



## Short-Term Energy Outlook

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### Forecast highlights

#### *Global liquid fuels*

- The May *Short-Term Energy Outlook* (STEO) remains subject to heightened levels of uncertainty because responses to COVID-19 continue to evolve. Economic activity has increased significantly after reaching multiyear lows in the second quarter of 2020. The increase in economic activity and easing of COVID-19-related restrictions have contributed to rising energy use. U.S. gross domestic product (GDP) declined by 3.5% in 2020 from 2019 levels. This STEO assumes U.S. GDP will grow by 6.2% in 2021 and by 4.3% in 2022. The U.S. macroeconomic assumptions in this outlook are based on forecasts by IHS Markit. Our forecast assumes continuing economic growth and increasing mobility with easing COVID-19-related restrictions, and any developments that would cause deviations from these assumptions would likely cause energy consumption and prices to deviate from our forecast.
- We completed modeling and analysis for this report before the temporary [closure of the Colonial Pipeline](#) on May 7 as a result of a cyberattack. Although effects of the outage are not reflected in this report, we are closely following supply and price developments related to the outage. Updates related to the outage will be reflected in *Today in Energy*, *This Week in Petroleum*, and the *Weekly Petroleum Status Report* as they become available.
- Brent crude oil spot prices averaged \$65 per barrel (b) in April, unchanged from the average in March. Brent prices were steady in April as market participants considered diverging trends in global COVID-19 cases. In some regions, notably the United States, oil demand is rising as both COVID-19 vaccination rates and economic activity increase. In other regions, notably India, oil demand is declining because of a sharp rise in COVID-19 cases. EIA forecasts that Brent prices will average \$65/b in the second quarter of 2021, \$61/b during the second half of 2021, and \$61/b in 2022.
- We estimate that the world consumed 96.2 million barrels per day (b/d) of petroleum and liquid fuels in April, an increase of 15.8 million b/d from April 2020 but 4.0 million b/d less than April 2019 levels. We forecast that global consumption of petroleum and liquid fuels will average 97.7 million b/d for all of 2021, which is a 5.4 million b/d increase from 2020. We forecast that consumption of petroleum and liquid fuels will increase by 3.7 million b/d in 2022 to average 101.4 million b/d.

- We expect that gasoline consumption in the United States will average almost 9.0 million b/d this summer (April–September), which is 1.2 million b/d more than last summer but almost 0.6 million b/d less than summer 2019. We increased our summer gasoline consumption forecast by 0.1 million b/d from [last month](#) based on [weekly data](#) that suggested more gasoline consumption than we had previously forecast. The increase also reflects IHS Markit’s increased employment forecast. For all of 2021, we forecast that U.S. gasoline consumption will average 8.7 million b/d, which is up from 2020 (8.0 million b/d) but down from 2019 (9.3 million b/d).
- According to [our most recent data](#), U.S. crude oil production averaged 9.9 million b/d in February 2021, which was down by 1.2 million b/d from January. In February, cold temperatures caused significant declines in crude oil production in Texas, as well as smaller declines in other states. We estimate that production outages were generally limited to February and that U.S. crude oil production rose to 10.9 million b/d in March and to almost 11.0 million b/d in April. Because the average price of West Texas Intermediate crude oil remains above \$55/b in our forecast, we expect producers will drill and complete enough wells in the coming months to offset declines at existing wells. In addition, [new projects in the Federal Offshore Gulf of Mexico](#) contribute to rising production in the forecast. U.S. crude oil production in the forecast averages 11.3 million b/d in the fourth quarter of 2021 and then rises to average 11.8 million b/d in 2022.

### **Natural Gas**

- In April, the natural gas spot price at Henry Hub averaged \$2.66 per million British thermal units (MMBtu), which is slightly higher than the March average of \$2.62/MMBtu. We expect the Henry Hub spot price will average \$2.78/MMBtu in the second quarter of 2021 and will average \$3.05/MMBtu for all of 2021, which is up from [the 2020 average of \\$2.03/MMBtu](#). We expect natural gas prices will rise this year, primarily as a result of two factors: growth in liquefied natural gas (LNG) exports and rising domestic natural gas consumption in the residential, commercial, and industrial sectors. In 2022, we expect the Henry Hub price will fall to an average \$3.02/MMBtu amid slowing growth in LNG exports and rising production.
- We expect that U.S. consumption of natural gas will average 82.6 billion cubic feet per day (Bcf/d) in 2021, down 0.7% from 2020. U.S. natural gas consumption declines in the forecast, in part, because electric power generators switch to coal from natural as a result of rising natural gas prices. In 2021, we expect residential and commercial natural gas consumption together will rise by 1.0 Bcf/d from 2020 and industrial consumption will rise by 0.8 Bcf/d from 2020. Rising consumption outside of the power sector results from expanding economic activity and colder temperatures in 2021 compared with 2020. We expect U.S. natural gas consumption will average 82.5 Bcf/d in 2022.

- We estimate that natural gas inventories ended April 2021 at almost 2.0 trillion cubic feet (Tcf), which is 3% lower than the five-year (2016–20) average. [Natural gas withdrawals from storage during the winter of 2020–21](#) were higher than the five-year average, largely as a result of the cold February temperatures that contributed to a drop in natural gas production. We forecast that natural gas inventories will end the 2021 injection season (end of October) at more than 3.6 Tcf, which is 3% below the five-year average.
- We forecast that U.S. production of dry natural gas will average 91.1 Bcf/d in 2021, which is down 0.3% from 2020. Dry natural gas production fell by 6.0 Bcf/d in February to 86.3 Bcf/d because of [cold weather that largely affected Texas](#). We estimate production increased to 91.3 Bcf/d in March. We expect relatively flat dry natural gas production in May ahead of production beginning to rise in mid-2021. We forecast dry natural gas production will reach 92.0 Bcf/d in the fourth quarter of 2021 and average 93.1 Bcf/d in 2022. The increase in production reflects sustained higher forecast prices for natural gas and crude oil compared with 2020.
- U.S. LNG exports set an all-time record in March 2021 at 10.5 Bcf/d and averaged 9.2 Bcf/d in April—the most exported LNG for those months since the United States began exporting it in 2016. Throughout 2020 and in January 2021, [more than half of U.S. LNG exports went to Asia](#). However, in February and March 2021, more than half of U.S. LNG exports went to Europe as a result of spot natural gas prices in Europe reaching levels similar to spot natural gas prices in Asia. For May, we forecast a decline in U.S. LNG exports to 8.6 Bcf/d (more than 90% of baseload export capacity utilization) before exports rise above 9.0 Bcf/d in the summer months to meet summer peak demand in Europe and Asia. We expect LNG exports will average 9.2 Bcf/d in both 2021 and 2022, up from 6.5 Bcf/d in 2020. Flat LNG exports in 2022 reflect our expectation that limited new export capacity will come online during the forecast period.

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

- We forecast that electricity consumption in the United States will increase by 2.2% in 2021 after falling 3.9% in 2020. We forecast electricity sales to the industrial sector will grow by 3.3% in 2021. We forecast that retail electricity sales to the residential sector will grow by 2.9% in 2021, which is primarily a result of colder temperatures in the first quarter of 2021 compared with the same period in 2020. We expect retail electricity sales to the commercial sector will increase by 1.4% in 2021. Much of the increased electricity consumption across the sectors reflects improving economic conditions in 2021. For 2022, we forecast that U.S. electricity consumption will grow by another 1.0%.
- We expect the share of electric power generated from natural gas in the United States will average 35% in both 2021 and 2022, down from 39% in 2020. The forecast share for natural gas as a generation fuel declines in response to an 85% increase in the average

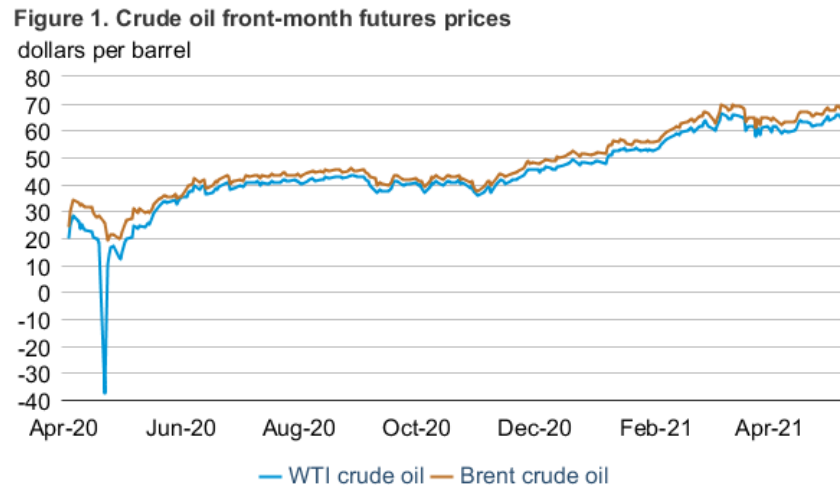
delivered natural gas price for electricity generators, from an average \$2.39/MMBtu in 2020 to an average \$4.41/MMBtu in 2021. As a result of the higher expected natural gas prices, the forecast share of generation from coal rises from 20% in 2020 to 24% this year and to 23% next year. New additions of solar and wind generating capacity contribute to our expectation that the renewables share of U.S. generation will rise from 20% in 2020 to 21% in 2021 and to 22% in 2022. The nuclear share of U.S. generation declines from 21% in 2020 to 20% in 2021 and to 19% in 2022 as a result of [retiring capacity](#) at some nuclear power plants.

- We forecast that planned additions to U.S. wind and solar generating capacity in 2021 and 2022 will contribute to rising electricity generation from those sources. We estimate that the U.S. electric power sector added 14.8 gigawatts (GW) of [new wind capacity in 2020](#). We expect 15.9 GW of new wind capacity will come online in 2021 and 5.2 GW in 2022. Utility-scale solar capacity rose by an estimated 10.5 GW in 2020. Our forecast for added utility-scale solar capacity is 15.7 GW and 15.9 GW for 2021 and 2022, respectively. We expect significant [solar capacity additions in Texas](#) during the forecast period. In addition, about 5 GW of small-scale solar (systems less than 1 megawatt) will come online each year during the 2021–22 STEO forecast.
- We expect U.S. coal production to total 582 million short tons (MMst) in 2021, 43 MMst (8%) more than in 2020. The increase in coal production is primarily driven by rising use of coal for electricity generation in response to rising natural gas prices. Recent strikes in Appalachia metallurgical coal mines likely limited production increases in April, but we do not expect them to significantly affect production through the rest of 2021. In 2022, we expect coal production to grow by an additional 23 MMst (4%).
- We estimate that U.S. energy-related carbon dioxide (CO<sub>2</sub>) emissions [decreased by 11% in 2020](#) as a result of less energy consumption related to reduced economic activity and responses to COVID-19. In 2021, we forecast energy-related CO<sub>2</sub> emissions will increase about 6% from the 2020 level as economic activity increases and leads to rising energy use. We also expect energy-related CO<sub>2</sub> emissions to rise in 2022, but by a slower rate of 2%. We forecast that after declining by 19% in 2020, coal-related CO<sub>2</sub> emissions will rise by 17% in 2021 and then fall by 1% in 2022.

# Petroleum and natural gas markets review

## Crude oil

**Prices:** The front-month futures price for Brent crude oil settled at \$68.09 per barrel (b) on May 6, 2021, up \$3.23/b from April 1. The front-month futures price for West Texas Intermediate (WTI) crude oil for delivery at Cushing, Oklahoma, increased by \$3.26/b during the same period, settling at \$64.71 on May 6 (**Figure 1**).



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

After approaching a 2021 high in early March of almost \$70/b, Brent crude oil prices declined to between \$60/b and \$65/b in mid-March through the first half of April. However, in the second half of April and into early May, crude oil prices began to rise, likely as a result of crude oil and petroleum product inventory draws and higher expectations for summer gasoline demand, particularly in the United States. The rise in oil prices was likely reinforced by macroeconomic indicators that pointed to continued economic recovery and led to price increases across a broad range of commodities, discussed in detail below. News of rising COVID-19 cases in India offset some of the expectation of rising demand globally, but India's increase in cases has not prevented crude oil prices from rising; they climbed to their monthly highs of \$68.56/b for Brent and \$65.01/b for WTI as of April 29. Oil market developments during the past month occurred against a backdrop of continuing production restraint from OPEC+, which likely contributed to some upward price pressure. However, we expect OPEC+ to begin increasing production in May, which is consistent with the production targets announced at its [early April meeting](#). OPEC+ plans to revisit its production targets at the next meeting, scheduled for [June 1](#).

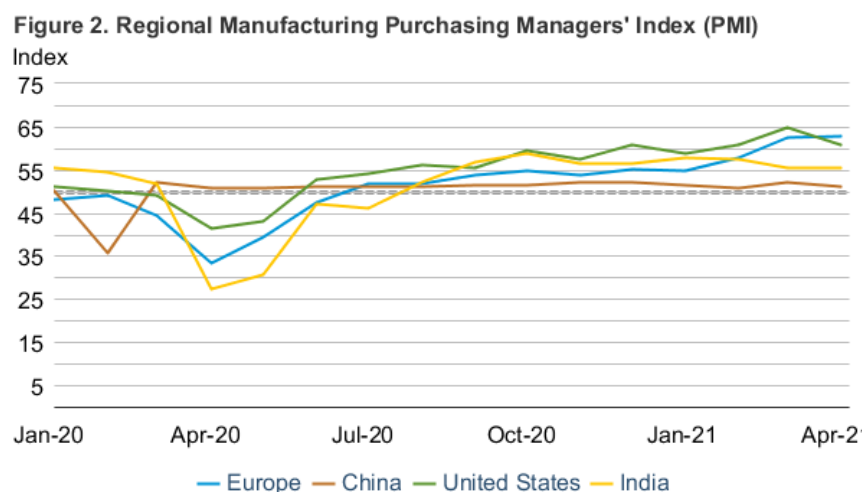
In the May STEO, we expect upward pressure on the Brent price to ease and the Brent price to decrease to average \$65/b in the second quarter. This decrease comes as OPEC+ crude oil production rises to meet gradually increasing crude oil demand. We expect global consumption

to average almost 97.0 million b/d in the second quarter, a 2.2 million b/d increase from the first quarter, before increasing to 98.9 million b/d in the third quarter and to 100.0 million b/d in the fourth quarter, which is largely unchanged from the April STEO.

Oil demand in Asia presents a downside risk to the forecast. India, the world’s third largest consumer of oil, has rising COVID-19 cases. The degree to which the increase in cases will affect oil demand is currently unclear. We reduced oil consumption in India by 0.3 million b/d on average during the second quarter of 2021 from the April STEO. This forecast is highly uncertain, as future case counts and their effect on mobility is unclear.

We expect global oil production to continue to increase in the second half of the year to keep pace with rising demand. Increased production puts downward pressure on crude oil prices: the Brent price falls to \$63/b in the third quarter and \$60/b in the fourth quarter of 2021.

**Commodity prices and manufacturing indexes:** Purchasing managers’ indexes (PMIs) for regional manufacturing in the United States and Europe remained firmly expansionary in April, suggesting increasing overall economic activity. PMIs are based on surveys sent to managerial staff of industry participants in the relevant country or region, in this case, within manufacturing sector companies. A PMI reading below 50 represents net expectations of a contraction in manufacturing activity, and a rating above 50 represents net expectations of manufacturing expansion. The PMI of the United States (data compiled by the [Institute for Supply Management](#)) decreased to 60.7 in April, down from its March high of 64.7, while Europe’s PMI (data compiled by [IHS Markit](#)) increased to 62.9 in April from 62.5 in March (**Figure 2**). The March 2021 PMI for the United States and the April 2021 PMI for Europe were the highest PMI index values for their respective regions since the pandemic began in early 2020, reflecting increased expectations for growing manufacturing activity in those regions.



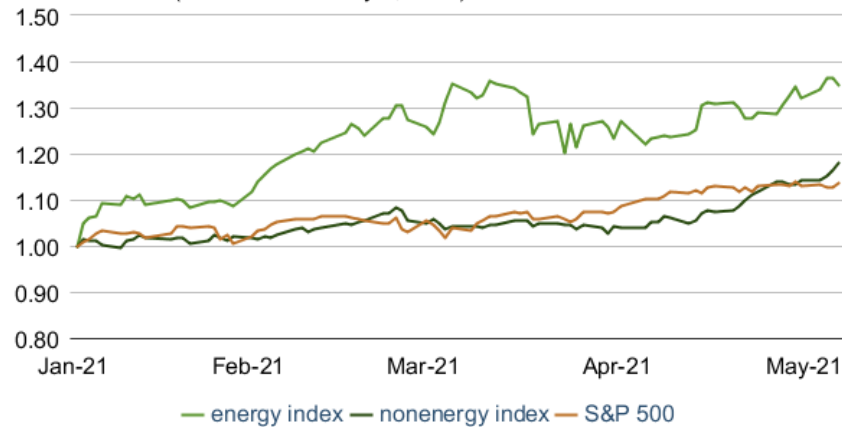
 Bloomberg L.P., IHS Markit, Institute for Supply Management

In Europe, the manufacturing PMI was less than 50 from January through June in 2020, and the United States' manufacturing PMI was less than 50 from March through May 2020. At 51.1 in April 2021, China's PMI was less than its November 2020 level (52.1) and was down from its March 2021 value of 51.9. China's PMI has historically trended closer to 50 than other regional PMIs. The increasing PMIs for the United States and Europe in March and April 2021 coincided with rising numbers of vaccinated persons, which has increased the available workforce who can return to work and leisure activities, stimulating demand for goods and services. The rising PMIs lend support to our expectation of rising oil consumption in the coming months.

Similar to higher PMI manufacturing surveys, increases in non-energy commodity prices in April 2021 also suggest increases in economic growth. Commodity prices, including copper, lumber, grains, and agricultural goods, have all increased in response to increasing economic activity. In addition to rising demand, commodity prices are also affected by a lower supply because low demand in 2020 led wholesalers and retailers to adjust inventory levels to changing demand. As demand increases, prices will face upward pressure as long as supply chains are strained to meet higher levels of demand.

The renewed demands and strain on supply chains is also reflected in recent upward pressure on broad commodity price indexes. The [S&P GSCI](#) (formerly the Goldman Sachs Commodity Index) is an index of commodity prices, based on weighted indexes for energy, agricultural commodities, livestock, precious metals, and industrial metals. As of May 6, the S&P GSCI non-energy index, increased 18% from January 1, 2021 (**Figure 3**). The majority of that growth occurred in April, as the sub-index started the month at just 4% above January 1. The upward pressure on non-energy commodities reflects more recent increases in economic activity, even as equities have shown steadier increases since the start of the year. Total returns on the S&P 500 have been showing steady growth since the start of 2021, posting record highs in April 2021. The S&P GSCI energy index has been increasing since mid-April, and during the first week of May, surpassed its previous highs from early March. The S&P GSCI energy index is largely weighted toward crude oil and petroleum products, although it also includes natural gas.

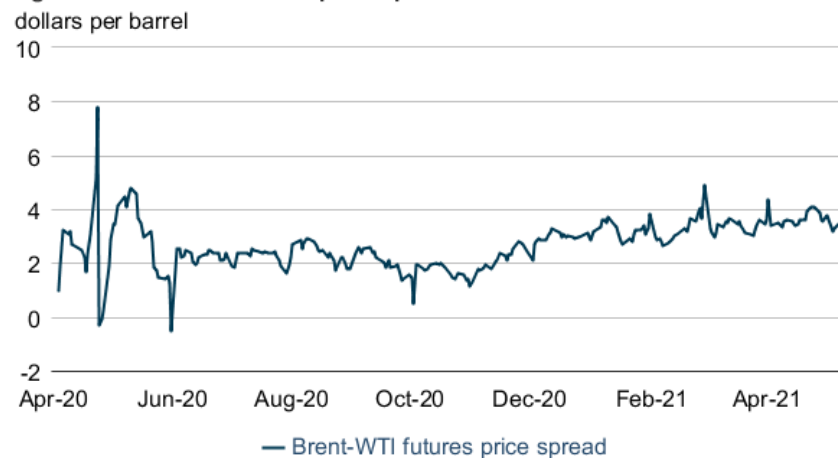
**Figure 3. Energy vs nonenergy commodities and equities**  
sub-index level (indexed to January 1, 2021)



eia Source: S&P Dow Jones, Bloomberg L.P.

**Brent–WTI spread:** The difference between Brent and WTI crude oil futures prices has been increasing on a monthly average basis since November 2020. In the past two months, the reduction in and subsequent return of U.S. crude oil production following outages resulting from widespread cold weather in February and lower Brent volumes resulting from production platform maintenance in the North Sea introduced increased volatility into the spread that has been gradually stabilizing at a wider level since March (**Figure 4**).

**Figure 4. Brent–WTI futures price spread**



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

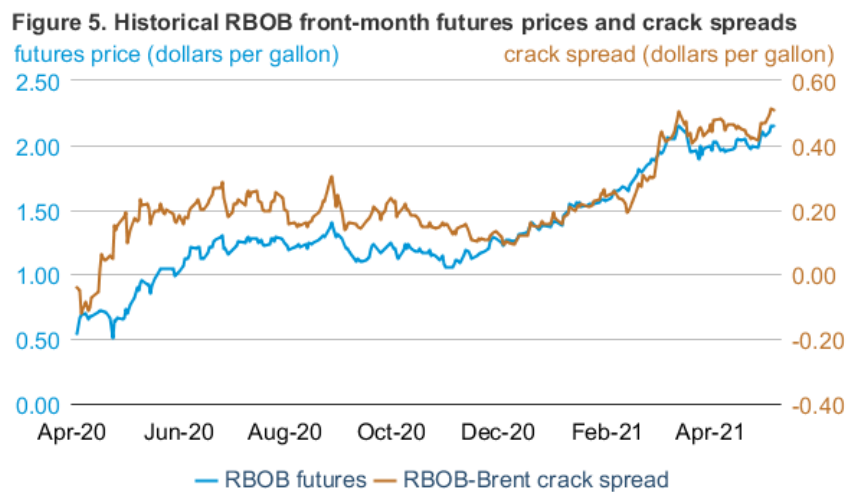
The Brent–WTI spread can reflect a wide range of factors, including the relative supply compared with demand for crude oils in their local markets—the U.S. Gulf Coast and Midwest for WTI and Northwest Europe for Brent. The spread also reflects the relative economics of shipping the two crude oils to refining markets around the world. The spread increased to more than \$3/b on a monthly average basis beginning in January 2021. After averaging \$3.38/b in



March, the April 2021 average Brent–WTI spread was \$3.63/b, a \$0.25/b monthly increase. Although the February weather events in U.S. producing regions appear to have increased volatility in the spread, the widening of the spread in March and April reflects both rising U.S. crude oil production and a longer-term widening of the spread since the fourth quarter of 2020. The spread between grades has widened each month, on average, since October 2020, after it narrowed to a monthly average of \$1.68/b in October 2020, its lowest point since the pandemic began in early 2020.

## Petroleum products

**Gasoline prices:** The front-month futures price of RBOB (the petroleum component of gasoline used in many parts of the country) settled at \$2.11 per gallon (gal) on May 6, up 9 cents/gal from April 1 (**Figure 5**). The RBOB–Brent crack spread (the difference between the price of RBOB and the price of Brent crude oil) increased by 1 cent/gal to settle at 49 cents/gal during the same period.



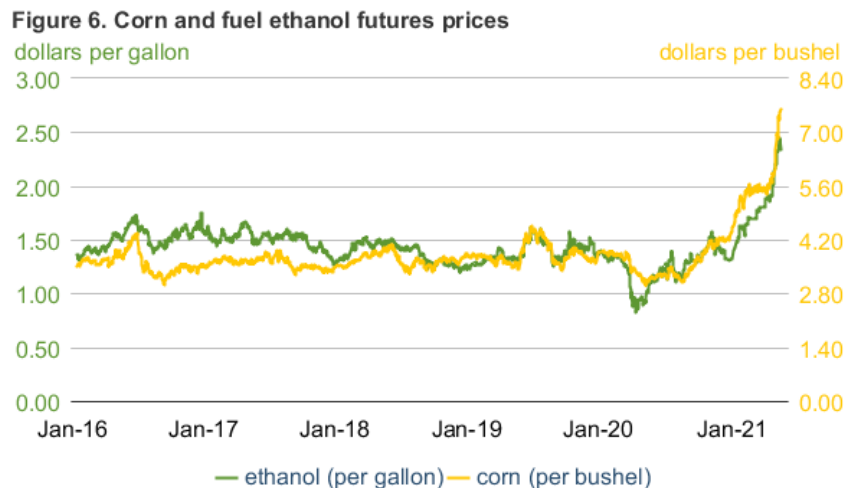
Source: CME Group, as compiled by Bloomberg L.P.  
 Note: RBOB is the petroleum component of gasoline used in many parts of the country.

The RBOB–Brent crack spread remains higher than average for this time of year, likely as a result of higher demand expectations, relatively low gasoline stocks, and higher ethanol costs. Gasoline stocks were relatively unchanged in April as the increase in consumption offset increases in production and net imports. We estimate the combined net imports of motor gasoline blending components and finished motor gasoline to be 173,000 b/d, which is higher than the five-year (2016–20) average, and we estimate production of 9.6 million b/d, the most on a monthly basis since February 2020. However, we also estimate that U.S. gasoline consumption increased to 8.8 million b/d in April, a 0.2 million b/d (2.3%) increase from March and the most gasoline consumption since February 2020. April’s gasoline stocks ended the month 3% below the month’s five-year (2016–20) average. We forecast that gasoline stocks will remain low through the rest of 2021 because of increased driving in upcoming months as a

result of typical summer travel, higher numbers of people who are willing to travel as a result of increasing vaccination rates, and continued increases in employment.

Recently, [record-high prices for Renewable Identification Number \(RIN\) credits](#) have been another contributing factor to higher-than-average RBOB prices. RINs are the compliance mechanisms used for the Renewable Fuel Standard (RFS) program, which the U.S. Environmental Protection Agency (EPA) administers. In recent years, RIN prices have typically been at a level that only minimally affected RBOB prices. In recent months, however, RIN prices have increased sharply, resulting, in part, from uncertainty concerning Renewable Volume Obligations (RVO) for 2021 and increasing ethanol feedstock costs, which have led to higher ethanol prices relative to gasoline. The higher cost of RFS compliance for gasoline producers and importers as a result of higher RIN prices may pass through to affect RBOB prices.

**Fuel ethanol and corn prices:** The front-month futures price of fuel ethanol closed higher than \$2.00/gal on April 14, 2021, for the first time since December 3, 2014. Fuel ethanol prices increased further throughout the remainder of April and settled at \$2.34 on May 6, 2021, 23 cents/gal higher than the front-month RBOB contract (**Figure 6**).

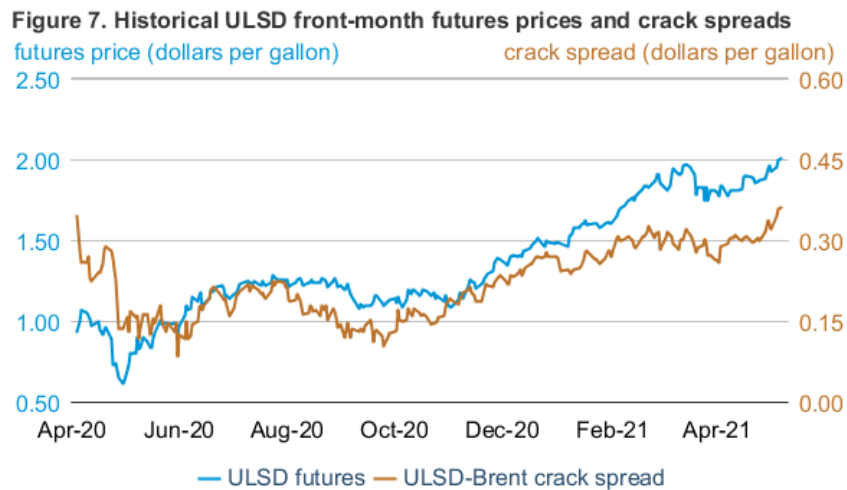


Source: CME Group, as compiled by Bloomberg L.P.  
Note: About 2.8 bushels of corn go into each gallon of ethanol.

These higher fuel ethanol prices, which have contributed to higher RIN prices, are mostly the result of higher prices for corn, which is the feedstock for fuel ethanol. On May 6, the front-month futures price of corn closed at \$7.60 per bushel, a 144% increase from \$3.12 per bushel on the same day a year ago and its highest price since November 2012. [Corn prices have been increasing](#), in part, because of factors unique to corn and grains, such as high demand in China, concerns of reduced supply in the United States as a result of cold weather in the Midwest, and lower production in Brazil as a result of hot and dry weather. Corn prices may also be increasing because of rising gasoline demand contributing to more demand for fuel ethanol blending and, therefore, more demand for corn as a feedstock.

Nevertheless, because some of the factors contributing to increased corn prices are separate from fuel ethanol demand, the fuel ethanol–corn crush spread (the difference between the price of fuel ethanol and the price of its corn inputs) has decreased and has been largely negative since November 2020. Before late 2020, the last time corn sold at a more-than 10 cent premium to fuel ethanol for at least 10 consecutive days was during the demand shock in March and April 2020. During that time, fuel ethanol production was disproportionately affected, falling by more than 45% in April 2020 compared with the previous year, but [largely tracking decreases in motor gasoline demand](#). Whereas the negative economics of blending corn ethanol likely contributed to a decrease in fuel ethanol production in April 2020, RIN prices at that time were low. In 2021 however, some portion of the currently high RIN values is likely being captured by fuel ethanol producers to offset the high operating costs and support fuel ethanol production closer to typical seasonal levels compared with last year.

**Ultra-low sulfur diesel prices:** The front-month futures price for ultra-low sulfur diesel (ULSD) for delivery in New York Harbor settled at \$1.99/gal on May 6, up 16 cents/gal from April 1 (**Figure 7**). The ULSD–Brent crack spread (the difference between the price of ULSD and the price of Brent crude oil) increased 8 cents/gal, settling at 37 cents/gal during the same period.



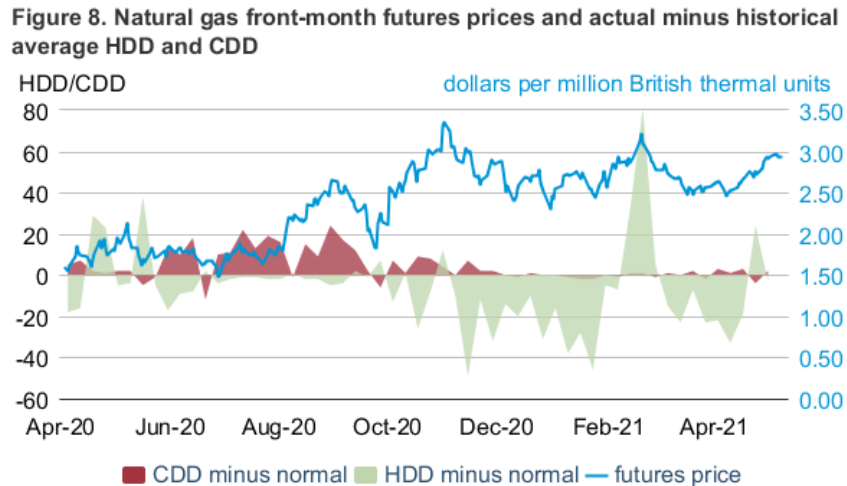
Source: CME Group, as compiled by Bloomberg L.P.  
 Note: ULSD=ultra-low sulfur diesel

The ULSD–Brent crack spread increased in the first week of May to its highest level in more than a year because of increases in consumption and exports. We estimate that U.S. distillate consumption increased to almost 4.1 million b/d in April, which, if confirmed by monthly data, is the most U.S. distillate consumption since November 2019. The increase in demand is likely related to [high freight demand](#), which we expect to continue as economic activity increases with improved vaccination and employment rates. We also estimate an increase in net exports during April to more than 0.8 million b/d, the most since September 2020, if confirmed by monthly data. The increases in U.S. consumption and exports contributed to a 9.5 million barrel (7%)

decrease in distillate stocks from March. This stock draw occurred despite an increase in distillate production.

## Natural Gas

**Prices:** The front-month natural gas futures contract for delivery at the Henry Hub settled at \$2.93 per million British thermal units (MMBtu) on May 6, 2021, which was up 29 cents/MMBtu from April 1, 2021 (**Figure 8**).

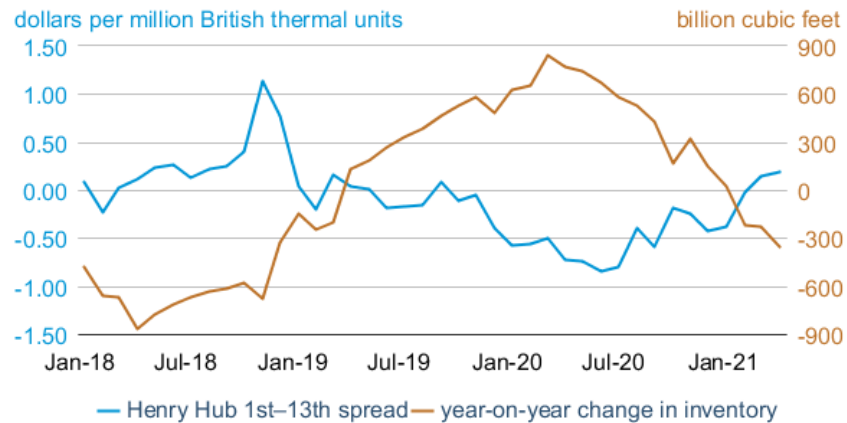


Sources: CME Group and National Oceanic and Atmospheric Administration, as compiled by Bloomberg L.P.  
 Note: HDD=heating degree days, CDD=cooling degree days.

The high levels of LNG exports have likely helped support natural gas prices. We estimate LNG exports of 9.2 million billion cubic feet per day (Bcf/d) in April, which is a decrease from the record 10.5 million Bcf/d of LNG exports in March but a 2.3 million Bcf/d (34%) increase from the previous 12-month average. April's natural gas stock builds were lower than the five-year (2016–20) average as a result of the high LNG exports, as well as lower production and seasonally-high consumption resulting from relatively cold temperatures during the week ending April 22.

**Futures price spreads:** The natural gas 1<sup>st</sup>–13<sup>th</sup> price spread averaged 19 cents per MMBtu in April, the highest backwardation (where near-term contract prices are higher than longer-dated ones) since December 2018 (**Figure 9**). Often, the 1<sup>st</sup>–13<sup>th</sup> price spread increases when natural gas inventories decrease, and the price spread often decreases when inventories increase. For example, in June 2020, when inventories were 672 billion cubic feet (Bcf) greater than their year-ago levels, the 1<sup>st</sup>–13<sup>th</sup> price spread was decreasing and averaged -84 cents/MMBtu for the month. In April 2021, natural gas inventories ended the month 353 Bcf lower than in April 2020, mostly as a result of high heating demand and production outages in February as well as several months of high export demand. Inventory draws from December through March, including February's draw that was a record high for that month, have contributed to low natural gas inventories and generally increasing front-month price spreads.

**Figure 9. Natural gas 1st–13th futures spread and year-on-year change in inventory**



Source: CME Group, as compiled by Bloomberg L.P.; U.S. Energy Information Administration  
 Note: Futures spreads are monthly averages.

We expect U.S. natural gas storage injections from April through October will be slightly less than, but close to, the five-year average injection rate for those months. In our forecast, natural gas inventories end October at 3,630 Bcf, which would be 122 Bcf (3%) less than the five-year average. We expect the slightly less-than-average storage injections to put some upward pressure on natural gas prices and that the third-quarter 2021 Henry Hub spot price will average \$2.90/MMBtu as a result.

## Notable forecast changes

- We increased our April and May U.S. gasoline consumption forecast by 140,000 b/d and 270,000 b/d, respectively. Overall, we revised up the summer (April–September) gasoline consumption forecast by 130,000 b/d from [last month](#) based on [weekly data](#) (which suggested gasoline consumption was higher than we had forecast) and IHS Markit’s upward revision in the employment forecast.
- We forecast OPEC crude oil production will average 26.9 million b/d in 2021 and 28.5 million b/d in 2022, which are 0.2 million b/d and 0.4 million b/d higher, respectively, than last month’s STEO. The higher forecast OPEC production mainly reflects our expectation that crude oil production in Iran will continue to increase, continuing the rising output trend that started in November 2020. Even though sanctions that target Iran’s crude oil exports remain in place, crude oil exports from Iran have been rising since the end of 2020, driving up crude oil production.
- Our forecast are secondary coal inventories are lower by 26 MMst (22%) in 2021 and by 20 MMst (24%) in 2022 compared with our April forecast. Lower inventories reflect EIA’s expectation that coal-fired electricity generation will increase at a faster rate than the forecast increase in coal production, which reflects a general decline in coal production capacity.

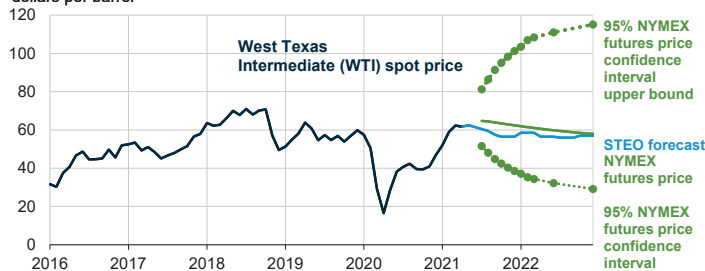
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# Short-Term Energy Outlook Chart Gallery



May 11, 2021

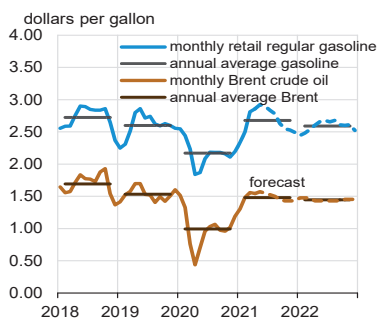
**West Texas Intermediate (WTI) crude oil price and NYMEX confidence intervals**  
dollars per barrel



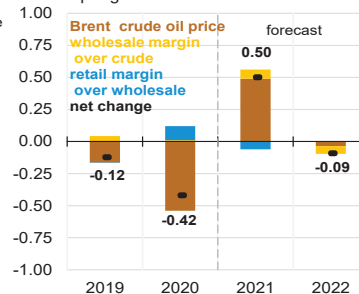
Note: Confidence interval derived from options market information for the five trading days ending May 6, 2021. Intervals not calculated for months with sparse trading in near-the-money options  
Sources: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021, CME Group, and Bloomberg, L.P.



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



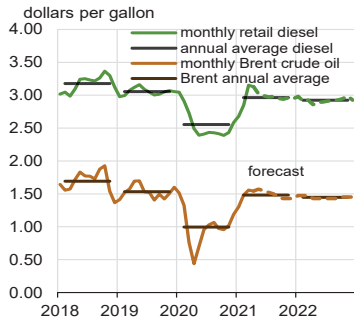
**Components of annual gasoline price changes**  
dollars per gallon



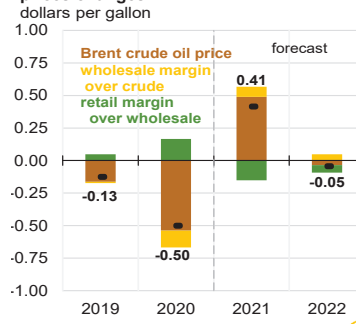
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021



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



### Components of annual diesel prices changes

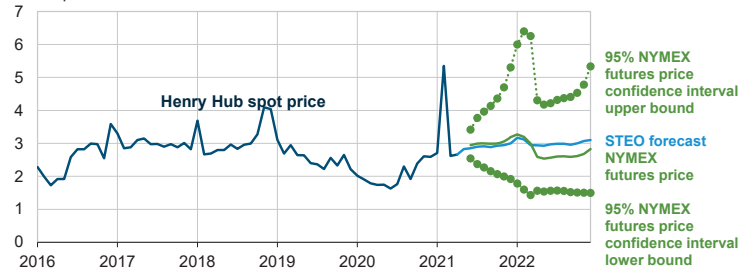


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021



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

dollars per million Btu



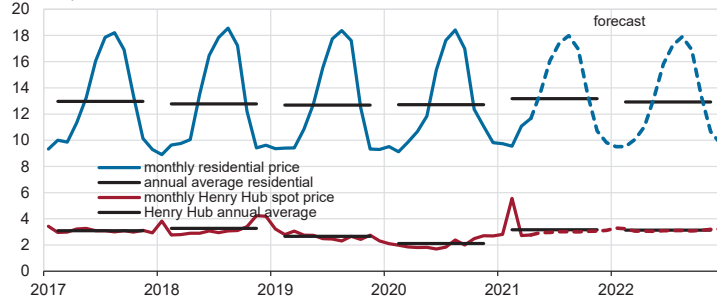
Note: Confidence interval derived from options market information for the five trading days ending May 6, 2021. Intervals not calculated for months with sparse trading in near-the-money options contracts.

Sources: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021, and CME Group



### U.S. natural gas prices

dollars per thousand cubic feet

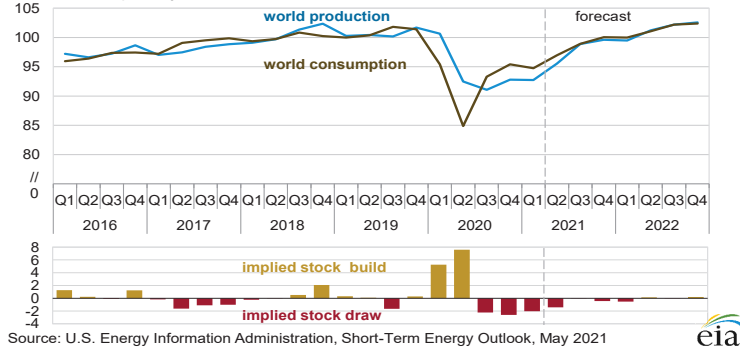


Sources: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021, and Refinitiv





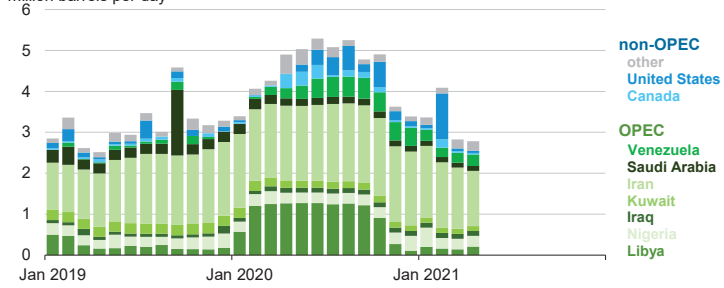
**World liquid fuels production and consumption balance**  
million barrels per day



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021



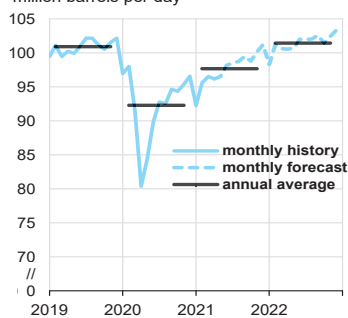
**Estimated unplanned liquid fuels production outages among OPEC and non-OPEC producers**  
million barrels per day



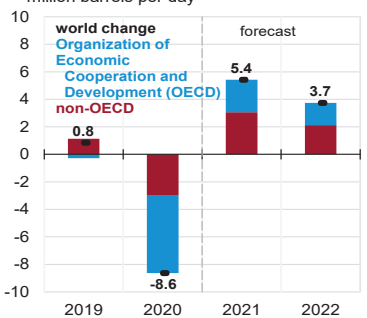
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021



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



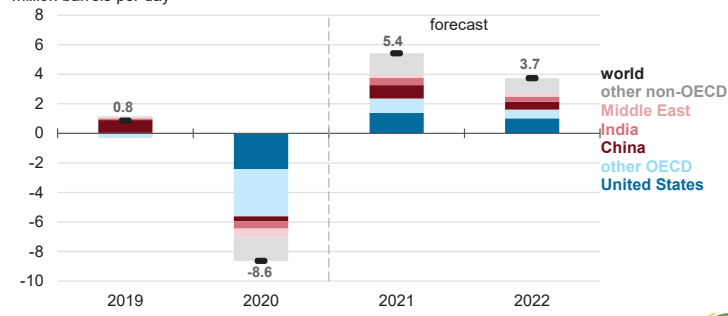
**Components of annual change**  
million barrels per day



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021



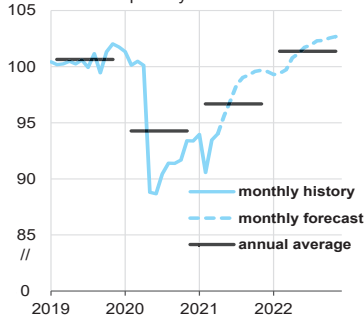
**Annual change in world liquid fuels consumption**  
million barrels per day



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021

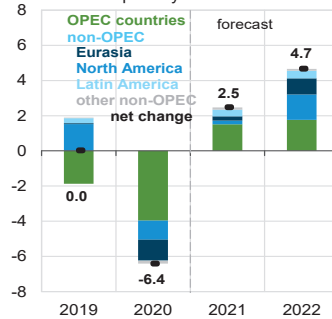


**World crude oil and liquid fuels production**  
million barrels per day

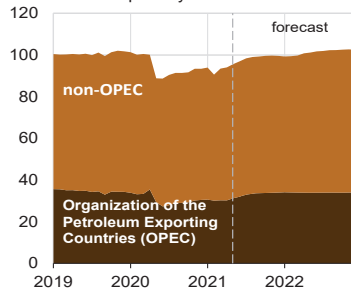


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021

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

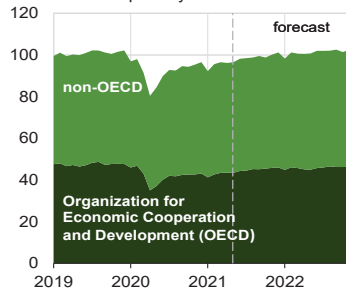


**World liquid fuels production**  
million barrels per day

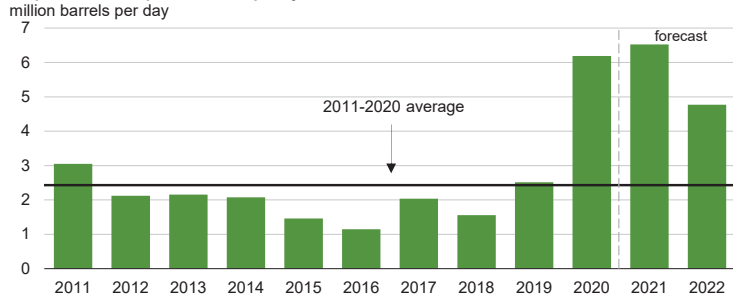


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021

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



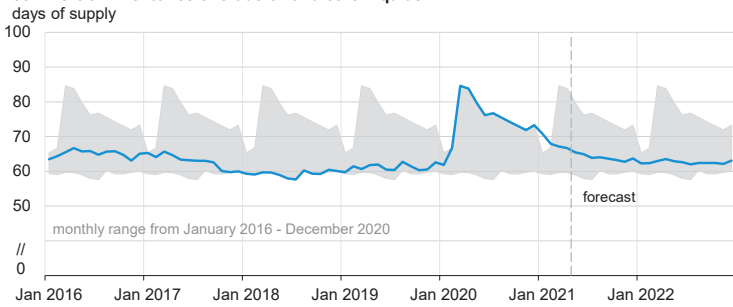
**Organization of the Petroleum Exporting Countries (OPEC)  
surplus crude oil production capacity**



Note: Black line represents 2011-2020 average (2.4 million barrels per day).  
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021



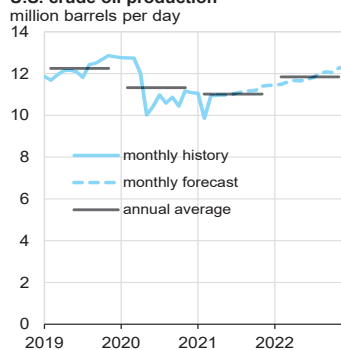
**Organization for Economic Cooperation and Development (OECD)  
commercial inventories of crude oil and other liquids**



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021

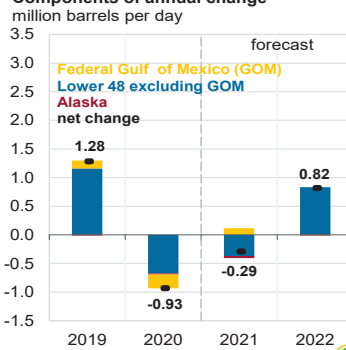


**U.S. crude oil production**

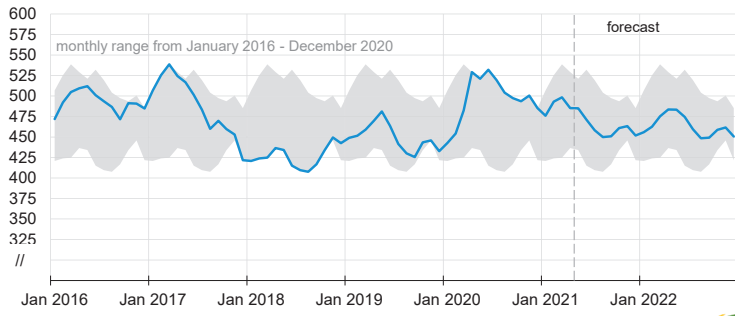


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021

**Components of annual change**



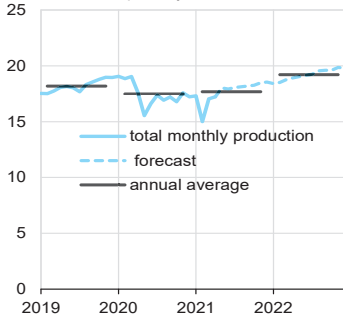
**U.S. commercial crude oil inventories**  
million barrels



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021

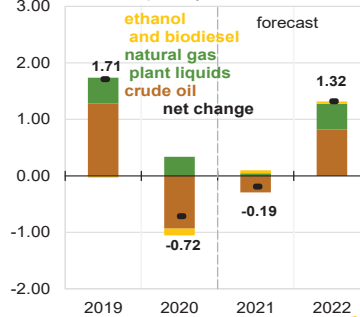


**U.S. crude oil and liquid fuels production**  
million barrels per day

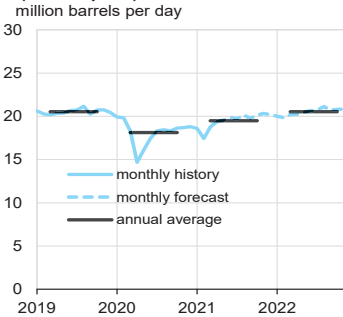


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021

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

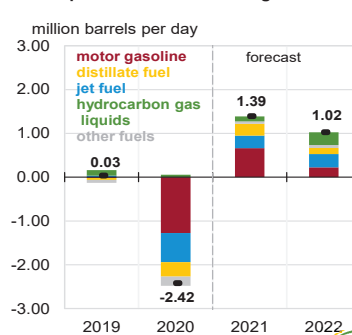


**U.S. liquid fuels product supplied (consumption)**  
million barrels per day

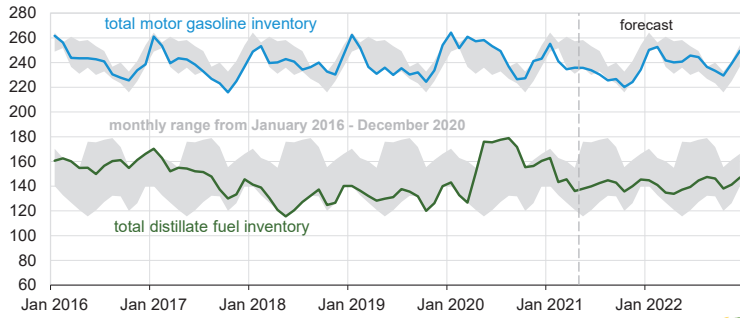


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021

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



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

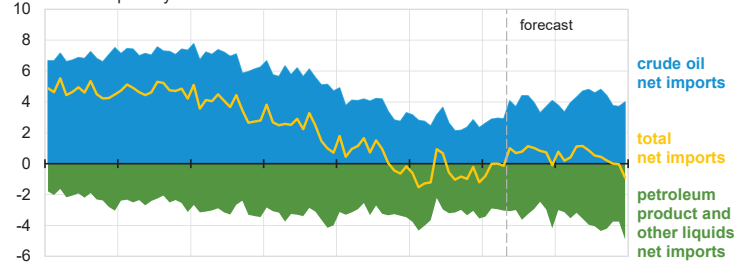


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021



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

million barrels per day



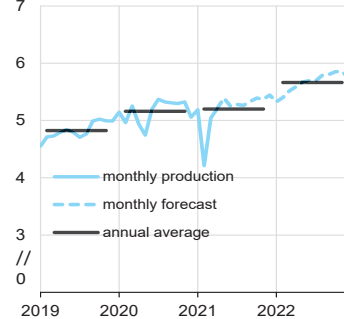
Note: Petroleum product and other liquids include: gasoline, distillate fuels, hydrocarbon gas liquids, jet fuel, residual fuel oil, unfinished oils, other hydrocarbons/oxygenates, and other oils.

Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021



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

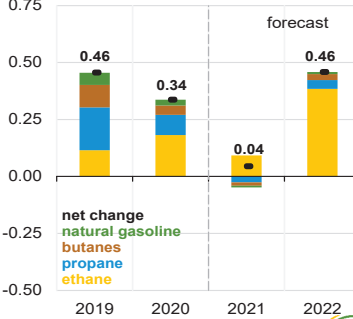
million barrels per day



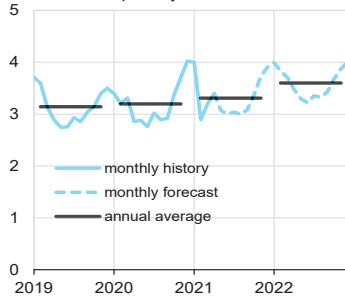
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021

**Components of annual change**

million barrels per day



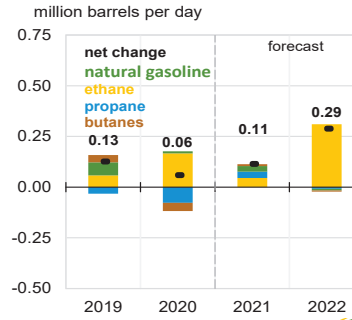
**U.S. hydrocarbon gas liquids product supplied (consumption)**  
million barrels per day



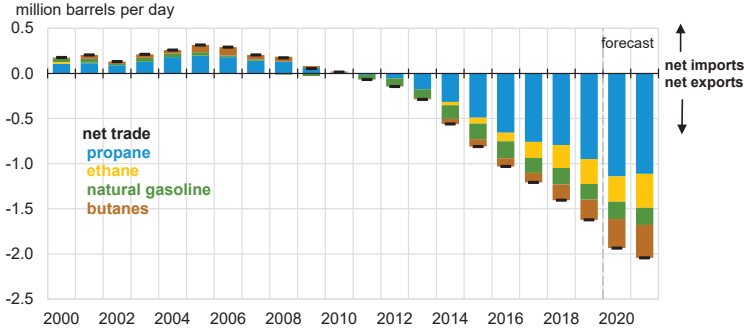
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021



**Components of annual change**



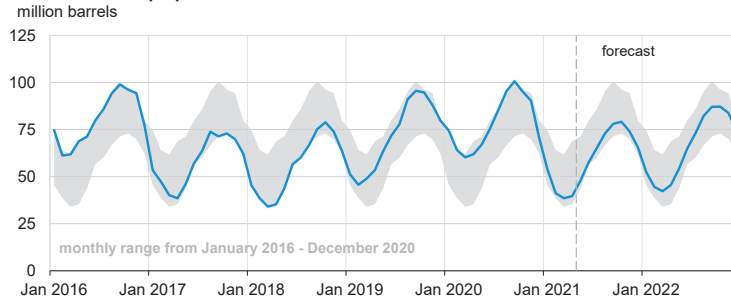
**U.S. net trade of hydrocarbon gas liquids (HGL)**



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021



**U.S. commercial propane inventories**

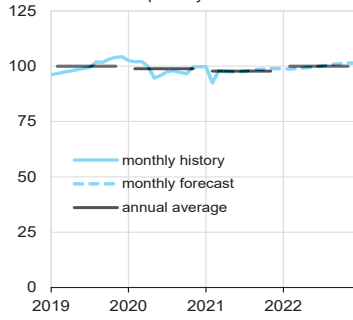


Note: Excludes propylene.

Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021



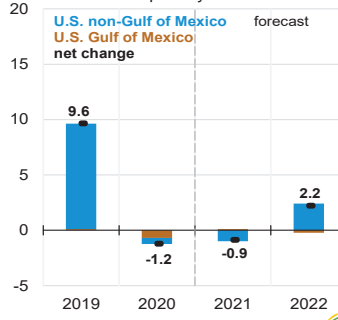
**U.S. marketed natural gas production**  
billion cubic feet per day



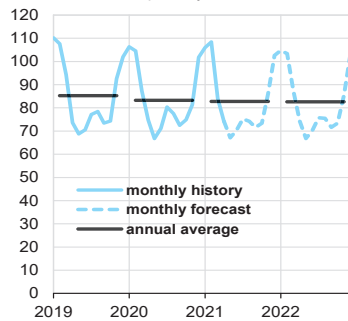
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021



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



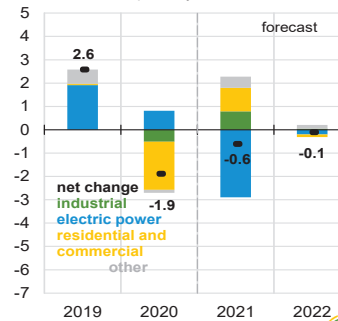
**U.S. natural gas consumption**  
billion cubic feet per day



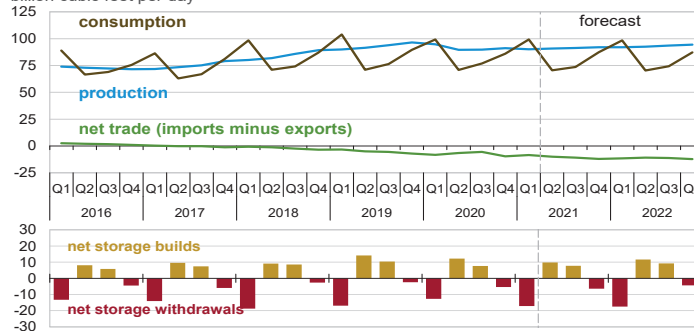
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021



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



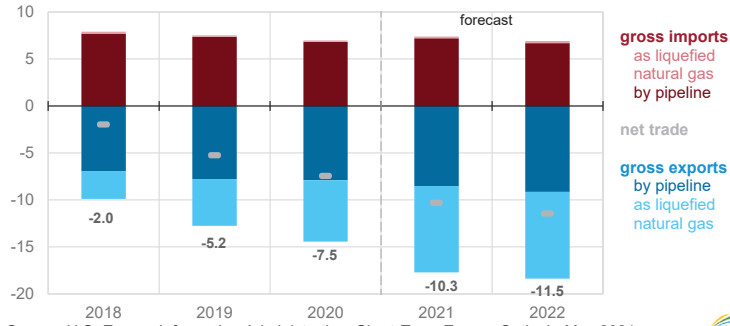
**U.S. natural gas production, consumption, and net imports**  
billion cubic feet per day



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021



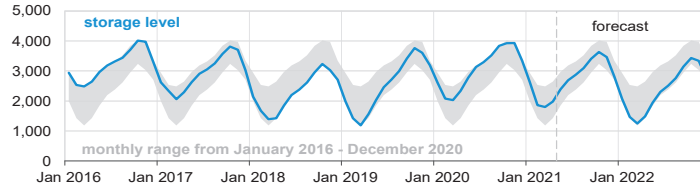
**U.S. annual natural gas trade**  
billion cubic feet per day



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021



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



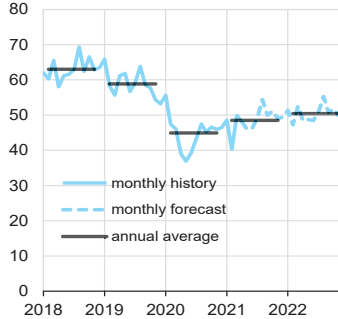
**Percent deviation from 2016 - 2020 average**



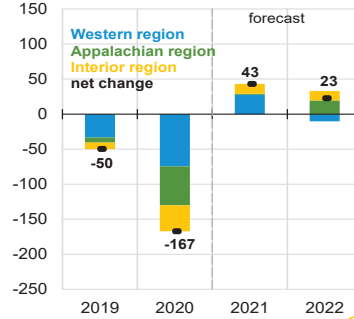
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021



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



**Components of annual change**  
million short tons

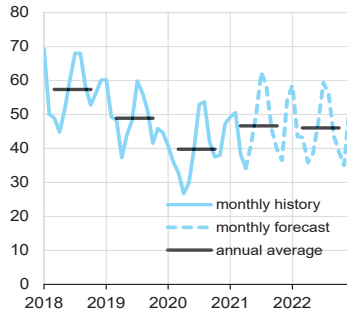


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021

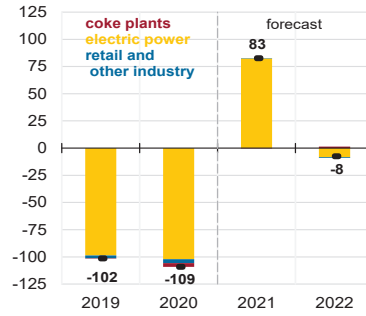




**U.S. coal consumption**  
million short tons



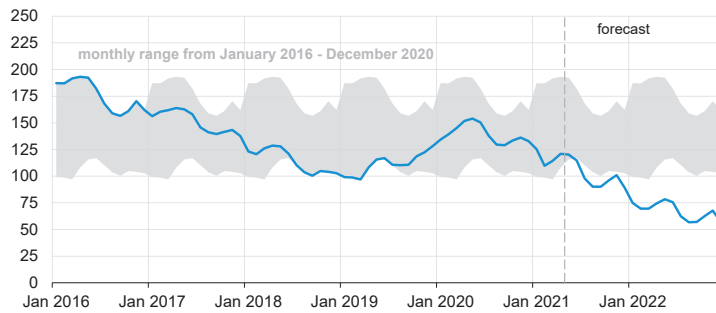
**Components of annual change**  
million short tons



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021



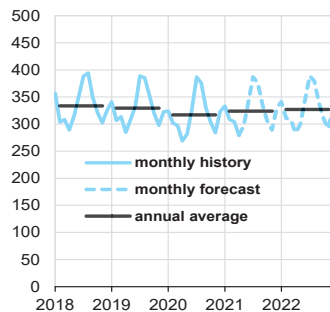
**U.S. electric power coal inventories**  
million short tons



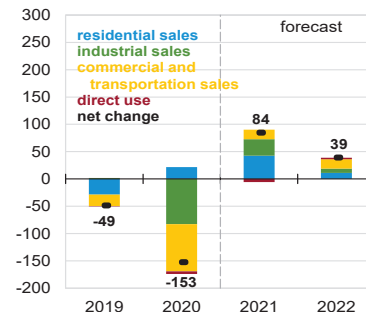
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021



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



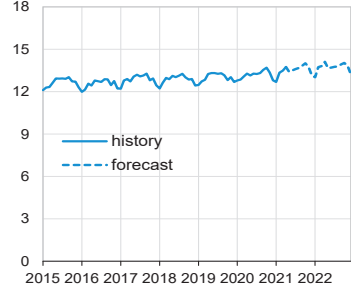
**Components of annual change**  
billion kilowatthours



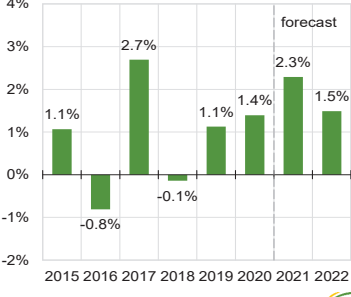
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021



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



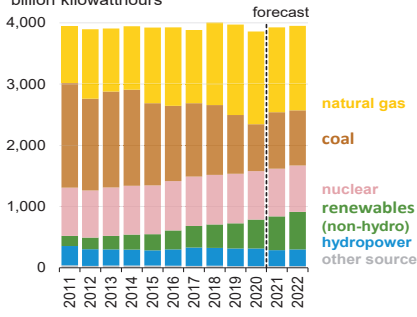
**Annual growth in residential electricity prices**  
percent



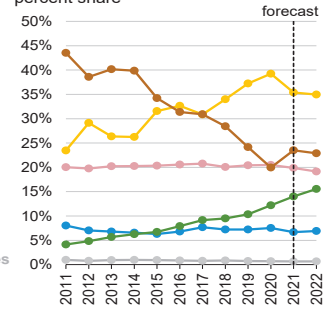
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021



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



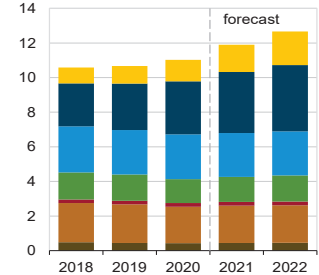
percent share



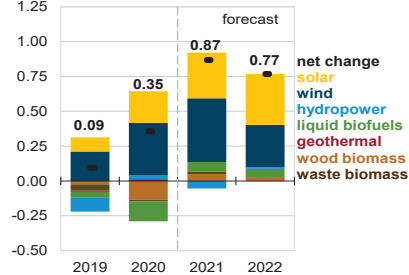
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021



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



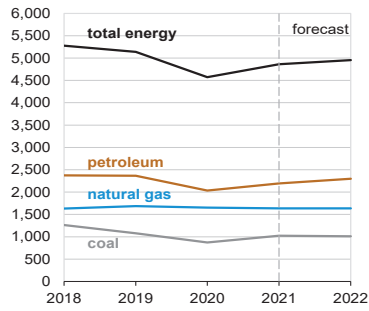
**Components of annual change**  
quadrillion British thermal units



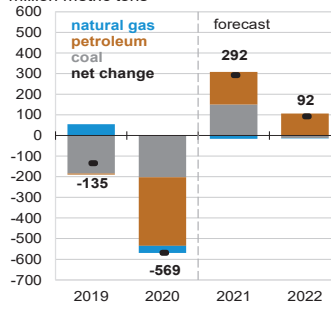
Note: Hydropower excludes pumped storage generation. Liquid biofuels include ethanol and biodiesel. Other biomass includes municipal waste from biogenic sources, landfill gas, and other non-wood waste.  
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021



**U.S. annual CO2 emissions by source**  
million metric tons



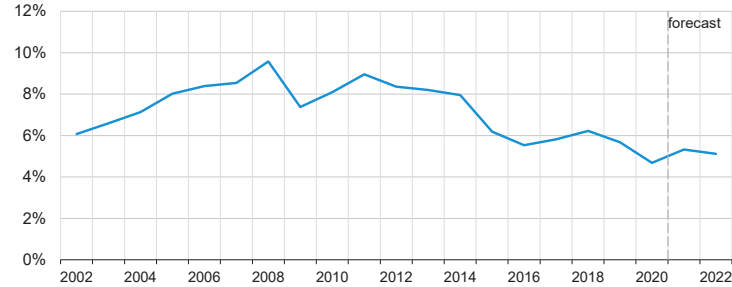
**Components of annual change**  
million metric tons



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021



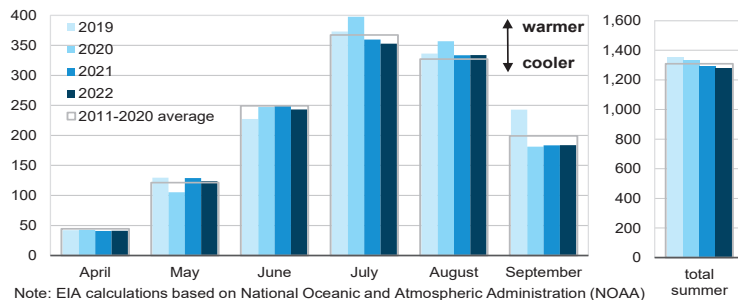
**U.S. annual energy expenditures**  
share of gross domestic product



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021



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

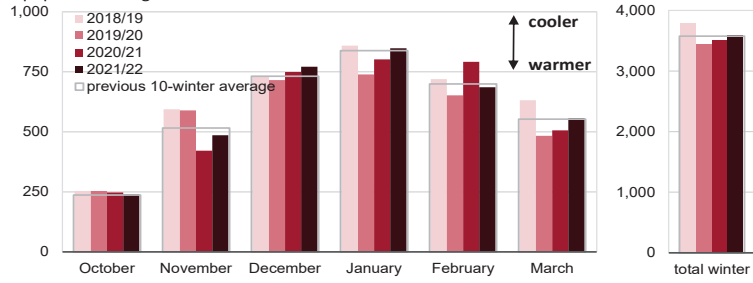


Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data. Projections reflect NOAA's 14-16 month outlook.

Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021



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

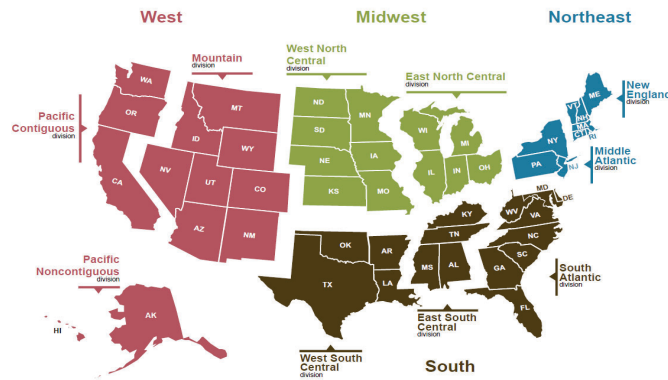


Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data. Projections reflect NOAA's 14-16 month outlook.

Source: U.S. Energy Information Administration, Short-Term Energy Outlook, May 2021



**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 - May 2021

	2020				2021				2022				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2020	2021	2022
<b>Energy Supply</b>															
Crude Oil Production (a) (million barrels per day) .....	<b>12.75</b>	<b>10.81</b>	<b>10.81</b>	<b>10.90</b>	<b>10.65</b>	<i>10.97</i>	<i>11.12</i>	<i>11.34</i>	<i>11.51</i>	<i>11.68</i>	<i>11.96</i>	<i>12.21</i>	<b>11.31</b>	<b>11.02</b>	<b>11.84</b>
Dry Natural Gas Production (billion cubic feet per day) .....	<b>94.79</b>	<b>89.68</b>	<b>89.83</b>	<b>91.15</b>	<b>90.09</b>	<i>90.75</i>	<i>91.34</i>	<i>92.03</i>	<i>91.97</i>	<i>92.54</i>	<i>93.60</i>	<i>94.36</i>	<b>91.35</b>	<b>91.06</b>	<b>93.12</b>
Coal Production (million short tons) .....	<b>149</b>	<b>115</b>	<b>136</b>	<b>139</b>	<b>139</b>	<i>140</i>	<i>154</i>	<i>150</i>	<i>151</i>	<i>146</i>	<i>157</i>	<i>151</i>	<b>539</b>	<b>582</b>	<b>605</b>
<b>Energy Consumption</b>															
Liquid Fuels (million barrels per day) .....	<b>19.33</b>	<b>16.08</b>	<b>18.36</b>	<b>18.71</b>	<b>18.31</b>	<i>19.60</i>	<i>19.88</i>	<i>20.22</i>	<i>20.03</i>	<i>20.46</i>	<i>20.84</i>	<i>20.78</i>	<b>18.12</b>	<b>19.51</b>	<b>20.53</b>
Natural Gas (billion cubic feet per day) .....	<b>99.31</b>	<b>70.84</b>	<b>76.83</b>	<b>86.08</b>	<b>99.19</b>	<i>70.53</i>	<i>73.69</i>	<i>87.38</i>	<i>98.39</i>	<i>70.42</i>	<i>74.32</i>	<i>87.21</i>	<b>83.25</b>	<b>82.64</b>	<b>82.53</b>
Coal (b) (million short tons) .....	<b>110</b>	<b>96</b>	<b>149</b>	<b>123</b>	<b>138</b>	<i>125</i>	<i>166</i>	<i>131</i>	<i>145</i>	<i>122</i>	<i>159</i>	<i>126</i>	<b>477</b>	<b>560</b>	<b>552</b>
Electricity (billion kilowatt hours per day) .....	<b>10.14</b>	<b>9.64</b>	<b>11.87</b>	<b>9.89</b>	<b>10.52</b>	<i>10.09</i>	<i>11.93</i>	<i>10.05</i>	<i>10.67</i>	<i>10.19</i>	<i>12.03</i>	<i>10.13</i>	<b>10.39</b>	<b>10.65</b>	<b>10.75</b>
Renewables (c) (quadrillion Btu) .....	<b>2.92</b>	<b>3.00</b>	<b>2.83</b>	<b>2.91</b>	<b>2.97</b>	<i>3.35</i>	<i>3.08</i>	<i>3.16</i>	<i>3.24</i>	<i>3.57</i>	<i>3.27</i>	<i>3.30</i>	<b>11.65</b>	<b>12.56</b>	<b>13.37</b>
Total Energy Consumption (d) (quadrillion Btu) .....	<b>25.10</b>	<b>20.63</b>	<b>23.42</b>	<b>23.79</b>	<b>24.70</b>	<i>22.72</i>	<i>24.08</i>	<i>24.68</i>	<i>25.53</i>	<i>23.24</i>	<i>24.50</i>	<i>24.87</i>	<b>92.94</b>	<b>96.18</b>	<b>98.14</b>
<b>Energy Prices</b>															
Crude Oil West Texas Intermediate Spot (dollars per barrel) .....	<b>45.34</b>	<b>27.96</b>	<b>40.89</b>	<b>42.50</b>	<b>58.09</b>	<i>61.89</i>	<i>59.19</i>	<i>56.50</i>	<i>58.50</i>	<i>56.50</i>	<i>56.00</i>	<i>57.00</i>	<b>39.17</b>	<b>58.91</b>	<b>56.99</b>
Natural Gas Henry Hub Spot (dollars per million Btu) .....	<b>1.91</b>	<b>1.71</b>	<b>2.00</b>	<b>2.53</b>	<b>3.56</b>	<i>2.78</i>	<i>2.90</i>	<i>2.96</i>	<i>3.08</i>	<i>2.95</i>	<i>2.98</i>	<i>3.06</i>	<b>2.03</b>	<b>3.05</b>	<b>3.02</b>
Coal (dollars per million Btu) .....	<b>1.93</b>	<b>1.91</b>	<b>1.93</b>	<b>1.92</b>	<b>1.93</b>	<i>1.98</i>	<i>1.98</i>	<i>1.95</i>	<i>1.99</i>	<i>1.99</i>	<i>1.97</i>	<i>1.95</i>	<b>1.92</b>	<b>1.96</b>	<b>1.98</b>
<b>Macroeconomic</b>															
Real Gross Domestic Product (billion chained 2012 dollars - SAAR) .....	<b>19,011</b>	<b>17,303</b>	<b>18,597</b>	<b>18,794</b>	<b>19,038</b>	<i>19,405</i>	<i>19,787</i>	<i>20,047</i>	<i>20,236</i>	<i>20,367</i>	<i>20,483</i>	<i>20,581</i>	<b>18,426</b>	<b>19,569</b>	<b>20,417</b>
Percent change from prior year .....	<b>0.3</b>	<b>-9.0</b>	<b>-2.8</b>	<b>-2.4</b>	<b>0.1</b>	<i>12.1</i>	<i>6.4</i>	<i>6.7</i>	<i>6.3</i>	<i>5.0</i>	<i>3.5</i>	<i>2.7</i>	<b>-3.5</b>	<b>6.2</b>	<b>4.3</b>
GDP Implicit Price Deflator (Index, 2012=100) .....	<b>113.4</b>	<b>112.9</b>	<b>113.8</b>	<b>114.4</b>	<b>115.4</b>	<i>116.0</i>	<i>116.5</i>	<i>117.0</i>	<i>117.5</i>	<i>118.2</i>	<i>118.8</i>	<i>119.5</i>	<b>113.6</b>	<b>116.2</b>	<b>118.5</b>
Percent change from prior year .....	<b>1.7</b>	<b>0.6</b>	<b>1.1</b>	<b>1.3</b>	<b>1.8</b>	<i>2.8</i>	<i>2.3</i>	<i>2.3</i>	<i>1.8</i>	<i>1.9</i>	<i>2.0</i>	<i>2.1</i>	<b>1.2</b>	<b>2.3</b>	<b>2.0</b>
Real Disposable Personal Income (billion chained 2012 dollars - SAAR) .....	<b>15,061</b>	<b>16,630</b>	<b>15,851</b>	<b>15,434</b>	<b>16,758</b>	<i>16,069</i>	<i>15,832</i>	<i>15,678</i>	<i>15,846</i>	<i>15,964</i>	<i>16,083</i>	<i>16,157</i>	<b>15,744</b>	<b>16,084</b>	<b>16,013</b>
Percent change from prior year .....	<b>1.4</b>	<b>12.2</b>	<b>6.4</b>	<b>3.1</b>	<b>11.3</b>	<i>-3.4</i>	<i>-0.1</i>	<i>1.6</i>	<i>-5.4</i>	<i>-0.6</i>	<i>1.6</i>	<i>3.1</i>	<b>5.8</b>	<b>2.2</b>	<b>-0.4</b>
Manufacturing Production Index (Index, 2012=100) .....	<b>104.4</b>	<b>89.3</b>	<b>100.1</b>	<b>103.1</b>	<b>103.7</b>	<i>105.3</i>	<i>107.6</i>	<i>109.0</i>	<i>109.9</i>	<i>110.6</i>	<i>111.0</i>	<i>111.3</i>	<b>99.2</b>	<b>106.4</b>	<b>110.7</b>
Percent change from prior year .....	<b>-2.0</b>	<b>-15.5</b>	<b>-5.5</b>	<b>-2.6</b>	<b>-0.6</b>	<i>17.9</i>	<i>7.5</i>	<i>5.7</i>	<i>6.0</i>	<i>5.0</i>	<i>3.1</i>	<i>2.2</i>	<b>-6.4</b>	<b>7.2</b>	<b>4.0</b>
<b>Weather</b>															
U.S. Heating Degree-Days .....	<b>1,875</b>	<b>540</b>	<b>70</b>	<b>1,418</b>	<b>2,099</b>	<i>453</i>	<i>69</i>	<i>1,496</i>	<i>2,090</i>	<i>478</i>	<i>69</i>	<i>1,494</i>	<b>3,903</b>	<b>4,117</b>	<b>4,131</b>
U.S. Cooling Degree-Days .....	<b>71</b>	<b>396</b>	<b>936</b>	<b>123</b>	<b>50</b>	<i>419</i>	<i>877</i>	<i>100</i>	<i>46</i>	<i>408</i>	<i>871</i>	<i>100</i>	<b>1,525</b>	<b>1,445</b>	<b>1,425</b>

(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).

(e) Refers to the refiner average acquisition cost (RAC) of crude oil.

- = no data available

Notes: EIA completed modeling and analysis for this report on Thursday May 6, 2021.

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

Prices are not adjusted for inflation.

**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.

**Forecasts:** EIA Short-Term Integrated Forecasting System. U.S. macroeconomic forecasts are based on the IHS Markit model of the U.S. Economy.

Weather forecasts from National Oceanic and Atmospheric Administration.

**Table 2. Energy Prices**

U.S. Energy Information Administration | Short-Term Energy Outlook - May 2021

	2020				2021				2022				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2020	2021	2022
<b>Crude Oil</b> (dollars per barrel)															
West Texas Intermediate Spot Average .....	<b>45.34</b>	<b>27.96</b>	<b>40.89</b>	<b>42.50</b>	<b>58.09</b>	<i>61.89</i>	<i>59.19</i>	<i>56.50</i>	<i>58.50</i>	<i>56.50</i>	<i>56.00</i>	<i>57.00</i>	<b>39.17</b>	<i>58.91</i>	<i>56.99</i>
Brent Spot Average .....	<b>49.97</b>	<b>29.52</b>	<b>42.97</b>	<b>44.34</b>	<b>61.12</b>	<i>65.25</i>	<i>62.69</i>	<i>60.00</i>	<i>62.00</i>	<i>60.00</i>	<i>60.00</i>	<i>61.00</i>	<b>41.69</b>	<i>62.26</i>	<i>60.74</i>
U.S. Imported Average .....	<b>43.76</b>	<b>26.33</b>	<b>39.90</b>	<b>40.64</b>	<b>55.89</b>	<i>59.95</i>	<i>57.24</i>	<i>54.50</i>	<i>56.25</i>	<i>54.25</i>	<i>53.50</i>	<i>54.50</i>	<b>37.26</b>	<i>56.94</i>	<i>54.54</i>
U.S. Refiner Average Acquisition Cost .....	<b>47.48</b>	<b>26.88</b>	<b>40.79</b>	<b>42.09</b>	<b>56.85</b>	<i>60.91</i>	<i>58.21</i>	<i>55.50</i>	<i>57.25</i>	<i>55.25</i>	<i>54.50</i>	<i>55.50</i>	<b>39.75</b>	<i>57.90</i>	<i>55.58</i>
<b>U.S. Liquid Fuels</b> (cents per gallon)															
<b>Refiner Prices for Resale</b>															
Gasoline .....	<b>153</b>	<b>104</b>	<b>137</b>	<b>133</b>	<b>181</b>	<i>209</i>	<i>194</i>	<i>172</i>	<i>174</i>	<i>184</i>	<i>186</i>	<i>176</i>	<b>133</b>	<i>189</i>	<i>180</i>
Diesel Fuel .....	<b>160</b>	<b>97</b>	<b>124</b>	<b>133</b>	<b>175</b>	<i>191</i>	<i>190</i>	<i>185</i>	<i>188</i>	<i>185</i>	<i>186</i>	<i>188</i>	<b>129</b>	<i>186</i>	<i>187</i>
Fuel Oil .....	<b>160</b>	<b>87</b>	<b>113</b>	<b>121</b>	<b>166</b>	<i>181</i>	<i>183</i>	<i>181</i>	<i>184</i>	<i>175</i>	<i>175</i>	<i>180</i>	<b>125</b>	<i>178</i>	<i>180</i>
<b>Refiner Prices to End Users</b>															
Jet Fuel .....	<b>165</b>	<b>85</b>	<b>116</b>	<b>125</b>	<b>161</b>	<i>179</i>	<i>181</i>	<i>178</i>	<i>185</i>	<i>183</i>	<i>183</i>	<i>186</i>	<b>131</b>	<i>176</i>	<i>185</i>
No. 6 Residual Fuel Oil (a) .....	<b>176</b>	<b>93</b>	<b>116</b>	<b>119</b>	<b>154</b>	<i>147</i>	<i>140</i>	<i>133</i>	<i>134</i>	<i>134</i>	<i>130</i>	<i>132</i>	<b>125</b>	<i>143</i>	<i>132</i>
<b>Retail Prices Including Taxes</b>															
Gasoline Regular Grade (b) .....	<b>241</b>	<b>194</b>	<b>218</b>	<b>215</b>	<b>256</b>	<i>289</i>	<i>275</i>	<i>252</i>	<i>249</i>	<i>265</i>	<i>265</i>	<i>258</i>	<b>218</b>	<i>268</i>	<i>259</i>
Gasoline All Grades (b) .....	<b>251</b>	<b>203</b>	<b>227</b>	<b>224</b>	<b>265</b>	<i>299</i>	<i>287</i>	<i>265</i>	<i>262</i>	<i>278</i>	<i>278</i>	<i>272</i>	<b>227</b>	<i>280</i>	<i>273</i>
On-highway Diesel Fuel .....	<b>289</b>	<b>243</b>	<b>243</b>	<b>246</b>	<b>290</b>	<i>305</i>	<i>297</i>	<i>295</i>	<i>294</i>	<i>288</i>	<i>292</i>	<i>295</i>	<b>255</b>	<i>297</i>	<i>292</i>
Heating Oil .....	<b>280</b>	<b>200</b>	<b>214</b>	<b>230</b>	<b>273</b>	<i>289</i>	<i>297</i>	<i>313</i>	<i>310</i>	<i>285</i>	<i>271</i>	<i>275</i>	<b>244</b>	<i>289</i>	<i>292</i>
<b>Natural Gas</b>															
Henry Hub Spot (dollars per thousand cubic feet) .....	<b>1.98</b>	<b>1.77</b>	<b>2.07</b>	<b>2.63</b>	<b>3.70</b>	<i>2.89</i>	<i>3.01</i>	<i>3.08</i>	<i>3.20</i>	<i>3.06</i>	<i>3.10</i>	<i>3.18</i>	<b>2.11</b>	<i>3.17</i>	<i>3.13</i>
Henry Hub Spot (dollars per million Btu) .....	<b>1.91</b>	<b>1.71</b>	<b>2.00</b>	<b>2.53</b>	<b>3.56</b>	<i>2.78</i>	<i>2.90</i>	<i>2.96</i>	<i>3.08</i>	<i>2.95</i>	<i>2.98</i>	<i>3.06</i>	<b>2.03</b>	<i>3.05</i>	<i>3.02</i>
<b>U.S. Retail Prices</b> (dollars per thousand cubic feet)															
Industrial Sector .....	<b>3.52</b>	<b>2.85</b>	<b>2.88</b>	<b>3.77</b>	<b>5.78</b>	<i>3.90</i>	<i>3.96</i>	<i>4.28</i>	<i>4.53</i>	<i>4.00</i>	<i>3.94</i>	<i>4.27</i>	<b>3.29</b>	<i>4.50</i>	<i>4.20</i>
Commercial Sector .....	<b>7.13</b>	<b>7.63</b>	<b>8.49</b>	<b>7.53</b>	<b>7.75</b>	<i>8.52</i>	<i>8.91</i>	<i>7.91</i>	<i>7.69</i>	<i>8.12</i>	<i>8.54</i>	<i>7.65</i>	<b>7.48</b>	<i>8.05</i>	<i>7.84</i>
Residential Sector .....	<b>9.46</b>	<b>11.89</b>	<b>17.65</b>	<b>10.60</b>	<b>9.98</b>	<i>13.16</i>	<i>17.42</i>	<i>10.66</i>	<i>9.66</i>	<i>12.62</i>	<i>17.34</i>	<i>10.60</i>	<b>10.83</b>	<i>11.16</i>	<i>10.97</i>
<b>U.S. Electricity</b>															
<b>Power Generation Fuel Costs</b> (dollars per million Btu)															
Coal .....	<b>1.93</b>	<b>1.91</b>	<b>1.93</b>	<b>1.92</b>	<b>1.93</b>	<i>1.98</i>	<i>1.98</i>	<i>1.95</i>	<i>1.99</i>	<i>1.99</i>	<i>1.97</i>	<i>1.95</i>	<b>1.92</b>	<i>1.96</i>	<i>1.98</i>
Natural Gas .....	<b>2.39</b>	<b>2.08</b>	<b>2.26</b>	<b>2.87</b>	<b>8.23</b>	<i>3.45</i>	<i>3.12</i>	<i>3.31</i>	<i>3.65</i>	<i>3.19</i>	<i>3.16</i>	<i>3.39</i>	<b>2.39</b>	<i>4.41</i>	<i>3.33</i>
Residual Fuel Oil (c) .....	<b>12.15</b>	<b>6.65</b>	<b>8.85</b>	<b>8.90</b>	<b>10.52</b>	<i>12.48</i>	<i>11.90</i>	<i>11.23</i>	<i>11.51</i>	<i>12.14</i>	<i>11.36</i>	<i>11.23</i>	<b>9.15</b>	<i>11.48</i>	<i>11.54</i>
Distillate Fuel Oil .....	<b>13.27</b>	<b>8.39</b>	<b>10.37</b>	<b>10.54</b>	<b>13.53</b>	<i>14.87</i>	<i>14.77</i>	<i>14.49</i>	<i>14.68</i>	<i>14.50</i>	<i>14.47</i>	<i>14.68</i>	<b>10.73</b>	<i>14.27</i>	<i>14.59</i>
<b>Retail Prices</b> (cents per kilowatt-hour)															
Industrial Sector .....	<b>6.38</b>	<b>6.63</b>	<b>7.08</b>	<b>6.53</b>	<b>7.14</b>	<i>6.91</i>	<i>7.19</i>	<i>6.57</i>	<i>6.90</i>	<i>7.00</i>	<i>7.19</i>	<i>6.58</i>	<b>6.66</b>	<i>6.96</i>	<i>6.92</i>
Commercial Sector .....	<b>10.33</b>	<b>10.63</b>	<b>10.97</b>	<b>10.62</b>	<b>10.92</b>	<i>10.96</i>	<i>11.41</i>	<i>11.01</i>	<i>11.22</i>	<i>11.18</i>	<i>11.50</i>	<i>11.08</i>	<b>10.65</b>	<i>11.09</i>	<i>11.25</i>
Residential Sector .....	<b>12.90</b>	<b>13.24</b>	<b>13.35</b>	<b>13.25</b>	<b>13.14</b>	<i>13.54</i>	<i>13.69</i>	<i>13.59</i>	<i>13.49</i>	<i>13.81</i>	<i>13.82</i>	<i>13.67</i>	<b>13.20</b>	<i>13.50</i>	<i>13.70</i>

(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.

- = no data available

Notes: EIA completed modeling and analysis for this report on Thursday May 6, 2021.

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

Prices are not adjusted for inflation; 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.

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

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

**Forecasts:** EIA Short-Term Integrated Forecasting System.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - May 2021

	2020				2021				2022				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2020	2021	2022
<b>Supply (million barrels per day) (a)</b>															
OECD .....	<b>32.95</b>	<b>29.44</b>	<b>29.98</b>	<b>30.69</b>	<b>30.15</b>	<i>30.67</i>	<i>31.33</i>	<i>31.80</i>	<i>31.96</i>	<i>32.29</i>	<i>32.66</i>	<i>33.20</i>	<b>30.76</b>	<b>30.99</b>	<b>32.53</b>
U.S. (50 States) .....	<b>20.22</b>	<b>17.58</b>	<b>18.30</b>	<b>18.31</b>	<b>17.57</b>	<i>18.61</i>	<i>18.78</i>	<i>19.09</i>	<i>19.26</i>	<i>19.73</i>	<i>20.19</i>	<i>20.51</i>	<b>18.60</b>	<b>18.52</b>	<b>19.93</b>
Canada .....	<b>5.65</b>	<b>4.92</b>	<b>4.95</b>	<b>5.56</b>	<b>5.66</b>	<i>5.26</i>	<i>5.74</i>	<i>5.77</i>	<i>5.81</i>	<i>5.78</i>	<i>5.80</i>	<i>5.83</i>	<b>5.27</b>	<b>5.61</b>	<b>5.80</b>
Mexico .....	<b>2.00</b>	<b>1.94</b>	<b>1.91</b>	<b>1.90</b>	<b>1.93</b>	<i>1.91</i>	<i>1.88</i>	<i>1.84</i>	<i>1.78</i>	<i>1.74</i>	<i>1.71</i>	<i>1.68</i>	<b>1.94</b>	<b>1.89</b>	<b>1.73</b>
Other OECD .....	<b>5.08</b>	<b>5.00</b>	<b>4.82</b>	<b>4.92</b>	<b>4.99</b>	<i>4.88</i>	<i>4.92</i>	<i>5.10</i>	<i>5.11</i>	<i>5.03</i>	<i>4.95</i>	<i>5.18</i>	<b>4.95</b>	<b>4.97</b>	<b>5.07</b>
Non-OECD .....	<b>67.71</b>	<b>63.05</b>	<b>61.09</b>	<b>62.12</b>	<b>62.58</b>	<i>64.87</i>	<i>67.55</i>	<i>67.81</i>	<i>67.52</i>	<i>68.94</i>	<i>69.52</i>	<i>69.38</i>	<b>63.48</b>	<b>65.72</b>	<b>68.85</b>
OPEC .....	<b>33.49</b>	<b>30.71</b>	<b>28.64</b>	<b>29.99</b>	<b>30.34</b>	<i>31.18</i>	<i>33.37</i>	<i>33.92</i>	<i>34.06</i>	<i>33.92</i>	<i>33.95</i>	<i>33.99</i>	<b>30.70</b>	<b>32.22</b>	<b>33.98</b>
Crude Oil Portion .....	<b>28.28</b>	<b>25.65</b>	<b>23.63</b>	<b>24.88</b>	<b>25.08</b>	<i>25.93</i>	<i>28.05</i>	<i>28.55</i>	<i>28.47</i>	<i>28.47</i>	<i>28.47</i>	<i>28.47</i>	<b>25.60</b>	<b>26.92</b>	<b>28.47</b>
Other Liquids (b) .....	<b>5.21</b>	<b>5.07</b>	<b>5.02</b>	<b>5.12</b>	<b>5.26</b>	<i>5.25</i>	<i>5.32</i>	<i>5.37</i>	<i>5.58</i>	<i>5.45</i>	<i>5.48</i>	<i>5.52</i>	<b>5.10</b>	<b>5.30</b>	<b>5.51</b>
Eurasia .....	<b>14.73</b>	<b>13.18</b>	<b>12.72</b>	<b>13.13</b>	<b>13.39</b>	<i>13.70</i>	<i>13.74</i>	<i>13.90</i>	<i>14.07</i>	<i>14.66</i>	<i>14.82</i>	<i>14.95</i>	<b>13.44</b>	<b>13.68</b>	<b>14.63</b>
China .....	<b>4.96</b>	<b>4.91</b>	<b>4.95</b>	<b>4.90</b>	<b>5.05</b>	<i>4.98</i>	<i>4.98</i>	<i>5.03</i>	<i>5.00</i>	<i>5.03</i>	<i>5.03</i>	<i>5.07</i>	<b>4.93</b>	<b>5.01</b>	<b>5.03</b>
Other Non-OECD .....	<b>14.52</b>	<b>14.24</b>	<b>14.78</b>	<b>14.09</b>	<b>13.80</b>	<i>15.01</i>	<i>15.46</i>	<i>14.97</i>	<i>14.40</i>	<i>15.33</i>	<i>15.72</i>	<i>15.36</i>	<b>14.41</b>	<b>14.81</b>	<b>15.21</b>
Total World Supply .....	<b>100.66</b>	<b>92.49</b>	<b>91.07</b>	<b>92.81</b>	<b>92.73</b>	<i>95.54</i>	<i>98.88</i>	<i>99.61</i>	<i>99.48</i>	<i>101.22</i>	<i>102.18</i>	<i>102.58</i>	<b>94.24</b>	<b>96.72</b>	<b>101.38</b>
Non-OPEC Supply .....	<b>67.17</b>	<b>61.77</b>	<b>62.42</b>	<b>62.82</b>	<b>62.39</b>	<i>64.36</i>	<i>65.51</i>	<i>65.69</i>	<i>65.43</i>	<i>67.31</i>	<i>68.23</i>	<i>68.58</i>	<b>63.54</b>	<b>64.50</b>	<b>67.40</b>
<b>Consumption (million barrels per day) (c)</b>															
OECD .....	<b>45.28</b>	<b>37.43</b>	<b>42.10</b>	<b>42.83</b>	<b>42.47</b>	<i>43.78</i>	<i>44.99</i>	<i>45.79</i>	<i>45.55</i>	<i>45.29</i>	<i>46.28</i>	<i>46.40</i>	<b>41.91</b>	<b>44.27</b>	<b>45.88</b>
U.S. (50 States) .....	<b>19.33</b>	<b>16.08</b>	<b>18.36</b>	<b>18.71</b>	<b>18.31</b>	<i>19.60</i>	<i>19.88</i>	<i>20.22</i>	<i>20.03</i>	<i>20.46</i>	<i>20.84</i>	<i>20.78</i>	<b>18.12</b>	<b>19.51</b>	<b>20.53</b>
U.S. Territories .....	<b>0.17</b>	<b>0.15</b>	<b>0.16</b>	<b>0.17</b>	<b>0.20</b>	<i>0.18</i>	<i>0.18</i>	<i>0.19</i>	<i>0.20</i>	<i>0.18</i>	<i>0.19</i>	<i>0.20</i>	<b>0.16</b>	<b>0.19</b>	<b>0.19</b>
Canada .....	<b>2.33</b>	<b>1.88</b>	<b>2.16</b>	<b>2.05</b>	<b>2.11</b>	<i>2.19</i>	<i>2.29</i>	<i>2.29</i>	<i>2.28</i>	<i>2.23</i>	<i>2.33</i>	<i>2.32</i>	<b>2.10</b>	<b>2.22</b>	<b>2.29</b>
Europe .....	<b>13.35</b>	<b>11.04</b>	<b>12.85</b>	<b>12.54</b>	<b>12.22</b>	<i>12.77</i>	<i>13.38</i>	<i>13.31</i>	<i>13.08</i>	<i>13.27</i>	<i>13.66</i>	<i>13.37</i>	<b>12.45</b>	<b>12.92</b>	<b>13.35</b>
Japan .....	<b>3.69</b>	<b>2.89</b>	<b>3.03</b>	<b>3.50</b>	<b>3.66</b>	<i>3.00</i>	<i>3.13</i>	<i>3.45</i>	<i>3.67</i>	<i>3.01</i>	<i>3.09</i>	<i>3.40</i>	<b>3.27</b>	<b>3.31</b>	<b>3.29</b>
Other OECD .....	<b>6.41</b>	<b>5.41</b>	<b>5.55</b>	<b>5.87</b>	<b>5.98</b>	<i>6.04</i>	<i>6.12</i>	<i>6.33</i>	<i>6.29</i>	<i>6.13</i>	<i>6.17</i>	<i>6.33</i>	<b>5.81</b>	<b>6.12</b>	<b>6.23</b>
Non-OECD .....	<b>50.13</b>	<b>47.45</b>	<b>51.21</b>	<b>52.59</b>	<b>52.29</b>	<i>53.18</i>	<i>53.92</i>	<i>54.25</i>	<i>54.45</i>	<i>55.79</i>	<i>55.92</i>	<i>55.99</i>	<b>50.35</b>	<b>53.42</b>	<b>55.54</b>
Eurasia .....	<b>4.86</b>	<b>4.48</b>	<b>5.28</b>	<b>5.17</b>	<b>4.92</b>	<i>5.01</i>	<i>5.40</i>	<i>5.24</i>	<i>5.09</i>	<i>5.17</i>	<i>5.58</i>	<i>5.43</i>	<b>4.95</b>	<b>5.15</b>	<b>5.32</b>
Europe .....	<b>0.71</b>	<b>0.69</b>	<b>0.71</b>	<b>0.72</b>	<b>0.72</b>	<i>0.73</i>	<i>0.73</i>	<i>0.74</i>	<i>0.74</i>	<i>0.74</i>	<i>0.76</i>	<i>0.76</i>	<b>0.71</b>	<b>0.73</b>	<b>0.75</b>
China .....	<b>13.89</b>	<b>14.08</b>	<b>14.65</b>	<b>15.11</b>	<b>15.10</b>	<i>15.51</i>	<i>15.22</i>	<i>15.51</i>	<i>15.80</i>	<i>16.02</i>	<i>15.70</i>	<i>15.94</i>	<b>14.43</b>	<b>15.34</b>	<b>15.86</b>
Other Asia .....	<b>13.16</b>	<b>11.64</b>	<b>12.60</b>	<b>13.61</b>	<b>13.88</b>	<i>13.86</i>	<i>13.79</i>	<i>14.22</i>	<i>14.68</i>	<i>14.91</i>	<i>14.48</i>	<i>14.89</i>	<b>12.75</b>	<b>13.94</b>	<b>14.74</b>
Other Non-OECD .....	<b>17.53</b>	<b>16.55</b>	<b>17.98</b>	<b>17.99</b>	<b>17.65</b>	<i>18.09</i>	<i>18.77</i>	<i>18.54</i>	<i>18.14</i>	<i>18.95</i>	<i>19.40</i>	<i>18.98</i>	<b>17.51</b>	<b>18.27</b>	<b>18.87</b>
Total World Consumption .....	<b>95.41</b>	<b>84.88</b>	<b>93.31</b>	<b>95.42</b>	<b>94.76</b>	<i>96.96</i>	<i>98.91</i>	<i>100.05</i>	<i>100.00</i>	<i>101.08</i>	<i>102.19</i>	<i>102.39</i>	<b>92.27</b>	<b>97.69</b>	<b>101.42</b>
<b>Total Crude Oil and Other Liquids Inventory Net Withdrawals (million barrels per day)</b>															
U.S. (50 States) .....	<b>-0.43</b>	<b>-1.68</b>	<b>0.49</b>	<b>0.89</b>	<b>0.56</b>	<i>0.12</i>	<i>-0.10</i>	<i>0.48</i>	<i>0.07</i>	<i>-0.53</i>	<i>0.03</i>	<i>0.42</i>	<b>-0.18</b>	<b>0.26</b>	<b>0.00</b>
Other OECD .....	<b>-0.50</b>	<b>-1.17</b>	<b>0.04</b>	<b>0.68</b>	<b>0.59</b>	<i>0.41</i>	<i>0.04</i>	<i>-0.01</i>	<i>0.14</i>	<i>0.12</i>	<i>-0.01</i>	<i>-0.19</i>	<b>-0.23</b>	<b>0.25</b>	<b>0.01</b>
Other Stock Draws and Balance .....	<b>-4.33</b>	<b>-4.75</b>	<b>1.72</b>	<b>1.04</b>	<b>0.88</b>	<i>0.89</i>	<i>0.09</i>	<i>-0.03</i>	<i>0.30</i>	<i>0.27</i>	<i>-0.01</i>	<i>-0.42</i>	<b>-1.56</b>	<b>0.45</b>	<b>0.03</b>
Total Stock Draw .....	<b>-5.25</b>	<b>-7.60</b>	<b>2.25</b>	<b>2.61</b>	<b>2.03</b>	<i>1.42</i>	<i>0.03</i>	<i>0.44</i>	<i>0.52</i>	<i>-0.15</i>	<i>0.01</i>	<i>-0.19</i>	<b>-1.97</b>	<b>0.97</b>	<b>0.05</b>
<b>End-of-period Commercial Crude Oil and Other Liquids Inventories (million barrels)</b>															
U.S. Commercial Inventory .....	<b>1,321</b>	<b>1,453</b>	<b>1,422</b>	<b>1,344</b>	<b>1,295</b>	<i>1,300</i>	<i>1,309</i>	<i>1,269</i>	<i>1,267</i>	<i>1,319</i>	<i>1,319</i>	<i>1,290</i>	<b>1,344</b>	<b>1,269</b>	<b>1,290</b>
OECD Commercial Inventory .....	<b>2,963</b>	<b>3,201</b>	<b>3,166</b>	<b>3,026</b>	<b>2,923</b>	<i>2,891</i>	<i>2,897</i>	<i>2,858</i>	<i>2,842</i>	<i>2,884</i>	<i>2,885</i>	<i>2,873</i>	<b>3,026</b>	<b>2,858</b>	<b>2,873</b>

(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.

- = 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.

Notes: EIA completed modeling and analysis for this report on Thursday May 6, 2021.

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.

**Forecasts:** EIA Short-Term Integrated Forecasting System.

**Table 3b. Non-OPEC Petroleum and Other Liquids Production (million barrels per day)**  
U.S. Energy Information Administration | Short-Term Energy Outlook - May 2021

	2020				2021				2022				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2020	2021	2022
<b>North America</b> .....	<b>27.87</b>	<b>24.44</b>	<b>25.16</b>	<b>25.76</b>	<b>25.16</b>	<i>25.79</i>	<i>26.41</i>	<i>26.70</i>	<i>26.85</i>	<i>27.25</i>	<i>27.71</i>	<i>28.02</i>	<b>25.81</b>	<i>26.02</i>	<i>27.46</i>
Canada .....	<b>5.65</b>	<b>4.92</b>	<b>4.95</b>	<b>5.56</b>	<b>5.66</b>	<i>5.26</i>	<i>5.74</i>	<i>5.77</i>	<i>5.81</i>	<i>5.78</i>	<i>5.80</i>	<i>5.83</i>	<b>5.27</b>	<i>5.61</i>	<i>5.80</i>
Mexico .....	<b>2.00</b>	<b>1.94</b>	<b>1.91</b>	<b>1.90</b>	<b>1.93</b>	<i>1.91</i>	<i>1.88</i>	<i>1.84</i>	<i>1.78</i>	<i>1.74</i>	<i>1.71</i>	<i>1.68</i>	<b>1.94</b>	<i>1.89</i>	<i>1.73</i>
United States .....	<b>20.22</b>	<b>17.58</b>	<b>18.30</b>	<b>18.31</b>	<b>17.57</b>	<i>18.61</i>	<i>18.78</i>	<i>19.09</i>	<i>19.26</i>	<i>19.73</i>	<i>20.19</i>	<i>20.51</i>	<b>18.60</b>	<i>18.52</i>	<i>19.93</i>
<b>Central and South America</b> .....	<b>6.02</b>	<b>6.05</b>	<b>6.62</b>	<b>5.89</b>	<b>5.57</b>	<i>6.75</i>	<i>7.17</i>	<i>6.71</i>	<i>6.13</i>	<i>7.11</i>	<i>7.54</i>	<i>7.21</i>	<b>6.15</b>	<i>6.56</i>	<i>7.00</i>
Argentina .....	<b>0.69</b>	<b>0.60</b>	<b>0.64</b>	<b>0.62</b>	<b>0.64</b>	<i>0.69</i>	<i>0.70</i>	<i>0.69</i>	<i>0.71</i>	<i>0.76</i>	<i>0.75</i>	<i>0.73</i>	<b>0.64</b>	<i>0.68</i>	<i>0.74</i>
Brazil .....	<b>3.44</b>	<b>3.89</b>	<b>4.28</b>	<b>3.51</b>	<b>3.24</b>	<i>4.30</i>	<i>4.66</i>	<i>4.20</i>	<i>3.56</i>	<i>4.54</i>	<i>4.90</i>	<i>4.46</i>	<b>3.78</b>	<i>4.10</i>	<i>4.37</i>
Colombia .....	<b>0.91</b>	<b>0.79</b>	<b>0.78</b>	<b>0.79</b>	<b>0.79</b>	<i>0.80</i>	<i>0.80</i>	<i>0.80</i>	<i>0.84</i>	<i>0.77</i>	<i>0.77</i>	<i>0.80</i>	<b>0.81</b>	<i>0.79</i>	<i>0.79</i>
Ecuador .....	<b>0.54</b>	<b>0.36</b>	<b>0.52</b>	<b>0.51</b>	<b>0.51</b>	<i>0.52</i>	<i>0.52</i>	<i>0.53</i>	<i>0.53</i>	<i>0.53</i>	<i>0.53</i>	<i>0.53</i>	<b>0.48</b>	<i>0.52</i>	<i>0.53</i>
Other Central and S. America .....	<b>0.44</b>	<b>0.42</b>	<b>0.41</b>	<b>0.46</b>	<b>0.40</b>	<i>0.44</i>	<i>0.49</i>	<i>0.50</i>	<i>0.49</i>	<i>0.50</i>	<i>0.59</i>	<i>0.69</i>	<b>0.43</b>	<i>0.46</i>	<i>0.57</i>
<b>Europe</b> .....	<b>4.44</b>	<b>4.35</b>	<b>4.17</b>	<b>4.29</b>	<b>4.40</b>	<i>4.29</i>	<i>4.32</i>	<i>4.50</i>	<i>4.52</i>	<i>4.45</i>	<i>4.37</i>	<i>4.61</i>	<b>4.31</b>	<i>4.38</i>	<i>4.48</i>
Norway .....	<b>2.05</b>	<b>2.00</b>	<b>1.96</b>	<b>2.02</b>	<b>2.12</b>	<i>2.08</i>	<i>2.12</i>	<i>2.23</i>	<i>2.25</i>	<i>2.20</i>	<i>2.22</i>	<i>2.34</i>	<b>2.01</b>	<i>2.14</i>	<i>2.25</i>
United Kingdom .....	<b>1.18</b>	<b>1.16</b>	<b>1.00</b>	<b>1.06</b>	<b>1.06</b>	<i>0.99</i>	<i>0.99</i>	<i>1.04</i>	<i>1.05</i>	<i>1.04</i>	<i>0.93</i>	<i>1.03</i>	<b>1.10</b>	<i>1.02</i>	<i>1.01</i>
<b>Eurasia</b> .....	<b>14.73</b>	<b>13.18</b>	<b>12.72</b>	<b>13.13</b>	<b>13.39</b>	<i>13.70</i>	<i>13.74</i>	<i>13.90</i>	<i>14.07</i>	<i>14.66</i>	<i>14.82</i>	<i>14.95</i>	<b>13.44</b>	<i>13.68</i>	<i>14.63</i>
Azerbaijan .....	<b>0.76</b>	<b>0.69</b>	<b>0.66</b>	<b>0.69</b>	<b>0.74</b>	<i>0.72</i>	<i>0.73</i>	<i>0.77</i>	<i>0.79</i>	<i>0.80</i>	<i>0.77</i>	<i>0.80</i>	<b>0.70</b>	<i>0.74</i>	<i>0.79</i>
Kazakhstan .....	<b>2.06</b>	<b>1.86</b>	<b>1.71</b>	<b>1.81</b>	<b>1.87</b>	<i>1.89</i>	<i>1.88</i>	<i>1.93</i>	<i>1.95</i>	<i>2.00</i>	<i>1.96</i>	<i>2.01</i>	<b>1.86</b>	<i>1.89</i>	<i>1.98</i>
Russia .....	<b>11.54</b>	<b>10.25</b>	<b>9.97</b>	<b>10.26</b>	<b>10.43</b>	<i>10.73</i>	<i>10.77</i>	<i>10.82</i>	<i>10.96</i>	<i>11.49</i>	<i>11.70</i>	<i>11.75</i>	<b>10.50</b>	<i>10.69</i>	<i>11.48</i>
Turkmenistan .....	<b>0.25</b>	<b>0.25</b>	<b>0.25</b>	<b>0.25</b>	<b>0.24</b>	<i>0.24</i>	<i>0.24</i>	<i>0.24</i>	<i>0.23</i>	<i>0.23</i>	<i>0.23</i>	<i>0.23</i>	<b>0.25</b>	<i>0.24</i>	<i>0.23</i>
Other Eurasia .....	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.11</b>	<i>0.12</i>	<i>0.12</i>	<i>0.14</i>	<i>0.15</i>	<i>0.16</i>	<i>0.16</i>	<i>0.16</i>	<b>0.12</b>	<i>0.12</i>	<i>0.16</i>
<b>Middle East</b> .....	<b>3.16</b>	<b>3.13</b>	<b>3.09</b>	<b>3.13</b>	<b>3.16</b>	<i>3.17</i>	<i>3.21</i>	<i>3.22</i>	<i>3.26</i>	<i>3.25</i>	<i>3.25</i>	<i>3.24</i>	<b>3.13</b>	<i>3.19</i>	<i>3.25</i>
Oman .....	<b>1.01</b>	<b>0.95</b>	<b>0.92</b>	<b>0.95</b>	<b>0.96</b>	<i>0.96</i>	<i>1.01</i>	<i>1.02</i>	<i>1.03</i>	<i>1.03</i>	<i>1.03</i>	<i>1.03</i>	<b>0.96</b>	<i>0.99</i>	<i>1.03</i>
Qatar .....	<b>1.84</b>	<b>1.87</b>	<b>1.88</b>	<b>1.88</b>	<b>1.90</b>	<i>1.91</i>	<i>1.92</i>	<i>1.92</i>	<i>1.93</i>	<i>1.93</i>	<i>1.93</i>	<i>1.93</i>	<b>1.87</b>	<i>1.91</i>	<i>1.93</i>
<b>Asia and Oceania</b> .....	<b>9.46</b>	<b>9.19</b>	<b>9.25</b>	<b>9.21</b>	<b>9.32</b>	<i>9.26</i>	<i>9.25</i>	<i>9.26</i>	<i>9.24</i>	<i>9.23</i>	<i>9.20</i>	<i>9.20</i>	<b>9.28</b>	<i>9.27</i>	<i>9.22</i>
Australia .....	<b>0.49</b>	<b>0.50</b>	<b>0.50</b>	<b>0.49</b>	<b>0.47</b>	<i>0.50</i>	<i>0.50</i>	<i>0.49</i>	<i>0.49</i>	<i>0.48</i>	<i>0.47</i>	<i>0.47</i>	<b>0.49</b>	<i>0.49</i>	<i>0.48</i>
China .....	<b>4.96</b>	<b>4.91</b>	<b>4.95</b>	<b>4.90</b>	<b>5.05</b>	<i>4.98</i>	<i>4.98</i>	<i>5.03</i>	<i>5.00</i>	<i>5.03</i>	<i>5.03</i>	<i>5.07</i>	<b>4.93</b>	<i>5.01</i>	<i>5.03</i>
India .....	<b>0.96</b>	<b>0.90</b>	<b>0.92</b>	<b>0.92</b>	<b>0.93</b>	<i>0.92</i>	<i>0.92</i>	<i>0.91</i>	<i>0.92</i>	<i>0.90</i>	<i>0.90</i>	<i>0.89</i>	<b>0.92</b>	<i>0.92</i>	<i>0.90</i>
Indonesia .....	<b>0.91</b>	<b>0.89</b>	<b>0.88</b>	<b>0.89</b>	<b>0.86</b>	<i>0.85</i>	<i>0.85</i>	<i>0.83</i>	<i>0.84</i>	<i>0.83</i>	<i>0.82</i>	<i>0.81</i>	<b>0.89</b>	<i>0.85</i>	<i>0.83</i>
Malaysia .....	<b>0.71</b>	<b>0.60</b>	<b>0.63</b>	<b>0.64</b>	<b>0.65</b>	<i>0.65</i>	<i>0.64</i>	<i>0.64</i>	<i>0.64</i>	<i>0.63</i>	<i>0.63</i>	<i>0.62</i>	<b>0.65</b>	<i>0.65</i>	<i>0.63</i>
Vietnam .....	<b>0.25</b>	<b>0.24</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<i>0.23</i>	<i>0.23</i>	<i>0.22</i>	<i>0.22</i>	<i>0.22</i>	<i>0.21</i>	<i>0.21</i>	<b>0.23</b>	<i>0.23</i>	<i>0.21</i>
<b>Africa</b> .....	<b>1.48</b>	<b>1.43</b>	<b>1.41</b>	<b>1.39</b>	<b>1.39</b>	<i>1.41</i>	<i>1.41</i>	<i>1.40</i>	<i>1.35</i>	<i>1.35</i>	<i>1.35</i>	<i>1.35</i>	<b>1.43</b>	<i>1.40</i>	<i>1.35</i>
Egypt .....	<b>0.62</b>	<b>0.61</b>	<b>0.59</b>	<b>0.57</b>	<b>0.59</b>	<i>0.61</i>	<i>0.61</i>	<i>0.61</i>	<i>0.57</i>	<i>0.57</i>	<i>0.57</i>	<i>0.57</i>	<b>0.60</b>	<i>0.61</i>	<i>0.57</i>
South Sudan .....	<b>0.15</b>	<b>0.15</b>	<b>0.17</b>	<b>0.17</b>	<b>0.16</b>	<i>0.17</i>	<i>0.18</i>	<i>0.18</i>	<i>0.18</i>	<i>0.18</i>	<i>0.18</i>	<i>0.18</i>	<b>0.16</b>	<i>0.17</i>	<i>0.18</i>
<b>Total non-OPEC liquids</b> .....	<b>67.17</b>	<b>61.77</b>	<b>62.42</b>	<b>62.82</b>	<b>62.39</b>	<i>64.36</i>	<i>65.51</i>	<i>65.69</i>	<i>65.43</i>	<i>67.31</i>	<i>68.23</i>	<i>68.58</i>	<b>63.54</b>	<i>64.50</i>	<i>67.40</i>
<b>OPEC non-crude liquids</b> .....	<b>5.21</b>	<b>5.07</b>	<b>5.02</b>	<b>5.12</b>	<b>5.26</b>	<i>5.25</i>	<i>5.32</i>	<i>5.37</i>	<i>5.58</i>	<i>5.45</i>	<i>5.48</i>	<i>5.52</i>	<b>5.10</b>	<i>5.30</i>	<i>5.51</i>
<b>Non-OPEC + OPEC non-crude</b> .....	<b>72.38</b>	<b>66.84</b>	<b>67.44</b>	<b>67.93</b>	<b>67.65</b>	<i>69.61</i>	<i>70.83</i>	<i>71.06</i>	<i>71.01</i>	<i>72.76</i>	<i>73.71</i>	<i>74.11</i>	<b>68.64</b>	<i>69.80</i>	<i>72.91</i>
<b>Unplanned non-OPEC Production Outages</b> .....	<b>0.18</b>	<b>0.90</b>	<b>0.69</b>	<b>0.53</b>	<b>0.67</b>	-	-	-	-	-	-	-	<b>0.57</b>	-	-

- = 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: EIA completed modeling and analysis for this report on Thursday May 6, 2021.

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.

**Forecasts:** EIA Short-Term Integrated Forecasting System.



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

U.S. Energy Information Administration | Short-Term Energy Outlook - May 2021

	2020				2021				2022				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2020	2021	2022
<b>Crude Oil</b>															
Algeria .....	<b>1.02</b>	<b>0.90</b>	<b>0.84</b>	<b>0.86</b>	<b>0.87</b>	-	-	-	-	-	-	-	<b>0.90</b>	-	-
Angola .....	<b>1.35</b>	<b>1.27</b>	<b>1.19</b>	<b>1.13</b>	<b>1.11</b>	-	-	-	-	-	-	-	<b>1.23</b>	-	-
Congo (Brazzaville) .....	<b>0.29</b>	<b>0.29</b>	<b>0.28</b>	<b>0.26</b>	<b>0.28</b>	-	-	-	-	-	-	-	<b>0.28</b>	-	-
Equatorial Guinea .....	<b>0.13</b>	<b>0.12</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	-	-	-	-	-	-	-	<b>0.11</b>	-	-
Gabon .....	<b>0.19</b>	<b>0.18</b>	<b>0.15</b>	<b>0.17</b>	<b>0.16</b>	-	-	-	-	-	-	-	<b>0.17</b>	-	-
Iran .....	<b>2.02</b>	<b>1.97</b>	<b>1.90</b>	<b>1.95</b>	<b>2.18</b>	-	-	-	-	-	-	-	<b>1.96</b>	-	-
Iraq .....	<b>4.56</b>	<b>4.16</b>	<b>3.70</b>	<b>3.84</b>	<b>3.94</b>	-	-	-	-	-	-	-	<b>4.06</b>	-	-
Kuwait .....	<b>2.77</b>	<b>2.48</b>	<b>2.25</b>	<b>2.30</b>	<b>2.33</b>	-	-	-	-	-	-	-	<b>2.45</b>	-	-
Libya .....	<b>0.35</b>	<b>0.08</b>	<b>0.11</b>	<b>0.92</b>	<b>1.18</b>	-	-	-	-	-	-	-	<b>0.36</b>	-	-
Nigeria .....	<b>1.72</b>	<b>1.55</b>	<b>1.44</b>	<b>1.44</b>	<b>1.31</b>	-	-	-	-	-	-	-	<b>1.54</b>	-	-
Saudi Arabia .....	<b>9.80</b>	<b>9.28</b>	<b>8.77</b>	<b>9.01</b>	<b>8.49</b>	-	-	-	-	-	-	-	<b>9.21</b>	-	-
United Arab Emirates .....	<b>3.30</b>	<b>2.88</b>	<b>2.55</b>	<b>2.50</b>	<b>2.61</b>	-	-	-	-	-	-	-	<b>2.81</b>	-	-
Venezuela .....	<b>0.77</b>	<b>0.50</b>	<b>0.35</b>	<b>0.40</b>	<b>0.52</b>	-	-	-	-	-	-	-	<b>0.50</b>	-	-
OPEC Total .....	<b>28.28</b>	<b>25.65</b>	<b>23.63</b>	<b>24.88</b>	<b>25.08</b>	<i>25.93</i>	<i>28.05</i>	<i>28.55</i>	<i>28.47</i>	<i>28.47</i>	<i>28.47</i>	<i>28.47</i>	<b>25.60</b>	<i>26.92</i>	<i>28.47</i>
<b>Other Liquids (a) .....</b>	<b>5.21</b>	<b>5.07</b>	<b>5.02</b>	<b>5.12</b>	<b>5.26</b>	<i>5.25</i>	<i>5.32</i>	<i>5.37</i>	<i>5.58</i>	<i>5.45</i>	<i>5.48</i>	<i>5.52</i>	<b>5.10</b>	<i>5.30</i>	<i>5.51</i>
<b>Total OPEC Supply .....</b>	<b>33.49</b>	<b>30.71</b>	<b>28.64</b>	<b>29.99</b>	<b>30.34</b>	<i>31.18</i>	<i>33.37</i>	<i>33.92</i>	<i>34.06</i>	<i>33.92</i>	<i>33.95</i>	<i>33.99</i>	<b>30.70</b>	<i>32.22</i>	<i>33.98</i>
<b>Crude Oil Production Capacity</b>															
Middle East .....	<b>25.61</b>	<b>26.02</b>	<b>26.06</b>	<b>26.22</b>	<b>26.55</b>	<i>26.97</i>	<i>27.18</i>	<i>27.18</i>	<i>27.18</i>	<i>27.19</i>	<i>27.19</i>	<i>27.19</i>	<b>25.98</b>	<i>26.97</i>	<i>27.19</i>
Other .....	<b>5.82</b>	<b>5.60</b>	<b>5.48</b>	<b>6.33</b>	<b>6.73</b>	<i>6.55</i>	<i>6.47</i>	<i>6.14</i>	<i>6.05</i>	<i>6.05</i>	<i>6.05</i>	<i>6.05</i>	<b>5.81</b>	<i>6.47</i>	<i>6.05</i>
OPEC Total .....	<b>31.43</b>	<b>31.63</b>	<b>31.54</b>	<b>32.56</b>	<b>33.28</b>	<i>33.52</i>	<i>33.65</i>	<i>33.32</i>	<i>33.24</i>	<i>33.23</i>	<i>33.24</i>	<i>33.25</i>	<b>31.79</b>	<i>33.44</i>	<i>33.24</i>
<b>Surplus Crude Oil Production Capacity</b>															
Middle East .....	<b>3.15</b>	<b>5.27</b>	<b>6.90</b>	<b>6.62</b>	<b>7.00</b>	<i>6.68</i>	<i>5.03</i>	<i>4.68</i>	<i>4.68</i>	<i>4.69</i>	<i>4.69</i>	<i>4.69</i>	<b>5.49</b>	<i>5.84</i>	<i>4.69</i>
Other .....	<b>0.00</b>	<b>0.71</b>	<b>1.02</b>	<b>1.06</b>	<b>1.19</b>	<i>0.90</i>	<i>0.57</i>	<i>0.09</i>	<i>0.08</i>	<i>0.08</i>	<i>0.08</i>	<i>0.08</i>	<b>0.70</b>	<i>0.69</i>	<i>0.08</i>
OPEC Total .....	<b>3.15</b>	<b>5.98</b>	<b>7.92</b>	<b>7.68</b>	<b>8.19</b>	<i>7.58</i>	<i>5.60</i>	<i>4.77</i>	<i>4.76</i>	<i>4.77</i>	<i>4.77</i>	<i>4.78</i>	<b>6.19</b>	<i>6.52</i>	<i>4.77</i>
<b>Unplanned OPEC Production Outages .....</b>	<b>3.72</b>	<b>4.18</b>	<b>4.35</b>	<b>3.45</b>	<b>2.73</b>	-	-	-	-	-	-	-	<b>3.92</b>	-	-

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

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).

Notes: EIA completed modeling and analysis for this report on Thursday May 6, 2021.

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

Forecasts are not published for individual OPEC countries.

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

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

**Forecasts:** EIA Short-Term Integrated Forecasting System.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - May 2021

	2020				2021				2022				2020	2021	2022
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
<b>North America</b> .....	<b>23.64</b>	<b>19.44</b>	<b>22.12</b>	<b>22.45</b>	<b>22.15</b>	<i>23.65</i>	<i>24.04</i>	<i>24.40</i>	<i>24.13</i>	<i>24.53</i>	<i>25.00</i>	<i>24.94</i>	<b>21.91</b>	<i>23.57</i>	<i>24.65</i>
Canada .....	<b>2.33</b>	<b>1.88</b>	<b>2.16</b>	<b>2.05</b>	<b>2.11</b>	<i>2.19</i>	<i>2.29</i>	<i>2.29</i>	<i>2.28</i>	<i>2.23</i>	<i>2.33</i>	<i>2.32</i>	<b>2.10</b>	<i>2.22</i>	<i>2.29</i>
Mexico .....	<b>1.97</b>	<b>1.48</b>	<b>1.59</b>	<b>1.68</b>	<b>1.73</b>	<i>1.85</i>	<i>1.86</i>	<i>1.88</i>	<i>1.81</i>	<i>1.83</i>	<i>1.82</i>	<i>1.83</i>	<b>1.68</b>	<i>1.83</i>	<i>1.82</i>
United States .....	<b>19.33</b>	<b>16.08</b>	<b>18.36</b>	<b>18.71</b>	<b>18.31</b>	<i>19.60</i>	<i>19.88</i>	<i>20.22</i>	<i>20.03</i>	<i>20.46</i>	<i>20.84</i>	<i>20.78</i>	<b>18.12</b>	<i>19.51</i>	<i>20.53</i>
<b>Central and South America</b> .....	<b>6.14</b>	<b>5.61</b>	<b>6.04</b>	<b>6.32</b>	<b>6.12</b>	<i>6.34</i>	<i>6.49</i>	<i>6.50</i>	<i>6.37</i>	<i>6.55</i>	<i>6.69</i>	<i>6.70</i>	<b>6.03</b>	<i>6.36</i>	<i>6.58</i>
Brazil .....	<b>2.89</b>	<b>2.67</b>	<b>2.97</b>	<b>3.06</b>	<b>2.90</b>	<i>3.02</i>	<i>3.14</i>	<i>3.14</i>	<i>3.03</i>	<i>3.13</i>	<i>3.24</i>	<i>3.24</i>	<b>2.90</b>	<i>3.05</i>	<i>3.16</i>
<b>Europe</b> .....	<b>14.06</b>	<b>11.73</b>	<b>13.57</b>	<b>13.27</b>	<b>12.95</b>	<i>13.49</i>	<i>14.12</i>	<i>14.04</i>	<i>13.82</i>	<i>14.01</i>	<i>14.42</i>	<i>14.13</i>	<b>13.16</b>	<i>13.65</i>	<i>14.10</i>
<b>Eurasia</b> .....	<b>4.86</b>	<b>4.48</b>	<b>5.28</b>	<b>5.17</b>	<b>4.92</b>	<i>5.01</i>	<i>5.40</i>	<i>5.24</i>	<i>5.09</i>	<i>5.17</i>	<i>5.58</i>	<i>5.43</i>	<b>4.95</b>	<i>5.15</i>	<i>5.32</i>
Russia .....	<b>3.65</b>	<b>3.33</b>	<b>4.04</b>	<b>3.92</b>	<b>3.71</b>	<i>3.82</i>	<i>4.15</i>	<i>3.98</i>	<i>3.85</i>	<i>3.96</i>	<i>4.30</i>	<i>4.14</i>	<b>3.74</b>	<i>3.92</i>	<i>4.06</i>
<b>Middle East</b> .....	<b>7.91</b>	<b>7.43</b>	<b>8.44</b>	<b>8.06</b>	<b>7.88</b>	<i>8.08</i>	<i>8.71</i>	<i>8.26</i>	<i>7.99</i>	<i>8.59</i>	<i>9.00</i>	<i>8.36</i>	<b>7.96</b>	<i>8.24</i>	<i>8.49</i>
<b>Asia and Oceania</b> .....	<b>34.64</b>	<b>32.14</b>	<b>33.80</b>	<b>35.87</b>	<b>36.43</b>	<i>36.05</i>	<i>35.88</i>	<i>37.14</i>	<i>38.14</i>	<i>37.74</i>	<i>37.11</i>	<i>38.24</i>	<b>34.11</b>	<i>36.38</i>	<i>37.80</i>
China .....	<b>13.89</b>	<b>14.08</b>	<b>14.65</b>	<b>15.11</b>	<b>15.10</b>	<i>15.51</i>	<i>15.22</i>	<i>15.51</i>	<i>15.80</i>	<i>16.02</i>	<i>15.70</i>	<i>15.94</i>	<b>14.43</b>	<i>15.34</i>	<i>15.86</i>
Japan .....	<b>3.69</b>	<b>2.89</b>	<b>3.03</b>	<b>3.50</b>	<b>3.66</b>	<i>3.00</i>	<i>3.13</i>	<i>3.45</i>	<i>3.67</i>	<i>3.01</i>	<i>3.09</i>	<i>3.40</i>	<b>3.27</b>	<i>3.31</i>	<i>3.29</i>
India .....	<b>4.63</b>	<b>3.77</b>	<b>4.17</b>	<b>4.93</b>	<b>5.05</b>	<i>4.76</i>	<i>4.70</i>	<i>4.96</i>	<i>5.24</i>	<i>5.33</i>	<i>4.98</i>	<i>5.30</i>	<b>4.37</b>	<i>4.87</i>	<i>5.21</i>
<b>Africa</b> .....	<b>4.18</b>	<b>4.05</b>	<b>4.07</b>	<b>4.29</b>	<b>4.31</b>	<i>4.34</i>	<i>4.26</i>	<i>4.46</i>	<i>4.47</i>	<i>4.48</i>	<i>4.40</i>	<i>4.59</i>	<b>4.15</b>	<i>4.34</i>	<i>4.49</i>
<b>Total OECD Liquid Fuels Consumption</b> .....	<b>45.28</b>	<b>37.43</b>	<b>42.10</b>	<b>42.83</b>	<b>42.47</b>	<i>43.78</i>	<i>44.99</i>	<i>45.79</i>	<i>45.55</i>	<i>45.29</i>	<i>46.28</i>	<i>46.40</i>	<b>41.91</b>	<i>44.27</i>	<i>45.88</i>
<b>Total non-OECD Liquid Fuels Consumption</b> .....	<b>50.13</b>	<b>47.45</b>	<b>51.21</b>	<b>52.59</b>	<b>52.29</b>	<i>53.18</i>	<i>53.92</i>	<i>54.25</i>	<i>54.45</i>	<i>55.79</i>	<i>55.92</i>	<i>55.99</i>	<b>50.35</b>	<i>53.42</i>	<i>55.54</i>
<b>Total World Liquid Fuels Consumption</b> .....	<b>95.41</b>	<b>84.88</b>	<b>93.31</b>	<b>95.42</b>	<b>94.76</b>	<i>96.96</i>	<i>98.91</i>	<i>100.05</i>	<i>100.00</i>	<i>101.08</i>	<i>102.19</i>	<i>102.39</i>	<b>92.27</b>	<i>97.69</i>	<i>101.42</i>
<b>Real Gross Domestic Product (a)</b>															
World Index, 2015 Q1 = 100 .....	<b>110.3</b>	<b>107.6</b>	<b>112.3</b>	<b>113.4</b>	<b>115.8</b>	<i>117.1</i>	<i>118.5</i>	<i>119.5</i>	<i>122.2</i>	<i>122.8</i>	<i>123.4</i>	<i>123.9</i>	<b>110.9</b>	<i>117.7</i>	<i>123.1</i>
Percent change from prior year .....	<b>-3.4</b>	<b>-6.2</b>	<b>-2.4</b>	<b>-1.8</b>	<b>5.0</b>	<i>8.9</i>	<i>5.5</i>	<i>5.3</i>	<i>5.6</i>	<i>4.8</i>	<i>4.1</i>	<i>3.7</i>	<b>-3.4</b>	<i>6.1</i>	<i>4.5</i>
OECD Index, 2015 = 100 .....													<b>103.5</b>	<i>109.0</i>	<i>113.0</i>
Percent change from prior year .....													<b>-4.8</b>	<i>5.3</i>	<i>3.7</i>
Non-OECD Index, 2015 = 100 .....													<b>116.0</b>	<i>123.7</i>	<i>130.1</i>
Percent change from prior year .....													<b>-2.2</b>	<i>6.7</i>	<i>5.1</i>
<b>Nominal U.S. Dollar Index (b)</b>															
Index, 2015 Q1 = 100 .....	<b>111.7</b>	<b>115.8</b>	<b>111.5</b>	<b>108.3</b>	<b>106.8</b>	<i>108.8</i>	<i>109.3</i>	<i>109.5</i>	<i>109.6</i>	<i>109.4</i>	<i>109.2</i>	<i>108.8</i>	<b>111.9</b>	<i>108.6</i>	<i>109.3</i>
Percent change from prior year .....	<b>2.8</b>	<b>5.8</b>	<b>0.9</b>	<b>-1.9</b>	<b>-4.4</b>	<i>-6.1</i>	<i>-2.0</i>	<i>1.1</i>	<i>2.6</i>	<i>0.6</i>	<i>-0.1</i>	<i>-0.6</i>	<b>1.9</b>	<i>-2.9</i>	<i>0.6</i>

(a) GDP values for the individual countries in the indexes are converted to U.S. dollars at purchasing power parity and then summed to create values for the world, OECD, and non-OECD. Historical and forecast data are from Oxford Economics, and quarterly values are reindexed to 2015 Q1 by EIA.

(b) Data source is the Board of Governors of the U.S. Federal Reserve System Nominal Broad Trade-Weighted Dollar Index. An increase in the index indicates an appreciation of the U.S. dollar against a basket of currencies and a decrease in the index indicates a depreciation of the U.S. dollar against a basket of currencies. Historical and forecast data are from Oxford Economics, and quarterly values are reindexed to 2015 Q1 by EIA.

- = 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.

Notes: EIA completed modeling and analysis for this report on Thursday May 6, 2021.

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.

**Forecasts:** EIA Short-Term Integrated Forecasting System.

**Table 4a. U.S. Petroleum and Other Liquids Supply, Consumption, and Inventories**  
U.S. Energy Information Administration | Short-Term Energy Outlook - May 2021

	2020				2021				2022				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2020	2021	2022
<b>Supply (million barrels per day)</b>															
<b>Crude Oil Supply</b>															
Domestic Production (a) .....	12.75	10.81	10.81	10.90	10.65	10.97	11.12	11.34	11.51	11.68	11.96	12.21	11.31	11.02	11.84
Alaska .....	0.48	0.41	0.44	0.46	0.45	0.37	0.39	0.44	0.43	0.36	0.38	0.43	0.45	0.41	0.40
Federal Gulf of Mexico (b) .....	1.96	1.69	1.45	1.52	1.79	1.83	1.74	1.73	1.76	1.74	1.76	1.81	1.66	1.77	1.77
Lower 48 States (excl GOM) .....	10.31	8.71	8.92	8.91	8.40	8.77	8.99	9.18	9.32	9.58	9.81	9.98	9.21	8.84	9.67
Crude Oil Net Imports (c) .....	2.90	3.08	2.31	2.51	2.82	3.56	4.26	3.69	3.70	4.61	4.60	3.82	2.70	3.59	4.18
SPR Net Withdrawals .....	0.00	-0.23	0.15	0.04	0.00	0.18	0.00	0.05	0.05	0.05	0.03	0.11	-0.01	0.06	0.06
Commercial Inventory Net Withdrawals .....	-0.55	-0.54	0.38	0.13	-0.15	0.30	0.22	-0.01	-0.26	0.01	0.28	-0.02	-0.14	0.09	0.00
Crude Oil Adjustment (d) .....	0.67	0.03	0.38	0.32	0.46	0.35	0.23	0.16	0.22	0.22	0.23	0.16	0.35	0.30	0.21
Total Crude Oil Input to Refineries .....	15.77	13.16	14.03	13.90	13.78	15.36	15.82	15.23	15.22	16.55	17.09	16.29	14.21	15.05	16.29
<b>Other Supply</b>															
Refinery Processing Gain .....	1.02	0.82	0.94	0.92	0.88	1.08	1.07	1.05	1.06	1.09	1.14	1.14	0.92	1.02	1.11
Natural Gas Plant Liquids Production .....	5.12	4.96	5.33	5.23	4.84	5.29	5.29	5.40	5.42	5.65	5.76	5.82	5.16	5.21	5.66
Renewables and Oxygenate Production (e) .....	1.11	0.80	1.03	1.07	1.02	1.06	1.09	1.09	1.07	1.10	1.11	1.11	1.01	1.07	1.10
Fuel Ethanol Production .....	1.02	0.70	0.92	0.97	0.90	0.96	0.98	0.98	0.97	0.99	0.99	1.00	0.91	0.96	0.99
Petroleum Products Adjustment (f) .....	0.22	0.19	0.20	0.19	0.19	0.21	0.21	0.21	0.20	0.22	0.22	0.22	0.20	0.20	0.22
Product Net Imports (c) .....	-4.03	-2.94	-3.12	-3.32	-3.10	-3.04	-3.28	-3.21	-3.23	-3.56	-4.21	-4.14	-3.35	-3.16	-3.79
Hydrocarbon Gas Liquids .....	-1.99	-1.86	-1.86	-2.03	-2.01	-2.10	-2.11	-1.96	-1.98	-2.16	-2.21	-2.11	-1.94	-2.05	-2.12
Unfinished Oils .....	0.31	0.25	0.34	0.19	0.12	0.37	0.43	0.30	0.21	0.26	0.30	0.20	0.27	0.30	0.24
Other HC/Oxygenates .....	-0.10	-0.05	-0.04	-0.04	-0.09	-0.07	-0.06	-0.07	-0.08	-0.07	-0.06	-0.08	-0.06	-0.07	-0.07
Motor Gasoline Blend Comp. ....	0.39	0.36	0.48	0.43	0.47	0.69	0.50	0.15	0.53	0.75	0.43	0.22	0.42	0.45	0.48
Finished Motor Gasoline .....	-0.72	-0.40	-0.58	-0.78	-0.67	-0.67	-0.68	-0.54	-0.75	-0.70	-0.77	-0.78	-0.62	-0.64	-0.75
Jet Fuel .....	-0.07	0.09	0.12	0.07	0.02	0.06	0.03	0.06	-0.04	0.01	0.10	0.16	0.05	0.04	0.06
Distillate Fuel Oil .....	-1.19	-0.86	-1.15	-0.74	-0.50	-0.74	-0.80	-0.54	-0.56	-0.95	-1.26	-1.13	-0.98	-0.65	-0.98
Residual Fuel Oil .....	-0.02	0.02	0.05	0.05	0.07	0.00	-0.01	0.05	-0.03	-0.07	-0.06	0.04	0.02	0.03	-0.03
Other Oils (g) .....	-0.65	-0.49	-0.49	-0.48	-0.52	-0.58	-0.58	-0.64	-0.52	-0.64	-0.68	-0.67	-0.52	-0.58	-0.63
Product Inventory Net Withdrawals .....	0.12	-0.91	-0.04	0.71	0.70	-0.35	-0.32	0.45	0.28	-0.58	-0.28	0.33	-0.03	0.12	-0.06
Total Supply .....	19.33	16.08	18.36	18.71	18.31	19.60	19.88	20.22	20.03	20.46	20.84	20.78	18.12	19.51	20.53
<b>Consumption (million barrels per day)</b>															
Hydrocarbon Gas Liquids .....	3.31	2.83	2.95	3.70	3.38	3.16	3.04	3.67	3.84	3.33	3.37	3.85	3.20	3.31	3.60
Unfinished Oils .....	0.14	0.11	0.01	0.03	-0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00
Motor Gasoline .....	8.49	7.11	8.50	8.02	8.01	8.94	9.00	8.82	8.50	9.13	9.19	8.86	8.03	8.70	8.92
Fuel Ethanol blended into Motor Gasoline .....	0.85	0.72	0.87	0.84	0.84	0.90	0.92	0.90	0.86	0.93	0.93	0.92	0.82	0.89	0.91
Jet Fuel .....	1.56	0.69	0.97	1.09	1.12	1.34	1.49	1.51	1.49	1.63	1.77	1.78	1.08	1.36	1.67
Distillate Fuel Oil .....	3.97	3.51	3.70	3.92	3.94	4.04	4.02	4.18	4.24	4.19	4.13	4.19	3.78	4.05	4.19
Residual Fuel Oil .....	0.17	0.15	0.32	0.23	0.26	0.21	0.28	0.24	0.23	0.21	0.25	0.26	0.22	0.25	0.24
Other Oils (g) .....	1.68	1.68	1.91	1.71	1.63	1.91	2.06	1.80	1.73	1.98	2.13	1.84	1.75	1.85	1.92
Total Consumption .....	19.33	16.08	18.36	18.71	18.31	19.60	19.88	20.22	20.03	20.46	20.84	20.78	18.12	19.51	20.53
<b>Total Petroleum and Other Liquids Net Imports .....</b>	<b>-1.13</b>	<b>0.14</b>	<b>-0.81</b>	<b>-0.81</b>	<b>-0.28</b>	<i>0.52</i>	<i>0.97</i>	<i>0.48</i>	<i>0.47</i>	<i>1.04</i>	<i>0.40</i>	<i>-0.32</i>	<b>-0.65</b>	<i>0.43</i>	<i>0.40</i>
<b>End-of-period Inventories (million barrels)</b>															
<b>Commercial Inventory</b>															
Crude Oil (excluding SPR) .....	482.5	531.9	497.3	485.3	498.3	471.1	450.9	451.9	475.2	474.5	449.2	450.6	485.3	451.9	450.6
Hydrocarbon Gas Liquids .....	180.8	233.9	299.1	229.2	170.5	207.5	247.6	202.7	160.0	208.4	249.3	208.3	229.2	202.7	208.3
Unfinished Oils .....	100.1	91.9	81.4	78.2	93.3	91.3	90.2	83.1	93.1	91.1	90.1	83.2	78.2	83.1	83.2
Other HC/Oxygenates .....	33.6	26.2	25.2	29.9	27.1	26.2	26.0	26.2	28.3	27.1	26.8	27.1	29.9	26.2	27.1
Total Motor Gasoline .....	260.8	253.3	226.5	243.2	234.6	233.7	226.7	234.3	241.7	245.7	233.4	249.4	243.2	234.3	249.4
Finished Motor Gasoline .....	22.6	23.5	22.4	25.3	19.1	23.4	22.2	24.4	24.1	23.9	23.1	26.2	25.3	24.4	26.2
Motor Gasoline Blend Comp. ....	238.3	229.8	204.1	217.9	215.5	210.3	204.5	209.9	217.6	221.8	210.3	223.3	217.9	209.9	223.3
Jet Fuel .....	39.9	41.5	40.1	38.6	38.3	40.1	42.4	39.5	39.1	40.0	42.4	39.3	38.6	39.5	39.3
Distillate Fuel Oil .....	126.7	175.4	171.7	160.4	145.5	139.8	142.9	145.4	134.8	139.4	146.2	147.0	160.4	145.4	147.0
Residual Fuel Oil .....	34.4	39.6	32.1	30.2	30.9	33.4	31.4	32.6	32.1	32.8	31.1	32.6	30.2	32.6	32.6
Other Oils (g) .....	62.0	59.2	48.6	49.3	56.0	56.5	50.9	53.2	62.2	59.9	50.7	52.1	49.3	53.2	52.1
Total Commercial Inventory .....	1320.8	1452.8	1422.0	1344.3	1294.5	1299.7	1309.1	1268.9	1266.6	1319.0	1319.0	1289.7	1344.3	1268.9	1289.7
Crude Oil in SPR .....	635.0	656.0	642.2	638.1	637.8	621.6	621.6	617.3	613.1	608.8	606.1	596.4	638.1	617.3	596.4

(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. Beginning in January 2021, renewable fuels includes biodiesel, renewable diesel, renewable jet fuel, renewable heating oil, renewable naphtha and gasoline, and other renewable fuels. For December 2020 and prior, renewable fuels includes only biodiesel.

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

(g) For net imports and inventories "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; for consumption "Other Oils" also includes renewable fuels except fuel ethanol.

- = no data available

SPR: Strategic Petroleum Reserve

HC: Hydrocarbons

Notes: EIA completed modeling and analysis for this report on Thursday May 6, 2021.

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; and *Weekly Petroleum Status Report*, DOE/EIA-0208.

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

**Forecasts:** EIA Short-Term Integrated Forecasting System.

**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 - May 2021

	2020				2021				2022				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2020	2021	2022
<b>HGL Production</b>															
<b>Natural Gas Processing Plants</b>															
Ethane .....	1.93	1.92	2.14	2.06	1.85	2.19	2.13	2.25	2.37	2.47	2.52	2.59	2.01	2.10	2.49
Propane .....	1.72	1.61	1.68	1.70	1.60	1.65	1.67	1.68	1.64	1.69	1.71	1.72	1.68	1.65	1.69
Butanes .....	0.91	0.86	0.90	0.89	0.84	0.87	0.89	0.90	0.87	0.90	0.92	0.92	0.89	0.88	0.90
Natural Gasoline (Pentanes Plus) .....	0.56	0.57	0.62	0.58	0.54	0.58	0.60	0.58	0.54	0.59	0.62	0.59	0.58	0.57	0.58
<b>Refinery and Blender Net Production</b>															
Ethane/Ethylene .....	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.01
Propane .....	0.29	0.24	0.27	0.27	0.25	0.29	0.31	0.31	0.30	0.30	0.32	0.31	0.26	0.29	0.31
Propylene (refinery-grade) .....	0.25	0.26	0.26	0.29	0.27	0.28	0.28	0.28	0.28	0.29	0.28	0.28	0.26	0.28	0.28
Butanes/Butylenes .....	-0.08	0.18	0.13	-0.19	-0.09	0.26	0.20	-0.19	-0.08	0.26	0.19	-0.19	0.01	0.04	0.05
<b>Renewable Fuels and Oxygenate Plant Net Production</b>															
Natural Gasoline (Pentanes Plus) .....	-0.02	-0.01	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02
<b>HGL Net Imports</b>															
Ethane .....	-0.30	-0.28	-0.27	-0.28	-0.35	-0.39	-0.38	-0.38	-0.43	-0.45	-0.45	-0.47	-0.28	-0.38	-0.45
Propane/Propylene .....	-1.12	-1.08	-1.08	-1.29	-1.08	-1.14	-1.16	-1.07	-1.04	-1.17	-1.21	-1.16	-1.14	-1.11	-1.15
Butanes/Butylenes .....	-0.30	-0.31	-0.36	-0.33	-0.35	-0.39	-0.39	-0.34	-0.33	-0.39	-0.39	-0.33	-0.32	-0.37	-0.36
Natural Gasoline (Pentanes Plus) .....	-0.27	-0.19	-0.16	-0.14	-0.22	-0.19	-0.19	-0.17	-0.18	-0.16	-0.17	-0.15	-0.19	-0.19	-0.16
<b>HGL Refinery and Blender Net Inputs</b>															
Butanes/Butylenes .....	0.46	0.25	0.32	0.47	0.38	0.28	0.31	0.49	0.39	0.29	0.32	0.50	0.37	0.36	0.38
Natural Gasoline (Pentanes Plus) .....	0.15	0.10	0.15	0.13	0.13	0.16	0.17	0.16	0.17	0.18	0.19	0.18	0.13	0.16	0.18
<b>HGL Consumption</b>															
Ethane/Ethylene .....	1.70	1.65	1.66	1.81	1.52	1.83	1.74	1.89	2.02	2.03	2.07	2.11	1.70	1.75	2.06
Propane .....	1.09	0.59	0.58	0.99	1.11	0.58	0.58	1.04	1.14	0.56	0.57	1.00	0.81	0.83	0.81
Propylene (refinery-grade) .....	0.26	0.27	0.27	0.30	0.29	0.30	0.29	0.30	0.30	0.30	0.30	0.30	0.28	0.29	0.30
Butanes/Butylenes .....	0.17	0.20	0.17	0.24	0.19	0.24	0.20	0.20	0.18	0.22	0.20	0.20	0.20	0.21	0.20
Natural Gasoline (Pentanes Plus) .....	0.09	0.13	0.26	0.35	0.26	0.21	0.23	0.24	0.21	0.22	0.23	0.24	0.21	0.23	0.23
<b>HGL Inventories (million barrels)</b>															
Ethane .....	52.6	49.5	62.5	74.9	65.7	66.4	65.0	66.6	58.6	58.0	57.1	60.1	59.9	65.9	58.5
Propane .....	60.3	75.3	100.7	70.4	38.5	57.4	78.0	65.6	42.3	64.9	87.1	74.2	70.4	65.6	74.2
Propylene (at refineries only) .....	1.4	1.5	1.5	1.5	1.1	1.5	1.9	1.9	1.7	1.9	2.1	2.0	1.5	1.9	2.0
Butanes/Butylenes .....	43.6	69.3	86.0	54.7	38.3	58.7	76.8	47.9	38.0	62.3	80.2	51.0	54.7	47.9	51.0
Natural Gasoline (Pentanes Plus) .....	24.0	35.7	38.6	32.9	25.0	25.1	24.6	23.2	20.5	21.5	22.2	21.4	32.9	23.2	21.4
<b>Refinery and Blender Net Inputs</b>															
Crude Oil .....	15.77	13.16	14.03	13.90	13.78	15.36	15.82	15.23	15.22	16.55	17.09	16.29	14.21	15.05	16.29
Hydrocarbon Gas Liquids .....	0.61	0.35	0.47	0.60	0.52	0.44	0.48	0.65	0.55	0.47	0.51	0.69	0.51	0.52	0.56
Other Hydrocarbons/Oxygenates .....	1.12	0.95	1.11	1.08	1.05	1.16	1.17	1.16	1.14	1.20	1.20	1.17	1.06	1.14	1.18
Unfinished Oils .....	0.05	0.23	0.44	0.20	-0.02	0.39	0.44	0.37	0.09	0.28	0.31	0.27	0.23	0.30	0.24
Motor Gasoline Blend Components .....	0.41	0.48	0.85	0.46	0.68	0.90	0.67	0.26	0.56	0.81	0.65	0.30	0.55	0.63	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 .....	17.97	15.17	16.90	16.23	16.01	18.26	18.58	17.67	17.57	19.31	19.76	18.72	16.57	17.64	18.85
<b>Refinery Processing Gain</b>															
.....	1.02	0.82	0.94	0.92	0.88	1.08	1.07	1.05	1.06	1.09	1.14	1.14	0.92	1.02	1.11
<b>Refinery and Blender Net Production</b>															
Hydrocarbon Gas Liquids .....	0.47	0.69	0.67	0.36	0.43	0.84	0.79	0.41	0.50	0.86	0.80	0.41	0.55	0.62	0.64
Finished Motor Gasoline .....	9.30	7.52	9.14	8.98	8.75	9.81	9.76	9.55	9.33	9.89	10.02	9.85	8.74	9.47	9.77
Jet Fuel .....	1.63	0.62	0.83	1.00	1.09	1.30	1.48	1.41	1.53	1.63	1.70	1.58	1.02	1.32	1.61
Distillate Fuel .....	4.95	4.83	4.72	4.46	4.26	4.66	4.78	4.68	4.65	5.14	5.40	5.27	4.74	4.59	5.12
Residual Fuel .....	0.23	0.18	0.19	0.15	0.19	0.23	0.26	0.21	0.26	0.29	0.29	0.23	0.19	0.22	0.27
Other Oils (a) .....	2.41	2.14	2.28	2.19	2.16	2.50	2.57	2.47	2.35	2.59	2.70	2.53	2.26	2.43	2.54
Total Refinery and Blender Net Production .....	18.99	15.99	17.84	17.15	16.88	19.34	19.65	18.72	18.63	20.40	20.90	19.86	17.49	18.66	19.95
<b>Refinery Distillation Inputs</b>															
.....	16.36	13.65	14.55	14.32	14.19	15.74	16.20	15.63	15.56	16.75	17.30	16.54	14.72	15.45	16.54
<b>Refinery Operable Distillation Capacity</b>															
.....	18.98	18.75	18.55	18.39	18.11	18.09	18.09	18.09	18.09	18.09	18.09	18.09	18.66	18.09	18.09
<b>Refinery Distillation Utilization Factor</b>															
.....	0.86	0.73	0.78	0.78	0.78	0.87	0.90	0.86	0.86	0.93	0.96	0.91	0.79	0.85	0.91

(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.

- = no data available

Notes: EIA completed modeling and analysis for this report on Thursday May 6, 2021.

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.

**Forecasts:** EIA Short-Term Integrated Forecasting System.

**Table 4c. U.S. Regional Motor Gasoline Prices and Inventories**  
U.S. Energy Information Administration | Short-Term Energy Outlook - May 2021

	2020				2021				2022				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2020	2021	2022
<b>Prices (cents per gallon)</b>															
Refiner Wholesale Price .....	153	104	137	133	181	209	194	172	174	184	186	176	133	189	180
<b>Gasoline Regular Grade Retail Prices Including Taxes</b>															
PADD 1 .....	236	191	211	212	252	279	270	247	242	253	258	249	214	262	251
PADD 2 .....	226	179	207	202	246	283	260	236	227	252	251	239	204	257	243
PADD 3 .....	210	162	186	183	229	258	243	221	221	232	233	224	187	238	228
PADD 4 .....	247	201	233	221	246	296	281	257	250	270	274	260	226	270	264
PADD 5 .....	311	258	283	278	312	351	338	319	324	339	330	339	284	331	333
U.S. Average .....	241	194	218	215	256	289	275	252	249	265	265	258	218	268	259
<b>Gasoline All Grades Including Taxes</b>	<b>251</b>	<b>203</b>	<b>227</b>	<b>224</b>	<b>265</b>	<b>299</b>	<b>287</b>	<b>265</b>	<b>262</b>	<b>278</b>	<b>278</b>	<b>272</b>	<b>227</b>	<b>280</b>	<b>273</b>
<b>End-of-period Inventories (million barrels)</b>															
<b>Total Gasoline Inventories</b>															
PADD 1 .....	71.0	73.0	61.6	68.5	64.0	62.3	58.4	59.6	65.3	68.0	62.9	68.8	68.5	59.6	68.8
PADD 2 .....	60.2	52.6	46.2	50.9	50.5	51.6	50.3	50.2	53.4	52.2	50.7	51.1	50.9	50.2	51.1
PADD 3 .....	84.8	90.5	79.7	83.7	80.4	82.2	80.9	85.4	85.1	88.1	82.7	89.6	83.7	85.4	89.6
PADD 4 .....	9.2	7.7	7.6	8.7	8.8	8.1	7.6	8.0	7.9	8.0	7.7	8.2	8.7	8.0	8.2
PADD 5 .....	35.6	29.4	31.5	31.4	30.9	29.6	29.6	31.1	30.0	29.4	29.4	31.7	31.4	31.1	31.7
U.S. Total .....	260.8	253.3	226.5	243.2	234.6	233.7	226.7	234.3	241.7	245.7	233.4	249.4	243.2	234.3	249.4
<b>Finished Gasoline Inventories</b>															
U.S. Total .....	22.6	23.5	22.4	25.3	19.1	23.4	22.2	24.4	24.1	23.9	23.1	26.2	25.3	24.4	26.2
<b>Gasoline Blending Components Inventories</b>															
U.S. Total .....	238.3	229.8	204.1	217.9	215.5	210.3	204.5	209.9	217.6	221.8	210.3	223.3	217.9	209.9	223.3

- = no data available

Notes: EIA completed modeling and analysis for this report on Thursday May 6, 2021.

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

Prices are not adjusted for inflation.

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.

**Forecasts:** EIA Short-Term Integrated Forecasting System.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - May 2021

	2020				2021				2022				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2020	2021	2022
<b>Supply (billion cubic feet per day)</b>															
Total Marketed Production .....	<b>102.27</b>	<b>96.83</b>	<b>97.55</b>	<b>98.70</b>	<b>96.91</b>	<i>97.51</i>	<i>98.13</i>	<i>98.86</i>	<i>98.80</i>	<i>99.41</i>	<i>100.55</i>	<i>101.37</i>	<b>98.83</b>	<i>97.86</i>	<i>100.04</i>
Alaska .....	<b>0.96</b>	<b>0.88</b>	<b>0.88</b>	<b>0.98</b>	<b>1.00</b>	<i>0.75</i>	<i>0.71</i>	<i>0.88</i>	<i>0.92</i>	<i>0.76</i>	<i>0.71</i>	<i>0.87</i>	<b>0.92</b>	<i>0.83</i>	<i>0.81</i>
Federal GOM (a) .....	<b>2.72</b>	<b>2.22</b>	<b>1.72</b>	<b>1.73</b>	<b>2.25</b>	<i>2.31</i>	<i>2.16</i>	<i>2.09</i>	<i>2.09</i>	<i>2.02</i>	<i>1.92</i>	<i>1.90</i>	<b>2.09</b>	<i>2.20</i>	<i>1.98</i>
Lower 48 States (excl GOM) .....	<b>98.58</b>	<b>93.74</b>	<b>94.95</b>	<b>95.99</b>	<b>93.66</b>	<i>94.45</i>	<i>95.26</i>	<i>95.90</i>	<i>95.79</i>	<i>96.64</i>	<i>97.92</i>	<i>98.60</i>	<b>95.81</b>	<i>94.82</i>	<i>97.25</i>
Total Dry Gas Production .....	<b>94.79</b>	<b>89.68</b>	<b>89.83</b>	<b>91.15</b>	<b>90.09</b>	<i>90.75</i>	<i>91.34</i>	<i>92.03</i>	<i>91.97</i>	<i>92.54</i>	<i>93.60</i>	<i>94.36</i>	<b>91.35</b>	<i>91.06</i>	<i>93.12</i>
LNG Gross Imports .....	<b>0.24</b>	<b>0.12</b>	<b>0.09</b>	<b>0.09</b>	<b>0.19</b>	<i>0.18</i>	<i>0.18</i>	<i>0.20</i>	<i>0.32</i>	<i>0.18</i>	<i>0.18</i>	<i>0.20</i>	<b>0.13</b>	<i>0.19</i>	<i>0.22</i>
LNG Gross Exports .....	<b>7.92</b>	<b>5.51</b>	<b>3.91</b>	<b>8.78</b>	<b>9.36</b>	<i>9.03</i>	<i>8.68</i>	<i>9.73</i>	<i>9.96</i>	<i>8.83</i>	<i>8.33</i>	<i>9.78</i>	<b>6.53</b>	<i>9.20</i>	<i>9.22</i>
Pipeline Gross Imports .....	<b>7.60</b>	<b>6.08</b>	<b>6.39</b>	<b>7.27</b>	<b>8.73</b>	<i>6.59</i>	<i>6.69</i>	<i>6.83</i>	<i>7.38</i>	<i>6.36</i>	<i>6.37</i>	<i>6.69</i>	<b>6.84</b>	<i>7.20</i>	<i>6.69</i>
Pipeline Gross Exports .....	<b>8.15</b>	<b>7.17</b>	<b>8.09</b>	<b>8.18</b>	<b>7.95</b>	<i>7.78</i>	<i>8.98</i>	<i>9.33</i>	<i>9.24</i>	<i>8.61</i>	<i>9.36</i>	<i>9.37</i>	<b>7.90</b>	<i>8.51</i>	<i>9.15</i>
Supplemental Gaseous Fuels .....	<b>0.19</b>	<b>0.17</b>	<b>0.15</b>	<b>0.18</b>	<b>0.18</b>	<i>0.17</i>	<i>0.17</i>	<i>0.18</i>	<i>0.18</i>	<i>0.18</i>	<i>0.18</i>	<i>0.18</i>	<b>0.17</b>	<i>0.18</i>	<i>0.18</i>
Net Inventory Withdrawals .....	<b>12.74</b>	<b>-12.24</b>	<b>-7.68</b>	<b>5.36</b>	<b>17.17</b>	<i>-9.81</i>	<i>-7.74</i>	<i>6.37</i>	<i>17.45</i>	<i>-11.57</i>	<i>-9.20</i>	<i>4.39</i>	<b>-0.46</b>	<i>1.44</i>	<i>0.21</i>
Total Supply .....	<b>99.49</b>	<b>71.13</b>	<b>76.78</b>	<b>87.09</b>	<b>99.05</b>	<i>71.07</i>	<i>73.00</i>	<i>86.53</i>	<i>98.09</i>	<i>70.23</i>	<i>73.44</i>	<i>86.67</i>	<b>83.61</b>	<i>82.36</i>	<i>82.05</i>
Balancing Item (b) .....	<b>-0.18</b>	<b>-0.29</b>	<b>0.05</b>	<b>-1.01</b>	<b>0.14</b>	<i>-0.55</i>	<i>0.69</i>	<i>0.85</i>	<i>0.30</i>	<i>0.19</i>	<i>0.88</i>	<i>0.54</i>	<b>-0.36</b>	<i>0.28</i>	<i>0.48</i>
Total Primary Supply .....	<b>99.31</b>	<b>70.84</b>	<b>76.83</b>	<b>86.08</b>	<b>99.19</b>	<i>70.53</i>	<i>73.69</i>	<i>87.38</i>	<i>98.39</i>	<i>70.42</i>	<i>74.32</i>	<i>87.21</i>	<b>83.25</b>	<i>82.64</i>	<i>82.53</i>
<b>Consumption (billion cubic feet per day)</b>															
Residential .....	<b>22.83</b>	<b>8.20</b>	<b>3.82</b>	<b>16.00</b>	<b>25.13</b>	<i>7.17</i>	<i>3.73</i>	<i>16.81</i>	<i>24.14</i>	<i>8.03</i>	<i>3.79</i>	<i>16.67</i>	<b>12.70</b>	<i>13.16</i>	<i>13.11</i>
Commercial .....	<b>13.93</b>	<b>5.82</b>	<b>4.36</b>	<b>10.31</b>	<b>14.69</b>	<i>6.44</i>	<i>4.70</i>	<i>10.82</i>	<i>14.89</i>	<i>6.19</i>	<i>4.62</i>	<i>10.74</i>	<b>8.60</b>	<i>9.14</i>	<i>9.09</i>
Industrial .....	<b>24.65</b>	<b>20.62</b>	<b>21.15</b>	<b>23.83</b>	<b>24.26</b>	<i>22.50</i>	<i>21.95</i>	<i>24.72</i>	<i>25.30</i>	<i>22.51</i>	<i>21.71</i>	<i>24.10</i>	<b>22.56</b>	<i>23.35</i>	<i>23.40</i>
Electric Power (c) .....	<b>29.55</b>	<b>29.05</b>	<b>40.10</b>	<b>28.19</b>	<b>26.79</b>	<i>26.52</i>	<i>35.38</i>	<i>26.62</i>	<i>25.39</i>	<i>25.73</i>	<i>36.20</i>	<i>27.16</i>	<b>31.74</b>	<i>28.85</i>	<i>28.64</i>
Lease and Plant Fuel .....	<b>5.17</b>	<b>4.90</b>	<b>4.93</b>	<b>4.99</b>	<b>4.90</b>	<i>4.93</i>	<i>4.96</i>	<i>5.00</i>	<i>5.00</i>	<i>5.03</i>	<i>5.08</i>	<i>5.13</i>	<b>5.00</b>	<i>4.95</i>	<i>5.06</i>
Pipeline and Distribution Use .....	<b>3.02</b>	<b>2.15</b>	<b>2.33</b>	<b>2.61</b>	<b>3.28</b>	<i>2.82</i>	<i>2.81</i>	<i>3.26</i>	<i>3.51</i>	<i>2.78</i>	<i>2.76</i>	<i>3.26</i>	<b>2.53</b>	<i>3.04</i>	<i>3.08</i>
Vehicle Use .....	<b>0.16</b>	<b>0.10</b>	<b>0.13</b>	<b>0.13</b>	<b>0.14</b>	<i>0.15</i>	<i>0.15</i>	<i>0.15</i>	<i>0.16</i>	<i>0.16</i>	<i>0.16</i>	<i>0.16</i>	<b>0.13</b>	<i>0.15</i>	<i>0.16</i>
Total Consumption .....	<b>99.31</b>	<b>70.84</b>	<b>76.83</b>	<b>86.08</b>	<b>99.19</b>	<i>70.53</i>	<i>73.69</i>	<i>87.38</i>	<i>98.39</i>	<i>70.42</i>	<i>74.32</i>	<i>87.21</i>	<b>83.25</b>	<i>82.64</i>	<i>82.53</i>
<b>End-of-period Inventories (billion cubic feet)</b>															
Working Gas Inventory .....	<b>2,030</b>	<b>3,133</b>	<b>3,840</b>	<b>3,341</b>	<b>1,801</b>	<i>2,693</i>	<i>3,405</i>	<i>2,819</i>	<i>1,249</i>	<i>2,302</i>	<i>3,149</i>	<i>2,744</i>	<b>3,341</b>	<i>2,819</i>	<i>2,744</i>
East Region (d) .....	<b>385</b>	<b>655</b>	<b>890</b>	<b>763</b>	<b>306</b>	<i>537</i>	<i>792</i>	<i>561</i>	<i>81</i>	<i>383</i>	<i>652</i>	<i>465</i>	<b>763</b>	<i>561</i>	<i>465</i>
Midwest Region (d) .....	<b>472</b>	<b>747</b>	<b>1,053</b>	<b>918</b>	<b>399</b>	<i>637</i>	<i>967</i>	<i>779</i>	<i>198</i>	<i>494</i>	<i>870</i>	<i>738</i>	<b>918</b>	<i>779</i>	<i>738</i>
South Central Region (d) .....	<b>857</b>	<b>1,221</b>	<b>1,313</b>	<b>1,155</b>	<b>763</b>	<i>1,035</i>	<i>1,088</i>	<i>1,005</i>	<i>630</i>	<i>921</i>	<i>1,013</i>	<i>976</i>	<b>1,155</b>	<i>1,005</i>	<i>976</i>
Mountain Region (d) .....	<b>92</b>	<b>177</b>	<b>235</b>	<b>195</b>	<b>114</b>	<i>166</i>	<i>211</i>	<i>173</i>	<i>117</i>	<i>165</i>	<i>230</i>	<i>209</i>	<b>195</b>	<i>173</i>	<i>209</i>
Pacific Region (d) .....	<b>200</b>	<b>308</b>	<b>318</b>	<b>282</b>	<b>197</b>	<i>295</i>	<i>326</i>	<i>278</i>	<i>200</i>	<i>318</i>	<i>362</i>	<i>334</i>	<b>282</b>	<i>278</i>	<i>334</i>
Alaska .....	<b>23</b>	<b>25</b>	<b>31</b>	<b>28</b>	<b>23</b>	<i>22</i>	<i>22</i>	<i>22</i>	<i>22</i>	<i>22</i>	<i>22</i>	<i>22</i>	<b>28</b>	<i>22</i>	<i>22</i>

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

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

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

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

- = no data available

LNG: liquefied natural gas.

Notes: EIA completed modeling and analysis for this report on Thursday May 6, 2021.

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: *Natural Gas Monthly*, DOE/EIA-0130; and *Electric Power Monthly*, Minor discrepancies with published historical data are due to independent rounding.

**Forecasts:** EIA Short-Term Integrated Forecasting System.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - May 2021

	2020				2021				2022				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2020	2021	2022
<b>Wholesale/Spot</b>															
Henry Hub Spot Price .....	1.98	1.77	2.07	2.63	3.70	2.89	3.01	3.08	3.20	3.06	3.10	3.18	2.11	3.17	3.13
<b>Residential Retail</b>															
New England .....	13.77	14.50	18.28	14.64	14.75	15.18	17.51	13.37	12.96	13.86	16.84	13.00	14.47	14.59	13.37
Middle Atlantic .....	10.77	11.85	17.85	11.77	10.42	12.76	16.98	11.00	10.09	12.42	17.16	11.29	11.76	11.27	11.24
E. N. Central .....	6.99	9.50	18.15	8.02	7.35	10.86	16.56	8.32	7.62	10.57	16.31	8.11	8.39	8.54	8.69
W. N. Central .....	6.85	9.89	17.26	8.66	8.63	12.33	17.72	9.45	8.08	10.86	16.95	9.02	8.48	9.73	9.23
S. Atlantic .....	12.12	15.52	24.15	14.20	12.02	17.26	22.91	12.66	11.22	16.37	22.54	12.54	14.23	13.63	13.12
E. S. Central .....	9.69	13.34	20.85	10.63	9.76	15.37	22.15	13.42	10.47	14.90	22.02	13.33	11.15	11.69	12.55
W. S. Central .....	8.52	14.22	20.83	11.67	9.93	14.97	20.61	11.74	8.86	14.27	20.27	11.48	11.40	12.04	11.36
Mountain .....	7.55	9.37	12.60	8.15	7.94	10.10	13.77	8.53	8.05	9.82	13.65	8.53	8.43	8.80	8.90
Pacific .....	13.41	14.47	14.50	13.70	14.30	14.61	14.98	13.73	13.84	14.53	15.29	14.22	13.82	14.26	14.25
U.S. Average .....	9.46	11.89	17.65	10.60	9.98	13.16	17.42	10.66	9.66	12.62	17.34	10.60	10.83	11.16	10.97
<b>Commercial Retail</b>															
New England .....	9.93	10.40	10.99	10.06	10.31	10.60	10.79	10.15	10.48	10.55	10.27	10.07	10.16	10.35	10.34
Middle Atlantic .....	7.91	7.00	6.78	7.53	7.85	7.61	6.98	7.44	7.82	7.62	7.17	7.66	7.50	7.58	7.66
E. N. Central .....	5.75	6.73	8.79	6.21	6.39	8.11	9.41	7.10	6.78	7.54	8.58	6.45	6.28	7.06	6.92
W. N. Central .....	5.43	6.53	8.12	6.55	7.47	8.30	9.11	7.28	7.06	7.54	8.80	6.97	6.14	7.64	7.22
S. Atlantic .....	8.51	9.21	9.55	8.88	8.87	9.87	10.00	8.85	8.39	9.15	9.42	8.43	8.87	9.16	8.65
E. S. Central .....	8.38	9.20	10.10	8.69	8.49	9.59	10.28	9.06	8.39	9.36	9.94	8.84	8.78	9.00	8.84
W. S. Central .....	5.99	7.18	8.13	7.46	7.28	8.03	8.69	7.96	7.08	7.53	8.00	7.29	6.92	7.78	7.35
Mountain .....	6.09	6.85	7.42	6.45	6.54	7.11	8.12	7.09	6.89	7.27	8.13	6.99	6.46	6.96	7.11
Pacific .....	9.58	9.30	9.59	9.70	10.35	10.01	10.09	9.36	9.23	9.05	9.51	9.15	9.57	9.94	9.21
U.S. Average .....	7.13	7.63	8.49	7.53	7.75	8.52	8.91	7.91	7.69	8.12	8.54	7.65	7.48	8.05	7.84
<b>Industrial Retail</b>															
New England .....	8.15	7.41	6.16	7.67	8.69	7.77	6.77	7.66	8.09	7.52	6.61	7.62	7.54	7.85	7.59
Middle Atlantic .....	7.43	6.76	7.00	7.61	7.70	7.24	7.25	7.46	8.02	7.75	7.63	8.00	7.28	7.48	7.91
E. N. Central .....	4.84	5.10	4.15	5.10	5.52	5.73	5.70	5.57	5.85	5.64	5.56	5.54	4.86	5.59	5.69
W. N. Central .....	3.97	3.30	3.15	4.13	6.03	4.97	4.54	4.94	5.18	4.52	4.41	4.90	3.68	5.18	4.79
S. Atlantic .....	4.15	3.70	3.72	4.56	5.43	4.85	4.84	5.09	5.28	4.73	4.68	4.95	4.06	5.07	4.93
E. S. Central .....	3.92	3.24	3.23	4.04	5.04	4.48	4.45	4.83	5.00	4.48	4.29	4.64	3.65	4.73	4.62
W. S. Central .....	2.19	1.92	2.19	2.89	5.44	3.00	3.27	3.30	3.35	3.22	3.28	3.34	2.31	3.70	3.30
Mountain .....	4.40	4.59	4.67	4.91	5.11	5.43	5.88	5.84	5.79	5.50	5.64	5.46	4.64	5.53	5.60
Pacific .....	7.46	6.28	6.18	7.23	8.27	7.19	7.13	7.07	7.07	6.54	6.80	6.84	6.86	7.41	6.83
U.S. Average .....	3.52	2.85	2.88	3.77	5.78	3.90	3.96	4.28	4.53	4.00	3.94	4.27	3.29	4.50	4.20

- = no data available

Notes: EIA completed modeling and analysis for this report on Thursday May 6, 2021.

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

Prices are not adjusted for inflation.

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.

**Forecasts:** EIA Short-Term Integrated Forecasting System.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - May 2021

	2020				2021				2022				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2020	2021	2022
<b>Supply (million short tons)</b>															
Production .....	149.1	115.2	135.8	139.0	138.7	140.2	153.6	149.6	151.1	145.5	156.6	151.5	539.1	582.1	604.8
Appalachia .....	39.7	29.3	33.9	35.5	34.8	35.1	34.5	35.6	39.6	41.1	39.0	39.9	138.3	140.0	159.6
Interior .....	25.8	19.2	23.2	22.3	22.4	24.7	28.7	28.5	30.2	29.1	29.7	28.8	90.4	104.4	117.7
Western .....	83.6	66.7	78.8	81.2	81.5	80.3	90.4	85.4	81.3	75.4	87.9	82.8	310.3	337.7	327.4
Primary Inventory Withdrawals .....	0.5	1.3	2.0	-0.9	0.0	0.1	2.1	-2.1	-1.3	-2.1	-0.8	-5.3	2.8	0.2	-9.6
Imports .....	1.3	1.1	1.3	1.3	1.1	0.9	1.2	1.2	1.0	1.0	1.3	1.3	5.1	4.5	4.6
Exports .....	20.0	14.8	15.3	19.1	20.7	17.9	17.2	21.2	27.2	18.0	18.4	24.0	69.1	77.0	87.5
Metallurgical Coal .....	11.7	9.0	10.2	11.3	10.3	8.5	10.8	11.7	15.4	10.6	12.2	13.1	42.1	41.4	51.4
Steam Coal .....	8.3	5.8	5.1	7.8	10.4	9.4	6.5	9.4	11.8	7.4	6.2	10.8	27.0	35.6	36.2
Total Primary Supply .....	130.9	102.9	123.8	120.3	119.1	123.3	139.8	127.5	123.6	126.4	138.8	123.5	477.9	509.8	512.3
Secondary Inventory Withdrawals .....	-16.6	-5.0	21.5	-3.3	17.8	-0.4	24.4	1.1	19.8	-6.2	18.5	0.4	-3.5	42.9	32.5
Waste Coal (a) .....	1.9	1.5	2.0	2.3	2.0	2.0	2.0	2.0	1.8	1.8	1.8	1.8	7.7	8.0	7.4
Total Supply .....	116.2	99.4	147.3	119.3	138.9	124.9	166.2	130.7	145.2	122.1	159.1	125.7	482.1	560.7	552.1
<b>Consumption (million short tons)</b>															
Coke Plants .....	4.3	3.5	3.2	3.5	1.3	2.6	4.2	6.1	3.4	3.2	3.7	5.3	14.4	14.1	15.5
Electric Power Sector (b) .....	97.9	87.2	139.3	112.1	129.8	115.8	155.5	117.8	135.1	112.4	149.0	113.9	436.5	518.9	510.4
Retail and Other Industry .....	7.4	5.7	6.1	7.2	7.0	6.6	6.5	6.8	6.8	6.5	6.4	6.5	26.4	26.8	26.2
Residential and Commercial .....	0.3	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.8	0.8	0.7
Other Industrial .....	7.1	5.6	5.9	7.0	6.8	6.4	6.3	6.5	6.6	6.4	6.2	6.3	25.6	26.0	25.5
Total Consumption .....	109.5	96.4	148.6	122.8	138.0	124.9	166.2	130.7	145.2	122.1	159.1	125.7	477.3	559.8	552.1
Discrepancy (c) .....	6.7	2.9	-1.3	-3.5	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.9	0.0
<b>End-of-period Inventories (million short tons)</b>															
Primary Inventories (d) .....	30.8	29.5	27.5	28.5	28.5	28.3	26.2	28.3	29.7	31.8	32.6	37.9	28.5	28.3	37.9
Secondary Inventories .....	150.6	155.6	134.2	137.5	119.7	120.1	95.7	94.5	74.7	80.9	62.4	62.1	137.5	94.5	62.1
Electric Power Sector .....	145.2	150.4	129.1	132.7	114.4	114.6	90.1	89.2	69.6	75.6	57.1	56.9	132.7	89.2	56.9
Retail and General Industry .....	3.0	3.0	2.9	2.8	3.8	3.6	3.5	3.3	3.6	3.4	3.4	3.2	2.8	3.3	3.2
Coke Plants .....	2.1	2.0	2.0	1.7	1.4	1.7	1.8	1.9	1.3	1.7	1.8	1.8	1.7	1.9	1.8
Commercial & Institutional .....	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2
<b>Coal Market Indicators</b>															
Coal Miner Productivity															
(Tons per hour) .....	6.37	6.37	6.37	6.37	6.32	6.32	6.32	6.32	6.30	6.30	6.30	6.30	6.37	6.32	6.30
Total Raw Steel Production															
(Million short tons per day) .....	0.268	0.174	0.197	0.224	0.246	0.257	0.268	0.303	0.290	0.255	0.251	0.258	0.216	0.269	0.263
Cost of Coal to Electric Utilities															
(Dollars per million Btu) .....	1.93	1.91	1.93	1.92	1.93	1.98	1.98	1.95	1.99	1.99	1.97	1.95	1.92	1.96	1.98

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

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

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

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

- = no data available

Notes: EIA completed modeling and analysis for this report on Thursday May 6, 2021.

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*,

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

**Forecasts:** EIA Short-Term Integrated Forecasting System.



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

U.S. Energy Information Administration | Short-Term Energy Outlook - May 2021

	2020				2021				2022				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2020	2021	2022
<b>Electricity Supply (billion kilowatthours)</b>															
Electricity Generation .....	966	933	1,148	962	990	974	1,139	967	993	982	1,149	975	4,009	4,070	4,099
Electric Power Sector (a) .....	925	896	1,109	923	952	936	1,101	930	956	944	1,109	937	3,853	3,920	3,946
Industrial Sector (b) .....	38	34	36	36	34	34	34	34	34	34	36	35	143	136	139
Commercial Sector (b) .....	3	3	4	3	3	3	4	3	3	3	4	3	13	14	14
Net Imports .....	10	11	15	12	9	12	15	11	12	13	15	11	47	47	51
Total Supply .....	976	944	1,163	973	999	986	1,154	978	1,006	994	1,164	986	4,056	4,117	4,150
Losses and Unaccounted for (c) .....	53	67	71	63	52	68	57	54	45	67	57	54	254	231	224
<b>Electricity Consumption (billion kilowatthours unless noted)</b>															
Retail Sales .....	887	844	1,057	876	913	885	1,064	892	927	894	1,071	898	3,664	3,754	3,790
Residential Sector .....	340	334	453	334	376	343	446	340	377	346	449	343	1,462	1,504	1,515
Commercial Sector .....	314	293	360	309	305	308	365	315	311	312	369	318	1,276	1,293	1,311
Industrial Sector .....	231	216	242	231	231	232	251	235	236	235	251	235	920	950	957
Transportation Sector .....	2	1	2	2	2	2	2	2	2	2	2	2	7	6	6
Direct Use (d) .....	36	33	35	34	33	33	34	33	33	33	35	34	138	133	136
Total Consumption .....	923	877	1,092	910	947	918	1,097	925	960	927	1,106	932	3,802	3,887	3,925
Average residential electricity usage per customer (kWh) .....	2,496	2,451	3,326	2,451	2,712	2,477	3,220	2,451	2,692	2,467	3,204	2,449	10,723	10,861	10,812
<b>End-of-period Fuel Inventories Held by Electric Power Sector</b>															
Coal (mmst) .....	145.2	150.4	129.1	132.7	114.4	114.6	90.1	89.2	69.6	75.6	57.1	56.9	132.7	89.2	56.9
Residual Fuel (mmb) .....	8.3	8.5	8.2	8.3	8.8	8.9	8.9	9.1	8.5	8.5	8.5	9.0	8.3	9.1	9.0
Distillate Fuel (mmb) .....	16.5	16.5	17.0	16.8	16.0	16.0	15.9	16.2	16.1	16.0	16.0	16.3	16.8	16.2	16.3
<b>Prices</b>															
<b>Power Generation Fuel Costs (dollars per million Btu)</b>															
Coal .....	1.93	1.91	1.93	1.92	1.93	1.98	1.98	1.95	1.99	1.99	1.97	1.95	1.92	1.96	1.98
Natural Gas .....	2.39	2.08	2.26	2.87	8.23	3.45	3.12	3.31	3.65	3.19	3.16	3.39	2.39	4.41	3.33
Residual Fuel Oil .....	12.15	6.65	8.85	8.90	10.52	12.48	11.90	11.23	11.51	12.14	11.36	11.23	9.15	11.48	11.54
Distillate Fuel Oil .....	13.27	8.39	10.37	10.54	13.53	14.87	14.77	14.49	14.68	14.50	14.47	14.68	10.73	14.27	14.59
<b>Retail Prices (cents per kilowatthour)</b>															
Residential Sector .....	12.90	13.24	13.35	13.25	13.14	13.54	13.69	13.59	13.49	13.81	13.82	13.67	13.20	13.50	13.70
Commercial Sector .....	10.33	10.63	10.97	10.62	10.92	10.96	11.41	11.01	11.22	11.18	11.50	11.08	10.65	11.09	11.25
Industrial Sector .....	6.38	6.63	7.08	6.53	7.14	6.91	7.19	6.57	6.90	7.00	7.19	6.58	6.66	6.96	6.92
<b>Wholesale Electricity Prices (dollars per megawatthour)</b>															
ERCOT North hub .....	23.41	24.03	34.12	26.41	616.34	8.86	18.75	15.87	16.83	15.81	15.70	15.57	26.99	164.96	15.98
CAISO SP15 zone .....	28.64	19.21	61.94	42.80	44.74	40.23	45.79	39.09	41.05	40.38	43.02	38.78	38.15	42.46	40.81
ISO-NE Internal hub .....	24.61	20.25	27.20	34.03	55.26	28.30	32.85	37.83	50.39	29.20	31.30	34.40	26.52	38.56	36.32
NYISO Hudson Valley zone .....	21.82	18.13	24.38	27.05	44.74	26.40	31.28	32.59	41.75	28.59	31.04	29.75	22.85	33.75	32.78
PJM Western hub .....	22.47	20.79	28.24	26.44	35.09	28.82	32.10	28.52	31.70	28.99	31.86	29.08	24.49	31.13	30.40
Midcontinent ISO Illinois hub .....	24.43	23.00	29.35	24.94	44.97	29.07	31.27	28.39	29.81	29.77	32.26	29.26	25.43	33.43	30.28
SPP ISO South hub .....	20.06	19.54	26.27	24.34	250.31	25.34	30.84	26.26	26.69	26.76	31.66	26.74	22.55	83.19	27.96
SERC index, Into Southern .....	23.58	18.23	23.47	25.21	41.10	27.16	29.28	27.09	27.97	27.53	29.35	27.22	22.62	31.16	28.02
FRCC index, Florida Reliability .....	26.24	18.53	23.75	25.39	27.73	26.74	28.69	28.42	28.85	27.52	27.85	27.90	23.48	27.89	28.03
Northwest index, Mid-Columbia .....	22.77	14.49	33.56	31.00	34.56	29.61	34.09	29.70	30.60	29.18	31.46	29.02	25.46	31.99	30.06
Southwest index, Palo Verde .....	22.07	19.60	80.81	36.10	41.72	34.36	39.51	32.72	32.76	34.34	36.20	32.68	39.64	37.08	33.99

Notes: EIA completed modeling and analysis for this report on Thursday May 6, 2021.

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

kWh = kilowatthours. Btu = British thermal units.

Prices are not adjusted for inflation.

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

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

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

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

**Historical data sources:**

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

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

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

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

**Forecasts:** EIA Short-Term Integrated Forecasting System.

**Table 7b. U.S. Regional Electricity Retail Sales (billion kilowatthours)**  
 U.S. Energy Information Administration | Short-Term Energy Outlook - May 2021

	2020				2021				2022				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2020	2021	2022
<b>Residential Sector</b>															
New England .....	11.7	10.9	14.6	11.0	13.0	11.1	13.7	11.2	13.2	11.2	13.5	11.1	48.2	49.0	49.0
Middle Atlantic .....	32.2	30.6	43.5	30.9	35.8	30.3	40.6	31.4	36.2	30.7	40.3	31.4	137.1	138.1	138.6
E. N. Central .....	46.4	43.7	56.5	43.4	50.0	44.3	54.8	44.7	51.0	44.7	54.7	44.9	190.0	193.9	195.3
W. N. Central .....	27.6	23.7	30.0	24.5	30.2	25.1	30.6	25.9	32.7	26.4	32.0	27.0	105.8	111.8	118.2
S. Atlantic .....	84.3	86.3	114.7	85.3	94.9	89.8	113.4	85.5	94.6	89.9	114.5	86.4	370.6	383.7	385.4
E. S. Central .....	29.0	26.0	37.2	26.6	33.6	27.1	38.1	27.3	33.4	27.3	38.4	27.5	118.8	126.1	126.6
W. S. Central .....	48.8	52.9	76.4	48.5	55.1	55.0	78.0	50.6	52.8	54.6	78.9	51.5	226.5	238.6	237.8
Mountain .....	22.5	25.7	36.2	24.0	23.6	25.8	34.3	24.0	23.6	26.0	34.5	24.4	108.4	107.8	108.4
Pacific contiguous .....	36.7	33.2	43.0	38.6	38.2	33.5	41.3	37.6	38.5	33.9	41.2	37.7	151.5	150.6	151.4
AK and HI .....	1.3	1.1	1.2	1.3	1.3	1.1	1.2	1.3	1.3	1.1	1.2	1.3	4.9	4.9	4.9
<b>Total .....</b>	<b>340.3</b>	<b>334.1</b>	<b>453.4</b>	<b>334.1</b>	<b>375.7</b>	<b>343.2</b>	<b>446.1</b>	<b>339.5</b>	<b>377.3</b>	<b>345.8</b>	<b>449.1</b>	<b>343.2</b>	<b>1,462.0</b>	<b>1,504.5</b>	<b>1,515.4</b>
<b>Commercial Sector</b>															
New England .....	12.3	10.6	13.2	11.4	11.9	10.8	12.9	11.5	12.0	10.9	12.9	11.5	47.5	47.2	47.3
Middle Atlantic .....	35.9	31.0	38.9	33.2	34.8	33.8	39.3	34.5	36.1	34.7	39.8	34.9	138.9	142.4	145.5
E. N. Central .....	43.1	38.3	47.3	41.0	41.4	41.2	48.2	42.4	42.7	41.9	48.7	42.8	169.7	173.2	176.0
W. N. Central .....	24.7	21.6	26.3	23.4	24.2	21.9	26.8	23.8	24.9	22.4	27.5	24.4	96.0	96.7	99.1
S. Atlantic .....	72.0	70.0	85.7	72.4	71.0	74.9	87.7	73.9	73.2	76.1	88.8	74.6	300.2	307.5	312.8
E. S. Central .....	20.7	19.4	25.3	20.4	20.7	20.1	25.9	20.8	21.0	20.3	26.1	20.9	85.8	87.5	88.2
W. S. Central .....	44.3	44.6	55.0	45.4	43.4	46.2	56.7	47.0	43.7	46.4	57.2	47.7	189.4	193.3	195.0
Mountain .....	22.4	22.1	27.4	22.8	22.1	23.4	27.4	23.2	22.7	23.8	27.9	23.7	94.7	96.2	98.1
Pacific contiguous .....	37.0	33.9	39.8	37.6	34.0	34.4	39.1	36.8	33.9	34.2	38.7	36.3	148.3	144.3	143.2
AK and HI .....	1.4	1.2	1.3	1.3	1.3	1.2	1.3	1.3	1.3	1.3	1.4	1.4	5.2	5.2	5.4
<b>Total .....</b>	<b>313.7</b>	<b>292.7</b>	<b>360.3</b>	<b>308.9</b>	<b>304.8</b>	<b>308.0</b>	<b>365.4</b>	<b>315.3</b>	<b>311.5</b>	<b>312.0</b>	<b>368.9</b>	<b>318.2</b>	<b>1,275.7</b>	<b>1,293.4</b>	<b>1,310.6</b>
<b>Industrial Sector</b>															
New England .....	3.7	3.5	3.9	3.7	3.7	3.6	4.0	3.7	3.7	3.6	3.9	3.6	14.8	15.0	14.7
Middle Atlantic .....	18.0	16.2	18.6	17.6	17.9	17.4	19.1	17.8	18.3	17.6	19.2	17.8	70.4	72.2	72.9
E. N. Central .....	44.0	37.7	44.5	42.5	44.7	41.6	46.8	43.3	45.8	41.8	46.6	43.0	168.7	176.3	177.2
W. N. Central .....	21.7	20.3	23.2	22.1	23.1	22.9	24.5	22.8	23.9	23.4	24.8	22.9	87.3	93.3	95.1
S. Atlantic .....	32.8	31.0	34.2	33.6	33.6	33.5	35.4	34.0	33.9	33.4	35.2	33.6	131.7	136.5	136.1
E. S. Central .....	23.3	21.4	23.4	22.9	23.6	23.2	24.2	23.2	24.1	23.3	24.1	23.0	91.1	94.3	94.6
W. S. Central .....	46.6	44.9	47.9	48.7	45.7	46.9	49.7	50.0	47.3	48.2	50.5	50.7	188.1	192.3	196.7
Mountain .....	20.1	20.3	22.6	19.9	19.7	21.5	23.4	20.3	20.2	21.9	23.7	20.5	82.9	84.9	86.3
Pacific contiguous .....	19.2	19.7	22.1	19.0	18.3	20.6	22.5	19.0	18.2	20.4	22.2	18.7	80.1	80.4	79.4
AK and HI .....	1.2	1.0	1.2	1.2	1.1	1.1	1.2	1.2	1.1	1.1	1.2	1.2	4.5	4.5	4.6
<b>Total .....</b>	<b>230.7</b>	<b>216.0</b>	<b>241.6</b>	<b>231.2</b>	<b>231.3</b>	<b>232.3</b>	<b>250.8</b>	<b>235.3</b>	<b>236.5</b>	<b>234.6</b>	<b>251.3</b>	<b>235.0</b>	<b>919.5</b>	<b>949.6</b>	<b>957.5</b>
<b>Total All Sectors (a)</b>															
New England .....	27.8	25.1	31.9	26.3	28.8	25.7	30.7	26.5	29.1	25.7	30.4	26.3	111.0	111.7	111.5
Middle Atlantic .....	86.9	78.5	101.8	82.5	89.3	82.3	99.7	84.5	91.4	83.6	100.1	84.9	349.7	355.8	360.1
E. N. Central .....	133.7	119.7	148.4	127.0	136.3	127.2	149.9	130.6	139.6	128.5	150.1	130.8	528.8	544.0	549.0
W. N. Central .....	74.0	65.7	79.5	70.0	77.4	69.9	82.0	72.6	81.6	72.2	84.3	74.3	289.2	301.8	312.4
S. Atlantic .....	189.5	187.6	235.0	191.6	199.8	198.4	236.9	193.7	202.0	199.8	238.8	194.9	803.7	828.8	835.4
E. S. Central .....	73.0	66.8	85.9	69.9	78.0	70.3	88.2	71.3	78.5	70.8	88.6	71.5	295.7	307.8	309.4
W. S. Central .....	139.8	142.4	179.4	142.7	144.3	148.2	184.4	147.6	143.9	149.2	186.6	149.9	604.2	624.4	629.7
Mountain .....	65.0	68.2	86.3	66.7	65.4	70.8	85.2	67.6	66.5	71.8	86.0	68.6	286.2	289.0	292.9
Pacific contiguous .....	93.1	87.0	105.1	95.4	90.6	88.7	103.2	93.6	90.8	88.7	102.3	93.0	380.6	376.1	374.7
AK and HI .....	3.8	3.4	3.6	3.8	3.6	3.5	3.7	3.9	3.7	3.6	3.7	3.9	14.6	14.6	14.9
<b>Total .....</b>	<b>886.6</b>	<b>844.3</b>	<b>1,056.9</b>	<b>875.9</b>	<b>913.4</b>	<b>885.0</b>	<b>1,063.8</b>	<b>891.7</b>	<b>927.0</b>	<b>893.9</b>	<b>1,071.0</b>	<b>898.0</b>	<b>3,663.7</b>	<b>3,753.9</b>	<b>3,789.9</b>

(a) Total retail sales to all sectors includes residential, commercial, industrial, and transportation sector sales.

- = no data available

Notes: EIA completed modeling and analysis for this report on Thursday May 6, 2021.

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

Retail Sales represents total retail electricity sales by electric utilities and power marketers.

Regions refer to U.S. Census divisions.

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

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

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

**Forecasts:** EIA Short-Term Integrated Forecasting System.

**Table 7c. U.S. Regional Retail Electricity Prices (Cents per Kilowatthour)**  
U.S. Energy Information Administration | Short-Term Energy Outlook - May 2021

	2020				2021				2022				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2020	2021	2022
<b>Residential Sector</b>															
New England .....	21.76	21.32	20.95	20.80	21.29	21.59	21.90	22.26	23.12	23.48	23.65	23.72	21.20	21.75	23.48
Middle Atlantic .....	15.47	15.96	16.18	15.98	15.74	16.48	16.86	16.59	16.13	16.69	17.03	16.70	15.92	16.43	16.64
E. N. Central .....	13.14	13.75	13.33	13.75	13.27	14.00	13.69	14.04	13.57	14.25	13.88	14.22	13.48	13.73	13.96
W. N. Central .....	10.98	12.59	12.88	11.46	10.98	12.99	13.51	11.65	10.70	12.74	13.17	11.53	11.99	12.28	12.01
S. Atlantic .....	11.79	11.80	12.05	11.83	11.67	11.82	12.28	12.18	12.14	12.21	12.52	12.22	11.88	12.00	12.29
E. S. Central .....	11.24	11.56	11.28	11.41	11.20	11.83	11.62	11.75	11.52	12.00	11.67	11.81	11.36	11.58	11.73
W. S. Central .....	11.04	11.42	11.29	11.37	12.42	11.94	11.59	11.55	12.30	11.54	11.22	11.32	11.29	11.85	11.55
Mountain .....	11.42	12.08	12.19	11.64	11.56	12.30	12.47	11.89	11.81	12.50	12.58	11.97	11.88	12.10	12.25
Pacific .....	15.69	16.18	17.77	16.79	16.42	17.01	18.28	17.12	17.07	18.03	19.00	17.47	16.67	17.24	17.91
U.S. Average .....	12.90	13.24	13.35	13.25	13.14	13.54	13.69	13.59	13.49	13.81	13.82	13.67	13.20	13.50	13.70
<b>Commercial Sector</b>															
New England .....	16.24	15.67	15.98	15.67	16.23	16.00	16.66	16.47	17.09	16.76	17.28	16.93	15.90	16.35	17.03
Middle Atlantic .....	11.69	12.53	13.21	12.41	12.43	13.08	13.71	12.87	12.70	13.28	13.77	12.89	12.47	13.04	13.18
E. N. Central .....	9.95	10.37	10.19	10.29	10.30	10.65	10.53	10.62	10.48	10.71	10.57	10.67	10.19	10.52	10.61
W. N. Central .....	9.07	10.12	10.33	9.12	9.25	10.74	11.13	9.50	9.03	10.35	10.69	9.32	9.66	10.17	9.86
S. Atlantic .....	9.23	9.02	9.09	9.20	9.25	9.01	9.31	9.55	9.52	9.11	9.27	9.47	9.13	9.28	9.34
E. S. Central .....	10.75	10.83	10.60	10.67	11.01	11.19	10.99	11.04	11.22	11.30	11.07	11.15	10.70	11.05	11.18
W. S. Central .....	7.84	7.87	7.89	7.98	10.35	8.40	8.55	8.37	11.05	9.05	8.92	8.64	7.90	8.88	9.36
Mountain .....	9.00	9.82	10.09	9.31	9.16	10.05	10.36	9.44	9.21	10.06	10.31	9.43	9.58	9.79	9.78
Pacific .....	13.50	14.79	17.20	15.05	14.22	15.37	18.01	15.63	14.77	15.95	18.44	16.00	15.18	15.88	16.35
U.S. Average .....	10.33	10.63	10.97	10.62	10.92	10.96	11.41	11.01	11.22	11.18	11.50	11.08	10.65	11.09	11.25
<b>Industrial Sector</b>															
New England .....	12.29	12.22	12.41	12.12	13.44	13.04	12.94	12.52	13.81	13.30	13.12	12.66	12.26	12.99	13.22
Middle Atlantic .....	6.36	6.35	6.41	6.28	6.42	6.38	6.35	6.20	6.24	6.25	6.20	6.05	6.35	6.34	6.19
E. N. Central .....	6.51	6.78	6.75	6.62	6.86	6.99	6.85	6.72	6.83	7.04	6.90	6.78	6.66	6.85	6.89
W. N. Central .....	6.94	7.32	7.89	6.62	7.13	7.37	8.00	6.75	7.08	7.50	8.15	6.88	7.20	7.33	7.41
S. Atlantic .....	5.98	6.09	6.50	6.09	6.19	6.31	6.62	6.14	6.17	6.32	6.60	6.13	6.17	6.32	6.31
E. S. Central .....	5.45	5.51	5.70	5.52	5.77	5.71	5.79	5.54	5.67	5.70	5.77	5.52	5.54	5.70	5.67
W. S. Central .....	5.05	4.98	5.21	5.03	7.60	5.37	5.33	4.92	6.46	5.63	5.17	4.82	5.07	5.77	5.50
Mountain .....	5.73	6.15	6.91	5.94	6.21	6.56	6.98	6.01	6.25	6.61	7.01	6.04	6.21	6.46	6.50
Pacific .....	8.97	10.33	12.38	10.95	9.66	10.94	12.66	11.28	9.94	11.28	13.03	11.63	10.71	11.21	11.55
U.S. Average .....	6.38	6.63	7.08	6.53	7.14	6.91	7.19	6.57	6.90	7.00	7.19	6.58	6.66	6.96	6.92
<b>All Sectors (a)</b>															
New England .....	18.02	17.61	17.79	17.27	18.13	17.97	18.49	18.32	19.39	19.17	19.56	19.17	17.68	18.24	19.33
Middle Atlantic .....	11.98	12.58	13.23	12.42	12.54	12.91	13.58	12.84	12.77	13.05	13.63	12.87	12.58	12.99	13.10
E. N. Central .....	9.92	10.47	10.36	10.24	10.26	10.61	10.53	10.49	10.41	10.74	10.63	10.61	10.24	10.47	10.60
W. N. Central .....	9.15	10.15	10.58	9.15	9.29	10.45	11.08	9.40	9.13	10.30	10.88	9.37	9.77	10.07	9.93
S. Atlantic .....	9.80	9.82	10.16	9.82	9.88	9.83	10.33	10.11	10.18	10.04	10.43	10.11	9.91	10.05	10.20
E. S. Central .....	9.25	9.41	9.56	9.26	9.50	9.63	9.83	9.52	9.64	9.73	9.89	9.59	9.38	9.63	9.72
W. S. Central .....	8.03	8.28	8.63	8.12	10.27	8.76	8.97	8.29	10.00	8.86	8.88	8.27	8.29	9.06	8.98
Mountain .....	8.83	9.58	10.14	9.14	9.14	9.81	10.28	9.28	9.24	9.89	10.31	9.32	9.48	9.67	9.73
Pacific .....	13.41	14.30	16.41	14.92	14.22	14.95	16.94	15.33	14.76	15.65	17.48	15.70	14.82	15.41	15.95
U.S. Average .....	10.29	10.63	11.11	10.54	10.87	10.90	11.37	10.82	11.04	11.10	11.46	10.89	10.66	11.01	11.14

(a) Volume-weighted average of retail prices to residential, commercial, industrial, and transportation sectors.

- = no data available

Notes: EIA completed modeling and analysis for this report on Thursday May 6, 2021.

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

Prices are not adjusted for inflation.

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*

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

**Forecasts:** EIA Short-Term Integrated Forecasting System.

**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 - May 2021

	2020				2021				2022				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2020	2021	2022
<b>United States</b>															
Natural Gas .....	<b>354.7</b>	<b>342.6</b>	<b>474.2</b>	<b>340.7</b>	<b>321.9</b>	<i>318.4</i>	<i>422.3</i>	<i>323.9</i>	<i>305.9</i>	<i>309.3</i>	<i>433.2</i>	<i>330.4</i>	<b>1,512.2</b>	<i>1,386.5</i>	<i>1,378.8</i>
Coal .....	<b>170.3</b>	<b>151.2</b>	<b>248.2</b>	<b>198.6</b>	<b>231.9</b>	<i>203.6</i>	<i>278.4</i>	<i>208.0</i>	<i>243.3</i>	<i>195.5</i>	<i>264.7</i>	<i>199.1</i>	<b>768.2</b>	<i>921.9</i>	<i>902.6</i>
Nuclear .....	<b>204.1</b>	<b>190.7</b>	<b>204.1</b>	<b>191.0</b>	<b>199.0</b>	<i>186.7</i>	<i>205.4</i>	<i>188.1</i>	<i>189.0</i>	<i>185.3</i>	<i>197.4</i>	<i>184.1</i>	<b>789.9</b>	<i>779.2</i>	<i>755.8</i>
Renewable Energy Sources: .....	<b>190.1</b>	<b>206.5</b>	<b>176.9</b>	<b>187.0</b>	<b>193.4</b>	<i>223.2</i>	<i>191.3</i>	<i>204.3</i>	<i>212.1</i>	<i>249.5</i>	<i>209.6</i>	<i>216.6</i>	<b>760.6</b>	<i>812.1</i>	<i>887.8</i>
Conventional Hydropower .....	<b>75.0</b>	<b>81.3</b>	<b>70.6</b>	<b>63.0</b>	<b>70.1</b>	<i>72.0</i>	<i>62.6</i>	<i>57.7</i>	<i>68.6</i>	<i>80.5</i>	<i>65.4</i>	<i>59.1</i>	<b>289.9</b>	<i>262.4</i>	<i>273.6</i>
Wind .....	<b>87.4</b>	<b>87.1</b>	<b>67.5</b>	<b>94.7</b>	<b>91.3</b>	<i>104.0</i>	<i>81.0</i>	<i>110.6</i>	<i>104.9</i>	<i>112.1</i>	<i>87.2</i>	<i>116.2</i>	<b>336.7</b>	<i>386.8</i>	<i>420.5</i>
Solar (a) .....	<b>16.7</b>	<b>27.3</b>	<b>27.6</b>	<b>18.5</b>	<b>20.6</b>	<i>34.7</i>	<i>35.6</i>	<i>24.1</i>	<i>27.0</i>	<i>44.5</i>	<i>44.6</i>	<i>29.4</i>	<b>90.1</b>	<i>115.0</i>	<i>145.6</i>
Biomass .....	<b>7.1</b>	<b>6.7</b>	<b>7.0</b>	<b>6.7</b>	<b>7.3</b>	<i>8.3</i>	<i>7.9</i>	<i>7.5</i>	<i>7.4</i>	<i>8.4</i>	<i>8.1</i>	<i>7.5</i>	<b>27.5</b>	<i>31.0</i>	<i>31.4</i>
Geothermal .....	<b>3.9</b>	<b>4.2</b>	<b>4.2</b>	<b>4.2</b>	<b>4.1</b>	<i>4.3</i>	<i>4.2</i>	<i>4.3</i>	<i>4.2</i>	<i>4.0</i>	<i>4.2</i>	<i>4.4</i>	<b>16.5</b>	<i>16.9</i>	<i>16.8</i>
Pumped Storage Hydropower .....	<b>-1.0</b>	<b>-1.2</b>	<b>-2.0</b>	<b>-1.2</b>	<b>-1.2</b>	<i>-1.4</i>	<i>-2.4</i>	<i>-1.2</i>	<i>-1.2</i>	<i>-1.3</i>	<i>-2.4</i>	<i>-1.1</i>	<b>-5.3</b>	<i>-6.2</i>	<i>-6.0</i>
Petroleum (b) .....	<b>4.0</b>	<b>3.9</b>	<b>4.5</b>	<b>4.0</b>	<b>4.9</b>	<i>3.6</i>	<i>4.1</i>	<i>4.1</i>	<i>4.1</i>	<i>3.8</i>	<i>4.2</i>	<i>4.8</i>	<b>16.5</b>	<i>16.7</i>	<i>16.9</i>
Other Gases .....	<b>1.0</b>	<b>0.4</b>	<b>0.8</b>	<b>0.9</b>	<b>0.7</b>	<i>0.5</i>	<i>0.7</i>	<i>0.8</i>	<i>0.8</i>	<i>0.4</i>	<i>0.7</i>	<i>0.8</i>	<b>3.1</b>	<i>2.7</i>	<i>2.7</i>
Other Nonrenewable Fuels (c) .....	<b>1.9</b>	<b>1.8</b>	<b>1.9</b>	<b>1.9</b>	<b>1.8</b>	<i>1.8</i>	<i>1.7</i>	<i>1.8</i>	<i>1.7</i>	<i>1.8</i>	<i>1.7</i>	<i>1.9</i>	<b>7.5</b>	<i>7.1</i>	<i>7.1</i>
Total Generation .....	<b>925.2</b>	<b>896.1</b>	<b>1,108.5</b>	<b>922.9</b>	<b>952.2</b>	<i>936.5</i>	<i>1,101.3</i>	<i>930.0</i>	<i>955.7</i>	<i>944.2</i>	<i>1,109.1</i>	<i>936.6</i>	<b>3,852.8</b>	<i>3,920.0</i>	<i>3,945.6</i>
<b>New England (ISO-NE)</b>															
Natural Gas .....	<b>10.8</b>	<b>10.0</b>	<b>16.1</b>	<b>10.8</b>	<b>11.6</b>	<i>11.1</i>	<i>17.2</i>	<i>12.8</i>	<i>9.7</i>	<i>11.7</i>	<i>17.7</i>	<i>12.0</i>	<b>47.7</b>	<i>52.6</i>	<i>51.2</i>
Coal .....	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>0.4</b>	<i>0.0</i>	<i>0.0</i>	<i>0.1</i>	<i>0.7</i>	<i>0.0</i>	<i>0.0</i>	<i>0.1</i>	<b>0.2</b>	<i>0.5</i>	<i>0.8</i>
Nuclear .....	<b>7.3</b>	<b>4.9</b>	<b>7.3</b>	<b>6.1</b>	<b>7.1</b>	<i>7.2</i>	<i>7.2</i>	<i>5.6</i>	<i>7.0</i>	<i>6.2</i>	<i>7.2</i>	<i>7.2</i>	<b>25.6</b>	<i>27.1</i>	<i>27.7</i>
Conventional hydropower .....	<b>2.2</b>	<b>2.1</b>	<b>1.8</b>	<b>1.7</b>	<b>1.9</b>	<i>2.2</i>	<i>1.3</i>	<i>1.8</i>	<i>2.0</i>	<i>2.3</i>	<i>1.3</i>	<i>1.8</i>	<b>7.8</b>	<i>7.3</i>	<i>7.4</i>
Nonhydro renewables (d) .....	<b>2.6</b>	<b>2.7</b>	<b>2.4</b>	<b>2.6</b>	<b>2.7</b>	<i>3.2</i>	<i>2.7</i>	<i>3.2</i>	<i>3.2</i>	<i>3.3</i>	<i>2.8</i>	<i>3.2</i>	<b>10.3</b>	<i>11.8</i>	<i>12.6</i>
Other energy sources (e) .....	<b>0.3</b>	<b>0.3</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<i>0.4</i>	<i>0.2</i>	<i>0.4</i>	<i>0.4</i>	<i>0.3</i>	<i>0.3</i>	<i>0.4</i>	<b>1.4</b>	<i>1.4</i>	<i>1.4</i>
Total generation .....	<b>23.2</b>	<b>20.1</b>	<b>28.0</b>	<b>21.7</b>	<b>24.1</b>	<i>24.2</i>	<i>28.6</i>	<i>23.9</i>	<i>23.1</i>	<i>23.9</i>	<i>29.3</i>	<i>24.8</i>	<b>92.9</b>	<i>100.7</i>	<i>101.0</i>
Net energy for load (f) .....	<b>27.9</b>	<b>25.2</b>	<b>32.3</b>	<b>27.6</b>	<b>29.3</b>	<i>26.6</i>	<i>31.9</i>	<i>28.2</i>	<i>29.9</i>	<i>27.1</i>	<i>31.9</i>	<i>28.3</i>	<b>113.0</b>	<i>116.0</i>	<i>117.2</i>
<b>New York (NYISO)</b>															
Natural Gas .....	<b>12.4</b>	<b>11.4</b>	<b>20.6</b>	<b>12.8</b>	<b>13.8</b>	<i>13.2</i>	<i>20.2</i>	<i>15.0</i>	<i>15.3</i>	<i>15.0</i>	<i>21.4</i>	<i>15.3</i>	<b>57.1</b>	<i>62.3</i>	<i>66.9</i>
Coal .....	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<b>0.1</b>	<i>0.0</i>	<i>0.0</i>
Nuclear .....	<b>10.7</b>	<b>9.2</b>	<b>9.0</b>	<b>9.6</b>	<b>9.4</b>	<i>7.6</i>	<i>7.1</i>	<i>6.8</i>	<i>6.5</i>	<i>7.0</i>	<i>6.7</i>	<i>7.0</i>	<b>38.5</b>	<i>30.9</i>	<i>27.2</i>
Conventional hydropower .....	<b>8.0</b>	<b>8.0</b>	<b>7.8</b>	<b>7.6</b>	<b>7.3</b>	<i>7.0</i>	<i>7.0</i>	<i>7.2</i>	<i>7.0</i>	<i>7.0</i>	<i>7.0</i>	<i>7.1</i>	<b>31.4</b>	<i>28.5</i>	<i>28.1</i>
Nonhydro renewables (d) .....	<b>2.0</b>	<b>1.9</b>	<b>1.7</b>	<b>2.1</b>	<b>1.9</b>	<i>2.0</i>	<i>1.8</i>	<i>2.2</i>	<i>2.0</i>	<i>2.3</i>	<i>2.1</i>	<i>2.6</i>	<b>7.6</b>	<i>7.9</i>	<i>8.8</i>
Other energy sources (e) .....	<b>0.2</b>	<b>0.1</b>	<b>0.1</b>	<b>0.2</b>	<b>0.4</b>	<i>0.1</i>	<i>0.1</i>	<i>0.1</i>	<i>0.4</i>	<i>0.1</i>	<i>0.1</i>	<i>0.1</i>	<b>0.6</b>	<i>0.7</i>	<i>0.7</i>
Total generation .....	<b>33.4</b>	<b>30.6</b>	<b>39.2</b>	<b>32.2</b>	<b>32.8</b>	<i>30.0</i>	<i>36.2</i>	<i>31.3</i>	<i>31.1</i>	<i>31.4</i>	<i>37.2</i>	<i>32.1</i>	<b>135.4</b>	<i>130.3</i>	<i>131.8</i>
Net energy for load (f) .....	<b>35.3</b>	<b>32.4</b>	<b>42.9</b>	<b>34.7</b>	<b>36.6</b>	<i>35.4</i>	<i>42.7</i>	<i>36.3</i>	<i>37.5</i>	<i>35.9</i>	<i>42.9</i>	<i>36.6</i>	<b>145.3</b>	<i>150.9</i>	<i>152.9</i>
<b>Mid-Atlantic (PJM)</b>															
Natural Gas .....	<b>78.4</b>	<b>69.9</b>	<b>97.6</b>	<b>69.9</b>	<b>75.1</b>	<i>74.0</i>	<i>87.8</i>	<i>71.3</i>	<i>76.6</i>	<i>81.3</i>	<i>98.1</i>	<i>78.3</i>	<b>315.8</b>	<i>308.2</i>	<i>334.4</i>
Coal .....	<b>33.7</b>	<b>29.7</b>	<b>46.8</b>	<b>38.1</b>	<b>51.5</b>	<i>40.6</i>	<i>52.3</i>	<i>42.4</i>	<i>60.2</i>	<i>36.4</i>	<i>46.7</i>	<i>38.0</i>	<b>148.3</b>	<i>186.8</i>	<i>181.3</i>
Nuclear .....	<b>68.9</b>	<b>67.1</b>	<b>70.9</b>	<b>68.9</b>	<b>68.3</b>	<i>65.0</i>	<i>72.5</i>	<i>62.4</i>	<i>59.1</i>	<i>59.3</i>	<i>62.9</i>	<i>57.6</i>	<b>275.7</b>	<i>268.2</i>	<i>238.9</i>
Conventional hydropower .....	<b>3.1</b>	<b>2.9</b>	<b>2.1</b>	<b>1.9</b>	<b>2.6</b>	<i>2.6</i>	<i>1.6</i>	<i>2.1</i>	<i>2.6</i>	<i>2.7</i>	<i>1.6</i>	<i>2.1</i>	<b>9.9</b>	<i>9.0</i>	<i>9.1</i>
Nonhydro renewables (d) .....	<b>10.4</b>	<b>10.2</b>	<b>7.5</b>	<b>10.9</b>	<b>10.8</b>	<i>12.3</i>	<i>8.9</i>	<i>12.1</i>	<i>11.9</i>	<i>13.2</i>	<i>9.5</i>	<i>12.8</i>	<b>39.1</b>	<i>44.1</i>	<i>47.4</i>
Other energy sources (e) .....	<b>0.6</b>	<b>0.5</b>	<b>0.4</b>	<b>0.7</b>	<b>0.6</b>	<i>0.3</i>	<i>0.1</i>	<i>0.9</i>	<i>0.8</i>	<i>0.4</i>	<i>0.2</i>	<i>1.0</i>	<b>2.2</b>	<i>2.0</i>	<i>2.4</i>
Total generation .....	<b>195.1</b>	<b>180.2</b>	<b>225.3</b>	<b>190.5</b>	<b>209.0</b>	<i>194.8</i>	<i>223.1</i>	<i>191.2</i>	<i>211.3</i>	<i>193.2</i>	<i>219.0</i>	<i>189.8</i>	<b>791.1</b>	<i>818.2</i>	<i>813.4</i>
Net energy for load (f) .....	<b>182.5</b>	<b>163.5</b>	<b>209.3</b>	<b>177.1</b>	<b>194.6</b>	<i>173.9</i>	<i>205.9</i>	<i>180.8</i>	<i>197.2</i>	<i>175.7</i>	<i>207.2</i>	<i>182.0</i>	<b>732.4</b>	<i>755.2</i>	<i>762.1</i>
<b>Southeast (SERC)</b>															
Natural Gas .....	<b>61.9</b>	<b>59.1</b>	<b>74.7</b>	<b>58.5</b>	<b>58.2</b>	<i>56.3</i>	<i>70.8</i>	<i>58.0</i>	<i>57.2</i>	<i>56.2</i>	<i>72.5</i>	<i>58.2</i>	<b>254.2</b>	<i>243.3</i>	<i>244.1</i>
Coal .....	<b>23.8</b>	<b>22.1</b>	<b>44.4</b>	<b>28.0</b>	<b>36.9</b>	<i>33.5</i>	<i>48.6</i>	<i>31.6</i>	<i>38.2</i>	<i>33.5</i>	<i>47.6</i>	<i>32.3</i>	<b>118.3</b>	<i>150.6</i>	<i>151.6</i>
Nuclear .....	<b>53.0</b>	<b>50.5</b>	<b>54.1</b>	<b>52.5</b>	<b>54.0</b>	<i>52.1</i>	<i>55.4</i>	<i>53.6</i>	<i>54.1</i>	<i>55.2</i>	<i>58.5</i>	<i>55.5</i>	<b>210.1</b>	<i>215.1</i>	<i>223.3</i>
Conventional hydropower .....	<b>11.1</b>	<b>10.2</b>	<b>8.8</b>	<b>8.6</b>	<b>9.3</b>	<i>7.3</i>	<i>6.6</i>	<i>7.8</i>	<i>10.2</i>	<i>7.6</i>	<i>6.7</i>	<i>7.8</i>	<b>38.7</b>	<i>31.1</i>	<i>32.2</i>
Nonhydro renewables (d) .....	<b>3.4</b>	<b>5.0</b>	<b>5.0</b>	<b>3.9</b>	<b>3.9</b>	<i>5.9</i>	<i>5.9</i>	<i>4.6</i>	<i>4.5</i>	<i>7.4</i>	<i>7.8</i>	<i>5.6</i>	<b>17.4</b>	<i>20.3</i>	<i>25.2</i>
Other energy sources (e) .....	<b>-0.1</b>	<b>-0.3</b>	<b>-0.6</b>	<b>-0.2</b>	<b>0.0</b>	<i>-0.4</i>	<i>-0.7</i>	<i>-0.2</i>	<i>0.0</i>	<i>-0.3</i>	<i>-0.7</i>	<i>-0.2</i>	<b>-1.1</b>	<i>-1.3</i>	<i>-1.2</i>
Total generation .....	<b>153.1</b>	<b>146.7</b>	<b>186.5</b>	<b>151.3</b>	<b>162.4</b>	<i>154.7</i>	<i>186.7</i>	<i>155.3</i>	<i>164.1</i>	<i>159.5</i>	<i>192.3</i>	<i>159.2</i>	<b>637.6</b>	<i>659.1</i>	<i>675.2</i>
Net energy for load (f) .....	<b>157.4</b>	<b>152.5</b>	<b>186.1</b>	<b>153.7</b>	<b>163.4</b>	<i>159.0</i>	<i>188.2</i>	<i>156.8</i>	<i>165.4</i>	<i>160.7</i>	<i>190.4</i>	<i>158.3</i>	<b>649.7</b>	<i>667.4</i>	<i>674.9</i>
<b>Florida (FRCC)</b>															
Natural Gas .....	<b>40.0</b>	<b>45.7</b>	<b>52.8</b>	<b>41.0</b>	<b>34.0</b>	<i>38.4</i>	<i>45.4</i>	<i>37.3</i>	<i>26.7</i>	<i>38.7</i>	<i>47.2</i>	<i>38.0</i>	<b>179.5</b>	<i>155.0</i>	<i>150.6</i>
Coal .....	<b>2.1</b>	<b>3.5</b>	<b>5.7</b>	<b>4.6</b>	<b>4.6</b>	<i>9.1</i>	<i>6.7</i>	<i>3.7</i>	<i>5.9</i>	<i>7.9</i>	<i>5.1</i>	<i>3.1</i>	<b>15.9</b>	<i>24.1</i>	<i>22.0</i>
Nuclear .....	<b>7.3</b>	<b>7.6</b>	<b>7.6</b>	<b>7.0</b>	<b>7.9</b>	<i>7.2</i>	<i>7.9</i>	<i>6.9</i>	<i>7.9</i>	<i>7.3</i>	<i>8.1</i>	<i>7.2</i>	<b>29.4</b>	<i>29.8</i>	<i>30.4</i>
Conventional hydropower .....	<b>0.1</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.1</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<b>0.2</b>	<i>0.2</i>	<i>0.2</i>
Nonhydro renewables (d) .....	<b>1.8</b>	<b>2.4</b>	<b>2.3</b>	<b>1.9</b>	<b>2.5</b>	<i>3.4</i>	<i>3.1</i>	<i>2.6</i>	<i>3.0</i>	<i>3.9</i>	<i>3.4</i>	<i>2.7</i>	<b>8.4</b>	<i>11.6</i>	

**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 - May 2021

	2020				2021				2022				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2020	2021	2022
<b>Midwest (MISO)</b>															
Natural Gas .....	43.9	43.2	53.4	37.7	33.9	36.8	45.7	34.5	36.6	37.2	50.2	38.0	178.3	150.9	162.0
Coal .....	51.0	41.1	68.5	57.8	68.2	55.8	78.3	62.2	72.3	53.9	74.6	58.5	218.4	264.5	259.3
Nuclear .....	26.6	22.9	24.4	21.2	23.6	21.0	24.7	24.1	23.9	22.2	23.8	22.2	95.1	93.5	92.2
Conventional hydropower .....	3.1	3.2	2.8	2.7	3.0	3.1	2.4	2.2	2.4	2.8	2.3	2.2	11.8	10.8	9.8
Nonhydro renewables (d) .....	20.8	20.1	16.2	24.2	23.2	24.6	19.1	27.7	24.7	25.8	20.2	28.6	81.3	94.5	99.3
Other energy sources (e) .....	1.4	1.3	1.3	1.2	1.6	1.2	1.0	1.3	1.1	1.2	1.2	1.9	5.2	5.1	5.3
Total generation .....	146.9	131.8	166.6	144.8	153.6	142.4	171.2	152.1	160.9	143.1	172.4	151.4	590.0	619.3	627.8
Net energy for load (f) .....	153.0	141.5	174.4	149.8	159.1	152.9	177.4	155.2	159.3	153.8	178.5	156.4	618.8	644.6	647.9
<b>Central (Southwest Power Pool)</b>															
Natural Gas .....	17.5	16.3	24.2	13.7	12.8	12.2	20.8	12.7	16.4	12.1	21.8	13.4	71.6	58.5	63.8
Coal .....	17.0	15.7	26.7	19.8	22.3	15.1	26.8	17.8	20.9	16.1	27.3	19.0	79.2	82.0	83.3
Nuclear .....	4.4	4.4	4.2	3.8	4.2	3.5	4.4	4.4	4.3	4.4	4.1	3.0	16.8	16.5	15.8
Conventional hydropower .....	5.9	6.0	5.1	4.8	5.5	5.2	4.4	3.3	3.6	4.3	4.0	3.2	21.8	18.4	15.0
Nonhydro renewables (d) .....	20.3	21.4	16.7	22.2	21.6	26.3	20.8	26.7	24.2	28.3	22.9	28.7	80.6	95.3	104.0
Other energy sources (e) .....	0.1	0.1	0.1	0.2	0.3	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.5	0.6	0.4
Total generation .....	65.2	63.9	77.0	64.4	66.6	62.4	77.2	65.1	69.5	65.3	80.1	67.4	270.5	271.2	282.3
Net energy for load (f) .....	62.8	63.7	74.7	60.9	64.9	60.8	74.1	60.4	66.5	63.2	76.6	62.3	262.1	260.2	268.6
<b>Texas (ERCOT)</b>															
Natural Gas .....	37.2	42.1	59.3	36.0	33.5	33.6	48.2	26.7	21.6	25.4	41.7	23.2	174.6	142.1	111.9
Coal .....	13.1	15.8	20.3	17.9	16.5	18.3	22.9	17.8	16.7	18.2	22.8	17.0	67.2	75.5	74.7
Nuclear .....	10.4	9.7	11.0	10.3	10.5	10.3	10.3	9.6	10.7	10.0	10.6	10.3	41.4	40.7	41.6
Conventional hydropower .....	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.1	0.2	0.2	0.2	0.1	1.1	0.8	0.7
Nonhydro renewables (d) .....	22.6	24.8	20.8	24.4	23.3	31.3	28.2	31.2	32.7	39.0	34.0	34.4	92.6	113.9	140.2
Other energy sources (e) .....	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.4	1.5	1.4	1.3
Total generation .....	84.1	93.1	112.1	89.1	84.4	94.1	110.1	85.8	82.2	93.1	109.7	85.4	378.4	374.3	370.4
Net energy for load (f) .....	84.1	93.1	112.1	89.1	84.4	94.1	110.1	85.8	82.2	93.1	109.7	85.4	378.4	374.3	370.4
<b>Northwest</b>															
Natural Gas .....	23.7	17.1	27.3	21.6	21.6	18.3	26.0	22.0	19.8	10.4	24.2	21.4	89.6	87.9	75.9
Coal .....	22.3	16.1	24.5	23.2	23.2	21.8	30.1	23.2	21.4	20.4	29.5	22.8	86.1	98.3	94.0
Nuclear .....	2.4	2.0	2.4	2.5	2.5	1.2	2.4	2.4	2.4	2.4	2.4	2.4	9.4	8.6	9.7
Conventional hydropower .....	35.0	38.7	32.4	29.9	34.7	33.8	29.4	27.5	33.4	42.0	31.5	28.2	136.0	125.4	135.2
Nonhydro renewables (d) .....	13.9	14.2	12.6	14.9	15.1	16.5	14.6	17.1	16.9	18.1	15.8	17.9	55.6	63.3	68.7
Other energy sources (e) .....	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.6	0.6	0.6
Total generation .....	97.5	88.3	99.4	92.2	97.2	91.8	102.7	92.4	94.1	93.4	103.6	92.9	377.4	384.0	384.1
Net energy for load (f) .....	89.9	81.7	93.6	87.7	89.4	84.7	94.8	89.4	89.5	86.0	95.0	89.6	353.0	358.2	360.2
<b>Southwest</b>															
Natural Gas .....	11.8	14.7	20.4	14.8	10.3	12.3	15.6	11.4	8.8	8.9	14.0	10.8	61.7	49.7	42.5
Coal .....	5.3	5.3	8.8	6.6	6.0	6.8	10.1	7.4	5.4	6.7	8.6	6.0	25.9	30.2	26.8
Nuclear .....	8.3	7.6	8.7	7.0	8.5	7.7	8.6	7.7	8.4	7.5	8.6	7.7	31.6	32.4	32.2
Conventional hydropower .....	2.7	4.0	3.7	2.5	2.6	3.8	3.8	2.5	2.9	4.0	3.9	2.6	12.8	12.7	13.5
Nonhydro renewables (d) .....	2.5	3.1	2.5	2.3	3.0	4.6	3.6	3.5	4.6	5.9	4.6	4.4	10.5	14.8	19.6
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 .....	30.5	34.8	44.2	33.1	30.4	35.3	41.8	32.5	30.2	33.1	39.9	31.5	142.7	140.0	134.7
Net energy for load (f) .....	19.8	25.3	32.7	21.3	19.3	24.0	31.3	20.6	19.2	24.4	31.4	20.7	99.2	95.2	95.7
<b>California</b>															
Natural Gas .....	16.7	12.6	27.0	23.6	16.5	11.7	24.1	21.4	16.3	11.6	23.8	21.0	79.9	73.6	72.7
Coal .....	1.4	1.2	2.1	2.0	1.8	2.2	2.2	1.4	1.1	2.1	2.1	1.8	6.7	7.7	7.1
Nuclear .....	4.8	4.9	4.5	2.1	2.9	4.0	4.7	4.7	4.6	3.8	4.4	4.0	16.3	16.4	16.8
Conventional hydropower .....	3.1	5.6	5.4	2.7	2.4	6.1	5.6	2.7	3.9	7.2	6.5	3.4	16.8	16.8	21.0
Nonhydro renewables (d) .....	14.3	18.9	18.1	14.4	15.0	20.6	19.6	15.2	15.5	21.4	20.6	16.2	65.8	70.3	73.6
Other energy sources (e) .....	0.0	0.1	0.1	0.1	-0.1	0.1	0.1	0.1	-0.1	0.1	0.1	0.1	0.2	0.2	0.2
Total generation .....	40.3	43.3	57.3	44.9	38.6	44.7	56.3	45.5	41.3	46.2	57.6	46.5	185.8	185.1	191.5
Net energy for load (f) .....	58.6	59.4	74.6	61.1	57.5	63.0	74.7	60.4	56.9	62.3	74.6	60.5	253.7	255.7	254.4

(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.

Notes: EIA completed modeling and analysis for this report on Thursday May 6, 2021.

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.

**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.

**Table 8a. U.S. Renewable Energy Consumption (Quadrillion Btu)**  
 U.S. Energy Information Administration | Short-Term Energy Outlook - May 2021

	2020				2021				2022				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2020	2021	2022
<b>Electric Power Sector</b>															
Geothermal	0.035	0.037	0.037	0.038	0.037	0.038	0.037	0.038	0.037	0.036	0.038	0.039	0.147	0.150	0.149
Hydroelectric Power (a)	0.668	0.724	0.629	0.561	0.675	0.694	0.599	0.559	0.691	0.694	0.597	0.556	2.581	2.527	2.538
Solar (b)	0.152	0.248	0.252	0.168	0.188	0.315	0.324	0.220	0.246	0.405	0.406	0.268	0.820	1.047	1.325
Waste Biomass (c)	0.063	0.058	0.059	0.059	0.061	0.066	0.064	0.062	0.060	0.066	0.065	0.063	0.238	0.253	0.254
Wood Biomass	0.049	0.043	0.048	0.046	0.051	0.062	0.059	0.054	0.054	0.063	0.060	0.054	0.185	0.225	0.231
Wind	0.796	0.793	0.615	0.862	0.831	0.947	0.737	1.007	0.955	1.020	0.794	1.058	3.065	3.522	3.828
Subtotal	1.761	1.904	1.639	1.733	1.843	2.122	1.820	1.940	2.043	2.285	1.961	2.037	7.037	7.724	8.325
<b>Industrial Sector</b>															
Biofuel Losses and Co-products (d)	0.197	0.135	0.179	0.188	0.171	0.184	0.190	0.190	0.184	0.189	0.193	0.194	0.698	0.735	0.760
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	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.003	0.002	0.002	0.009	0.009	0.009
Solar (b)	0.007	0.010	0.010	0.007	0.007	0.011	0.011	0.008	0.008	0.012	0.012	0.009	0.033	0.037	0.041
Waste Biomass (c)	0.041	0.039	0.036	0.041	0.041	0.039	0.038	0.040	0.040	0.039	0.038	0.040	0.156	0.157	0.157
Wood Biomass	0.349	0.340	0.336	0.352	0.337	0.338	0.353	0.357	0.348	0.345	0.356	0.358	1.376	1.386	1.407
Subtotal	0.594	0.520	0.558	0.588	0.556	0.569	0.589	0.595	0.580	0.581	0.595	0.600	2.261	2.309	2.355
<b>Commercial Sector</b>															
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)	0.025	0.037	0.037	0.025	0.029	0.043	0.044	0.031	0.035	0.051	0.051	0.035	0.123	0.146	0.172
Waste Biomass (c)	0.010	0.008	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.036	0.036	0.036
Wood Biomass	0.021	0.021	0.021	0.021	0.020	0.020	0.021	0.021	0.020	0.020	0.021	0.021	0.083	0.082	0.082
Subtotal	0.068	0.077	0.078	0.067	0.071	0.084	0.086	0.073	0.077	0.092	0.094	0.078	0.290	0.314	0.340
<b>Residential Sector</b>															
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)	0.058	0.086	0.086	0.061	0.067	0.103	0.104	0.072	0.079	0.119	0.120	0.083	0.291	0.346	0.401
Wood Biomass	0.114	0.114	0.115	0.115	0.114	0.114	0.115	0.115	0.114	0.114	0.115	0.115	0.458	0.457	0.457
Subtotal	0.181	0.210	0.211	0.186	0.190	0.226	0.229	0.197	0.202	0.243	0.245	0.208	0.788	0.843	0.898
<b>Transportation Sector</b>															
Biomass-based Diesel (f)	0.061	0.064	0.073	0.076	0.058	0.074	0.073	0.079	0.079	0.082	0.087	0.091	0.275	0.284	0.339
Ethanol (f)	0.257	0.220	0.267	0.258	0.252	0.273	0.282	0.276	0.259	0.283	0.286	0.282	1.002	1.083	1.109
Subtotal	0.318	0.284	0.340	0.334	0.310	0.347	0.355	0.355	0.337	0.365	0.373	0.373	1.277	1.367	1.448
<b>All Sectors Total</b>															
Biomass-based Diesel (f)	0.061	0.064	0.073	0.076	0.058	0.074	0.073	0.079	0.079	0.082	0.087	0.091	0.275	0.284	0.339
Biofuel Losses and Co-products (d)	0.197	0.135	0.179	0.188	0.171	0.184	0.190	0.190	0.184	0.189	0.193	0.194	0.698	0.735	0.760
Ethanol (f)	0.267	0.228	0.278	0.268	0.262	0.283	0.293	0.287	0.269	0.294	0.297	0.293	1.041	1.124	1.152
Geothermal	0.052	0.054	0.054	0.055	0.054	0.055	0.054	0.055	0.054	0.052	0.055	0.056	0.214	0.218	0.217
Hydroelectric Power (a)	0.671	0.727	0.632	0.563	0.678	0.697	0.602	0.562	0.694	0.697	0.600	0.558	2.592	2.538	2.549
Solar (b)(e)	0.238	0.374	0.377	0.257	0.290	0.472	0.482	0.330	0.368	0.587	0.589	0.394	1.246	1.574	1.939
Waste Biomass (c)	0.113	0.105	0.104	0.108	0.111	0.113	0.111	0.111	0.109	0.114	0.112	0.112	0.430	0.446	0.447
Wood Biomass	0.532	0.517	0.519	0.533	0.522	0.534	0.548	0.547	0.536	0.542	0.552	0.548	2.101	2.150	2.177
Wind	0.796	0.793	0.615	0.862	0.831	0.947	0.737	1.007	0.955	1.020	0.794	1.058	3.065	3.522	3.828
<b>Total Consumption</b>	<b>2.923</b>	<b>2.995</b>	<b>2.826</b>	<b>2.907</b>	<b>2.970</b>	<b>3.348</b>	<b>3.080</b>	<b>3.160</b>	<b>3.239</b>	<b>3.565</b>	<b>3.267</b>	<b>3.296</b>	<b>11.652</b>	<b>12.558</b>	<b>13.367</b>

(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)

(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

- = no data available

Notes: EIA completed modeling and analysis for this report on Thursday May 6, 2021.

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*

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

**Forecasts:** EIA Short-Term Integrated Forecasting System.

**Table 8b. U.S. Renewable Electricity Generation and Capacity**  
 U.S. Energy Information Administration | Short-Term Energy Outlook - May 2021

	2020				2021				2022				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2020	2021	2022
<b>Renewable Energy Electric Generating Capacity (megawatts, end of period)</b>															
<b>Electric Power Sector (a)</b>															
Biomass .....	6,615	6,613	6,577	6,576	6,566	6,421	6,420	6,465	6,468	6,470	6,470	6,470	6,576	6,465	6,470
Waste .....	3,942	3,940	3,866	3,865	3,855	3,853	3,852	3,897	3,900	3,902	3,902	3,902	3,865	3,897	3,902
Wood .....	2,673	2,673	2,711	2,711	2,711	2,568	2,568	2,568	2,568	2,568	2,568	2,568	2,711	2,568	2,568
Conventional Hydroelectric .....	79,506	79,510	79,658	79,663	79,723	79,735	79,734	79,784	79,798	79,813	79,854	79,857	79,663	79,784	79,857
Geothermal .....	2,502	2,520	2,520	2,520	2,520	2,520	2,520	2,562	2,562	2,562	2,562	2,562	2,520	2,562	2,562
Large-Scale Solar (b) .....	39,095	41,329	42,976	47,525	50,021	53,271	56,770	63,197	64,814	70,246	72,046	79,137	47,525	63,197	79,137
Wind .....	106,204	107,767	109,294	118,261	124,234	127,344	128,916	134,147	135,208	137,080	137,160	139,321	118,261	134,147	139,321
<b>Other Sectors (c)</b>															
Biomass .....	6,403	6,403	6,399	6,413	6,405	6,386	6,386	6,386	6,386	6,386	6,379	6,379	6,413	6,386	6,379
Waste .....	788	788	784	798	798	799	799	799	799	799	799	799	798	799	799
Wood .....	5,615	5,615	5,615	5,615	5,607	5,587	5,587	5,587	5,587	5,587	5,579	5,579	5,615	5,587	5,579
Conventional Hydroelectric .....	289	289	289	289	289	289	287	287	287	287	287	287	289	287	287
Large-Scale Solar (b) .....	441	468	473	479	494	498	513	532	534	534	534	534	479	532	534
Small-Scale Solar (d) .....	24,355	25,255	26,264	27,724	29,019	30,333	31,648	32,960	34,325	35,643	36,970	38,276	27,724	32,960	38,276
Residential Sector .....	15,071	15,689	16,373	17,238	18,118	19,001	19,869	20,715	21,597	22,451	23,337	24,188	17,238	20,715	24,188
Commercial Sector .....	7,425	7,642	7,910	8,430	8,798	9,167	9,550	9,952	10,370	10,770	11,148	11,539	8,430	9,952	11,539
Industrial Sector .....	1,859	1,924	1,981	2,056	2,104	2,166	2,229	2,293	2,358	2,422	2,484	2,548	2,056	2,293	2,548
Wind .....	113	339	348	348	348	348	348	598	598	598	598	598	348	598	598
<b>Renewable Electricity Generation (billion kilowatthours)</b>															
<b>Electric Power Sector (a)</b>															
Biomass .....	7.1	6.7	7.0	6.7	7.3	8.3	7.9	7.5	7.4	8.4	8.1	7.5	27.5	31.0	31.4
Waste .....	4.1	4.0	4.0	3.9	4.1	4.4	4.3	4.2	4.0	4.5	4.4	4.2	16.1	17.0	17.1
Wood .....	3.0	2.7	3.0	2.7	3.1	3.8	3.6	3.4	3.3	3.9	3.7	3.3	11.4	14.0	14.3
Conventional Hydroelectric .....	75.0	81.3	70.6	63.0	70.1	72.0	62.6	57.7	68.6	80.5	65.4	59.1	289.9	262.4	273.6
Geothermal .....	3.9	4.2	4.2	4.2	4.1	4.3	4.2	4.3	4.2	4.0	4.2	4.4	16.5	16.9	16.8
Large-Scale Solar (b) .....	16.7	27.3	27.6	18.5	20.6	34.7	35.6	24.1	27.0	44.5	44.6	29.4	90.1	115.0	145.6
Wind .....	87.4	87.1	67.5	94.7	91.3	104.0	81.0	110.6	104.9	112.1	87.2	116.2	336.7	386.8	420.5
<b>Other Sectors (c)</b>															
Biomass .....	7.4	7.1	7.0	7.1	7.1	7.1	7.0	7.1	7.1	7.1	7.0	7.1	28.6	28.2	28.2
Waste .....	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.7	2.7	2.7
Wood .....	6.7	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	25.8	25.5	25.5
Conventional Hydroelectric .....	0.3	0.3	0.3	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) .....	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.8	0.8	0.9
Small-Scale Solar (d) .....	8.4	12.4	12.3	8.7	9.8	14.8	15.1	10.4	11.7	17.6	17.7	12.2	41.7	50.1	59.2
Residential Sector .....	5.0	7.5	7.5	5.4	5.9	9.1	9.3	6.4	7.2	10.9	11.0	7.6	25.4	30.8	36.6
Commercial Sector .....	2.7	3.8	3.8	2.6	3.1	4.5	4.6	3.2	3.7	5.4	5.4	3.7	12.9	15.4	18.1
Industrial Sector .....	0.7	1.0	1.0	0.7	0.8	1.1	1.2	0.8	0.9	1.3	1.3	0.9	3.5	3.9	4.4
Wind .....	0.1	0.1	0.2	0.4	0.3	0.3	0.2	0.3	0.4	0.4	0.4	0.4	0.8	1.1	1.5

(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 1 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 1 megawatt).

(d) Solar photovoltaic systems smaller than one megawatt.

- = no data available

Notes: EIA completed modeling and analysis for this report on Thursday May 6, 2021.

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 Electric Power Monthly, DOE/EIA-0226.

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

**Forecasts:** EIA Short-Term Integrated Forecasting System.

**Table 9a. U.S. Macroeconomic Indicators and CO2 Emissions**  
 U.S. Energy Information Administration | Short-Term Energy Outlook - May 2021

	2020				2021				2022				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2020	2021	2022
<b>Macroeconomic</b>															
Real Gross Domestic Product (billion chained 2012 dollars - SAAR)	19,011	17,303	18,597	18,794	19,038	19,405	19,787	20,047	20,236	20,367	20,483	20,581	18,426	19,569	20,417
Real Personal Consumption Expend. (billion chained 2012 dollars - SAAR)	13,118	11,860	12,925	12,999	13,257	13,506	13,719	13,935	14,081	14,206	14,307	14,405	12,726	13,604	14,249
Real Private Fixed Investment (billion chained 2012 dollars - SAAR)	3,375	3,096	3,315	3,459	3,520	3,557	3,619	3,659	3,686	3,703	3,722	3,742	3,311	3,589	3,713
Business Inventory Change (billion chained 2012 dollars - SAAR)	-52	-298	-1	60	-71	26	173	212	218	204	174	144	-73	85	185
Real Government Expenditures (billion chained 2012 dollars - SAAR)	3,348	3,369	3,327	3,320	3,389	3,453	3,453	3,447	3,453	3,434	3,434	3,429	3,341	3,436	3,438
Real Exports of Goods & Services (billion chained 2012 dollars - SAAR)	2,495	1,927	2,167	2,279	2,282	2,333	2,379	2,430	2,478	2,518	2,555	2,589	2,217	2,356	2,535
Real Imports of Goods & Services (billion chained 2012 dollars - SAAR)	3,283	2,702	3,186	3,400	3,466	3,565	3,633	3,715	3,754	3,769	3,776	3,795	3,143	3,595	3,774
Real Disposable Personal Income (billion chained 2012 dollars - SAAR)	15,061	16,630	15,851	15,434	16,758	16,069	15,832	15,678	15,846	15,964	16,083	16,157	15,744	16,084	16,013
Non-Farm Employment (millions)	151.9	133.7	140.9	142.6	143.4	146.2	148.1	149.3	150.2	151.0	151.7	152.4	142.3	146.7	151.3
Civilian Unemployment Rate (percent)	3.8	13.1	8.8	6.8	6.2	5.5	4.7	4.3	4.1	3.9	3.7	3.6	8.1	5.2	3.8
Housing Starts (millions - SAAR)	1.48	1.08	1.43	1.58	1.61	1.68	1.62	1.59	1.54	1.49	1.45	1.41	1.40	1.62	1.47
<b>Industrial Production Indices (Index, 2012=100)</b>															
Total Industrial Production	107.7	93.7	102.5	104.9	105.5	107.2	109.4	110.8	111.9	112.8	113.3	113.8	102.2	108.2	113.0
Manufacturing	104.4	89.3	100.1	103.1	103.7	105.3	107.6	109.0	109.9	110.6	111.0	111.3	99.2	106.4	110.7
Food	116.5	107.9	113.6	116.0	117.7	119.5	120.0	120.0	120.2	120.4	120.6	121.0	113.5	119.3	120.5
Paper	94.7	87.2	87.0	91.8	92.2	93.4	94.5	95.0	95.5	95.7	95.5	95.4	90.2	93.8	95.5
Petroleum and Coal Products	105.0	82.7	89.9	93.2	98.3	99.9	101.3	102.2	102.8	103.2	103.2	103.1	92.7	100.4	103.1
Chemicals	99.8	93.7	96.4	99.8	97.1	103.7	108.0	109.7	110.1	110.2	110.1	110.4	97.4	104.6	110.2
Nonmetallic Mineral Products	122.2	106.3	113.7	117.7	115.8	116.6	117.7	118.2	118.4	118.4	118.3	118.5	115.0	117.1	118.4
Primary Metals	94.4	69.6	79.3	87.7	89.6	92.1	93.4	93.7	93.9	93.8	92.6	91.7	82.7	92.2	93.0
Coal-weighted Manufacturing (a)	106.5	94.1	100.9	105.2	103.2	105.4	106.9	107.7	108.2	108.7	108.7	108.9	101.7	105.8	108.7
Distillate-weighted Manufacturing (a)	98.8	85.6	92.5	95.8	97.0	98.6	99.9	100.5	100.7	100.8	100.6	100.4	93.2	99.0	100.6
Electricity-weighted Manufacturing (a)	105.1	89.4	98.4	103.0	102.3	105.1	106.6	107.4	107.9	108.3	108.1	108.0	99.0	105.3	108.1
Natural Gas-weighted Manufacturing (a)	107.8	94.0	100.3	105.4	102.8	106.3	107.8	108.5	109.0	109.5	109.3	109.3	101.9	106.3	109.3
<b>Price Indexes</b>															
Consumer Price Index (all urban consumers) (index, 1982-1984=1.00)	2.59	2.56	2.59	2.61	2.63	2.65	2.66	2.67	2.68	2.69	2.70	2.72	2.59	2.65	2.69
Producer Price Index: All Commodities (index, 1982=1.00)	1.97	1.88	1.94	1.99	2.08	2.10	2.09	2.08	2.08	2.09	2.09	2.10	1.94	2.09	2.09
Producer Price Index: Petroleum (index, 1982=1.00)	1.71	1.05	1.47	1.50	1.87	2.05	1.97	1.83	1.84	1.89	1.89	1.85	1.43	1.93	1.87
GDP Implicit Price Deflator (index, 2012=100)	113.4	112.9	113.8	114.4	115.4	116.0	116.5	117.0	117.5	118.2	118.8	119.5	113.6	116.2	118.5
<b>Miscellaneous</b>															
Vehicle Miles Traveled (b) (million miles/day)	7,762	6,880	8,262	8,008	7,581	8,824	8,866	8,793	8,143	9,130	9,193	8,949	7,730	8,520	8,857
Air Travel Capacity (Available ton-miles/day, thousands)	628	362	475	533	603	583	613	655	653	711	728	700	500	614	698
Aircraft Utilization (Revenue ton-miles/day, thousands)	328	152	208	238	285	306	356	385	407	454	462	439	231	333	440
Airline Ticket Price Index (index, 1982-1984=100)	250.8	203.7	200.6	215.1	195.3	183.6	174.2	184.6	188.6	205.0	209.8	227.8	217.5	184.4	207.8
Raw Steel Production (million short tons per day)	0.268	0.174	0.197	0.224	0.246	0.257	0.268	0.303	0.290	0.255	0.251	0.258	0.216	0.269	0.263
<b>Carbon Dioxide (CO2) Emissions (million metric tons)</b>															
Petroleum	553	442	518	522	509	550	564	571	555	573	587	585	2,035	2,193	2,300
Natural Gas	490	349	383	429	485	348	367	436	481	347	370	435	1,651	1,636	1,633
Coal	201	177	271	224	251	227	304	242	264	223	291	232	873	1,023	1,011
Total Energy (c)	1,247	971	1,174	1,178	1,247	1,127	1,237	1,251	1,303	1,146	1,251	1,255	4,571	4,863	4,955

(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.

- = no data available

SAAR = Seasonally-adjusted annual rate

Notes: EIA completed modeling and analysis for this report on Thursday May 6, 2021.

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

**Forecasts:** EIA Short-Term Integrated Forecasting System. U.S. macroeconomic forecasts 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 - May 2021

	2020				2021				2022				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2020	2021	2022
<b>Real Gross State Product (Billion \$2009)</b>															
New England .....	<b>993</b>	<b>901</b>	<b>969</b>	<b>981</b>	<b>996</b>	1,014	1,033	1,045	1,053	1,060	1,066	1,070	<b>961</b>	1,022	1,062
Middle Atlantic .....	<b>2,774</b>	<b>2,486</b>	<b>2,669</b>	<b>2,695</b>	<b>2,729</b>	2,792	2,846	2,885	2,916	2,939	2,959	2,972	<b>2,656</b>	2,813	2,947
E. N. Central .....	<b>2,502</b>	<b>2,266</b>	<b>2,458</b>	<b>2,480</b>	<b>2,516</b>	2,564	2,609	2,642	2,660	2,672	2,681	2,687	<b>2,427</b>	2,583	2,675
W. N. Central .....	<b>1,188</b>	<b>1,084</b>	<b>1,168</b>	<b>1,184</b>	<b>1,198</b>	1,216	1,238	1,251	1,261	1,267	1,274	1,278	<b>1,156</b>	1,226	1,270
S. Atlantic .....	<b>3,388</b>	<b>3,114</b>	<b>3,337</b>	<b>3,369</b>	<b>3,409</b>	3,470	3,534	3,575	3,609	3,632	3,651	3,670	<b>3,302</b>	3,497	3,641
E. S. Central .....	<b>828</b>	<b>742</b>	<b>809</b>	<b>820</b>	<b>830</b>	844	860	870	876	881	884	888	<b>800</b>	851	882
W. S. Central .....	<b>2,317</b>	<b>2,125</b>	<b>2,267</b>	<b>2,303</b>	<b>2,332</b>	2,375	2,424	2,460	2,484	2,501	2,519	2,535	<b>2,253</b>	2,398	2,509
Mountain .....	<b>1,283</b>	<b>1,177</b>	<b>1,265</b>	<b>1,280</b>	<b>1,301</b>	1,324	1,351	1,367	1,381	1,390	1,399	1,407	<b>1,251</b>	1,336	1,394
Pacific .....	<b>3,769</b>	<b>3,436</b>	<b>3,684</b>	<b>3,714</b>	<b>3,759</b>	3,837	3,925	3,985	4,029	4,059	4,084	4,109	<b>3,651</b>	3,876	4,071
<b>Industrial Output, Manufacturing (Index, Year 2012=100)</b>															
New England .....	<b>97.1</b>	<b>82.9</b>	<b>92.3</b>	<b>95.4</b>	<b>95.8</b>	97.5	99.6	100.8	101.4	101.9	102.2	102.4	<b>91.9</b>	98.4	102.0
Middle Atlantic .....	<b>96.2</b>	<b>79.7</b>	<b>90.8</b>	<b>93.6</b>	<b>93.9</b>	95.6	97.8	99.2	100.3	101.2	101.7	102.1	<b>90.1</b>	96.6	101.3
E. N. Central .....	<b>104.7</b>	<b>84.9</b>	<b>99.8</b>	<b>102.7</b>	<b>103.5</b>	105.3	107.5	109.3	110.2	110.8	111.2	111.5	<b>98.0</b>	106.4	110.9
W. N. Central .....	<b>103.8</b>	<b>90.4</b>	<b>100.0</b>	<b>102.7</b>	<b>103.9</b>	105.5	107.5	108.7	109.5	110.0	110.5	110.8	<b>99.2</b>	106.4	110.2
S. Atlantic .....	<b>109.1</b>	<b>94.3</b>	<b>105.1</b>	<b>108.7</b>	<b>109.1</b>	110.8	113.3	114.7	115.6	116.3	116.6	116.9	<b>104.3</b>	112.0	116.4
E. S. Central .....	<b>108.6</b>	<b>89.1</b>	<b>104.8</b>	<b>108.5</b>	<b>109.4</b>	111.0	113.2	114.6	115.0	115.4	115.6	115.8	<b>102.7</b>	112.0	115.4
W. S. Central .....	<b>100.1</b>	<b>88.2</b>	<b>95.3</b>	<b>97.7</b>	<b>98.1</b>	99.7	102.0	103.6	104.8	105.7	106.2	106.7	<b>95.3</b>	100.9	105.8
Mountain .....	<b>115.6</b>	<b>102.9</b>	<b>113.6</b>	<b>117.0</b>	<b>117.7</b>	119.4	121.7	123.0	123.9	124.5	124.8	125.0	<b>112.3</b>	120.4	124.5
Pacific .....	<b>102.9</b>	<b>89.1</b>	<b>97.5</b>	<b>99.5</b>	<b>99.8</b>	101.2	103.6	104.8	106.1	107.2	107.7	108.4	<b>97.2</b>	102.4	107.3
<b>Real Personal Income (Billion \$2009)</b>															
New England .....	<b>890</b>	<b>978</b>	<b>931</b>	<b>904</b>	<b>975</b>	941	928	921	931	939	946	950	<b>926</b>	941	942
Middle Atlantic .....	<b>2,305</b>	<b>2,509</b>	<b>2,421</b>	<b>2,317</b>	<b>2,498</b>	2,414	2,381	2,362	2,390	2,409	2,427	2,436	<b>2,388</b>	2,414	2,416
E. N. Central .....	<b>2,452</b>	<b>2,694</b>	<b>2,574</b>	<b>2,512</b>	<b>2,720</b>	2,613	2,578	2,553	2,576	2,593	2,609	2,618	<b>2,558</b>	2,616	2,599
W. N. Central .....	<b>1,158</b>	<b>1,258</b>	<b>1,179</b>	<b>1,184</b>	<b>1,255</b>	1,224	1,209	1,199	1,209	1,216	1,224	1,229	<b>1,195</b>	1,222	1,219
S. Atlantic .....	<b>3,272</b>	<b>3,513</b>	<b>3,417</b>	<b>3,353</b>	<b>3,617</b>	3,492	3,455	3,432	3,467	3,494	3,521	3,540	<b>3,389</b>	3,499	3,505
E. S. Central .....	<b>909</b>	<b>989</b>	<b>935</b>	<b>926</b>	<b>1,014</b>	970	957	947	955	960	966	969	<b>940</b>	972	963
W. S. Central .....	<b>2,037</b>	<b>2,202</b>	<b>2,100</b>	<b>2,067</b>	<b>2,228</b>	2,157	2,132	2,117	2,144	2,163	2,182	2,196	<b>2,101</b>	2,158	2,171
Mountain .....	<b>1,217</b>	<b>1,322</b>	<b>1,263</b>	<b>1,245</b>	<b>1,337</b>	1,295	1,281	1,272	1,285	1,296	1,305	1,313	<b>1,262</b>	1,296	1,300
Pacific .....	<b>2,833</b>	<b>3,041</b>	<b>2,978</b>	<b>2,911</b>	<b>3,104</b>	3,001	2,974	2,960	2,994	3,019	3,044	3,062	<b>2,941</b>	3,010	3,030
<b>Households (Thousands)</b>															
New England .....	<b>5,896</b>	<b>5,877</b>	<b>5,900</b>	<b>5,924</b>	<b>5,941</b>	5,959	5,975	5,984	5,992	6,001	6,011	6,023	<b>5,924</b>	5,984	6,023
Middle Atlantic .....	<b>16,161</b>	<b>16,102</b>	<b>16,164</b>	<b>16,234</b>	<b>16,281</b>	16,327	16,364	16,388	16,411	16,435	16,459	16,485	<b>16,234</b>	16,388	16,485
E. N. Central .....	<b>18,864</b>	<b>18,814</b>	<b>18,901</b>	<b>18,989</b>	<b>19,050</b>	19,113	19,167	19,208	19,244	19,270	19,295	19,323	<b>18,989</b>	19,208	19,323
W. N. Central .....	<b>8,646</b>	<b>8,631</b>	<b>8,677</b>	<b>8,732</b>	<b>8,768</b>	8,803	8,832	8,854	8,873	8,895	8,917	8,934	<b>8,732</b>	8,854	8,934
S. Atlantic .....	<b>25,669</b>	<b>25,649</b>	<b>25,815</b>	<b>26,001</b>	<b>26,137</b>	26,267	26,384	26,482	26,572	26,667	26,756	26,841	<b>26,001</b>	26,482	26,841
E. S. Central .....	<b>7,659</b>	<b>7,647</b>	<b>7,689</b>	<b>7,739</b>	<b>7,771</b>	7,802	7,830	7,851	7,870	7,890	7,909	7,925	<b>7,739</b>	7,851	7,925
W. S. Central .....	<b>14,887</b>	<b>14,880</b>	<b>14,981</b>	<b>15,097</b>	<b>15,180</b>	15,260	15,331	15,391	15,448	15,505	15,563	15,616	<b>15,097</b>	15,391	15,616
Mountain .....	<b>9,464</b>	<b>9,470</b>	<b>9,544</b>	<b>9,629</b>	<b>9,693</b>	9,755	9,812	9,861	9,908	9,951	9,994	10,032	<b>9,629</b>	9,861	10,032
Pacific .....	<b>18,779</b>	<b>18,739</b>	<b>18,838</b>	<b>18,951</b>	<b>19,021</b>	19,086	19,142	19,184	19,226	19,266	19,310	19,348	<b>18,951</b>	19,184	19,348
<b>Total Non-farm Employment (Millions)</b>															
New England .....	<b>7.6</b>	<b>6.4</b>	<b>6.9</b>	<b>7.0</b>	<b>7.0</b>	7.2	7.3	7.3	7.4	7.4	7.5	7.5	<b>6.9</b>	7.2	7.4
Middle Atlantic .....	<b>20.1</b>	<b>16.8</b>	<b>18.0</b>	<b>18.3</b>	<b>18.4</b>	18.8	19.1	19.3	19.5	19.6	19.8	19.9	<b>18.3</b>	18.9	19.7
E. N. Central .....	<b>22.3</b>	<b>19.4</b>	<b>20.8</b>	<b>21.0</b>	<b>21.1</b>	21.5	21.7	21.9	22.0	22.1	22.2	22.2	<b>20.9</b>	21.6	22.1
W. N. Central .....	<b>10.8</b>	<b>9.8</b>	<b>10.2</b>	<b>10.3</b>	<b>10.4</b>	10.5	10.7	10.7	10.7	10.8	10.8	10.8	<b>10.3</b>	10.6	10.8
S. Atlantic .....	<b>29.3</b>	<b>26.3</b>	<b>27.6</b>	<b>27.9</b>	<b>28.1</b>	28.6	29.0	29.2	29.3	29.5	29.6	29.7	<b>27.8</b>	28.7	29.6
E. S. Central .....	<b>8.3</b>	<b>7.5</b>	<b>7.9</b>	<b>8.1</b>	<b>8.1</b>	8.2	8.3	8.3	8.3	8.3	8.4	8.4	<b>8.0</b>	8.2	8.4
W. S. Central .....	<b>17.9</b>	<b>16.3</b>	<b>16.8</b>	<b>17.1</b>	<b>17.2</b>	17.5	17.8	17.9	18.0	18.0	18.1	18.2	<b>17.0</b>	17.6	18.1
Mountain .....	<b>11.2</b>	<b>10.1</b>	<b>10.6</b>	<b>10.7</b>	<b>10.8</b>	11.0	11.1	11.2	11.3	11.3	11.4	11.5	<b>10.6</b>	11.0	11.4
Pacific .....	<b>24.0</b>	<b>21.0</b>	<b>21.8</b>	<b>22.0</b>	<b>22.1</b>	22.6	22.9	23.2	23.4	23.6	23.8	23.9	<b>22.2</b>	22.7	23.7

- = no data available

Notes: EIA completed modeling and analysis for this report on Thursday May 6, 2021.

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.

**Forecasts:** U.S. macroeconomic forecasts 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 - May 2021

	2020				2021				2022				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2020	2021	2022
<b>Heating Degree Days</b>															
New England .....	2,738	972	114	1,998	3,009	766	125	2,100	3,074	847	127	2,100	<b>5,822</b>	6,000	6,147
Middle Atlantic .....	2,469	837	85	1,833	2,822	591	77	1,926	2,871	671	73	1,926	<b>5,224</b>	5,416	5,541
E. N. Central .....	2,787	847	126	2,101	3,087	668	109	2,232	3,151	724	112	2,232	<b>5,861</b>	6,096	6,218
W. N. Central .....	3,037	799	168	2,312	3,225	696	143	2,434	3,247	705	147	2,434	<b>6,316</b>	6,498	6,533
South Atlantic .....	1,107	252	17	875	1,340	196	10	913	1,367	183	10	911	<b>2,252</b>	2,459	2,471
E. S. Central .....	1,484	338	20	1,228	1,794	282	16	1,262	1,812	242	16	1,262	<b>3,069</b>	3,353	3,332
W. S. Central .....	974	103	8	738	1,298	123	4	764	1,149	81	4	763	<b>1,822</b>	2,189	1,997
Mountain .....	2,209	671	126	1,767	2,292	652	138	1,818	2,189	679	141	1,817	<b>4,773</b>	4,901	4,826
Pacific .....	1,536	524	64	1,083	1,558	520	90	1,209	1,524	590	87	1,210	<b>3,208</b>	3,377	3,410
U.S. Average .....	1,875	540	70	1,418	2,099	453	69	1,496	2,090	478	69	1,494	<b>3,903</b>	4,117	4,131
<b>Heating Degree Days, Prior 10-year Average</b>															
New England .....	3,152	823	105	2,128	3,134	856	107	2,100	3,100	851	112	2,121	<b>6,207</b>	6,196	6,184
Middle Atlantic .....	2,948	644	69	1,944	2,913	677	72	1,911	2,887	677	73	1,929	<b>5,606</b>	5,573	5,566
E. N. Central .....	3,197	698	102	2,197	3,157	731	105	2,170	3,133	724	101	2,196	<b>6,194</b>	6,162	6,154
W. N. Central .....	3,287	702	132	2,379	3,247	728	133	2,367	3,218	723	130	2,396	<b>6,500</b>	6,475	6,468
South Atlantic .....	1,459	169	10	952	1,393	180	11	914	1,377	185	11	915	<b>2,589</b>	2,498	2,488
E. S. Central .....	1,850	214	15	1,277	1,772	232	16	1,249	1,764	240	14	1,251	<b>3,356</b>	3,268	3,269
W. S. Central .....	1,199	83	3	794	1,140	86	3	786	1,145	94	3	781	<b>2,078</b>	2,016	2,023
Mountain .....	2,192	718	135	1,844	2,181	701	134	1,842	2,173	681	134	1,828	<b>4,889</b>	4,858	4,816
Pacific .....	1,456	580	85	1,162	1,462	553	81	1,147	1,455	526	80	1,137	<b>3,284</b>	3,242	3,198
U.S. Average .....	2,149	472	64	1,509	2,108	482	65	1,484	2,090	476	64	1,488	<b>4,194</b>	4,138	4,119
<b>Cooling Degree Days</b>															
New England .....	0	102	541	0	0	97	423	2	0	86	413	2	<b>643</b>	522	502
Middle Atlantic .....	0	157	681	4	0	172	557	5	0	159	549	5	<b>842</b>	733	713
E. N. Central .....	2	217	609	2	2	236	565	7	0	219	556	7	<b>830</b>	811	782
W. N. Central .....	6	294	662	3	8	291	713	11	3	263	692	11	<b>965</b>	1,024	969
South Atlantic .....	196	618	1,231	301	154	679	1,185	249	133	674	1,188	249	<b>2,345</b>	2,266	2,244
E. S. Central .....	72	422	1,059	80	40	520	1,087	74	28	522	1,085	74	<b>1,634</b>	1,721	1,709
W. S. Central .....	174	840	1,498	209	89	899	1,535	215	89	869	1,524	215	<b>2,722</b>	2,738	2,697
Mountain .....	10	465	1,086	118	10	447	949	78	20	434	937	79	<b>1,679</b>	1,485	1,470
Pacific .....	24	198	722	129	23	162	579	59	27	166	573	59	<b>1,073</b>	823	824
U.S. Average .....	71	396	936	123	50	419	877	100	46	408	871	100	<b>1,525</b>	1,445	1,425
<b>Cooling Degree Days, Prior 10-year Average</b>															
New England .....	0	83	471	1	0	80	474	1	0	83	468	1	<b>554</b>	555	552
Middle Atlantic .....	0	170	609	6	0	163	610	6	0	161	601	7	<b>785</b>	779	769
E. N. Central .....	3	240	579	8	3	234	572	7	3	236	565	7	<b>829</b>	816	811
W. N. Central .....	7	296	696	11	7	294	686	10	7	297	678	10	<b>1,010</b>	997	993
South Atlantic .....	127	696	1,202	247	143	680	1,195	261	147	675	1,191	266	<b>2,272</b>	2,279	2,279
E. S. Central .....	36	557	1,082	72	42	532	1,064	74	44	526	1,064	78	<b>1,747</b>	1,713	1,712
W. S. Central .....	100	892	1,576	207	114	880	1,567	210	113	866	1,542	213	<b>2,774</b>	2,771	2,734
Mountain .....	24	432	939	81	24	444	954	86	23	453	949	86	<b>1,476</b>	1,509	1,512
Pacific .....	31	185	624	78	31	193	648	86	31	199	651	85	<b>917</b>	957	966
U.S. Average .....	47	420	892	100	52	415	894	105	53	415	889	107	<b>1,459</b>	1,466	1,463

- = no data available

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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 See *Change in Regional and U.S. Degree-Day Calculations* ([http://www.eia.gov/forecasts/steo/special/pdf/2012\\_sp\\_04.pdf](http://www.eia.gov/forecasts/steo/special/pdf/2012_sp_04.pdf)) for more information.

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

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

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

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