0.199**	**0.203**	**0.197**	**0.135**	**0.179**	*0.183*	*0.184*	*0.184*	*0.192*	*0.193*	**0.800**	*0.694*	*0.753*
Geothermal	**0.001**	**0.001**	**0.001**	**0.001**	**0.001**	**0.001**	**0.001**	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*	**0.004**	*0.004*	*0.004*
Hydroelectric Power (a)	**0.003**	**0.003**	**0.002**	**0.002**	**0.003**	**0.002**	**0.002**	*0.002*	*0.002*	*0.002*	*0.002*	*0.002*	**0.009**	*0.009*	*0.009*
Solar (b)	**0.006**	**0.008**	**0.009**	**0.006**	**0.007**	**0.010**	**0.010**	*0.007*	*0.007*	*0.011*	*0.011*	*0.008*	**0.028**	*0.033*	*0.037*
Waste Biomass (c)	**0.041**	**0.038**	**0.037**	**0.041**	**0.041**	**0.039**	**0.036**	*0.040*	*0.039*	*0.038*	*0.037*	*0.040*	**0.156**	*0.156*	*0.155*
Wood Biomass	**0.357**	**0.345**	**0.356**	**0.356**	**0.350**	**0.341**	**0.337**	*0.350*	*0.339*	*0.336*	*0.348*	*0.351*	**1.413**	*1.378*	*1.373*
Subtotal	**0.599**	**0.594**	**0.600**	**0.608**	**0.596**	**0.522**	**0.560**	*0.580*	*0.570*	*0.566*	*0.585*	*0.591*	**2.401**	*2.258*	*2.312*
Commercial Sector															
Geothermal	**0.006**	**0.006**	**0.006**	**0.006**	**0.006**	**0.006**	**0.006**	*0.006*	*0.006*	*0.006*	*0.006*	*0.006*	**0.024**	*0.024*	*0.024*
Solar (b)	**0.021**	**0.031**	**0.032**	**0.021**	**0.025**	**0.037**	**0.037**	*0.026*	*0.029*	*0.042*	*0.042*	*0.030*	**0.106**	*0.125*	*0.143*
Waste Biomass (c)	**0.010**	**0.009**	**0.010**	**0.010**	**0.010**	**0.008**	**0.009**	*0.009*	*0.009*	*0.009*	*0.009*	*0.009*	**0.039**	*0.036*	*0.036*
Wood Biomass	**0.021**	**0.021**	**0.021**	**0.021**	**0.021**	**0.021**	**0.021**	*0.021*	*0.020*	*0.020*	*0.021*	*0.021*	**0.084**	*0.083*	*0.082*
Subtotal	**0.065**	**0.074**	**0.075**	**0.065**	**0.068**	**0.077**	**0.079**	*0.068*	*0.071*	*0.083*	*0.085*	*0.072*	**0.280**	*0.292*	*0.311*
Residential Sector															
Geothermal	**0.010**	**0.010**	**0.010**	**0.010**	**0.010**	**0.010**	**0.010**	*0.010*	*0.010*	*0.010*	*0.010*	*0.010*	**0.040**	*0.040*	*0.040*
Solar (e)	**0.049**	**0.075**	**0.077**	**0.051**	**0.058**	**0.087**	**0.087**	*0.060*	*0.065*	*0.100*	*0.101*	*0.069*	**0.252**	*0.292*	*0.336*
Wood Biomass	**0.130**	**0.132**	**0.133**	**0.133**	**0.124**	**0.124**	**0.128**	*0.133*	*0.124*	*0.124*	*0.128*	*0.133*	**0.529**	*0.509*	*0.509*
Subtotal	**0.189**	**0.217**	**0.220**	**0.195**	**0.191**	**0.220**	**0.225**	*0.203*	*0.199*	*0.234*	*0.239*	*0.212*	**0.821**	*0.840*	*0.884*
Transportation Sector															
Biomass-based Diesel (f)	**0.058**	**0.071**	**0.071**	**0.066**	**0.061**	**0.064**	**0.073**	*0.071*	*0.071*	*0.072*	*0.072*	*0.078*	**0.265**	*0.269*	*0.292*
Ethanol (f)	**0.273**	**0.295**	**0.291**	**0.297**	**0.257**	**0.220**	**0.267**	*0.262*	*0.255*	*0.269*	*0.280*	*0.275*	**1.155**	*1.006*	*1.079*
Subtotal	**0.331**	**0.365**	**0.362**	**0.362**	**0.318**	**0.284**	**0.340**	*0.333*	*0.326*	*0.342*	*0.351*	*0.353*	**1.421**	*1.275*	*1.372*
All Sectors Total															
Biomass-based Diesel (f)	**0.058**	**0.071**	**0.071**	**0.066**	**0.061**	**0.064**	**0.073**	*0.071*	*0.071*	*0.072*	*0.072*	*0.078*	**0.265**	*0.269*	*0.292*
Biofuel Losses and Co-products (d)	**0.194**	**0.203**	**0.199**	**0.203**	**0.197**	**0.135**	**0.179**	*0.183*	*0.184*	*0.184*	*0.192*	*0.193*	**0.800**	*0.694*	*0.753*
Ethanol (f)	**0.284**	**0.306**	**0.302**	**0.308**	**0.267**	**0.228**	**0.278**	*0.272*	*0.265*	*0.280*	*0.290*	*0.286*	**1.200**	*1.045*	*1.121*
Geothermal	**0.052**	**0.051**	**0.053**	**0.045**	**0.052**	**0.054**	**0.054**	*0.047*	*0.053*	*0.056*	*0.055*	*0.046*	**0.201**	*0.207*	*0.209*
Hydroelectric Power (a)	**0.659**	**0.782**	**0.587**	**0.534**	**0.670**	**0.727**	**0.637**	*0.556*	*0.678*	*0.694*	*0.595*	*0.564*	**2.563**	*2.590*	*2.531*
Solar (b)(e)	**0.193**	**0.307**	**0.317**	**0.201**	**0.238**	**0.373**	**0.378**	*0.256*	*0.306*	*0.477*	*0.483*	*0.322*	**1.018**	*1.245*	*1.588*
Waste Biomass (c)	**0.113**	**0.108**	**0.108**	**0.113**	**0.113**	**0.105**	**0.104**	*0.108*	*0.115*	*0.111*	*0.108*	*0.110*	**0.442**	*0.430*	*0.444*
Wood Biomass	**0.560**	**0.543**	**0.565**	**0.558**	**0.544**	**0.529**	**0.533**	*0.551*	*0.546*	*0.533*	*0.555*	*0.558*	**2.227**	*2.157*	*2.192*
Wind	**0.659**	**0.700**	**0.604**	**0.719**	**0.786**	**0.794**	**0.620**	*0.844*	*0.943*	*0.945*	*0.735*	*0.946*	**2.682**	*3.045*	*3.569*
Total Consumption	**2.769**	**3.068**	**2.806**	**2.745**	**2.926**	**3.007**	**2.851**	*2.882*	*3.152*	*3.341*	*3.075*	*3.095*	**11.388**	*11.666*	*12.663*

- = 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 - December 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
Renewable Energy Electric Generating Capacity (megawatts, end of period)															
Electric Power Sector (a)															
Biomass	**6,805**	**6,758**	**6,659**	**6,669**	**6,670**	**6,588**	**6,589**	*6,625*	*6,627*	*6,629*	*6,554*	*6,640*	**6,669**	*6,625*	*6,640*
Waste	**4,002**	**3,970**	**3,960**	**3,942**	**3,943**	**3,861**	**3,863**	*3,899*	*3,901*	*3,903*	*3,828*	*3,913*	**3,942**	*3,899*	*3,913*
Wood	**2,803**	**2,788**	**2,699**	**2,727**	**2,727**	**2,727**	**2,727**	*2,727*	*2,727*	*2,727*	*2,727*	*2,727*	**2,727**	*2,727*	*2,727*
Conventional Hydroelectric	**79,611**	**79,590**	**79,485**	**79,470**	**79,483**	**79,470**	**79,640**	*79,596*	*79,733*	*79,682*	*79,758*	*79,800*	**79,470**	*79,596*	*79,800*
Geothermal	**2,486**	**2,486**	**2,486**	**2,506**	**2,506**	**2,506**	**2,506**	*2,506*	*2,506*	*2,506*	*2,506*	*2,548*	**2,506**	*2,506*	*2,548*
Large-Scale Solar (b)	**32,763**	**33,213**	**33,952**	**37,045**	**38,876**	**41,100**	**42,694**	*49,796*	*51,036*	*53,767*	*56,433*	*63,760*	**37,045**	*49,796*	*63,760*
Wind	**96,514**	**97,989**	**99,570**	**103,651**	**105,999**	**107,453**	**109,049**	*126,685*	*127,934*	*129,073*	*129,261*	*136,187*	**103,651**	*126,685*	*136,187*
Other Sectors (c)															
Biomass	**6,552**	**6,501**	**6,501**	**6,434**	**6,443**	**6,443**	**6,443**	*6,440*	*6,440*	*6,440*	*6,440*	*6,440*	**6,434**	*6,440*	*6,440*
Waste	**785**	**786**	**786**	**786**	**786**	**786**	**786**	*804*	*804*	*804*	*804*	*804*	**786**	*804*	*804*
Wood	**5,767**	**5,715**	**5,715**	**5,648**	**5,656**	**5,656**	**5,656**	*5,636*	*5,636*	*5,636*	*5,636*	*5,636*	**5,648**	*5,636*	*5,636*
Conventional Hydroelectric	**289**	**289**	**289**	**289**	**289**	**289**	**289**	*289*	*289*	*292*	*290*	*290*	**289**	*289*	*290*
Large-Scale Solar (b)	**414**	**421**	**432**	**439**	**441**	**453**	**458**	*461*	*461*	*461*	*461*	*476*	**439**	*461*	*476*
Small-Scale Solar (d)	**20,254**	**21,073**	**22,031**	**23,214**	**24,434**	**25,370**	**26,506**	*27,379*	*28,292*	*29,284*	*30,391*	*31,498*	**23,214**	*27,379*	*31,498*
Residential Sector	**12,281**	**12,847**	**13,534**	**14,249**	**15,072**	**15,700**	**16,428**	*17,027*	*17,595*	*18,200*	*18,863*	*19,550*	**14,249**	*17,027*	*19,550*
Commercial Sector	**6,362**	**6,538**	**6,761**	**7,168**	**7,486**	**7,730**	**8,079**	*8,300*	*8,586*	*8,912*	*9,290*	*9,646*	**7,168**	*8,300*	*9,646*
Industrial Sector	**1,611**	**1,688**	**1,736**	**1,797**	**1,875**	**1,939**	**1,998**	*2,052*	*2,110*	*2,172*	*2,238*	*2,302*	**1,797**	*2,052*	*2,302*
Wind	**118**	**118**	**118**	**118**	**118**	**344**	**353**	*353*	*353*	*353*	*353*	*353*	**118**	*353*	*353*
Renewable Electricity Generation (billion kilowatthours)															
Electric Power Sector (a)															
Biomass	**7.1**	**6.7**	**7.4**	**6.9**	**7.2**	**6.7**	**7.0**	*6.9*	*8.4*	*7.7*	*7.8*	*7.4*	**28.1**	*27.7*	*31.3*
Waste	**4.0**	**4.0**	**4.1**	**4.0**	**4.1**	**4.0**	**4.0**	*3.9*	*4.5*	*4.4*	*4.2*	*4.1*	**16.1**	*16.1*	*17.1*
Wood	**3.0**	**2.7**	**3.4**	**2.9**	**3.0**	**2.7**	**3.0**	*3.0*	*3.9*	*3.3*	*3.6*	*3.3*	**12.0**	*11.7*	*14.2*
Conventional Hydroelectric	**73.6**	**87.5**	**65.8**	**59.7**	**74.9**	**81.3**	**70.9**	*60.6*	*74.1*	*75.4*	*63.0*	*61.8*	**286.7**	*287.7*	*274.2*
Geothermal	**4.0**	**3.8**	**4.0**	**3.2**	**3.9**	**4.2**	**4.2**	*3.3*	*3.9*	*4.3*	*4.2*	*3.2*	**15.0**	*15.6*	*15.6*
Large-Scale Solar (b)	**13.2**	**21.7**	**22.6**	**13.8**	**16.7**	**27.1**	**27.3**	*18.0*	*22.4*	*35.6*	*36.1*	*23.7*	**71.3**	*89.0*	*117.8*
Wind	**72.4**	**76.9**	**66.4**	**79.0**	**86.4**	**87.2**	**68.1**	*92.7*	*103.6*	*103.8*	*80.7*	*103.9*	**294.6**	*334.4*	*392.0*
Other Sectors (c)															
Biomass	**7.5**	**7.0**	**7.6**	**7.4**	**7.4**	**7.1**	**7.0**	*7.4*	*7.3*	*7.1*	*7.0*	*7.4*	**29.4**	*28.8*	*28.7*
Waste	**0.8**	**0.7**	**0.7**	**0.7**	**0.7**	**0.7**	**0.7**	*0.7*	*0.7*	*0.7*	*0.7*	*0.7*	**2.9**	*2.8*	*2.8*
Wood	**6.7**	**6.3**	**6.9**	**6.6**	**6.7**	**6.4**	**6.3**	*6.6*	*6.6*	*6.4*	*6.3*	*6.6*	**26.5**	*26.0*	*26.0*
Conventional Hydroelectric	**0.4**	**0.4**	**0.2**	**0.3**	**0.3**	**0.3**	**0.3**	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	**1.2**	*1.2*	*1.2*
Large-Scale Solar (b)	**0.1**	**0.2**	**0.2**	**0.1**	**0.2**	**0.2**	**0.2**	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	**0.7**	*0.8*	*0.8*
Small-Scale Solar (d)	**6.9**	**10.4**	**10.6**	**7.1**	**8.4**	**12.4**	**12.4**	*8.5*	*9.6*	*14.4*	*14.5*	*10.0*	**35.0**	*41.7*	*48.4*
Residential Sector	**4.0**	**6.2**	**6.4**	**4.3**	**5.0**	**7.5**	**7.5**	*5.1*	*5.7*	*8.8*	*8.8*	*6.1*	**20.9**	*25.1*	*29.4*
Commercial Sector	**2.2**	**3.3**	**3.3**	**2.2**	**2.7**	**3.8**	**3.9**	*2.7*	*3.1*	*4.4*	*4.5*	*3.1*	**11.0**	*13.0*	*15.1*
Industrial Sector	**0.6**	**0.9**	**0.9**	**0.6**	**0.7**	**1.0**	**1.1**	*0.7*	*0.8*	*1.2*	*1.2*	*0.8*	**3.0**	*3.5*	*4.0*
Wind	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.2**	*0.3*	*0.2*	*0.2*	*0.2*	*0.2*	**0.3**	*0.7*	*0.9*

-- = no data available

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

(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 - December 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
Macroeconomic															
Real Gross Domestic Product															
(billion chained 2012 dollars - SAAR)	**18,950**	**19,021**	**19,142**	**19,254**	**19,011**	**17,303**	**18,584**	*18,749*	*18,872*	*18,923*	*19,014*	*19,109*	**19,092**	*18,412*	*18,979*
Real Personal Consumption Expend.															
(billion chained 2012 dollars - SAAR)	**13,093**	**13,213**	**13,301**	**13,354**	**13,118**	**11,860**	**12,917**	*13,022*	*13,072*	*13,134*	*13,199*	*13,274*	**13,240**	*12,729*	*13,170*
Real Private Fixed Investment															
(billion chained 2012 dollars - SAAR)	**3,362**	**3,359**	**3,379**	**3,387**	**3,375**	**3,096**	**3,297**	*3,353*	*3,364*	*3,350*	*3,345*	*3,350*	**3,372**	*3,280*	*3,352*
Business Inventory Change															
(billion chained 2012 dollars - SAAR)	**99**	**53**	**41**	**3**	**-52**	**-298**	**0**	*38*	*68*	*80*	*76*	*66*	**49**	*-78*	*72*
Real Government Expenditures															
(billion chained 2012 dollars - SAAR)	**3,260**	**3,300**	**3,318**	**3,337**	**3,348**	**3,369**	**3,330**	*3,305*	*3,315*	*3,320*	*3,326*	*3,327*	**3,304**	*3,338*	*3,322*
Real Exports of Goods & Services															
(billion chained 2012 dollars - SAAR)	**2,560**	**2,531**	**2,537**	**2,558**	**2,495**	**1,927**	**2,167**	*2,232*	*2,321*	*2,331*	*2,393*	*2,460*	**2,547**	*2,205*	*2,376*
Real Imports of Goods & Services															
(billion chained 2012 dollars - SAAR)	**3,468**	**3,483**	**3,487**	**3,419**	**3,283**	**2,702**	**3,177**	*3,250*	*3,312*	*3,338*	*3,367*	*3,407*	**3,464**	*3,103*	*3,356*
Real Disposable Personal Income															
(billion chained 2012 dollars - SAAR)	**14,854**	**14,818**	**14,895**	**14,965**	**15,061**	**16,576**	**15,852**	*15,283*	*15,079*	*15,054*	*15,071*	*15,074*	**14,883**	*15,693*	*15,070*
Non-Farm Employment															
(millions)	**150.2**	**150.6**	**151.2**	**151.8**	**151.9**	**133.7**	**140.8**	*143.2*	*145.7*	*147.0*	*148.1*	*149.0*	**150.9**	*142.4*	*147.5*
Civilian Unemployment Rate															
(percent)	**3.9**	**3.6**	**3.6**	**3.5**	**3.8**	**13.0**	**8.8**	*6.7*	*6.0*	*5.8*	*5.6*	*5.4*	**3.7**	*8.1*	*5.7*
Housing Starts															
(millions - SAAR)	**1.20**	**1.26**	**1.29**	**1.43**	**1.48**	**1.08**	**1.44**	*1.48*	*1.39*	*1.38*	*1.35*	*1.34*	**1.30**	*1.37*	*1.37*
Industrial Production Indices (Index, 2012=100)															
Total Industrial Production	**109.8**	**109.2**	**109.5**	**109.6**	**107.7**	**93.6**	**102.1**	*103.1*	*103.4*	*103.6*	*103.8*	*104.3*	**109.5**	*101.6*	*103.8*
Manufacturing	**106.5**	**105.7**	**105.9**	**105.8**	**104.4**	**89.2**	**99.8**	*100.9*	*101.2*	*100.8*	*100.5*	*100.7*	**106.0**	*98.6*	*100.8*
Food	**115.1**	**115.3**	**114.6**	**116.1**	**116.5**	**107.9**	**113.3**	*114.7*	*115.9*	*117.1*	*118.2*	*118.9*	**115.3**	*113.1*	*117.5*
Paper	**94.2**	**91.8**	**92.6**	**93.6**	**94.7**	**87.2**	**88.0**	*89.1*	*88.0*	*88.5*	*88.9*	*89.5*	**93.0**	*89.7*	*88.7*
Petroleum and Coal Products	**106.3**	**104.9**	**106.7**	**104.9**	**105.0**	**82.7**	**89.3**	*90.8*	*92.7*	*93.9*	*94.7*	*95.4*	**105.7**	*91.9*	*94.2*
Chemicals	**101.4**	**99.9**	**100.6**	**100.3**	**99.8**	**93.7**	**96.5**	*99.0*	*101.1*	*103.5*	*105.4*	*106.8*	**100.5**	*97.2*	*104.2*
Nonmetallic Mineral Products	**119.7**	**119.0**	**119.7**	**119.3**	**122.2**	**106.3**	**112.8**	*112.9*	*111.5*	*111.2*	*111.1*	*111.3*	**119.4**	*113.5*	*111.3*
Primary Metals	**97.9**	**96.7**	**96.4**	**96.6**	**94.4**	**69.7**	**79.3**	*82.2*	*80.3*	*80.6*	*80.7*	*81.2*	**96.9**	*81.4*	*80.7*
Coal-weighted Manufacturing (a)	**106.9**	**105.6**	**106.0**	**106.4**	**106.5**	**94.1**	**100.7**	*102.0*	*101.7*	*102.0*	*102.3*	*102.8*	**106.2**	*100.8*	*102.2*
Distillate-weighted Manufacturing (a)	**98.5**	**97.9**	**98.3**	**98.6**	**98.8**	**85.5**	**92.2**	*93.5*	*93.8*	*94.2*	*94.4*	*94.7*	**98.3**	*92.5*	*94.3*
Electricity-weighted Manufacturing (a)	**106.5**	**105.3**	**105.6**	**105.9**	**105.1**	**89.3**	**98.3**	*100.0*	*100.0*	*100.8*	*101.3*	*102.1*	**105.8**	*98.2*	*101.0*
Natural Gas-weighted Manufacturing (a)	**108.7**	**107.7**	**108.0**	**108.2**	**107.8**	**94.0**	**100.5**	*102.2*	*102.2*	*103.3*	*104.1*	*104.9*	**108.1**	*101.1*	*103.6*
Price Indexes															
Consumer Price Index (all urban consumers)															
(index, 1982-1984=1.00)	**2.53**	**2.55**	**2.56**	**2.58**	**2.59**	**2.56**	**2.60**	*2.61*	*2.62*	*2.64*	*2.66*	*2.67*	**2.56**	*2.59*	*2.65*
Producer Price Index: All Commodities															
(index, 1982=1.00)	**2.01**	**2.00**	**1.99**	**2.00**	**1.97**	**1.87**	**1.94**	*1.99*	*2.02*	*2.05*	*2.05*	*2.06*	**2.00**	*1.94*	*2.05*
Producer Price Index: Petroleum															
(index, 1982=1.00)	**1.81**	**2.08**	**1.95**	**1.93**	**1.74**	**1.09**	**1.45**	*1.49*	*1.51*	*1.61*	*1.63*	*1.59*	**1.94**	*1.44*	*1.58*
GDP Implicit Price Deflator															
(index, 2012=100)	**111.5**	**112.2**	**112.6**	**113.0**	**113.4**	**112.9**	**113.9**	*114.3*	*114.8*	*115.4*	*115.9*	*116.5*	**112.3**	*113.6*	*115.7*
Miscellaneous															
Vehicle Miles Traveled (b)															
(million miles/day)	**8,293**	**9,323**	**9,281**	**8,897**	**7,756**	**6,872**	**8,282**	*8,021*	*7,786*	*8,703*	*8,865*	*8,704*	**8,951**	*7,735*	*8,518*
Air Travel Capacity															
(Available ton-miles/day, thousands)	**643**	**685**	**712**	**688**	**628**	**362**	**487**	*546*	*566*	*552*	*569*	*639*	**682**	*506*	*581*
Aircraft Utilization															
(Revenue ton-miles/day, thousands)	**380**	**426**	**427**	**406**	**328**	**152**	**211**	*273*	*306*	*308*	*349*	*374*	**410**	*241*	*335*
Airline Ticket Price Index															
(index, 1982-1984=100)	**255.7**	**278.3**	**263.8**	**263.8**	**250.8**	**203.7**	**200.6**	*204.4*	*188.8*	*192.0*	*190.8*	*198.9*	**265.4**	*214.9*	*192.7*
Raw Steel Production															
(million short tons per day)	**0.273**	**0.271**	**0.264**	**0.265**	**0.268**	**0.174**	**0.196**	*0.219*	*0.270*	*0.240*	*0.241*	*0.282*	**0.268**	*0.214*	*0.258*
Carbon Dioxide (CO2) Emissions (million metric tons)															
Petroleum	**578**	**592**	**599**	**597**	**552**	**442**	**518**	*534*	*534*	*552*	*567*	*575*	**2,365**	*2,046*	*2,229*
Natural Gas	**511**	**351**	**382**	**450**	**493**	**351**	**385**	*434*	*474*	*332*	*354*	*419*	**1,694**	*1,663*	*1,579*
Coal	**289**	**238**	**306**	**242**	**202**	**177**	**273**	*224*	*252*	*247*	*304*	*259*	**1,076**	*876*	*1,062*
Total Energy (c)	**1,380**	**1,184**	**1,290**	**1,292**	**1,250**	**973**	**1,179**	*1,195*	*1,263*	*1,134*	*1,228*	*1,256*	**5,146**	*4,597*	*4,881*

- = 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 - December 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
Real Gross State Product (Billion $2009)															
New England	**999**	**999**	**1,003**	**1,005**	**993**	**901**	**972**	*980*	*986*	*989*	*993*	*997*	**1,001**	*962*	*991*
Middle Atlantic	**2,786**	**2,799**	**2,804**	**2,813**	**2,774**	**2,486**	**2,679**	*2,704*	*2,725*	*2,737*	*2,755*	*2,774*	**2,801**	*2,661*	*2,748*
E. N. Central	**2,524**	**2,522**	**2,538**	**2,545**	**2,502**	**2,266**	**2,465**	*2,482*	*2,491*	*2,497*	*2,505*	*2,515*	**2,532**	*2,429*	*2,502*
W. N. Central	**1,187**	**1,189**	**1,196**	**1,201**	**1,188**	**1,084**	**1,160**	*1,169*	*1,175*	*1,176*	*1,182*	*1,185*	**1,193**	*1,150*	*1,180*
S. Atlantic	**3,372**	**3,382**	**3,405**	**3,426**	**3,388**	**3,114**	**3,332**	*3,356*	*3,371*	*3,377*	*3,389*	*3,402*	**3,396**	*3,297*	*3,385*
E. S. Central	**826**	**829**	**834**	**836**	**828**	**742**	**804**	*811*	*815*	*817*	*821*	*824*	**831**	*796*	*819*
W. S. Central	**2,330**	**2,331**	**2,355**	**2,358**	**2,317**	**2,125**	**2,264**	*2,282*	*2,292*	*2,298*	*2,309*	*2,321*	**2,344**	*2,247*	*2,305*
Mountain	**1,259**	**1,267**	**1,283**	**1,294**	**1,283**	**1,177**	**1,257**	*1,269*	*1,277*	*1,280*	*1,285*	*1,289*	**1,276**	*1,247*	*1,283*
Pacific	**3,698**	**3,735**	**3,755**	**3,808**	**3,769**	**3,436**	**3,681**	*3,728*	*3,772*	*3,785*	*3,809*	*3,832*	**3,749**	*3,654*	*3,799*
Industrial Output, Manufacturing (Index, Year 2012=100)															
New England	**99.5**	**98.6**	**98.8**	**98.8**	**97.6**	**83.4**	**92.4**	*93.9*	*94.2*	*94.2*	*94.0*	*94.2*	**98.9**	*91.8*	*94.2*
Middle Atlantic	**99.1**	**98.2**	**98.1**	**98.1**	**97.1**	**80.3**	**90.9**	*91.9*	*91.8*	*91.5*	*91.7*	*92.1*	**98.4**	*90.1*	*91.8*
E. N. Central	**108.4**	**107.1**	**107.0**	**106.7**	**105.1**	**86.0**	**99.3**	*100.6*	*100.8*	*100.6*	*99.9*	*100.6*	**107.3**	*97.7*	*100.5*
W. N. Central	**106.0**	**105.2**	**105.3**	**105.2**	**103.7**	**90.2**	**100.3**	*101.6*	*102.0*	*101.6*	*101.3*	*101.4*	**105.4**	*99.0*	*101.6*
S. Atlantic	**111.0**	**110.4**	**110.8**	**111.1**	**109.2**	**94.3**	**104.9**	*106.4*	*106.7*	*106.2*	*105.8*	*106.0*	**110.8**	*103.7*	*106.2*
E. S. Central	**110.8**	**109.8**	**110.2**	**110.0**	**109.0**	**90.1**	**104.1**	*105.7*	*106.4*	*106.0*	*105.5*	*105.6*	**110.2**	*102.2*	*105.9*
W. S. Central	**101.7**	**101.1**	**101.4**	**101.5**	**99.8**	**87.7**	**95.3**	*96.0*	*95.8*	*95.2*	*95.0*	*95.3*	**101.4**	*94.7*	*95.3*
Mountain	**116.5**	**115.8**	**116.6**	**116.2**	**114.7**	**102.7**	**113.8**	*114.8*	*115.0*	*114.4*	*113.9*	*114.0*	**116.3**	*111.5*	*114.3*
Pacific	**105.1**	**104.2**	**104.1**	**104.3**	**102.4**	**86.7**	**95.4**	*96.3*	*96.4*	*95.9*	*95.8*	*96.0*	**104.4**	*95.2*	*96.0*
Real Personal Income (Billion $2009)															
New England	**889**	**885**	**883**	**885**	**892**	**992**	**938**	*903*	*890*	*889*	*890*	*891*	**886**	*931*	*890*
Middle Atlantic	**2,280**	**2,284**	**2,286**	**2,294**	**2,308**	**2,507**	**2,395**	*2,319*	*2,288*	*2,288*	*2,292*	*2,294*	**2,286**	*2,382*	*2,291*
E. N. Central	**2,432**	**2,426**	**2,433**	**2,441**	**2,449**	**2,683**	**2,572**	*2,491*	*2,453*	*2,452*	*2,454*	*2,454*	**2,433**	*2,549*	*2,453*
W. N. Central	**1,145**	**1,139**	**1,150**	**1,152**	**1,160**	**1,252**	**1,212**	*1,171*	*1,156*	*1,152*	*1,152*	*1,151*	**1,146**	*1,199*	*1,153*
S. Atlantic	**3,212**	**3,213**	**3,220**	**3,237**	**3,269**	**3,477**	**3,407**	*3,305*	*3,279*	*3,273*	*3,276*	*3,276*	**3,220**	*3,364*	*3,276*
E. S. Central	**891**	**890**	**893**	**896**	**904**	**968**	**947**	*913*	*904*	*902*	*903*	*901*	**893**	*933*	*902*
W. S. Central	**2,006**	**2,005**	**2,014**	**2,022**	**2,027**	**2,194**	**2,124**	*2,046*	*2,023*	*2,014*	*2,017*	*2,017*	**2,012**	*2,098*	*2,018*
Mountain	**1,183**	**1,184**	**1,192**	**1,199**	**1,211**	**1,312**	**1,269**	*1,231*	*1,216*	*1,213*	*1,215*	*1,215*	**1,190**	*1,256*	*1,215*
Pacific	**2,788**	**2,798**	**2,801**	**2,830**	**2,852**	**3,065**	**2,935**	*2,870*	*2,853*	*2,854*	*2,861*	*2,863*	**2,804**	*2,931*	*2,858*
Households (Thousands)															
New England	**5,948**	**5,958**	**5,973**	**5,968**	**5,909**	**5,931**	**5,934**	*5,942*	*5,964*	*5,976*	*5,988*	*6,000*	**5,968**	*5,942*	*6,000*
Middle Atlantic	**16,285**	**16,326**	**16,369**	**16,352**	**16,190**	**16,254**	**16,276**	*16,314*	*16,383*	*16,418*	*16,450*	*16,481*	**16,352**	*16,314*	*16,481*
E. N. Central	**19,041**	**19,058**	**19,112**	**19,097**	**18,913**	**19,002**	**19,032**	*19,081*	*19,162*	*19,209*	*19,252*	*19,297*	**19,097**	*19,081*	*19,297*
W. N. Central	**8,689**	**8,713**	**8,745**	**8,744**	**8,665**	**8,706**	**8,722**	*8,745*	*8,795*	*8,824*	*8,851*	*8,879*	**8,744**	*8,745*	*8,879*
S. Atlantic	**25,670**	**25,735**	**25,851**	**25,876**	**25,668**	**25,804**	**25,864**	*25,949*	*26,109*	*26,221*	*26,334*	*26,455*	**25,876**	*25,949*	*26,455*
E. S. Central	**7,689**	**7,714**	**7,740**	**7,738**	**7,668**	**7,703**	**7,715**	*7,735*	*7,776*	*7,800*	*7,822*	*7,845*	**7,738**	*7,735*	*7,845*
W. S. Central	**14,856**	**14,913**	**14,981**	**14,996**	**14,876**	**14,957**	**15,003**	*15,070*	*15,157*	*15,231*	*15,301*	*15,373*	**14,996**	*15,070*	*15,373*
Mountain	**9,399**	**9,443**	**9,500**	**9,523**	**9,458**	**9,518**	**9,550**	*9,595*	*9,670*	*9,725*	*9,777*	*9,830*	**9,523**	*9,595*	*9,830*
Pacific	**18,920**	**18,954**	**19,015**	**19,010**	**18,834**	**18,919**	**18,968**	*19,043*	*19,156*	*19,223*	*19,282*	*19,341*	**19,010**	*19,043*	*19,341*
Total Non-farm Employment (Millions)															
New England	**7.5**	**7.5**	**7.5**	**7.5**	**7.5**	**6.4**	**6.8**	*7.0*	*7.1*	*7.2*	*7.2*	*7.3*	**7.5**	*6.9*	*7.2*
Middle Atlantic	**20.0**	**20.0**	**20.1**	**20.1**	**20.1**	**16.8**	**18.0**	*18.4*	*18.7*	*19.0*	*19.2*	*19.4*	**20.0**	*18.3*	*19.1*
E. N. Central	**22.3**	**22.3**	**22.3**	**22.3**	**22.3**	**19.3**	**20.6**	*21.0*	*21.4*	*21.6*	*21.7*	*21.9*	**22.3**	*20.8*	*21.6*
W. N. Central	**10.8**	**10.8**	**10.8**	**10.8**	**10.8**	**9.8**	**10.2**	*10.4*	*10.5*	*10.5*	*10.6*	*10.6*	**10.8**	*10.3*	*10.6*
S. Atlantic	**29.0**	**29.1**	**29.2**	**29.3**	**29.4**	**26.4**	**27.6**	*28.0*	*28.5*	*28.7*	*28.9*	*29.0*	**29.1**	*27.8*	*28.8*
E. S. Central	**8.3**	**8.3**	**8.3**	**8.3**	**8.3**	**7.5**	**7.9**	*8.0*	*8.1*	*8.2*	*8.2*	*8.2*	**8.3**	*8.0*	*8.2*
W. S. Central	**17.6**	**17.7**	**17.8**	**17.9**	**18.0**	**16.4**	**16.9**	*17.1*	*17.3*	*17.5*	*17.6*	*17.6*	**17.8**	*17.1*	*17.5*
Mountain	**11.0**	**11.0**	**11.1**	**11.2**	**11.2**	**10.2**	**10.6**	*10.8*	*11.0*	*11.1*	*11.1*	*11.2*	**11.1**	*10.7*	*11.1*
Pacific	**23.6**	**23.7**	**23.9**	**24.0**	**24.0**	**20.9**	**21.8**	*22.3*	*22.9*	*23.1*	*23.4*	*23.5*	**23.8**	*22.3*	*23.2*

- = no data available

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

Regions refer to U.S. Census divisions.

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

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

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

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

Table 9c. U.S. Regional Weather Data

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

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
Heating Degree Days															
New England	**3,227**	**895**	**135**	**2,278**	**2,730**	**971**	**111**	*2,038*	*3,173*	*869*	*125*	*2,096*	**6,535**	*5,851*	*6,263*
Middle Atlantic	**2,988**	**633**	**68**	**2,064**	**2,471**	**838**	**85**	*1,835*	*2,942*	*698*	*73*	*1,920*	**5,752**	*5,229*	*5,632*
E. N. Central	**3,326**	**760**	**64**	**2,278**	**2,789**	**848**	**126**	*2,190*	*3,162*	*733*	*117*	*2,225*	**6,428**	*5,953*	*6,237*
W. N. Central	**3,644**	**772**	**107**	**2,547**	**3,038**	**799**	**168**	*2,460*	*3,258*	*704*	*158*	*2,448*	**7,070**	*6,465*	*6,568*
South Atlantic	**1,335**	**128**	**2**	**919**	**1,109**	**253**	**17**	*844*	*1,401*	*190*	*10*	*910*	**2,384**	*2,223*	*2,512*
E. S. Central	**1,713**	**194**	**1**	**1,273**	**1,482**	**336**	**19**	*1,198*	*1,797*	*236*	*17*	*1,257*	**3,180**	*3,036*	*3,308*
W. S. Central	**1,207**	**90**	**0**	**847**	**973**	**102**	**8**	*727*	*1,071*	*69*	*4*	*775*	**2,144**	*1,809*	*1,920*
Mountain	**2,428**	**786**	**127**	**1,965**	**2,217**	**673**	**126**	*1,791*	*2,191*	*671*	*147*	*1,825*	**5,306**	*4,807*	*4,834*
Pacific	**1,684**	**573**	**94**	**1,178**	**1,534**	**521**	**64**	*1,131*	*1,547*	*584*	*86*	*1,193*	**3,530**	*3,249*	*3,411*
U.S. Average	**2,209**	**480**	**56**	**1,557**	**1,875**	**541**	**70**	*1,443*	*2,109*	*483*	*70*	*1,494*	**4,302**	*3,929*	*4,157*
Heating Degree Days, Prior 10-year Average															
New England	**3,165**	**820**	**111**	**2,122**	**3,152**	**822**	**105**	*2,127*	*3,133*	*855*	*107*	*2,103*	**6,218**	*6,207*	*6,198*
Middle Atlantic	**2,956**	**650**	**76**	**1,941**	**2,949**	**644**	**69**	*1,944*	*2,913*	*677*	*72*	*1,911*	**5,623**	*5,606*	*5,573*
E. N. Central	**3,196**	**697**	**112**	**2,198**	**3,198**	**698**	**102**	*2,197*	*3,157*	*731*	*105*	*2,179*	**6,203**	*6,195*	*6,171*
W. N. Central	**3,255**	**702**	**140**	**2,380**	**3,287**	**702**	**131**	*2,379*	*3,247*	*728*	*133*	*2,382*	**6,477**	*6,500*	*6,490*
South Atlantic	**1,480**	**176**	**11**	**964**	**1,459**	**169**	**10**	*952*	*1,393*	*181*	*11*	*911*	**2,631**	*2,589*	*2,496*
E. S. Central	**1,861**	**222**	**17**	**1,292**	**1,850**	**214**	**15**	*1,277*	*1,772*	*232*	*16*	*1,246*	**3,392**	*3,356*	*3,265*
W. S. Central	**1,183**	**85**	**4**	**808**	**1,199**	**83**	**3**	*794*	*1,140*	*86*	*3*	*785*	**2,079**	*2,078*	*2,014*
Mountain	**2,164**	**714**	**139**	**1,855**	**2,192**	**718**	**135**	*1,844*	*2,182*	*701*	*134*	*1,845*	**4,873**	*4,890*	*4,862*
Pacific	**1,444**	**582**	**83**	**1,175**	**1,456**	**580**	**85**	*1,161*	*1,461*	*552*	*80*	*1,151*	**3,283**	*3,282*	*3,244*
U.S. Average	**2,150**	**475**	**68**	**1,518**	**2,149**	**472**	**64**	*1,509*	*2,108*	*482*	*64*	*1,486*	**4,212**	*4,194*	*4,140*
Cooling Degree Days															
New England	**0**	**67**	**469**	**0**	**0**	**103**	**544**	*0*	*0*	*85*	*419*	*2*	**536**	*647*	*506*
Middle Atlantic	**0**	**144**	**631**	**8**	**0**	**155**	**677**	*5*	*0*	*153*	*551*	*5*	**783**	*837*	*708*
E. N. Central	**0**	**175**	**651**	**7**	**2**	**217**	**607**	*3*	*0*	*217*	*546*	*7*	**833**	*829*	*771*
W. N. Central	**0**	**222**	**729**	**2**	**6**	**295**	**662**	*3*	*3*	*268*	*670*	*10*	**954**	*966*	*951*
South Atlantic	**152**	**755**	**1,297**	**307**	**195**	**617**	**1,233**	*315*	*124*	*659*	*1,188*	*249*	**2,511**	*2,361*	*2,220*
E. S. Central	**29**	**550**	**1,217**	**87**	**72**	**422**	**1,062**	*79*	*28*	*530*	*1,080*	*73*	**1,882**	*1,637*	*1,711*
W. S. Central	**72**	**821**	**1,696**	**167**	**174**	**839**	**1,499**	*215*	*101*	*918*	*1,530*	*212*	**2,757**	*2,727*	*2,761*
Mountain	**10**	**341**	**987**	**60**	**9**	**463**	**1,081**	*125*	*20*	*440*	*935*	*80*	**1,399**	*1,678*	*1,475*
Pacific	**22**	**166**	**595**	**68**	**24**	**199**	**735**	*130*	*27*	*168*	*586*	*59*	**852**	*1,089*	*841*
U.S. Average	**45**	**399**	**954**	**105**	**70**	**395**	**937**	*127*	*45*	*410*	*869*	*99*	**1,503**	*1,529*	*1,424*
Cooling Degree Days, Prior 10-year Average															
New England	**0**	**79**	**455**	**1**	**0**	**83**	**471**	*1*	*0*	*81*	*474*	*1*	**536**	*554*	*556*
Middle Atlantic	**0**	**165**	**589**	**6**	**0**	**170**	**609**	*6*	*0*	*163*	*609*	*6*	**760**	*785*	*778*
E. N. Central	**3**	**242**	**548**	**7**	**3**	**240**	**579**	*8*	*3*	*234*	*572*	*7*	**799**	*829*	*816*
W. N. Central	**7**	**298**	**669**	**11**	**7**	**296**	**697**	*11*	*7*	*294*	*686*	*10*	**985**	*1,011*	*998*
South Atlantic	**120**	**684**	**1,180**	**239**	**127**	**696**	**1,202**	*247*	*143*	*680*	*1,196*	*262*	**2,224**	*2,272*	*2,280*
E. S. Central	**36**	**555**	**1,049**	**67**	**36**	**557**	**1,082**	*72*	*42*	*532*	*1,065*	*74*	**1,706**	*1,747*	*1,713*
W. S. Central	**103**	**897**	**1,552**	**205**	**100**	**892**	**1,576**	*207*	*114*	*880*	*1,567*	*210*	**2,757**	*2,774*	*2,772*
Mountain	**25**	**438**	**932**	**81**	**24**	**432**	**939**	*81*	*24*	*444*	*954*	*87*	**1,476**	*1,476*	*1,509*
Pacific	**31**	**185**	**631**	**76**	**31**	**185**	**625**	*78*	*31*	*193*	*650*	*86*	**923**	*919*	*960*
U.S. Average	**46**	**417**	**873**	**97**	**47**	**420**	**892**	*100*	*52*	*415*	*894*	*105*	**1,433**	*1,459*	*1,466*

- = 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) for more information.

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

Regions refer to U.S. Census divisions. See "Census division" in EIA's Energy Glossary (http://www.eia.gov/tools/glossary/) for a list of states in each region.

Historical data: Latest data available from U.S. Department of Commerce, National Oceanic and Atmospheric Association (NOAA).

Projections: Based on forecasts by the NOAA Climate Prediction Center (http://www.cpc.ncep.noaa.gov/pacdir/DDdir/NHOME3.shtml).

Appendix to the December 2020 *Short-Term Energy Outlook*

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

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

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

Table a1. Summary of Estimated Petroleum and Other Liquids Quantities

	October 2020	November 2020	October-November 2020 Average	October-November 2019 Average	2017–2019 Average
Global Petroleum and Other Liquids (million barrels per day)					
Global Petroleum and Other Liquids Production (a)	91.7	93.4	92.5	101.6	99.8
Global Petroleum and Other Liquids Consumption (b)	94.8	95.6	95.2	101.4	100.3
Biofuels Production (c)	2.6	2.4	2.5	2.7	2.5
Biofuels Consumption (c)	2.3	2.3	2.3	2.4	2.3
Iran Liquid Fuels Production	2.6	2.7	2.7	3.0	4.1
Iran Liquid Fuels Consumption	1.7	1.7	1.7	1.8	1.8
Petroleum and Petroleum Products Produced and Consumed in Countries Other Than Iran (million barrels per day)					
Production (d)	86.4	88.4	87.4	96.0	93.2
Consumption (d)	90.8	91.6	91.2	97.2	96.2
Production minus Consumption	-4.5	-3.2	-3.8	-1.2	-2.9
World Inventory Net Withdrawals Including Iran	3.2	2.1	2.7	-0.2	0.5
Estimated OECD Inventory Level (e) (million barrels)	3,091	3,057	3,074	2,885	2,910
Surplus Production Capacity (million barrels per day)					
OPEC Surplus Crude Oil Production Capacity (f)	7.7	7.7	7.7	2.1	2.0

Note: The term “petroleum and other liquids” encompasses crude oil, lease condensate, natural gas liquids, biofuels, coal-to-liquids, gas-to-liquids, and refinery processing gains, which are important to consider in concert due to the inter-related supply, demand, and price dynamics of petroleum, petroleum products, and related fuels.
(a) Production includes crude oil (including lease condensates), natural gas liquids, other liquids, and refinery processing gains.
(b) Consumption of petroleum by the OECD countries is synonymous with “products supplied," defined in the glossary of the EIA Petroleum Supply Monthly, DOE/EIA-0109. Consumption of petroleum by the non-OECD countries is "apparent consumption," which includes internal consumption, refinery fuel, and loss, and bunkering.
(c) Biofuels production and consumption are based on EIA estimates as published in the International Energy Statistics. Biofuels production in the third quarter tends to be at its highest level in the year as ethanol production in Brazil reaches its seasonal peak and is typically lowest in the first quarter as seasonal production falls in the South/South-Central region of Brazil.
(d) Global production of petroleum and petroleum products outside of Iran is derived by subtracting biofuels production and Iran liquid fuels production from global liquid fuels production. The same method is used to calculate global consumption outside of Iran.
(e) Estimated inventory level is for OECD countries only.
(f) EIA defines surplus oil production capacity as potential oil production that could be brought online within 30 days and sustained for at least 90 days, consistent with sound business practices. This does not include oil production increases that could not be sustained without degrading the future production capacity of a field.
Source: U.S. Energy Information Administration.

Table a2. Crude Oil and Petroleum Product Price Data

Item	October 2020	November 2020	October-November 2020 Average	October-November 2019 Average	2017–2019 Average
Brent Front Month Futures Price ($ per barrel)	41.52	43.98	42.69	61.06	63.53
WTI Front Month Futures Price ($ per barrel)	39.55	41.35	40.41	55.43	57.60
Dubai Front Month Futures Price ($ per barrel)	41.13	44.22	42.60	61.56	62.36
Brent 1st - 13th Month Futures Spread ($ per barrel)	-3.06	-1.64	-2.39	3.70	2.02
WTI 1st - 13th Month Futures Spread ($ per barrel)	-2.56	-1.78	-2.19	2.98	1.39
RBOB Front Month Futures Price ($ per gallon)	1.16	1.17	1.16	1.63	1.76
Heating Oil Front Month Futures Price ($ per gallon)	1.15	1.25	1.20	1.93	1.90
RBOB - Brent Futures Crack Spread ($ per gallon)	0.17	0.12	0.15	0.18	0.24
Heating Oil - Brent Futures Crack Spread ($ per gallon)	0.16	0.20	0.18	0.47	0.39
Heating Oil - Brent Futures Crack Spread ($ per gallon)	0.16	0.20	0.18	0.47	0.39

(a) Brent refers to Brent crude oil traded on the Intercontinental Exchange (ICE).
(b) WTI refers to West Texas Intermediate crude oil traded on the New York Mercantile Exchange (NYMEX), owned by Chicago Mercantile Exchange (CME) Group.
(c) RBOB refers to r*eformulated blendstock for oxygenate blending traded on the NYMEX.*
Source: U.S. Energy Information Administration, based on Chicago Mercantile Exchange (CME), Intercontinental Exchange (ICE), and Dubai Mercantile Exchange (DME).