Independent Statistics & Analysis
U.S. Energy Information Administration

March 2022

Short-Term Energy Outlook

Forecast highlights

Global liquid fuels

- The March *Short-Term Energy Outlook* (STEO) is subject to heightened levels of uncertainty resulting from a variety of factors, including Russia's further invasion of Ukraine. This STEO assumes U.S. GDP will grow by 3.6% in 2022 and by 2.7% in 2023, after growing by 5.7% in 2021. We use the S&P Global (formerly IHS Markit) macroeconomic model to generate our U.S. economic assumptions. Global macroeconomic assumptions in our forecast are from Oxford Economics and include global GDP growth of 4.3% in 2022 and 4.0% in 2023, compared with growth of 5.9% in 2021. These GDP forecasts were completed in mid-February. The rest of the forecast was completed on March 3 and accounts for available information to that point. A wide range of potential macroeconomic outcomes could significantly affect energy markets during the forecast period. Supply uncertainty results from the conflict in Ukraine, the production decisions of OPEC+, and the rate at which U.S. oil and natural gas producers increase drilling.

- Brent crude oil spot prices averaged $97 per barrel (b) in February, an $11/b increase from January. Daily spot prices for Brent closed at almost $124/b in the first week of March as the further invasion of Ukraine by Russia and subsequent sanctions on Russia and other actions created significant market uncertainties about the potential for oil supply disruptions. These events are occurring against a backdrop of low oil inventories and persistent upward oil price pressures. Global oil inventories have fallen steadily since mid-2020, and inventory draws averaged 1.8 million barrels per day (b/d) from the third quarter of 2020 (3Q20) through the end of 2021. We estimate that oil inventories fell further in the first two months of 2022 and that commercial inventories in the OECD ended February at 2.64 billion barrels, which is the lowest level since mid-2014.

- We expect the Brent price will average $117/b in March, $116/b in 2Q22, and $102/b in the second half of 2022 (2H22). We expect the average price to fall to $89/b in 2023. However, this price forecast is highly uncertain. Actual price outcomes will be dependent on the degree to which existing sanctions imposed on Russia, any potential future sanctions, and independent corporate actions affect Russia's oil production or the sale of Russia's oil in the global market. In addition, the degree to which other oil producers respond to current oil prices, as well as the effects macroeconomic developments might have on global oil demand, will be important for oil price formation

Note: EIA completed modeling and analysis for this report on Thursday, March 3, 2022

in the coming months. Although we reduced Russia's oil production in our forecast, we still expect that global oil inventories will build at an average rate of 0.5 million b/d from 2Q22 through the end of 2023, which we expect will put downward pressure on crude oil prices. However, if production disruptions—in Russia or elsewhere—are more than we forecast, resulting crude oil prices would be higher than our forecast.

- We forecast that global consumption of petroleum and liquid fuels will average 100.6 million b/d for all of 2022, up 3.1 million b/d from 2021. We forecast that consumption will increase by 1.9 million b/d in 2023 to average 102.6 million b/d. Economic forecasts in this outlook were completed before Russia's further invasion of Ukraine. The outlook for economic growth and oil consumption in Russia and surrounding countries is highly uncertain. Oil consumption will depend on how economic activity and travel respond to recent and any potential future events and sanctions.

- U.S. regular gasoline retail prices averaged $3.52 per gallon (gal) in February, up 20 cents/gal from January and up $1.02/gal from February 2021. Retail diesel prices averaged $4.03/gal in February—the highest average price (not adjusted for inflation) for any month since March 2013. Product prices have risen compared with year-ago levels because of rising crude oil prices and high refining margins. We expect crude oil price increases will push the U.S. average gasoline price to $4.10/gal on average in 2Q22, which would be the first time that gasoline prices (not adjusted for inflation) have reached at least $4/gal in any month since July 2008. We expect diesel prices will average $4.43/gal during 2Q22. Gasoline and diesel prices are closely tied to crude oil prices. We forecast gasoline prices will average $3.71/gal in 2H22, and we forecast diesel prices will average $4.04/gal over the same period. However, actual prices could be significantly affected by the same factors that affect crude oil prices.

- U.S. crude oil production fell below 11.6 million b/d in December 2021 (the most recent monthly historical data point), a decline of 0.2 million b/d from November 2021. We forecast that production will rise to average 12.0 million b/d in 2022 and then to record-high production on an annual-average basis of 13.0 million b/d in 2023. The previous annual-average record of 12.3 million b/d was set in 2019.

Natural Gas

- In February, the Henry Hub natural gas spot price averaged $4.69 per million British thermal units (MMBtu), which was up from the January average of $4.38/MMBtu. Although temperatures across the eastern part of the United States were close to normal in February, reducing natural gas consumption from January levels, natural gas production fell slightly last month relative to January, in part as a result of temporary freeze-offs in producing regions. The drop in production partly contributed to inventory draws outpacing the five-year (2017–2021) average in February. This outlook assumes that temperatures in March will be milder than February and near the 10-year average

for March. We expect production will rise from February levels, contributing to a lower average Henry Hub price of $4.10/MMBtu for March. We expect the Henry Hub price will average $3.83/MMBtu in 2Q22 and $3.95/MMBtu for all of 2022. We expect the Henry Hub spot price will average $3.59/MMBtu in 2023.

- We estimate that inventory withdrawals in February were 627 billion cubic feet (Bcf) and that natural gas inventories ended the month at 1.6 trillion cubic feet (Tcf). We expect natural gas inventories to fall by about 95 Bcf in March, ending the withdrawal season at about 1.5 Tcf, which would be 10% less than the five-year average for this time of year. We forecast that natural gas inventories will end the 2022 injection season (end of October) at 3.5 Tcf, which would be 4% less than the five-year average.

- In February, U.S. liquefied natural gas (LNG) exports averaged 10.9 billion cubic feet per day (Bcf/d), down from 11.2 Bcf/d in January. Similar to last year, U.S. LNG exports in February were limited by fog in the Gulf of Mexico that affected vessel traffic and led to piloting services being suspended for several days on the Sabine Pass, Lake Charles (location of Cameron LNG), and Corpus Christi waterways. Although exports fell in February, they were higher than in any month prior to December 2021. Many U.S. LNG cargoes were delivered to Europe last month, where inventories are lower than the five-year average and potential supply disruptions related to the conflict in Ukraine are a concern. Although Europe's inventories are low, the additional LNG imports, as well as a mild winter, are helping bring inventories closer to the five-year average than they were at the beginning of the winter. We expect high levels of U.S. LNG exports to continue in 2022, averaging 11.3 Bcf/d for the year, a 16% increase from 2021.

- We expect that U.S. consumption of natural gas will average 84.6 Bcf/d in 2022, up 2% from 2021. The increase in U.S. natural gas consumption reflects rising demand in the industrial sector as a result of increased manufacturing activity. In addition, the increase in natural gas consumption reflects higher consumption in the residential and commercial sectors as a result of colder temperatures this year compared with 2021. Higher consumption in these sectors is partly offset by lower consumption in the electric power sector due to a forecast increase in generation from renewable energy sources.

- We estimate dry natural gas production averaged 95.3 Bcf/d in the United States in February, down 0.6 Bcf/d from January. Production in January and February was lower than in December because of freezing temperatures in certain production regions. We forecast natural gas production to average 95.7 Bcf/d in March. For 2022, we expect that natural gas production will average 96.7 Bcf/d, which is 3.1 Bcf/d more than in 2021. We expect dry natural gas production to rise to an average of 99.1 Bcf/d in 2023.

Electricity, coal, renewables, and emissions

- U.S. electric power sector generation in February 2022 was 1.3% lower than generation in February 2021, when generation was high because of extreme cold weather. We forecast that the annual share of U.S. electricity generation from renewable energy sources will rise from 20% in 2021, to 22% in 2022, and to 24% in 2023, as a result of continuing increases in solar and wind generating capacity. This increase in renewables generation leads to an expected decline in natural gas generation, which falls from a 37% share in 2021, to 36% in 2022, and to 35% in 2023. Natural gas generation falls in the forecast even though we expect the cost of natural gas for power generation to fall from $4.97/MMBtu in 2021, to $4.16/MMBtu in 2022, and to $3.80/MMBtu in 2023. Increasing renewable generation also contributes to our forecast that the share of generation from coal will fall from 23% in 2021 to 22% in 2022 and 21% in 2023. Nuclear generation remains relatively constant in the forecast at an average share of 20%.

- Planned additions to U.S. wind and solar capacity in 2022 and 2023 increase electricity generation from those sources in our forecast. The U.S. electric power sector added 14 gigawatts (GW) of new wind capacity in 2021. We expect 10 GW of new wind capacity will come online in 2022 and 5 GW in 2023. Utility-scale solar capacity rose by 13 GW in 2021. Our forecast for added utility-scale solar capacity is 22 GW for 2022 and 24 GW for 2023. We expect solar additions to account for nearly half of new electric generating capacity in 2022. In addition, in 2021, small-scale solar capacity (systems less than 1 megawatt) increased by 5.4 GW to 33 GW. We project that small-scale solar capacity will grow by 4.0 GW in 2022 and 4.3 GW in 2023.

- We expect U.S. coal production to increase by more than 25 million short tons (MMst) (4%) in 2022 to 604 MMst and then rise by 9 MMst (1%) in 2023. Although labor strikes at some metallurgical mines in Appalachia continue to affect production, we expect producers to regain a portion of that production later during 1H22. Increased production of coal will help support rising export demand as well as help replenish coal inventories at power plants that were depleted during 2021.

- We expect U.S. coal consumption to decrease by 7 MMst in 2022 and by 15 MMst in 2023. In both forecast years, declining consumption from the electric power sector is somewhat offset by rising consumption at coke plants.

- Coal exports in our forecast total 88 MMst in 2022, up 3% from 2021, and 91 MMst in 2023. We assume international prices will remain supportive of U.S. coal exports as the conflict in Ukraine creates the potential to disrupt supplies from that region.

- U.S. energy-related carbon dioxide (CO_2) emissions increased by nearly 7% in 2021 as economic activity increased and contributed to rising energy use. We expect a 2% increase in energy-related CO_2 emissions in 2022, primarily from growing

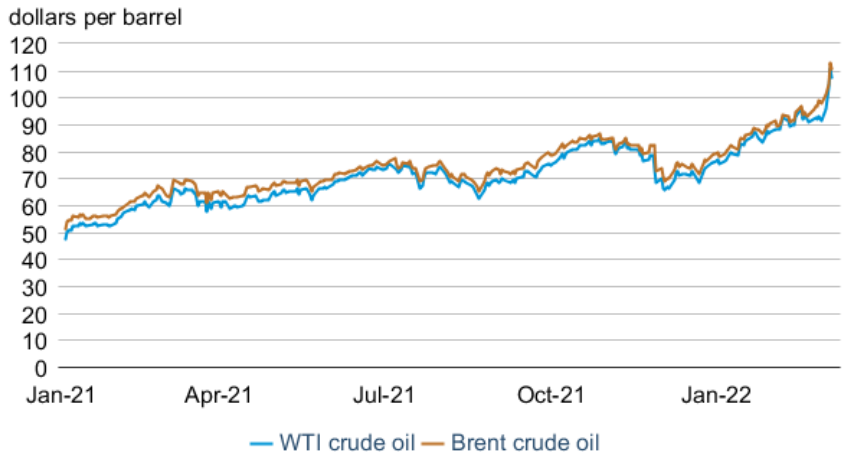
transportation-related petroleum consumption. Forecast energy-related CO_2 emissions remain almost unchanged in 2023. We expect petroleum emissions to increase by 4% in 2022 compared with 2021, and this growth rate slows to less than 1% in 2023. Natural gas emissions increase by 2% in 2022 and then decrease slightly in our forecast for 2023. We forecast that coal-related CO_2 emissions will fall by 3% in 2022 and by 2% in 2023.

Petroleum and natural gas markets review

Crude oil

Prices: The front-month futures price for Brent crude oil settled at $110.46 per barrel (b) on March 3, 2022, an increase of $21.30/b from the February 1, 2022, price of $89.16/b. The front-month futures price for West Texas Intermediate (WTI) crude oil for delivery at Cushing, Oklahoma, increased by $19.47/b during the same period, settling at $107.67/b on March 3 **(Figure 1)**.

Figure 1. Crude oil front-month futures prices



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

The Russian invasion further into Ukraine on February 24 and the subsequent escalation of armed conflict, which had been preceded by increasing tensions in earlier weeks, contributed to rising crude oil prices. On February 28, the front-month Brent crude oil price settled at over $100/b for the first time since September 2014. The increase in crude oil prices reflects potential effects of the extensive sanctions levied by the United States, European Union, and others on Russian entities in response to Russia's continued invasion of Ukraine, as well as the risk of potential disruptions to crude oil and energy production and infrastructure related to the conflict. The sanctions that have so far been announced have primarily targeted Russian individuals and financial institutions but avoided direct sanctions on Russia's energy companies, including crude oil and natural gas production and exports. Although sanctions so far have generally avoided direct sanctions on Russia's energy companies, there are trade press reports

that sanctions targeting financial institutions have increased concerns among oil market participants about purchasing energy from Russia and about the potential for additional sanctions.

The February monthly average front-month Brent crude oil futures price was $94/b, up $9/b over January 2022 and up $32/b over February 2021. The increased risks to oil supplies presented by Russia's further invasion of Ukraine builds on a number of other factors that have been underpinning crude oil price increases for the past several months. First, oil consumption has persistently been greater than oil production since mid-2020, contributing to a decline in global oil inventories in all but one month from June 2020 through February 2022. As a result, total commercial oil inventories in the OECD have fallen to their lowest levels since mid-2014. Second, several minor geopolitical disruptions contributed to increased risks in recent months. Port closures contributed to reduced crude oil production in Libya, while Houthi attacks targeting the United Arab Emirates and political unrest in Kazakhstan also contributed to additional risks to global supplies. Third, several OPEC members have been unable to increase production in line with previously agreed on targets. Finally, decreasing COVID-19 cases and natural gas-to-oil switching in the electric power sector have likely contributed to demand increases.

A number of western energy companies, including ExxonMobil, Shell, BP, and Equinor have announced they are stopping operations in Russia and ending partnerships with Russian firms. Trade press also reports that a number of European refiners, shippers, and insurance companies are not purchasing or shipping crude oil from Russia, even without formal energy sanctions. This distancing from Russian markets by private entities has contributed to significant price discounts on some Russian crude oil streams. However, as of March 3, trade press reported significant volumes of Russian crude oil and petroleum products remained unsold as shippers and refiners refuse to take cargoes from Russia. We expect that the withdrawal of some firms from Russia, combined with limitations on finance, are likely to contribute to ongoing constraints on new field development and crude oil production with ongoing effects into the medium term. Market participant trading activity combined with the active conflict involving Russia remains a substantial source of uncertainty and risk for global crude oil production and prices.

We estimate Russia produced 11.3 million b/d of petroleum and other liquids in February 2022, and given most recent reports, we expect that production in Russia will fall by 0.25 million b/d in March, with an additional decline of 0.5 million b/d in April. We expect production to temporarily decrease as some shippers refrain from picking up crude oil cargoes from Russia, mainly as a result of current sanctions or anticipation of additional sanctions. Although Russia's crude oil production and export capacity will continue to be available, there is considerable uncertainty to which degree countries will continue to import crude oil and petroleum products from Russia. While we recognize that the range of outcomes for Russia's oil production is wide, we assume that there will be a decrease in Russian crude oil exports, and therefore in production, in the coming months. With crude oil exports decreasing, onshore storage likely will

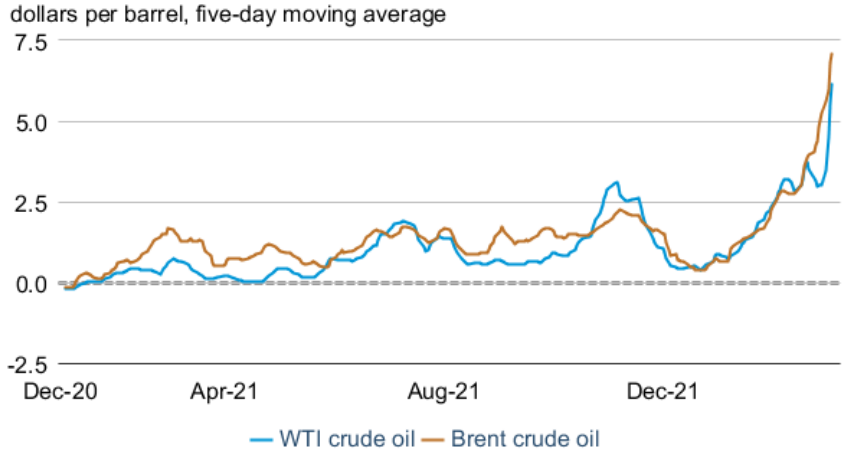
fill up quickly because of limited onshore storage capacity, which will necessitate production shut-ins and the use of floating storage on ships. We assess that most of Russia's crude oil will find export destinations, but we expect there will be a temporary dislocation of production and exports as new trade routes are established and as Russia finds other crude oil buyers. However, this assessment is based on sanctions as of March 3, 2022, and it is subject to significant uncertainty about the way in which market participants will respond to those sanctions.

We expect that Russia's liquid fuels production will decrease by about 0.7 million b/d in 2Q22 compared with 1Q22 and then increase slightly in 3Q22. Overall, we expect Russia's production to be about 0.5 million b/d lower in December 2022 compared with February and to remain flat in 2023. Compared with our forecast last month, in which were expecting growth in Russia's liquid fuels production, we now expect Russia's liquid fuels production to be 1.0 million b/d less on average from 2Q22 through the end of 2023. This forecast remains subject to significant revisions because the extent to which sanctions and other private corporate actions will affect production remains unclear.

We expect the Brent crude oil spot price to average $117/b in March, then average $116/b in 2Q22 and $102/b in 2H22, although this forecast remains highly uncertain in light of current geopolitical developments. The effect that current sanctions and private corporate action will have on production in Russia or on global purchases of crude oil from Russia remains a major source of uncertainty in the outlook. Similarly, the effect that current and near-term high price levels have on production outside of Russia remains a potential risk and is highly variable in our current outlook, because high prices increase the incentive for new production.

Crude oil front-month to 3rd month futures spread: Oil market uncertainties linked to Russia's further invasion of Ukraine have occurred while global petroleum inventory levels are low. This situation has contributed to historically high levels of backwardation (when near-term prices are higher than longer-dated ones). The spread between crude oil front-month contracts and third-month contracts (1-3) reflects heightened calls on crude oil inventories in the very short term **(Figure 2)**. The Brent 1-3 spread increased to its highest level on record at $7.06/b on March 3. The spread averaged $3.55/b throughout February, more than doubling from January, when the spread was $1.46/b, and is also well above the 2021 annual average of $1.11/b. The WTI 1-3 crude oil price spread increased similarly to the Brent spread in February, reaching a high of $6.15/b on March 3 and averaging $3.12/b in February, also doubling the January level.

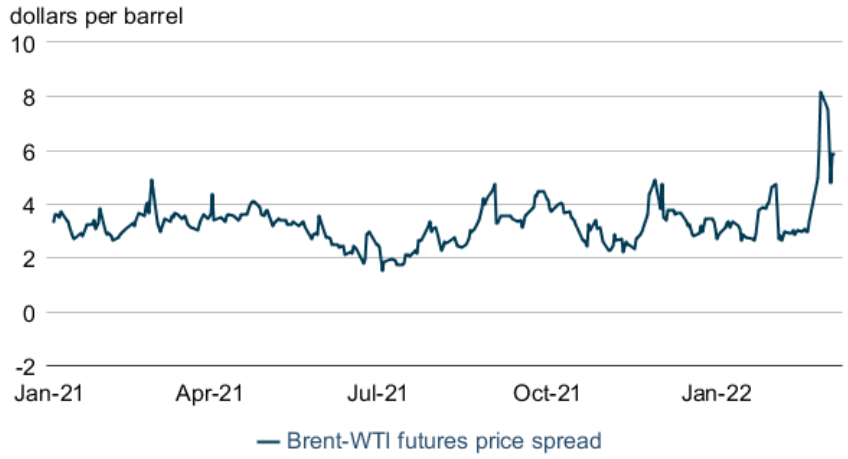
Figure 2. Crude oil front-month to third-month futures price spread



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

The increase in the spread for WTI futures is not quite as sharp as the spread with Brent, which is also reflected in the front-month prices **(Figure 3)**. The spread between Brent and WTI increased by $1.60/b to $4.93/b on February 22, when the possibility of further Russian invasion into Ukraine heightened, and widened another $3.21/b over the next two days to $8.14/b on February 24, the day the invasion escalated. The highest Brent-WTI spread in 2021 was $4.90/b, and the spread averaged $3.38/b in January 2022. Since February 22, the spread has averaged $6.40/b, likely reflecting the impact of risks related to the Russian invasion further into Ukraine. European oil markets are likely to be affected more significantly than U.S. or western hemisphere markets, which may be better captured by the WTI price. Countries in OECD Europe received 24% of their crude oil and condensate imports from Russia in 2020. About 48% of Russia's crude oil and condensate exports in 2020 went to countries in Europe. Slight differences in the delivery times of the WTI and Brent crude oil futures contracts may also be contributing to some of the difference in the spread.

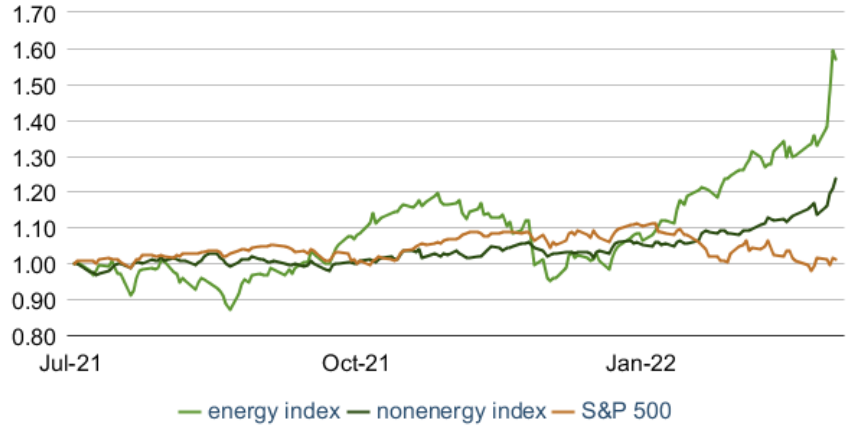
Figure 3. Brent–WTI futures price spread



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

Energy and non-energy commodity indexes: Since the start of 2022, price increases in energy commodities have outpaced increases in non-energy commodities. The energy component of the S&P Goldman Sachs Commodity Index (GSCI) is heavily weighted toward crude oil, although it also includes smaller shares of natural gas, gasoline, and distillate commodity prices. The non-energy component accounts for a basket of other commodities, including agricultural products, livestock, and metals. The increase in the energy segment of the index reflects the drivers of increased crude oil prices discussed previously. Non-energy commodity prices have also been increasing through much of February, although not necessarily by as much as energy commodities. Although Russia's energy exports may be the largest source of uncertainty for global markets, Ukraine and Russia are both substantial producers and exporter of agricultural products, and the impact of the conflict is also likely reflected in risks to non-energy agricultural commodities. Equities in the S&P 500, conversely, have experienced downward pressure in February as a result of rising prices for global commodities, concerns over inflation, and risks of commercial disruptions related to the Ukraine conflict. As of March 3, the energy index had increased 57% over July 1, 2021, compared with an increase of 23% for the non-energy index, and the S&P 500 increased 1% over July 1 levels **(Figure 4)**.

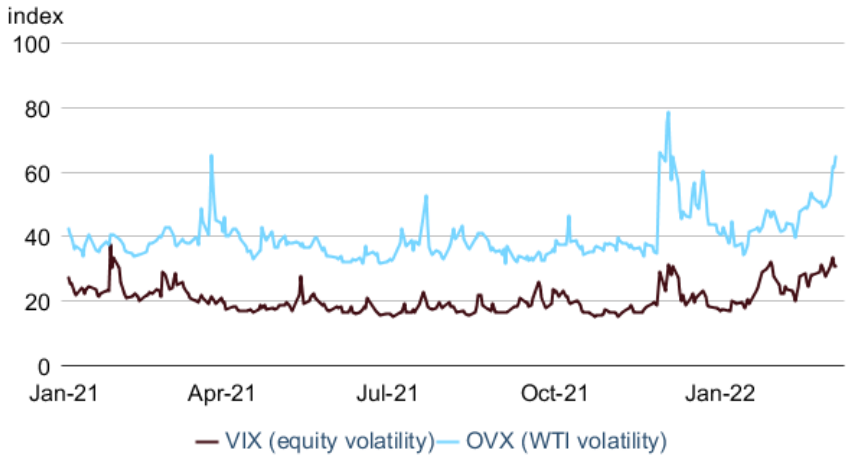
Figure 4. Energy versus non-energy commodities and equities



eia Source: Graph by EIA, based on data from S&P Dow Jones, as compiled by Bloomberg L.P.

U.S. volatility indexes: The Volatility Index (VIX) is a measure of implied volatility in U.S. equity prices, calculated from prices of put and call options on the S&P 500 index, by the Chicago Board of Options Exchange. The Crude Oil Volatility Index (OVX) is a similar estimate derived from options prices for the United States Oil Fund, reflecting the WTI crude oil futures price. The OVX is generally higher than the VIX, partially because it represents the price volatility of a single commodity instead of a diversified group of large U.S. companies **(Figure 5)**. In addition, since the beginning of the COVID-19 pandemic, energy markets have been more volatile compared with equities markets, likely related to the unique effects of the pandemic on oil production and consumption. In 2021, the OVX averaged almost double the VIX over the course of the year. New volatility introduced by Russia's invasion further into Ukraine in February 2022 pushed the monthly average OVX value to higher than in any month in 2021, other than December, averaging 47% in February and peaking at 64% on March 3. This volatility remained below the peak related to the COVID-19 Omicron variant on December 1, 2021, which was 78%. The impact on equities from Russia's invasion further into Ukraine was also high, with the VIX averaging 26% in February, higher than any monthly average last year, and peaking at 33% on March 1 (exceeding the Omicron-related peak of 31% in December 2021).

Figure 5. Equity and crude oil volatility indexes

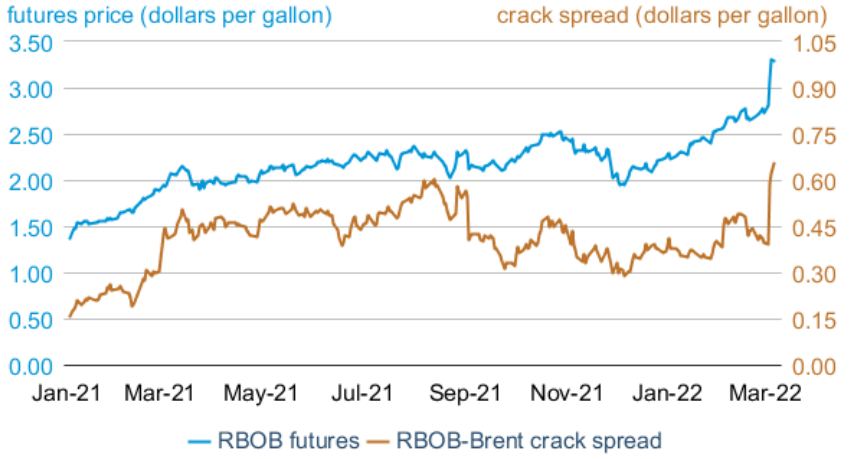


Source: Graph by EIA, based on data from Chicago Board of Options Exchange, as compiled by Bloomberg L.P.

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 $3.28 per gallon (gal) on March 3, up 71 cents/gal from February 1 **(Figure 6)**. The RBOB–Brent crack spread (the difference between the price of RBOB and the price of Brent crude oil) settled at 65 cents/gal on March 3, up 20 cents/gal during the same period. The average RBOB–Brent crack spread in February was 45 cents/gal, 8 cents/gal higher than January and 19 cents/gal higher than February 2021.

Figure 6. Historical RBOB front-month futures prices and crack spreads



Source: Graph by EIA, based on data from 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 well above the average for this time of year, likely as a result of low gasoline stocks and relatively low gasoline production. Gasoline inventories tend to build in the winter in preparation for the summer driving season, when gasoline demand is at its

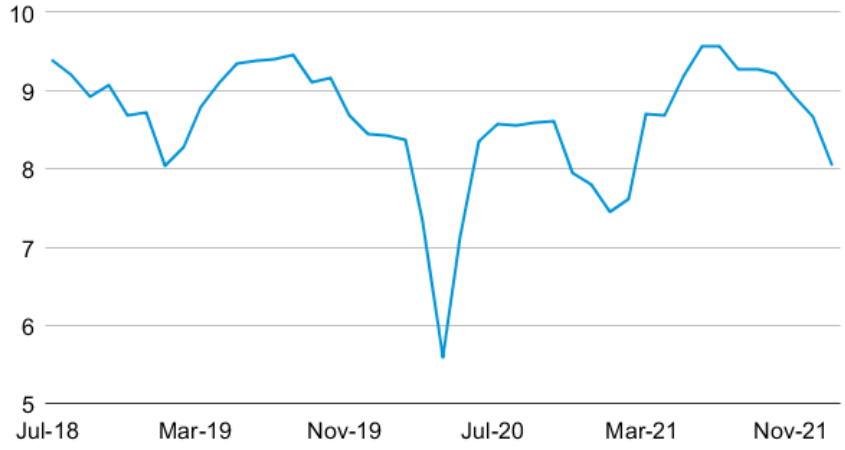
highest. However, after building in January, we estimate U.S. gasoline inventories declined to 246 million barrels, a 2.1 million barrel draw in February, putting inventories 4.3 million barrels (1.7%) below the five-year average. Gasoline inventories have been below the five-year average since January 2021. From February 28 to March 3, the RBOB-Brent crack spread increased by 67%, from 39 cents/gal to 65 cents/gal, as oil prices increased.

We estimate U.S. gasoline consumption averaged 8.5 million barrels per day (b/d) in February, about 0.5 million b/d (5.7%) below the 2016–2020 average, which for February are the years preceding the effects of the pandemic. Meanwhile, we estimate finished motor gasoline production in February totaled 9.2 million b/d, around 0.5 million b/d (4.9%) below the 2016–2020 average for this time of year. Both planned and unplanned refinery outages, including cold weather-related power outages at several Houston area refineries and an explosion at Marathon's 578,000-b/d Garyville, Louisiana, refinery, likely contributed to lower production and higher crack spreads.

RBOB prices reached $3.31/gal on March 2, the highest price since September 2012. Rising crude oil prices are supporting higher prices for RBOB. Starting from the most recent low of $1.95/gal on December 1, 2021, when news of the outbreak of the Omicron variant created expectations of reduced demand, RBOB prices have increased 68%. One third of the increase happened since February 28.

Gasoline demand: The Federal Highway Administration's (FHWA) report, *Traffic Volume Trends*, estimates vehicle miles traveled based on hourly traffic count data reported by states. Transportation makes up 96% of the end use for motor gasoline, which makes changes in vehicle miles traveled a direct factor on gasoline demand. The latest FHWA report shows total vehicle miles traveled in December 2021 were 268.4 billion, about 1.3% above the five-year (2015–19) average of 264.9 billion. Seasonally adjusted data shows a 1.1 billion mile (0.4%) decline in total vehicle miles traveled from November to December 2021. Total vehicle miles (for both passenger vehicles and trucks) increased for most of 2021, surpassing 2019 levels in every month from June to November **(Figure 7)**. For passenger vehicles alone, November marked the first time since the beginning of the COVID-19 pandemic that total miles traveled in weekly data surpassed 2019 levels. Since then, passenger vehicle miles traveled have been below 2019 levels in every week through February 27. The emergence of the Omicron variant at the end of November may have contributed to less driving in the following months.

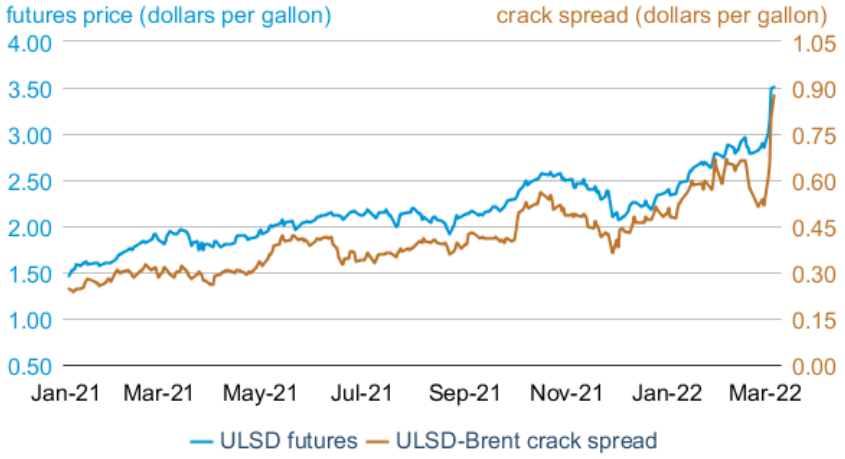
Figure 7. Vehicle miles traveled



Source: Graph by EIA, based on data from the Federal Highway Administration
Note: January 2022 is a forecast number from the Short-Term Energy Outlook.

Ultra-low sulfur diesel prices: The front-month futures price for ultra-low sulfur diesel (ULSD) for delivery in New York Harbor settled at $3.50/gal on March 3, a 76 cent/gal increase from February 1 **(Figure 8)**. The ULSD-Brent crack spread (the difference between the price of ULSD and the price of Brent crude oil) increased 26 cents/gal during the same period and settled at 87 cents/gal on March 3.

Figure 8. Historical ULSD front-month futures prices and crack spreads



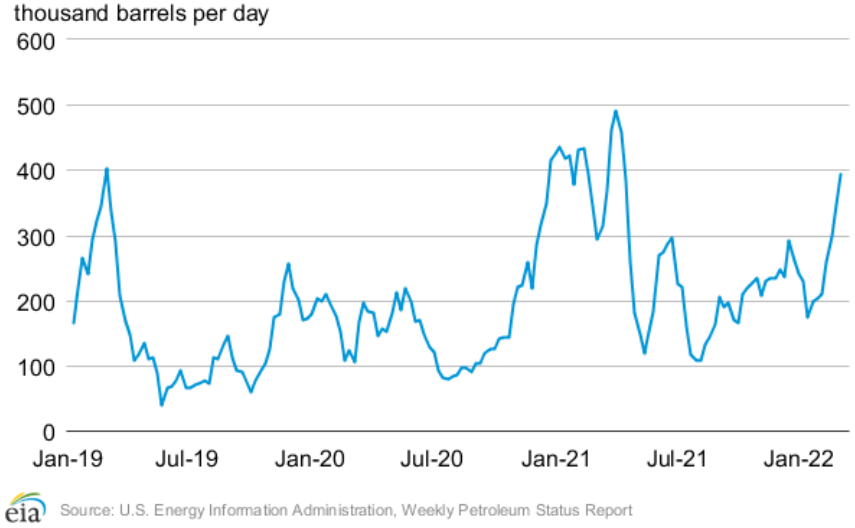
Source: Graph by EIA, based on data from CME Group, as compiled by Bloomberg L.P.
Note: ULSD=ultra-low sulfur diesel

The front-month ULSD contract averaged higher in February than in any month since June 2008. The ULSD–Brent crack spread increased significantly on February 28 and the first three trading days of March because of the possibility of reduced distillate exports from Russia. After a particularly cold January in New England, the U.S. region that relies most heavily on heating oil, ULSD crack spreads began February at 62 cents/gal and reached as high as 67 cents/gal on February 3. Crack spreads decreased in the second half of February due in part to warmer

weather. We estimate that there were 295 (23%) fewer heating degree days in New England in February than in January, contributing to slightly lower consumption for distillate fuel in February than in January. However, our 4.3 million b/d estimate of distillate consumption for February is 0.3 million b/d (8%) higher than in February 2021. One reason for higher distillate demand from a year ago is congestion at U.S. ports leading to increased trucking demand, as shown by the American Trucker's Associations' Truck Tonnage Index. This index measures freight tonnage transported by trucks, which increased 1.2% year-over-year in January 2022. Consistently high demand has resulted in low distillate stocks. We estimate that United States distillate fuel oil stocks totaled 118.4 million barrels in February, the lowest level since May 2018, and 17% lower than the five-year February average. We forecast distillate stocks to begin increasing in May 2022.

East Coast distillate fuel oil imports: Distillate imports into the U.S. East Coast (PADD 1) have recently been increasing, likely due to a combination of lower prices abroad, high demand in the United States, and low domestic stocks. According to our *Weekly Petroleum Status Report*, the four-week average of distillate imports increased every week from January 7 through February 25, and the four-week average of distillate imports to the East Coast was 393,000 b/d as of February 25 **(Figure 9)**. If confirmed in monthly data, this would be the most East Coast distillate imports for the month of February since 2004, likely because of high heating oil demand.

Figure 9. Four-week average of U.S. East Coast distillate fuel oil imports

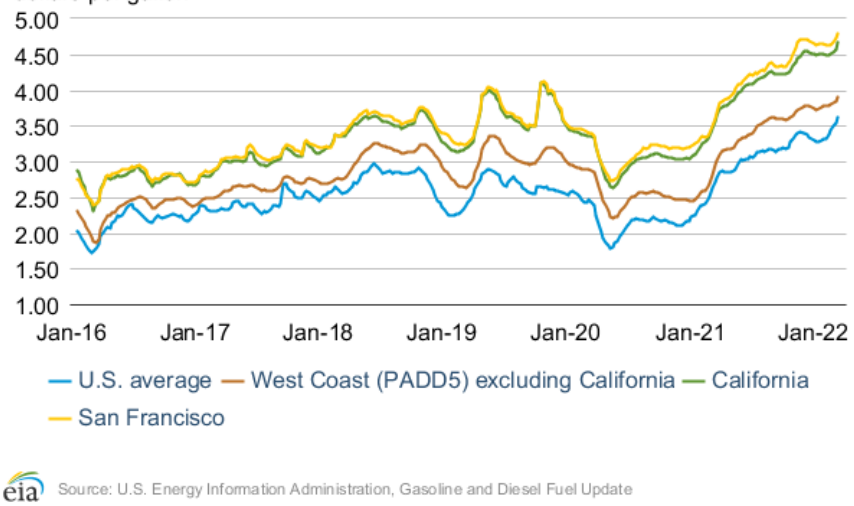


West Coast retail fuel prices: On February 28, the average U.S. regular-grade retail gasoline price was $3.61/gal, the highest price (in nominal terms, meaning not adjusted for inflation) since July 2014 **(Figure 10)**. Over the past two years, the average U.S. gasoline price increased by $1.84/gal (103%) from the pandemic low of $1.77/gal on April 27, 2020. In California, a market with higher and more variable prices than other states, prices have increased more than in any other state. The average California price has increased by $2.04/gal (77%) from the pandemic low of $2.64/gal to average $4.67/gal as of February 28, the highest nominal price according to

data going back to 2000. San Francisco's average price of $4.80/gal is the highest price in city-level data and the highest nominal price on record for any city in data going back to 2000.

Crude oil prices are the most important factor in determining gasoline prices, making up 56% of the total cost to produce a gallon of gasoline in January 2022. In addition, refinery closures could be contributing to higher prices in the West as suppliers rely more on imports and structurally different supply sources. We forecast West Coast gasoline prices to continue to increase through May as higher crude oil prices increase the cost to produce gasoline.

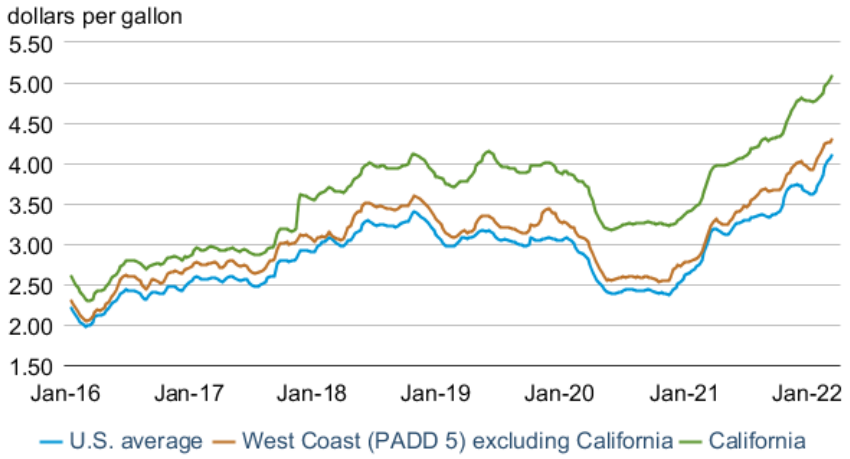
Figure 10. Nominal U.S. and West Coast weekly regular retail gasoline prices



Source: U.S. Energy Information Administration, Gasoline and Diesel Fuel Update

The nominal average retail price for on-highway diesel in the United States exceeded $4.00/gal on February 14 for the first time since March 17, 2014, and was $4.10/gal on February 28 **(Figure 11)**. Crude oil prices are the primary driver of U.S. retail diesel prices, making up 51% of the total cost to produce a gallon of diesel in January 2022. On the West Coast (PADD 5), excluding California, the average retail diesel price was $4.30/gal on February 28. In California, the average retail diesel price was $5.08/gal on February 28, which when adjusting for inflation is the highest retail diesel price in California since September 2013.

Figure 11. Nominal U.S. and West Coast weekly retail diesel prices

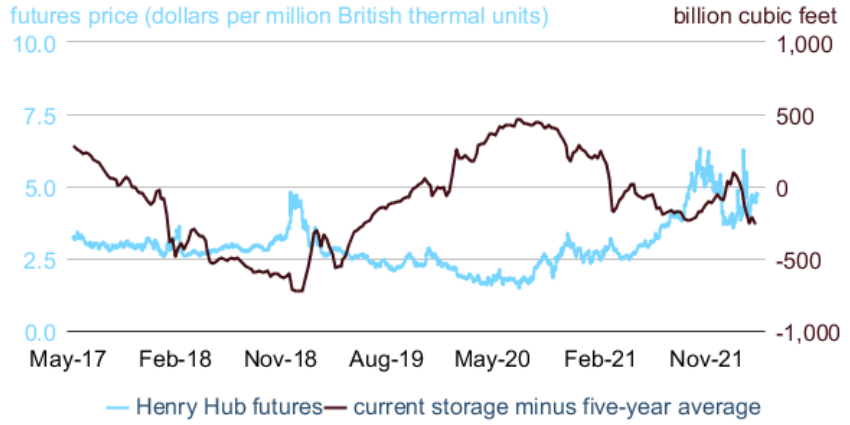


Source: U.S. Energy Information Administration, Gasoline and Diesel Fuel Update

Natural Gas

Prices: The front-month natural gas futures contract for delivery at the Henry Hub was $4.72 per million British thermal units (MMBtu) on March 3, 2022, which was down 3 cents from February 1, 2022 **(Figure 12)**. The average closing price for front-month natural gas futures prices in February was $4.46/MMBtu, the highest February monthly average in real terms since February 2014.

Figure 12. U.S. natural gas front-month futures prices and current storage deviation from five-year average



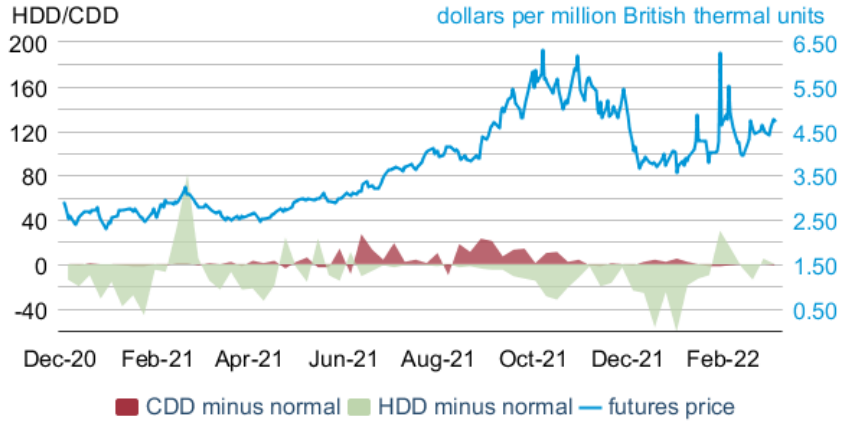
Source: Graph by EIA, based on data from CME Group, as compiled by Bloomberg L.P.

Natural gas storage withdrawals outpaced the five-year (2017−2021) average at the beginning of February. Colder-than-normal weather during the second half of January and early February contributed to higher-than-average consumption of natural gas used for space heating in the residential and commercial sectors, resulting in increased natural gas storage withdrawals.

Weekly storage withdrawals for the Lower 48 states during most of January and early February (weeks ending January 14 to February 11) each totaled at least 190 billion cubic feet (Bcf), compared with a five-year average range of 150 Bcf–167 Bcf for those same weeks. As a result, total inventories fell to 12% below the five-year average as of February 11.

Despite the colder-than-normal temperatures in early February, the weather across the country was near the 10-year average for the entire month. For February, heating degree days (HDDs) totaled 696, which is 1% fewer than the 10-year average **(Figure 13)**. The cold start to February followed by warmer-than-normal weather for the rest of the month contributed to storage inventories ending February at 1,626 Bcf, or 13% below the five-year average.

Figure 13. Natural gas front-month futures prices and actual minus historical average HDD and CDD



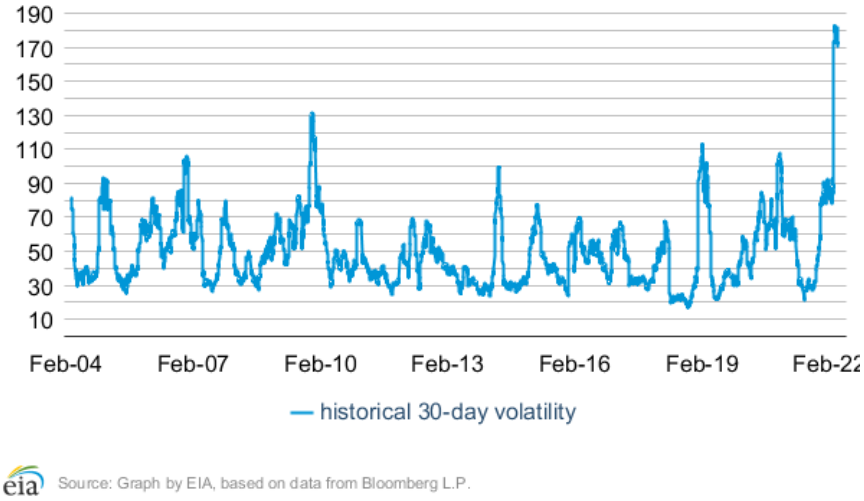
Sources: CME Group and National Oceanic and Atmospheric Administration, as compiled by Bloomberg L.P.
Note: HDD=heating degree days, CDD=cooling degree days.

Warmer weather on average in February compared with January contributed to a decrease in natural gas consumption in the residential and commercial sectors, which averaged an estimated combined 45.5 billion cubic feet per day (Bcf/d) in February, down 4.1 Bcf/d (8%) from January. Natural gas consumption in the electric power sector was also down in February, averaging 28.4 Bcf/d, or 2.3 Bcf/d (7%) less than in January. Despite the decrease in natural gas consumption compared with January, natural gas futures prices increased in February and remained above $4/MMBtu. Prices were supported by below-average inventories and by high demand for U.S. liquefied natural gas (LNG) exports – a result of high international prices. We estimate U.S. LNG exports were 10.9 Bcf/d in February, down 0.3 Bcf/d from January and up 3.5 Bcf/d from February 2021. We forecast U.S. LNG exports to increase to 13.0 Bcf/d by the end of 2022 and average 12.1 Bcf/d in 2023.

Historical volatility: Volatility of U.S. natural gas futures prices has risen during the past seven months, reaching record-high levels in February **(Figure 14)**. Historical volatility measures the magnitude of daily changes in the closing price for a commodity during a specific time in the past. Based on rolling front-month contracts, the 30-day historical volatility of the U.S. natural

gas futures price was 179.1% for February, almost doubling from January. The previous record natural gas price volatility for any month was October 2009, when the historical volatility averaged 123.8%. The historical volatility of the natural gas futures price at the Henry Hub in February has corresponded with volatility at international pricing hubs in Europe and Asia. Daily front-month natural gas futures prices ranged from a monthly intraday high of $5.57/MMBtu on February 2 to a low of $3.88/MMBtu on February 11.

Figure 14. Natural gas historical volatility



Source: Graph by EIA, based on data from Bloomberg L.P.

Notable forecast changes

- We forecast the Brent crude oil spot price will average $105/b in 2022, which is $22/b more than we forecast in the February STEO. The higher price forecast partly reflects the uncertainties about disruptions to supply and additional sanctions related to Russia's further invasion of Ukraine. It also reflects a reduction in our forecast of OECD inventories throughout the forecast. The increase in crude oil prices in the forecast also results in higher prices for gasoline and diesel fuel in 2022 compared with last month's forecast.

- We forecast U.S. crude oil production to average 13.0 million b/d in 2023, 0.4 million b/d more than in last month's forecast. The higher production forecast is the result of higher forecast crude oil prices.

- Our forecast for Russia's liquid fuels production averages 10.8 million b/d in both 2022 and 2023, which is unchanged from 2021, but 0.7 million b/d and 1.1 million b/d lower, respectively, than we forecast in the February STEO.

- We forecast global oil inventories will rise by 0.4 million b/d in both 2022 and 2023. Our current expectation for 2022 inventory builds are 0.4 million b/d less than forecast last month and builds for 2023 are 0.6 million b/d less.
- For more information, see the detailed table of forecast changes.

Short-Term Energy Outlook
Chart Gallery

March 8, 2022

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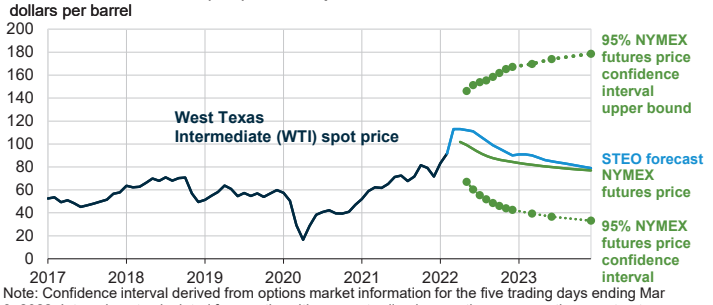
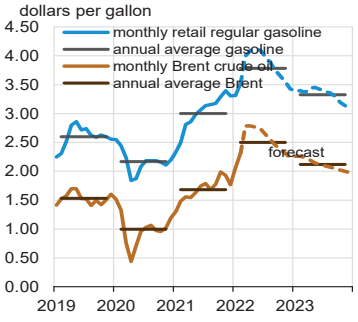
West Texas Intermediate (WTI) crude oil price and NYMEX confidence intervals
dollars per barrel



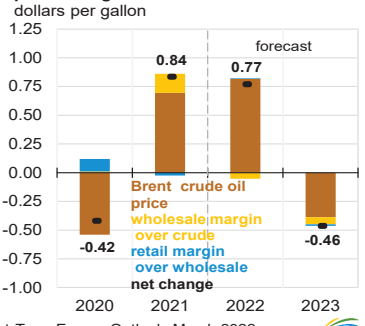
Note: Confidence interval derived from options market information for the five trading days ending Mar 3, 2022. Intervals not calculated for months with sparse trading in near-the-money options contracts.

Sources: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022, CME Group, Bloomberg, L.P., and Refinitiv an LSEG Business

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

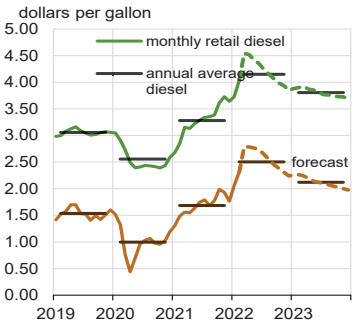


Components of annual gasoline price changes
dollars per gallon

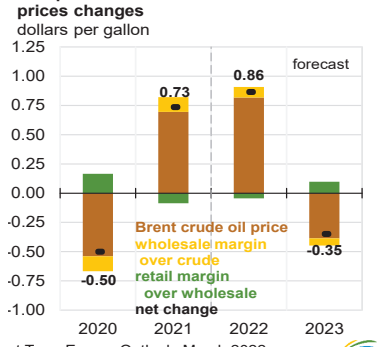


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022, and Refinitiv an LSEG Business

U.S. diesel and crude oil prices

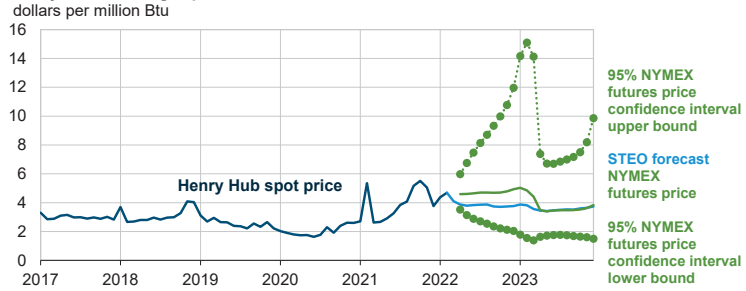


Components of annual diesel prices changes



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022, and Refinitiv an LSEG Business

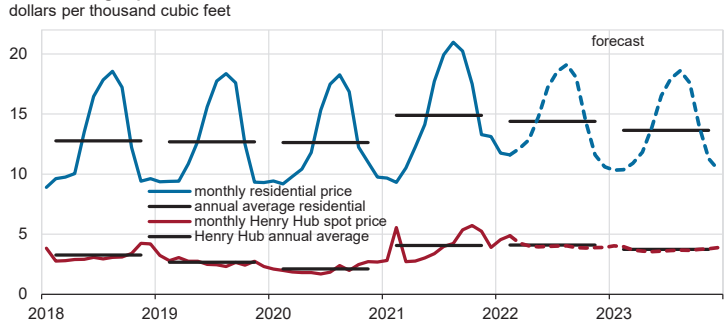
Henry Hub natural gas price and NYMEX confidence intervals



Note: Confidence interval derived from options market information for the five trading days ending Mar 3, 2022. Intervals not calculated for months with sparse trading in near-the-money options contracts.

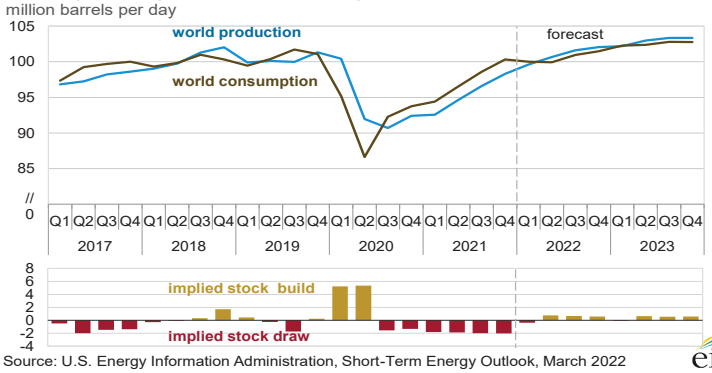
Sources: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022, CME Group, and Refinitiv an LSEG Business

U.S. natural gas prices



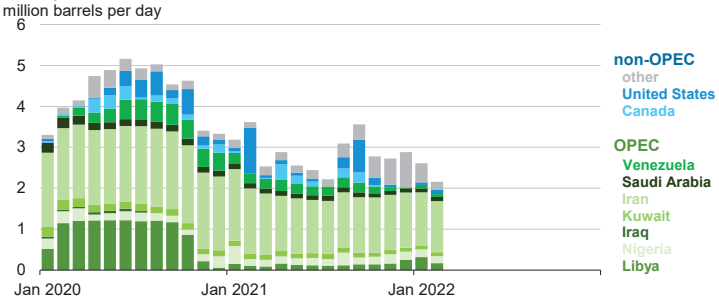
Sources: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022, and Refinitiv an LSEG Business

World liquid fuels production and consumption balance
million barrels per day



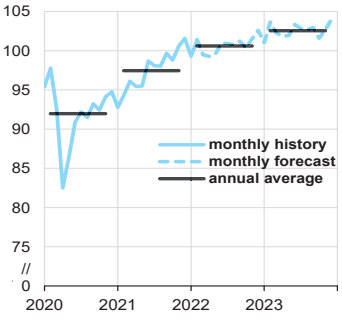
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

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

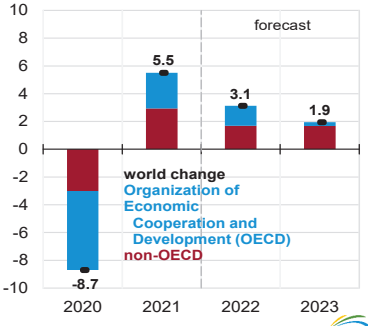


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

World liquid fuels consumption
million barrels per day

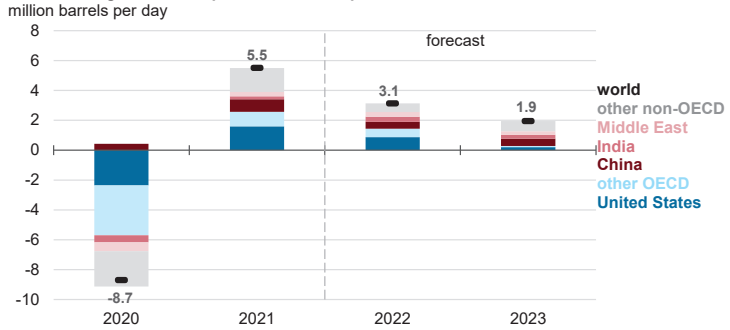


Components of annual change
million barrels per day



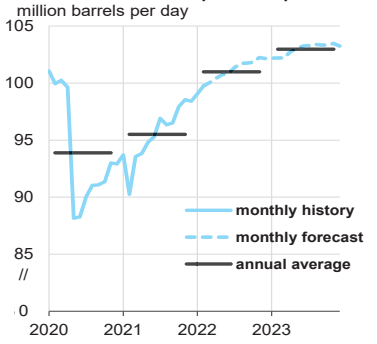
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

Annual change in world liquid fuels consumption
million barrels per day

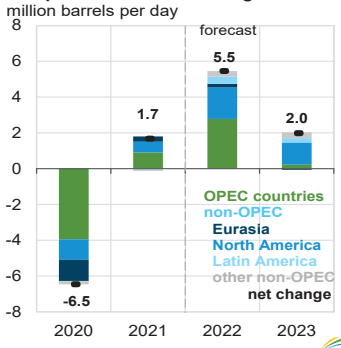


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

World crude oil and liquid fuels production
million barrels per day

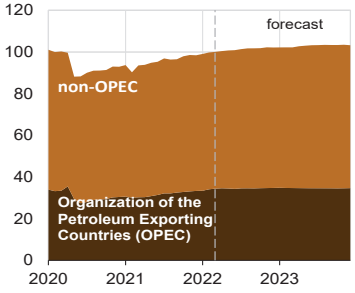


Components of annual change
million barrels per day

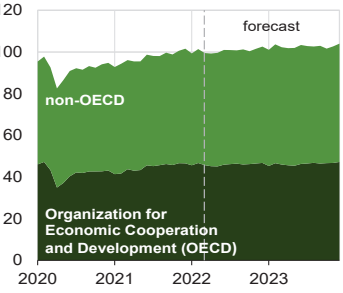


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

World liquid fuels production
million barrels per day

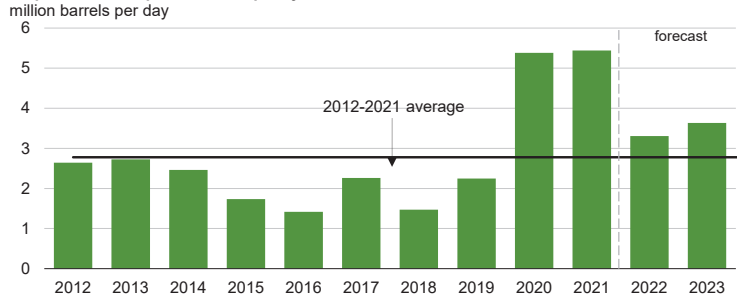


World liquid fuels consumption
million barrels per day



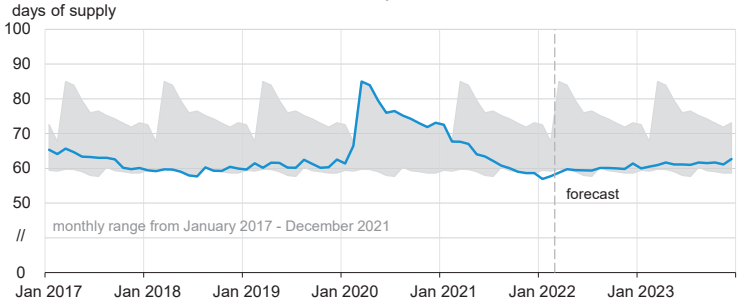
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

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



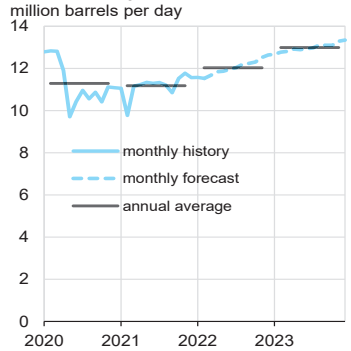
Note: Black line represents 2012-2021 average (2.8 million barrels per day).
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

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

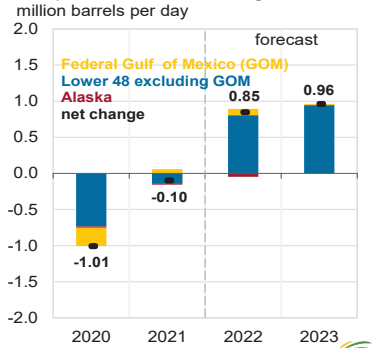


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

U.S. crude oil production
million barrels per day



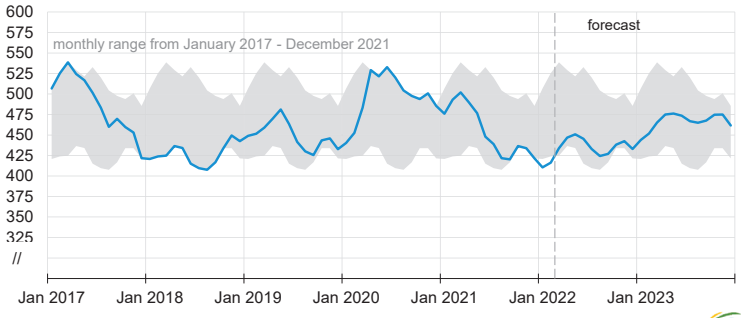
Components of annual change
million barrels per day



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

U.S. commercial crude oil inventories

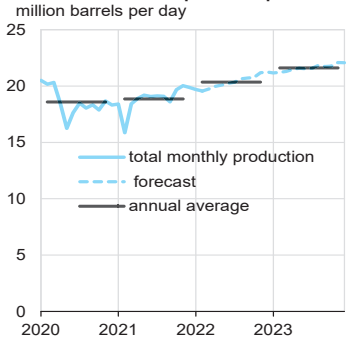
million barrels



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

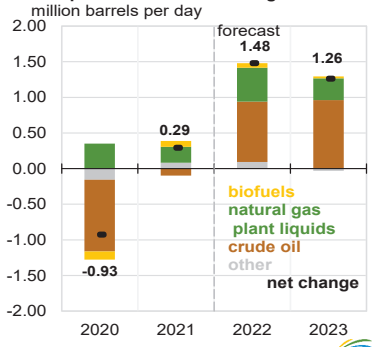
U.S. crude oil and liquid fuels production

million barrels per day



Components of annual change

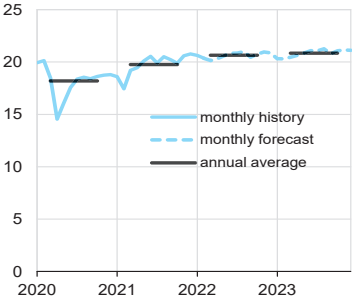
million barrels per day



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

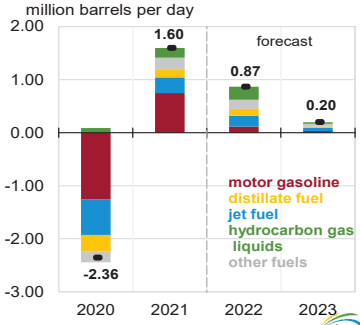
U.S. liquid fuels product supplied (consumption)

million barrels per day



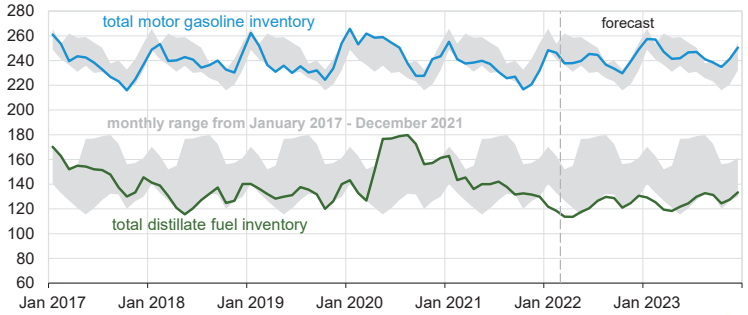
Components of annual change

million barrels per day



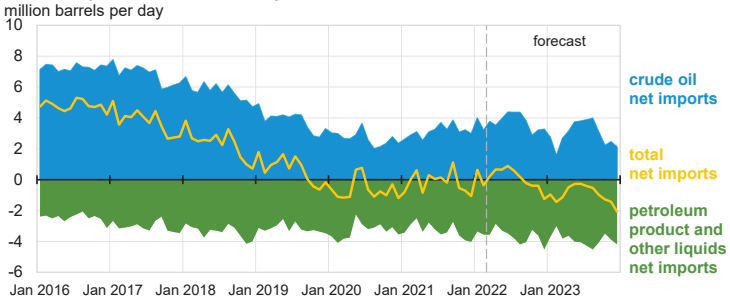
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

U.S. gasoline and distillate inventories
million barrels



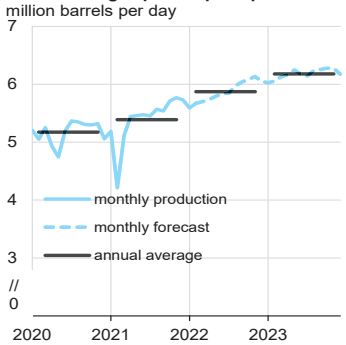
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

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

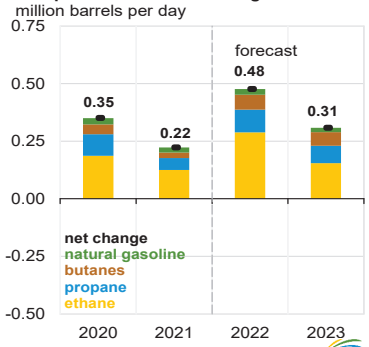


Note: Petroleum product and other liquids include: gasoline, distillate fuels, hydrocarbon gas liquids, jet fuel, residual fuel oil, unfinished oils, other hydrocarbons/oxygenates, and other oils.
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

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

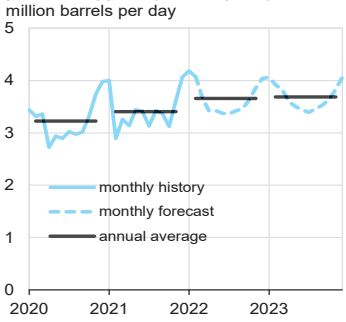


Components of annual change
million barrels per day

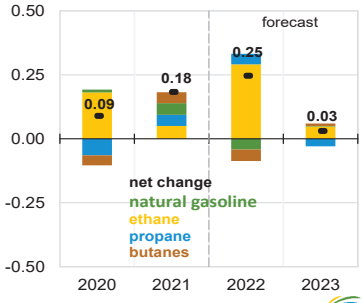


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

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

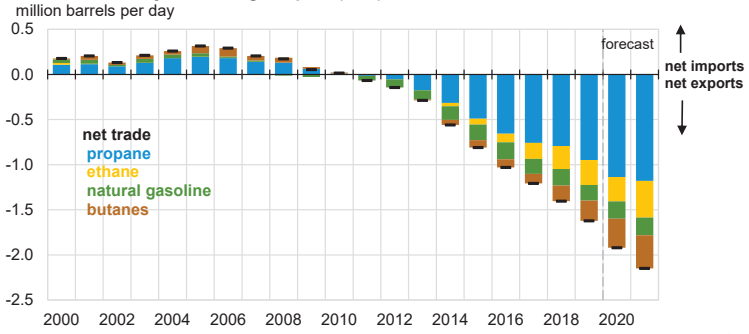


Components of annual change
million barrels per day



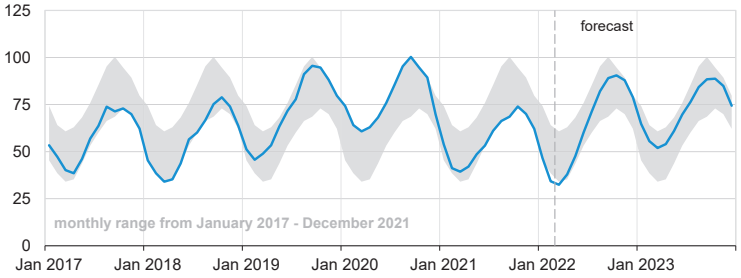
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

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

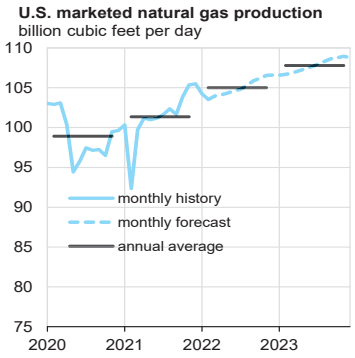


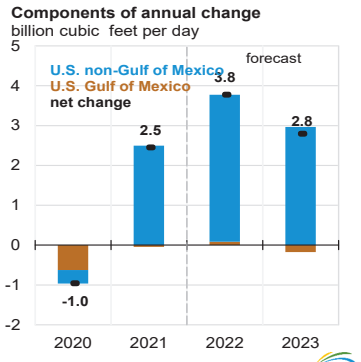
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

U.S. commercial propane inventories
million barrels

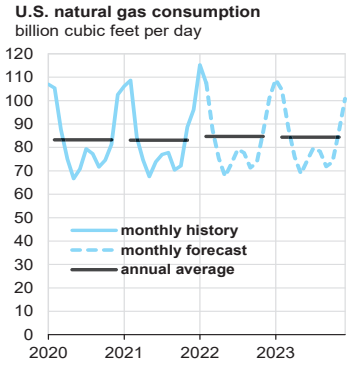


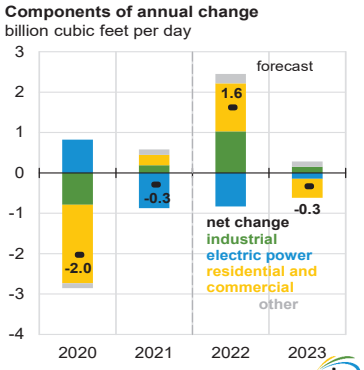
Note: Excludes propylene.
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022



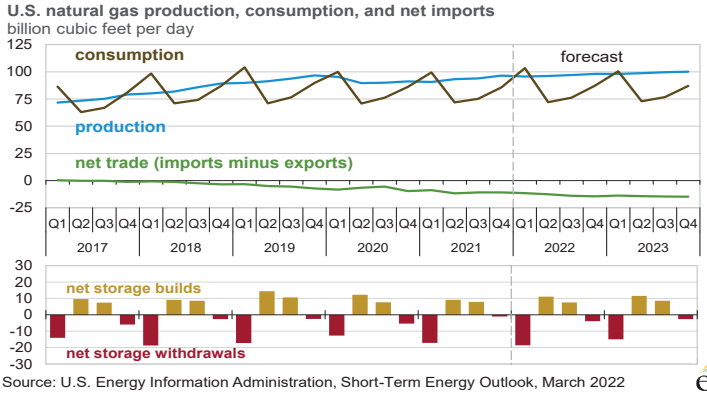


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022



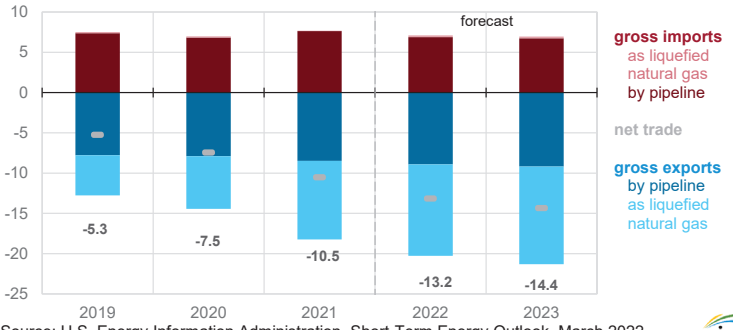


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022



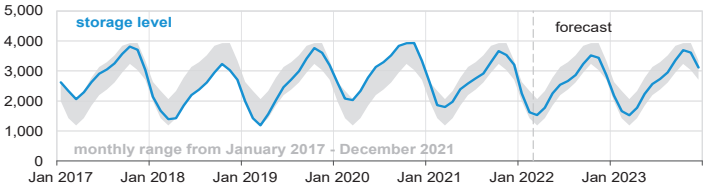
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

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

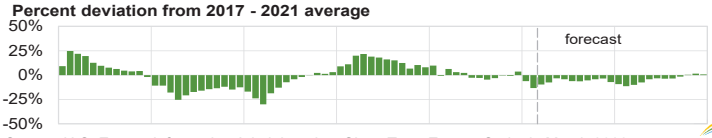


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

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

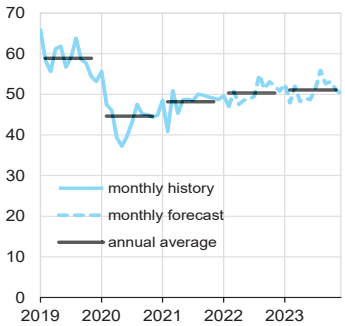


Percent deviation from 2017 - 2021 average

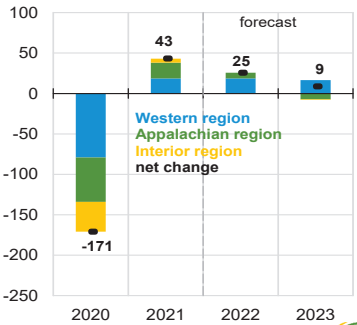


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

U.S. coal production
million short tons

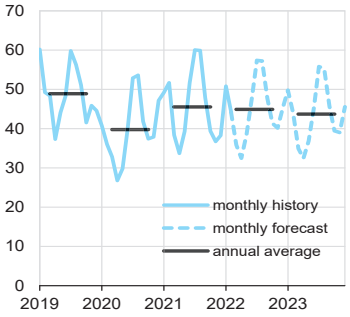


Components of annual change
million short tons

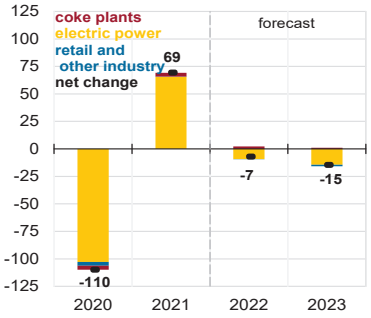


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

U.S. coal consumption
million short tons

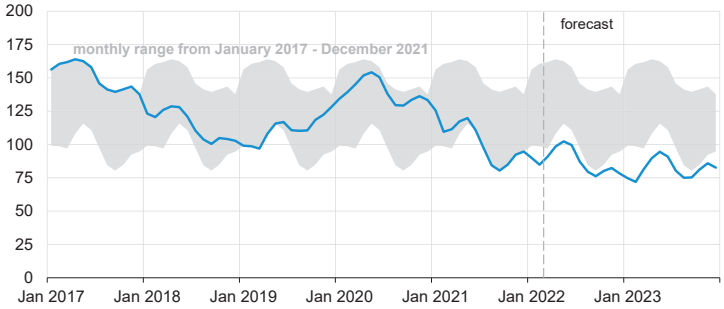


Components of annual change
million short tons



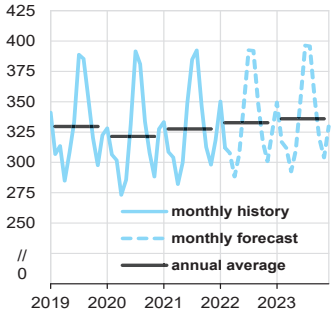
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

U.S. electric power coal inventories
million short tons

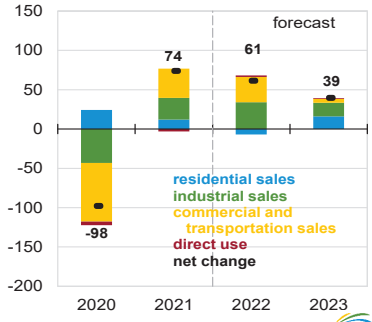


Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

U.S. electricity consumption
billion kilowatthours



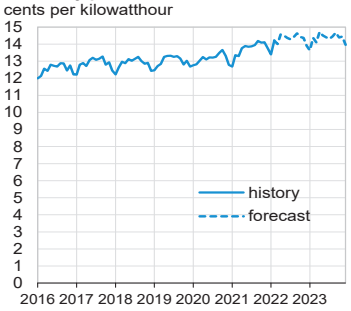
Components of annual change
billion kilowatthours



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

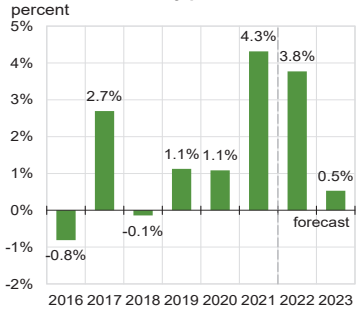
U.S. monthly nominal residential electricity price

cents per kilowatthour



Annual growth in nominal residential electricity prices

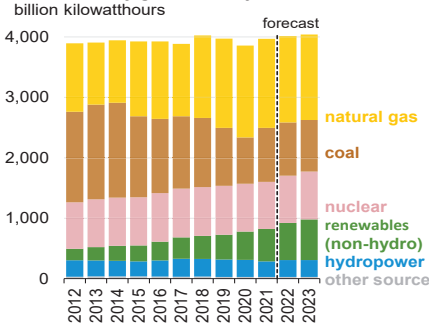
percent



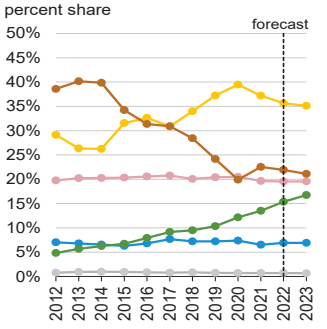
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

U.S. electricity generation by source, all sectors

billion kilowatthours



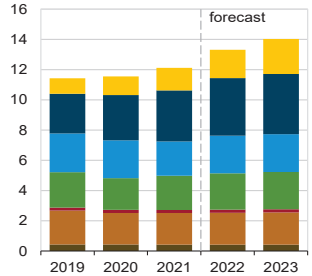
percent share



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

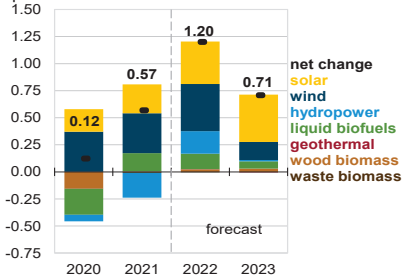
U.S. renewable energy supply

quadrillion British thermal units



Components of annual change

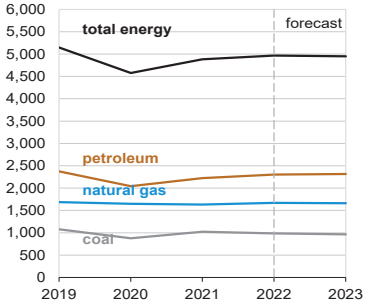
quadrillion British thermal units



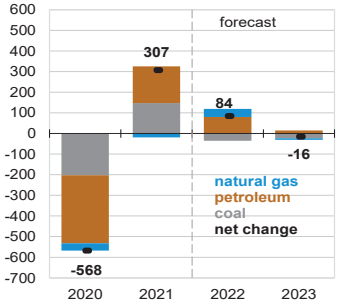
Note: Hydropower excludes pumped storage generation. Liquids include ethanol, biodiesel, renewable diesel, other biofuels, and biofuel losses and coproducts.Waste biommas includes municipal waste from biogenic sources, landfill gas, and non-wood waste.

Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

U.S. annual CO_2 emissions by source
million metric tons

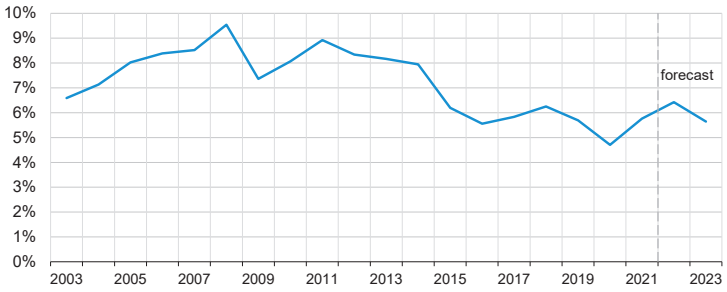


Components of annual change
million metric tons



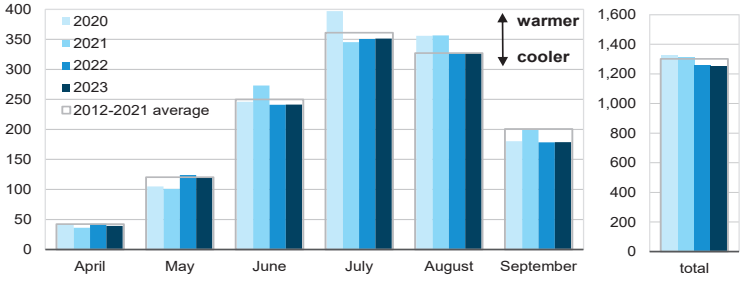
Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

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



Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

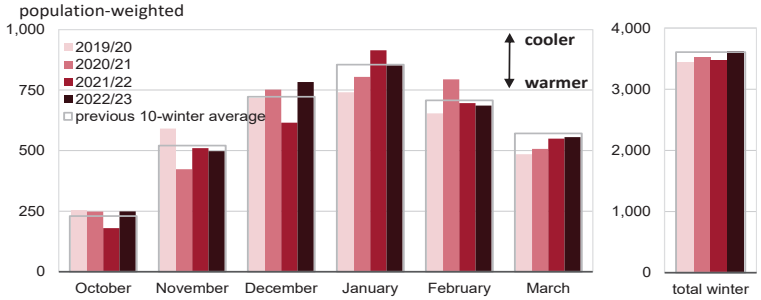
U.S. summer cooling degree days
population-weighted



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, March 2022

U.S. winter heating degree days
population-weighted

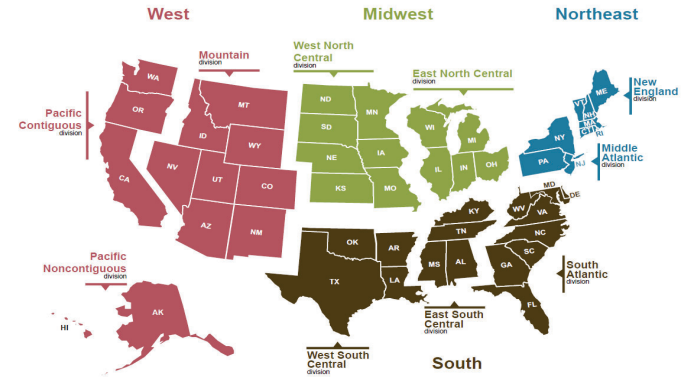


Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data. Projections reflect NOAA's 14-16 month outlook.

Source: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022

eia

U.S. Census regions and divisions



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

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Table 1. U.S. Energy Markets Summary

U.S. Energy Information Administration | Short-Term Energy Outlook - March 2022

	2021				2022				2023				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2021	2022	2023
Energy Production															
Crude Oil Production (a)															
(million barrels per day)	**10.69**	**11.28**	**11.13**	**11.62**	*11.59*	*11.89*	*12.15*	*12.48*	*12.75*	*12.91*	*13.06*	*13.24*	**11.18**	*12.03*	*12.99*
Dry Natural Gas Production															
(billion cubic feet per day)	**90.59**	**93.15**	**93.86**	**96.57**	*95.69*	*96.09*	*96.97*	*98.00*	*98.11*	*98.75*	*99.60*	*100.10*	**93.56**	*96.69*	*99.15*
Coal Production															
(million short tons)	**140**	**143**	**148**	**147**	*147*	*145*	*156*	*156*	*152*	*146*	*160*	*154*	**578**	*604*	*613*
Energy Consumption															
Liquid Fuels															
(million barrels per day)	**18.45**	**20.03**	**20.21**	**20.41**	*20.38*	*20.58*	*20.77*	*20.85*	*20.36*	*20.86*	*21.03*	*21.11*	**19.78**	*20.65*	*20.84*
Natural Gas															
(billion cubic feet per day)	**99.44**	**71.95**	**75.09**	**85.64**	*103.32*	*72.03*	*76.15*	*87.13*	*100.47*	*72.98*	*76.73*	*87.08*	**82.97**	*84.59*	*84.26*
Coal (b)															
(million short tons)	**139**	**125**	**168**	**114**	*131*	*119*	*162*	*127*	*129*	*115*	*157*	*124*	**546**	*539*	*524*
Electricity															
(billion kilowatt hours per day)	**10.51**	**10.23**	**12.22**	**10.10**	*10.78*	*10.38*	*12.33*	*10.25*	*10.87*	*10.49*	*12.44*	*10.36*	**10.77**	*10.94*	*11.04*
Renewables (c)															
(quadrillion Btu)	**2.94**	**3.15**	**2.94**	**3.12**	*3.31*	*3.53*	*3.21*	*3.27*	*3.45*	*3.72*	*3.40*	*3.46*	**12.15**	*13.31*	*14.03*
Total Energy Consumption (d)															
(quadrillion Btu)	**25.03**	**23.14**	**24.52**	**24.46**	*26.27*	*23.67*	*25.00*	*25.24*	*26.14*	*23.95*	*25.28*	*25.51*	**97.14**	*100.18*	*100.88*
Energy Prices															
Crude Oil West Texas Intermediate Spot															
(dollars per barrel)	**58.09**	**66.19**	**70.61**	**77.27**	*96.85*	*111.97*	*102.94*	*92.95*	*90.63*	*86.25*	*83.00*	*80.03*	**68.21**	*101.17*	*84.98*
Natural Gas Henry Hub Spot															
(dollars per million Btu)	**3.56**	**2.94**	**4.36**	**4.77**	*4.39*	*3.83*	*3.83*	*3.73*	*3.75*	*3.45*	*3.52*	*3.66*	**3.91**	*3.95*	*3.59*
Coal															
(dollars per million Btu)	**1.91**	**1.92**	**2.03**	**2.05**	*1.80*	*1.74*	*1.58*	*1.58*	*1.59*	*1.61*	*1.60*	*1.59*	**1.98**	*1.67*	*1.60*
Macroeconomic															
Real Gross Domestic Product															
(billion chained 2012 dollars - SAAR)	**19,056**	**19,368**	**19,479**	**19,806**	*19,884*	*20,079*	*20,218*	*20,352*	*20,475*	*20,609*	*20,749*	*20,901*	**19,427**	*20,133*	*20,684*
Percent change from prior year	**0.5**	**12.2**	**4.9**	**5.5**	*4.3*	*3.7*	*3.8*	*2.8*	*3.0*	*2.6*	*2.6*	*2.7*	**5.7**	*3.6*	*2.7*
GDP Implicit Price Deflator															
(Index, 2012=100)	**115.8**	**117.5**	**119.3**	**121.3**	*122.5*	*123.7*	*124.6*	*125.3*	*125.9*	*126.6*	*127.4*	*128.1*	**118.5**	*124.0*	*127.0*
Percent change from prior year	**2.1**	**4.1**	**4.6**	**5.8**	*5.7*	*5.3*	*4.5*	*3.3*	*2.8*	*2.4*	*2.2*	*2.3*	**4.2**	*4.7*	*2.4*
Real Disposable Personal Income															
(billion chained 2012 dollars - SAAR)	**17,219**	**15,807**	**15,633**	**15,401**	*15,236*	*15,370*	*15,513*	*15,617*	*15,761*	*15,875*	*15,991*	*16,112*	**16,015**	*15,434*	*15,935*
Percent change from prior year	**15.1**	**-4.3**	**-0.9**	**-0.3**	*-11.5*	*-2.8*	*-0.8*	*1.4*	*3.4*	*3.3*	*3.1*	*3.2*	**2.2**	*-3.6*	*3.2*
Manufacturing Production Index															
(Index, 2017=100)	**97.3**	**98.7**	**99.7**	**100.9**	*101.9*	*103.6*	*104.5*	*105.5*	*106.4*	*107.3*	*108.0*	*108.8*	**99.2**	*103.9*	*107.6*
Percent change from prior year	**-0.2**	**17.2**	**5.9**	**4.4**	*4.7*	*4.9*	*4.8*	*4.6*	*4.4*	*3.6*	*3.3*	*3.1*	**6.5**	*4.8*	*3.6*
Weather															
U.S. Heating Degree-Days	**2,106**	**472**	**51**	**1,306**	*2,160*	*483*	*74*	*1,531*	*2,094*	*484*	*74*	*1,529*	**3,935**	*4,247*	*4,182*
U.S. Cooling Degree-Days	**49**	**410**	**901**	**127**	*44*	*408*	*856*	*94*	*43*	*400*	*857*	*95*	**1,488**	*1,401*	*1,395*

(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 March 3, 2022.

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 S&P Global 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 - March 2022

	2021				2022				2023				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2021	2022	2023
Crude Oil (dollars per barrel)															
West Texas Intermediate Spot Average	**58.09**	**66.19**	**70.61**	**77.27**	*96.85*	*111.97*	*102.94*	*92.95*	*90.63*	*86.25*	*83.00*	*80.03*	**68.21**	*101.17*	*84.98*
Brent Spot Average	**61.12**	**68.91**	**73.45**	**79.42**	*101.08*	*115.97*	*106.94*	*96.95*	*94.63*	*90.25*	*87.00*	*84.03*	**70.89**	*105.22*	*88.98*
U.S. Imported Average	**55.27**	**64.80**	**68.38**	**75.42**	*93.64*	*109.43*	*100.64*	*90.12*	*87.86*	*83.48*	*80.33*	*77.26*	**66.32**	*99.04*	*82.16*
U.S. Refiner Average Acquisition Cost	**57.12**	**66.11**	**70.30**	**76.97**	*94.70*	*110.48*	*101.53*	*91.16*	*88.90*	*84.54*	*81.28*	*78.23*	**67.98**	*99.62*	*83.12*
U.S. Liquid Fuels (cents per gallon)															
Refiner Prices for Resale															
Gasoline	**180**	**216**	**232**	**243**	*285*	*327*	*303*	*265*	*257*	*262*	*252*	*231*	**219**	*295*	*250*
Diesel Fuel	**178**	**204**	**219**	**241**	*295*	*329*	*303*	*280*	*269*	*260*	*254*	*248*	**211**	*302*	*257*
Fuel Oil	**162**	**180**	**197**	**222**	*279*	*304*	*282*	*268*	*264*	*247*	*236*	*238*	**188**	*281*	*255*
Refiner Prices to End Users															
Jet Fuel	**163**	**182**	**199**	**226**	*283*	*319*	*301*	*279*	*268*	*257*	*251*	*246*	**195**	*296*	*255*
No. 6 Residual Fuel Oil (a)	**162**	**181**	**194**	**211**	*214*	*261*	*246*	*221*	*226*	*217*	*210*	*203*	**190**	*234*	*214*
Retail Prices Including Taxes															
Gasoline Regular Grade (b)	**256**	**297**	**316**	**333**	*362*	*410*	*388*	*354*	*338*	*344*	*335*	*314*	**302**	*379*	*333*
Gasoline All Grades (b)	**265**	**306**	**325**	**343**	*372*	*421*	*400*	*368*	*352*	*357*	*348*	*328*	**311**	*391*	*346*
On-highway Diesel Fuel	**290**	**321**	**336**	**366**	*410*	*443*	*415*	*392*	*390*	*384*	*376*	*371*	**329**	*415*	*380*
Heating Oil	**272**	**283**	**297**	**346**	*392*	*404*	*376*	*366*	*364*	*343*	*326*	*330*	**300**	*385*	*348*
Natural Gas															
Henry Hub Spot (dollars per thousand cubic feet)	**3.70**	**3.06**	**4.53**	**4.96**	*4.56*	*3.98*	*3.98*	*3.88*	*3.89*	*3.58*	*3.65*	*3.80*	**4.06**	*4.10*	*3.73*
Henry Hub Spot (dollars per million Btu)	**3.56**	**2.94**	**4.36**	**4.77**	*4.39*	*3.83*	*3.83*	*3.73*	*3.75*	*3.45*	*3.52*	*3.66*	**3.91**	*3.95*	*3.59*
U.S. Retail Prices (dollars per thousand cubic feet)															
Industrial Sector	**5.73**	**4.09**	**5.10**	**6.87**	*5.88*	*5.09*	*4.91*	*5.15*	*5.35*	*4.62*	*4.52*	*4.95*	**5.50**	*5.27*	*4.88*
Commercial Sector	**7.54**	**8.85**	**10.12**	**10.27**	*9.58*	*9.75*	*9.83*	*8.66*	*8.42*	*8.78*	*9.12*	*8.24*	**8.82**	*9.37*	*8.51*
Residential Sector	**9.75**	**13.87**	**20.38**	**13.82**	*11.80*	*14.25*	*18.54*	*11.52*	*10.50*	*13.37*	*18.03*	*11.23*	**12.27**	*12.54*	*11.70*
U.S. Electricity															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	**1.91**	**1.92**	**2.03**	**2.05**	*1.80*	*1.74*	*1.58*	*1.58*	*1.59*	*1.61*	*1.60*	*1.59*	**1.98**	*1.67*	*1.60*
Natural Gas	**7.23**	**3.26**	**4.36**	**5.42**	*4.84*	*3.98*	*3.91*	*4.00*	*4.23*	*3.56*	*3.58*	*3.93*	**4.97**	*4.16*	*3.80*
Residual Fuel Oil (c)	**11.28**	**13.08**	**14.21**	**16.10**	*15.74*	*20.52*	*19.72*	*17.95*	*17.18*	*17.30*	*15.97*	*15.30*	**13.66**	*18.16*	*16.42*
Distillate Fuel Oil	**13.54**	**15.20**	**16.20**	**18.03**	*20.96*	*24.88*	*23.25*	*21.52*	*20.68*	*19.95*	*19.42*	*19.06*	**15.50**	*22.34*	*19.85*
Retail Prices (cents per kilowatthour)															
Industrial Sector	**7.09**	**6.92**	**7.62**	**7.38**	*7.28*	*7.04*	*7.58*	*7.24*	*7.22*	*7.02*	*7.53*	*7.21*	**7.26**	*7.29*	*7.25*
Commercial Sector	**10.99**	**11.07**	**11.59**	**11.37**	*11.60*	*11.59*	*11.91*	*11.60*	*11.75*	*11.62*	*11.93*	*11.61*	**11.27**	*11.68*	*11.74*
Residential Sector	**13.10**	**13.84**	**13.99**	**13.97**	*13.85*	*14.46*	*14.43*	*14.22*	*14.02*	*14.52*	*14.47*	*14.25*	**13.72**	*14.24*	*14.32*

(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 March 3, 2022.

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 - March 2022

	2021				2022				2023				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2021	2022	2023
Production (million barrels per day) (a)															
OECD	**30.07**	**30.74**	**31.07**	**32.25**	*32.27*	*32.65*	*32.97*	*33.73*	*34.13*	*34.37*	*34.44*	*34.84*	**31.04**	*32.91*	*34.45*
U.S. (50 States)	**17.62**	**19.05**	**18.94**	**19.86**	*19.66*	*20.10*	*20.57*	*21.06*	*21.23*	*21.53*	*21.72*	*21.98*	**18.87**	*20.35*	*21.61*
Canada	**5.62**	**5.37**	**5.49**	**5.76**	*5.87*	*5.83*	*5.85*	*5.86*	*5.91*	*5.88*	*5.89*	*5.90*	**5.56**	*5.85*	*5.90*
Mexico	**1.93**	**1.95**	**1.90**	**1.92**	*1.94*	*1.93*	*1.89*	*1.86*	*1.90*	*1.86*	*1.83*	*1.79*	**1.92**	*1.91*	*1.85*
Other OECD	**4.91**	**4.37**	**4.74**	**4.71**	*4.79*	*4.78*	*4.66*	*4.95*	*5.08*	*5.10*	*5.00*	*5.17*	**4.68**	*4.80*	*5.09*
Non-OECD	**62.51**	**63.91**	**65.52**	**66.04**	*67.35*	*68.02*	*68.64*	*68.33*	*68.07*	*68.63*	*68.91*	*68.50*	**64.51**	*68.09*	*68.53*
OPEC	**30.34**	**30.88**	**32.28**	**33.10**	*34.00*	*34.48*	*34.57*	*34.71*	*34.78*	*34.63*	*34.62*	*34.61*	**31.66**	*34.44*	*34.66*
Crude Oil Portion	**25.08**	**25.49**	**26.84**	**27.66**	*28.44*	*29.05*	*29.09*	*29.19*	*29.24*	*29.22*	*29.16*	*29.11*	**26.28**	*28.95*	*29.18*
Other Liquids (b)	**5.26**	**5.39**	**5.44**	**5.44**	*5.56*	*5.43*	*5.48*	*5.52*	*5.54*	*5.41*	*5.46*	*5.50*	**5.38**	*5.50*	*5.48*
Eurasia	**13.38**	**13.61**	**13.58**	**14.23**	*14.32*	*13.66*	*13.83*	*13.92*	*13.94*	*13.82*	*13.82*	*13.91*	**13.70**	*13.93*	*13.87*
China	**4.99**	**5.03**	**5.01**	**4.94**	*5.04*	*5.04*	*5.04*	*5.08*	*5.06*	*5.09*	*5.08*	*5.13*	**4.99**	*5.05*	*5.09*
Other Non-OECD	**13.79**	**14.38**	**14.64**	**13.78**	*14.00*	*14.84*	*15.20*	*14.62*	*14.29*	*15.08*	*15.38*	*14.85*	**14.15**	*14.67*	*14.91*
Total World Production	**92.58**	**94.65**	**96.59**	**98.29**	*99.62*	*100.67*	*101.61*	*102.06*	*102.20*	*103.00*	*103.35*	*103.34*	**95.55**	*101.00*	*102.97*
Non-OPEC Production	**62.23**	**63.77**	**64.31**	**65.20**	*65.62*	*66.19*	*67.04*	*67.35*	*67.42*	*68.36*	*68.72*	*68.73*	**63.89**	*66.56*	*68.31*
Consumption (million barrels per day) (c)															
OECD	**42.30**	**44.00**	**45.72**	**46.32**	*46.00*	*45.41*	*46.22*	*46.50*	*45.96*	*45.78*	*46.59*	*46.89*	**44.60**	*46.03*	*46.31*
U.S. (50 States)	**18.45**	**20.03**	**20.21**	**20.41**	*20.38*	*20.58*	*20.77*	*20.86*	*20.36*	*20.86*	*21.03*	*21.11*	**19.78**	*20.65*	*20.84*
U.S. Territories	**0.20**	**0.18**	**0.18**	**0.19**	*0.20*	*0.18*	*0.19*	*0.20*	*0.19*	*0.17*	*0.17*	*0.18*	**0.19**	*0.19*	*0.18*
Canada	**2.12**	**2.16**	**2.41**	**2.37**	*2.30*	*2.29*	*2.41*	*2.39*	*2.38*	*2.33*	*2.43*	*2.40*	**2.27**	*2.35*	*2.38*
Europe	**11.91**	**12.62**	**13.83**	**13.67**	*13.22*	*13.28*	*13.62*	*13.31*	*13.18*	*13.34*	*13.74*	*13.50*	**13.01**	*13.36*	*13.44*
Japan	**3.73**	**3.08**	**3.18**	**3.56**	*3.76*	*3.09*	*3.20*	*3.55*	*3.68*	*3.08*	*3.18*	*3.50*	**3.39**	*3.40*	*3.36*
Other OECD	**5.89**	**5.92**	**5.90**	**6.12**	*6.14*	*5.99*	*6.03*	*6.19*	*6.17*	*6.01*	*6.04*	*6.18*	**5.96**	*6.09*	*6.10*
Non-OECD	**52.11**	**52.54**	**52.87**	**54.00**	*54.01*	*54.52*	*54.75*	*55.00*	*56.32*	*56.58*	*56.21*	*55.87*	**52.88**	*54.57*	*56.24*
Eurasia	**4.65**	**4.73**	**5.08**	**4.94**	*4.77*	*4.68*	*5.06*	*4.97*	*4.75*	*4.91*	*5.25*	*5.16*	**4.85**	*4.87*	*5.02*
Europe	**0.74**	**0.74**	**0.74**	**0.76**	*0.76*	*0.76*	*0.77*	*0.78*	*0.76*	*0.78*	*0.78*	*0.79*	**0.75**	*0.77*	*0.78*
China	**15.27**	**15.48**	**14.99**	**15.33**	*15.55*	*15.86*	*15.60*	*15.91*	*16.64*	*16.54*	*15.90*	*15.82*	**15.27**	*15.73*	*16.22*
Other Asia	**13.61**	**13.16**	**13.01**	**13.89**	*14.02*	*14.15*	*13.76*	*14.16*	*14.84*	*14.81*	*14.22*	*14.52*	**13.42**	*14.02*	*14.60*
Other Non-OECD	**17.84**	**18.43**	**19.04**	**19.08**	*18.91*	*19.07*	*19.55*	*19.18*	*19.33*	*19.54*	*20.06*	*19.59*	**18.60**	*19.18*	*19.63*
Total World Consumption	**94.41**	**96.53**	**98.58**	**100.32**	*100.01*	*99.93*	*100.97*	*101.49*	*102.28*	*102.37*	*102.80*	*102.76*	**97.48**	*100.61*	*102.55*
Total Crude Oil and Other Liquids Inventory Net Withdrawals (million barrels per day)															
U.S. (50 States)	**0.47**	**0.51**	**0.37**	**0.77**	*0.59*	*-0.47*	*-0.20*	*0.31*	*0.08*	*-0.54*	*-0.27*	*0.57*	**0.53**	*0.06*	*-0.04*
Other OECD	**0.81**	**0.14**	**0.96**	**0.27**	*-0.06*	*-0.08*	*-0.14*	*-0.28*	*0.00*	*-0.03*	*-0.09*	*-0.37*	**0.54**	*-0.14*	*-0.12*
Other Stock Draws and Balance	**0.56**	**1.24**	**0.66**	**0.98**	*-0.14*	*-0.18*	*-0.30*	*-0.60*	*0.00*	*-0.06*	*-0.19*	*-0.79*	**0.86**	*-0.31*	*-0.26*
Total Stock Draw	**1.83**	**1.88**	**1.99**	**2.02**	*0.40*	*-0.74*	*-0.64*	*-0.57*	*0.08*	*-0.63*	*-0.55*	*-0.58*	**1.93**	*-0.39*	*-0.42*
End-of-period Commercial Crude Oil and Other Liquids Inventories (million barrels)															
U.S. Commercial Inventory	**1,302**	**1,271**	**1,241**	**1,194**	*1,167*	*1,249*	*1,267*	*1,246*	*1,247*	*1,304*	*1,326*	*1,284*	**1,194**	*1,246*	*1,284*
OECD Commercial Inventory	**2,911**	**2,868**	**2,749**	**2,677**	*2,656*	*2,745*	*2,776*	*2,781*	*2,782*	*2,841*	*2,871*	*2,863*	**2,677**	*2,781*	*2,863*

(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 March 3, 2022.

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 - March 2022

	2021				2022				2023				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2021	2022	2023
North America	**25.16**	**26.36**	**26.33**	**27.54**	*27.47*	*27.86*	*28.31*	*28.78*	*29.04*	*29.27*	*29.43*	*29.67*	**26.36**	*28.11*	*29.36*
Canada	**5.62**	**5.37**	**5.49**	**5.76**	*5.87*	*5.83*	*5.85*	*5.86*	*5.91*	*5.88*	*5.89*	*5.90*	**5.56**	*5.85*	*5.90*
Mexico	**1.93**	**1.95**	**1.90**	**1.92**	*1.94*	*1.93*	*1.89*	*1.86*	*1.90*	*1.86*	*1.83*	*1.79*	**1.92**	*1.91*	*1.85*
United States	**17.62**	**19.05**	**18.94**	**19.86**	*19.66*	*20.10*	*20.57*	*21.06*	*21.23*	*21.53*	*21.72*	*21.98*	**18.87**	*20.35*	*21.61*
Central and South America	**5.64**	**6.29**	**6.69**	**5.80**	*5.88*	*6.72*	*7.11*	*6.56*	*6.21*	*7.03*	*7.36*	*6.84*	**6.11**	*6.57*	*6.86*
Argentina	**0.65**	**0.69**	**0.73**	**0.74**	*0.73*	*0.74*	*0.77*	*0.79*	*0.77*	*0.78*	*0.81*	*0.83*	**0.70**	*0.76*	*0.80*
Brazil	**3.22**	**3.89**	**4.21**	**3.42**	*3.40*	*4.21*	*4.52*	*3.89*	*3.50*	*4.29*	*4.58*	*4.03*	**3.69**	*4.01*	*4.10*
Colombia	**0.77**	**0.74**	**0.77**	**0.77**	*0.76*	*0.75*	*0.74*	*0.73*	*0.68*	*0.67*	*0.66*	*0.65*	**0.76**	*0.74*	*0.66*
Ecuador	**0.51**	**0.50**	**0.49**	**0.41**	*0.49*	*0.53*	*0.53*	*0.53*	*0.54*	*0.56*	*0.58*	*0.60*	**0.48**	*0.52*	*0.57*
Other Central and S. America	**0.49**	**0.46**	**0.49**	**0.46**	*0.49*	*0.50*	*0.55*	*0.62*	*0.72*	*0.73*	*0.73*	*0.73*	**0.48**	*0.54*	*0.73*
Europe	**4.32**	**3.83**	**4.13**	**4.12**	*4.21*	*4.18*	*4.06*	*4.35*	*4.49*	*4.51*	*4.41*	*4.59*	**4.10**	*4.20*	*4.50*
Norway	**2.11**	**1.90**	**2.06**	**2.05**	*2.11*	*2.12*	*2.09*	*2.27*	*2.39*	*2.39*	*2.38*	*2.48*	**2.03**	*2.15*	*2.41*
United Kingdom	**1.06**	**0.81**	**0.93**	**0.94**	*0.97*	*0.95*	*0.85*	*0.96*	*0.99*	*1.00*	*0.91*	*0.98*	**0.93**	*0.93*	*0.97*
Eurasia	**13.38**	**13.61**	**13.58**	**14.23**	*14.32*	*13.66*	*13.83*	*13.92*	*13.94*	*13.82*	*13.82*	*13.91*	**13.70**	*13.93*	*13.87*
Azerbaijan	**0.75**	**0.70**	**0.71**	**0.71**	*0.73*	*0.74*	*0.73*	*0.73*	*0.71*	*0.70*	*0.69*	*0.71*	**0.72**	*0.73*	*0.70*
Kazakhstan	**1.87**	**1.86**	**1.72**	**2.01**	*2.04*	*2.01*	*1.98*	*2.02*	*2.05*	*1.95*	*1.96*	*2.03*	**1.87**	*2.01*	*2.00*
Russia	**10.42**	**10.71**	**10.80**	**11.16**	*11.21*	*10.56*	*10.76*	*10.81*	*10.81*	*10.81*	*10.81*	*10.81*	**10.78**	*10.83*	*10.81*
Turkmenistan	**0.24**	**0.24**	**0.24**	**0.24**	*0.23*	*0.23*	*0.23*	*0.23*	*0.24*	*0.24*	*0.24*	*0.24*	**0.24**	*0.23*	*0.24*
Other Eurasia	**0.10**	**0.10**	**0.10**	**0.10**	*0.12*	*0.13*	*0.14*	*0.13*	*0.13*	*0.13*	*0.13*	*0.13*	**0.10**	*0.13*	*0.13*
Middle East	**3.07**	**3.09**	**3.13**	**3.14**	*3.17*	*3.17*	*3.17*	*3.17*	*3.20*	*3.20*	*3.20*	*3.19*	**3.11**	*3.17*	*3.20*
Oman	**0.96**	**0.97**	**0.98**	**1.01**	*1.04*	*1.04*	*1.04*	*1.04*	*1.07*	*1.07*	*1.07*	*1.07*	**0.98**	*1.04*	*1.07*
Qatar	**1.80**	**1.82**	**1.83**	**1.83**	*1.85*	*1.86*	*1.86*	*1.86*	*1.86*	*1.86*	*1.86*	*1.86*	**1.82**	*1.86*	*1.86*
Asia and Oceania	**9.18**	**9.10**	**9.05**	**8.97**	*9.18*	*9.16*	*9.14*	*9.16*	*9.12*	*9.11*	*9.09*	*9.12*	**9.07**	*9.16*	*9.11*
Australia	**0.46**	**0.42**	**0.49**	**0.48**	*0.48*	*0.50*	*0.50*	*0.49*	*0.48*	*0.48*	*0.47*	*0.46*	**0.46**	*0.49*	*0.47*
China	**4.99**	**5.03**	**5.01**	**4.94**	*5.04*	*5.04*	*5.04*	*5.08*	*5.06*	*5.09*	*5.08*	*5.13*	**4.99**	*5.05*	*5.09*
India	**0.90**	**0.89**	**0.89**	**0.89**	*0.90*	*0.88*	*0.89*	*0.89*	*0.89*	*0.87*	*0.87*	*0.87*	**0.89**	*0.89*	*0.88*
Indonesia	**0.88**	**0.85**	**0.85**	**0.85**	*0.85*	*0.84*	*0.84*	*0.83*	*0.83*	*0.82*	*0.81*	*0.81*	**0.86**	*0.84*	*0.82*
Malaysia	**0.66**	**0.62**	**0.57**	**0.59**	*0.62*	*0.62*	*0.61*	*0.60*	*0.60*	*0.59*	*0.59*	*0.58*	**0.61**	*0.61*	*0.59*
Vietnam	**0.21**	**0.21**	**0.20**	**0.20**	*0.20*	*0.20*	*0.19*	*0.18*	*0.18*	*0.18*	*0.17*	*0.17*	**0.20**	*0.19*	*0.18*
Africa	**1.48**	**1.47**	**1.40**	**1.40**	*1.39*	*1.42*	*1.42*	*1.42*	*1.42*	*1.42*	*1.40*	*1.40*	**1.44**	*1.42*	*1.41*
Egypt	**0.66**	**0.67**	**0.65**	**0.66**	*0.65*	*0.65*	*0.65*	*0.65*	*0.64*	*0.64*	*0.64*	*0.64*	**0.66**	*0.65*	*0.64*
South Sudan	**0.16**	**0.16**	**0.15**	**0.16**	*0.16*	*0.18*	*0.18*	*0.18*	*0.19*	*0.19*	*0.19*	*0.20*	**0.16**	*0.18*	*0.19*
Total non-OPEC liquids	**62.23**	**63.77**	**64.31**	**65.20**	*65.62*	*66.19*	*67.04*	*67.35*	*67.42*	*68.36*	*68.72*	*68.73*	**63.89**	*66.56*	*68.31*
OPEC non-crude liquids	**5.26**	**5.39**	**5.44**	**5.44**	*5.56*	*5.43*	*5.48*	*5.52*	*5.54*	*5.41*	*5.46*	*5.50*	**5.38**	*5.50*	*5.48*
Non-OPEC + OPEC non-crude	**67.50**	**69.16**	**69.75**	**70.64**	*71.18*	*71.62*	*72.52*	*72.87*	*72.96*	*73.78*	*74.18*	*74.23*	**69.27**	*72.05*	*73.79*
Unplanned non-OPEC Production Outages	**0.61**	**0.50**	**0.80**	**0.77**	-	-	-	-	-	-	-	-	**0.67**	-	-

- = 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 March 3, 2022.

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 - March 2022

	2021				2022				2023				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2021	2022	2023
Crude Oil															
Algeria	**0.87**	**0.88**	**0.92**	**0.94**	-	-	-	-	-	-	-	-	**0.90**	-	-
Angola	**1.11**	**1.08**	**1.11**	**1.13**	-	-	-	-	-	-	-	-	**1.11**	-	-
Congo (Brazzaville)	**0.28**	**0.27**	**0.26**	**0.26**	-	-	-	-	-	-	-	-	**0.26**	-	-
Equatorial Guinea	**0.11**	**0.10**	**0.10**	**0.09**	-	-	-	-	-	-	-	-	**0.10**	-	-
Gabon	**0.16**	**0.17**	**0.18**	**0.19**	-	-	-	-	-	-	-	-	**0.18**	-	-
Iran	**2.18**	**2.47**	**2.47**	**2.45**	-	-	-	-	-	-	-	-	**2.39**	-	-
Iraq	**3.94**	**3.98**	**4.07**	**4.25**	-	-	-	-	-	-	-	-	**4.06**	-	-
Kuwait	**2.33**	**2.36**	**2.45**	**2.53**	-	-	-	-	-	-	-	-	**2.42**	-	-
Libya	**1.18**	**1.16**	**1.18**	**1.12**	-	-	-	-	-	-	-	-	**1.16**	-	-
Nigeria	**1.31**	**1.32**	**1.28**	**1.31**	-	-	-	-	-	-	-	-	**1.30**	-	-
Saudi Arabia	**8.49**	**8.53**	**9.55**	**9.87**	-	-	-	-	-	-	-	-	**9.11**	-	-
United Arab Emirates	**2.61**	**2.65**	**2.76**	**2.86**	-	-	-	-	-	-	-	-	**2.72**	-	-
Venezuela	**0.52**	**0.53**	**0.53**	**0.68**	-	-	-	-	-	-	-	-	**0.56**	-	-
OPEC Total	**25.08**	**25.49**	**26.84**	**27.66**	*28.44*	*29.05*	*29.09*	*29.19*	*29.24*	*29.22*	*29.16*	*29.11*	**26.28**	*28.95*	*29.18*
Other Liquids (a)	**5.26**	**5.39**	**5.44**	**5.44**	*5.56*	*5.43*	*5.48*	*5.52*	*5.54*	*5.41*	*5.46*	*5.50*	**5.38**	*5.50*	*5.48*
Total OPEC Production	**30.34**	**30.88**	**32.28**	**33.10**	*34.00*	*34.48*	*34.57*	*34.71*	*34.78*	*34.63*	*34.62*	*34.61*	**31.66**	*34.44*	*34.66*
Crude Oil Production Capacity															
Middle East	**25.31**	**25.60**	**25.60**	**25.58**	*25.66*	*25.73*	*25.82*	*26.22*	*26.42*	*26.42*	*26.42*	*26.42*	**25.52**	*25.86*	*26.42*
Other	**6.18**	**6.19**	**6.16**	**6.25**	*6.27*	*6.46*	*6.42*	*6.41*	*6.42*	*6.42*	*6.39*	*6.36*	**6.19**	*6.39*	*6.40*
OPEC Total	**31.49**	**31.78**	**31.75**	**31.83**	*31.93*	*32.19*	*32.24*	*32.63*	*32.84*	*32.84*	*32.81*	*32.78*	**31.71**	*32.25*	*32.82*
Surplus Crude Oil Production Capacity															
Middle East	**5.76**	**5.62**	**4.31**	**3.63**	*3.09*	*2.90*	*2.95*	*3.25*	*3.40*	*3.40*	*3.40*	*3.40*	**4.82**	*3.05*	*3.40*
Other	**0.65**	**0.68**	**0.60**	**0.54**	*0.41*	*0.24*	*0.20*	*0.19*	*0.20*	*0.23*	*0.25*	*0.27*	**0.62**	*0.26*	*0.23*
OPEC Total	**6.41**	**6.29**	**4.91**	**4.17**	*3.49*	*3.14*	*3.15*	*3.44*	*3.60*	*3.63*	*3.65*	*3.67*	**5.44**	*3.31*	*3.63*
Unplanned OPEC Production Outages	**2.49**	**2.12**	**2.15**	**2.03**	-	-	-	-	-	-	-	-	**2.20**	-	-

(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 March 3, 2022.

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 - March 2022

	2021				2022				2023						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2021	2022	2023
North America	**22.20**	**23.84**	**24.22**	**24.49**	*24.31*	*24.52*	*24.82*	*24.89*	*24.35*	*24.82*	*25.09*	*25.16*	**23.70**	*24.64*	*24.86*
Canada	**2.12**	**2.16**	**2.41**	**2.37**	*2.30*	*2.29*	*2.41*	*2.39*	*2.38*	*2.33*	*2.43*	*2.40*	**2.27**	*2.35*	*2.38*
Mexico	**1.62**	**1.64**	**1.60**	**1.70**	*1.62*	*1.64*	*1.63*	*1.64*	*1.60*	*1.62*	*1.62*	*1.64*	**1.64**	*1.63*	*1.62*
United States	**18.45**	**20.03**	**20.21**	**20.41**	*20.38*	*20.58*	*20.77*	*20.86*	*20.36*	*20.86*	*21.03*	*21.11*	**19.78**	*20.65*	*20.84*
Central and South America	**5.99**	**6.14**	**6.36**	**6.48**	*6.26*	*6.35*	*6.46*	*6.47*	*6.34*	*6.47*	*6.58*	*6.51*	**6.24**	*6.38*	*6.48*
Brazil	**2.78**	**2.89**	**3.01**	**3.11**	*2.90*	*2.91*	*2.99*	*2.99*	*2.91*	*2.96*	*3.04*	*3.02*	**2.95**	*2.94*	*2.98*
Europe	**12.65**	**13.36**	**14.57**	**14.42**	*13.99*	*14.05*	*14.39*	*14.08*	*13.94*	*14.11*	*14.52*	*14.29*	**13.76**	*14.13*	*14.22*
Eurasia	**4.65**	**4.73**	**5.08**	**4.94**	*4.77*	*4.68*	*5.06*	*4.97*	*4.75*	*4.91*	*5.25*	*5.16*	**4.85**	*4.87*	*5.02*
Russia	**3.42**	**3.52**	**3.81**	**3.66**	*3.49*	*3.45*	*3.76*	*3.64*	*3.50*	*3.59*	*3.90*	*3.75*	**3.60**	*3.59*	*3.69*
Middle East	**8.12**	**8.54**	**9.08**	**8.82**	*8.86*	*8.87*	*9.34*	*8.75*	*9.05*	*9.10*	*9.61*	*9.02*	**8.65**	*8.96*	*9.20*
Asia and Oceania	**36.44**	**35.55**	**34.99**	**36.70**	*37.36*	*36.95*	*36.46*	*37.70*	*39.26*	*38.33*	*37.22*	*37.92*	**35.92**	*37.12*	*38.18*
China	**15.27**	**15.48**	**14.99**	**15.33**	*15.55*	*15.86*	*15.60*	*15.91*	*16.64*	*16.54*	*15.90*	*15.82*	**15.27**	*15.73*	*16.22*
Japan	**3.73**	**3.08**	**3.18**	**3.56**	*3.76*	*3.09*	*3.20*	*3.55*	*3.68*	*3.08*	*3.18*	*3.50*	**3.39**	*3.40*	*3.36*
India	**4.94**	**4.37**	**4.41**	**4.89**	*5.02*	*5.11*	*4.77*	*5.08*	*5.31*	*5.38*	*5.01*	*5.34*	**4.65**	*5.00*	*5.26*
Africa	**4.35**	**4.37**	**4.28**	**4.46**	*4.46*	*4.51*	*4.44*	*4.63*	*4.60*	*4.62*	*4.53*	*4.70*	**4.37**	*4.51*	*4.61*
Total OECD Liquid Fuels Consumption	**42.30**	**44.00**	**45.72**	**46.32**	*46.00*	*45.41*	*46.22*	*46.50*	*45.96*	*45.78*	*46.59*	*46.89*	**44.60**	*46.03*	*46.31*
Total non-OECD Liquid Fuels Consumption	**52.11**	**52.54**	**52.87**	**54.00**	*54.01*	*54.52*	*54.75*	*55.00*	*56.32*	*56.58*	*56.21*	*55.87*	**52.88**	*54.57*	*56.24*
Total World Liquid Fuels Consumption	**94.41**	**96.53**	**98.58**	**100.32**	*100.01*	*99.93*	*100.97*	*101.49*	*102.28*	*102.37*	*102.80*	*102.76*	**97.48**	*100.61*	*102.55*
Real Gross Domestic Product (a)															
World Index, 2015 Q1 = 100	**116.3**	**117.3**	**118.6**	**120.4**	*120.9*	*122.6*	*124.0*	*125.3*	*126.3*	*127.6*	*128.7*	*129.9*	**118.2**	*123.2*	*128.1*
Percent change from prior year	**3.3**	**11.5**	**4.8**	**4.4**	*3.9*	*4.5*	*4.5*	*4.1*	*4.5*	*4.1*	*3.8*	*3.7*	**5.9**	*4.3*	*4.0*
OECD Index, 2015 = 100													**109.4**	*113.2*	*116.3*
Percent change from prior year													**5.4**	*3.5*	*2.7*
Non-OECD Index, 2015 = 100													**123.5**	*129.5*	*136.1*
Percent change from prior year													**6.2**	*4.8*	*5.1*
Nominal U.S. Dollar Index (b)															
Index, 2015 Q1 = 100	**106.5**	**106.1**	**107.5**	**109.1**	*109.6*	*109.9*	*109.7*	*109.3*	*108.8*	*108.5*	*108.2*	*107.9*	**107.3**	*109.6*	*108.3*
Percent change from prior year	**-4.6**	**-8.2**	**-3.4**	**0.9**	*2.9*	*3.6*	*2.1*	*0.2*	*-0.7*	*-1.3*	*-1.4*	*-1.3*	**-3.9**	*2.2*	*-1.2*

(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 March 3, 2022.

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 - March 2022

	2021				2022				2023				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2021	2022	2023
Supply (million barrels per day)															
Crude Oil Supply															
Domestic Production (a)	**10.69**	**11.28**	**11.13**	**11.62**	*11.59*	*11.89*	*12.15*	*12.48*	*12.75*	*12.91*	*13.06*	*13.24*	**11.18**	*12.03*	*12.99*
Alaska	**0.46**	**0.44**	**0.41**	**0.44**	*0.42*	*0.36*	*0.38*	*0.41*	*0.41*	*0.36*	*0.39*	*0.42*	**0.44**	*0.39*	*0.39*
Federal Gulf of Mexico (b)	**1.80**	**1.79**	**1.49**	**1.73**	*1.81*	*1.82*	*1.74*	*1.79*	*1.84*	*1.83*	*1.75*	*1.78*	**1.70**	*1.79*	*1.80*
Lower 48 States (excl GOM)	**8.44**	**9.05**	**9.24**	**9.44**	*9.37*	*9.71*	*10.03*	*10.29*	*10.50*	*10.72*	*10.92*	*11.05*	**9.05**	*9.85*	*10.80*
Crude Oil Net Imports (c)	**2.87**	**2.96**	**3.60**	**3.09**	*3.67*	*3.95*	*4.19*	*3.12*	*2.36*	*3.56*	*3.66*	*2.26*	**3.13**	*3.73*	*2.96*
SPR Net Withdrawals	**0.00**	**0.18**	**0.04**	**0.26**	*0.30*	*0.43*	*0.00*	*0.08*	*0.09*	*0.09*	*-0.04*	*0.11*	**0.12**	*0.20*	*0.06*
Commercial Inventory Net Withdrawals	**-0.18**	**0.59**	**0.30**	**-0.01**	*-0.14*	*-0.13*	*0.20*	*-0.06*	*-0.36*	*-0.09*	*0.06*	*0.06*	**0.18**	*-0.03*	*-0.08*
Crude Oil Adjustment (d)	**0.42**	**0.63**	**0.54**	**0.55**	*-0.06*	*0.22*	*0.23*	*0.16*	*0.22*	*0.22*	*0.23*	*0.16*	**0.54**	*0.14*	*0.21*
Total Crude Oil Input to Refineries	**13.81**	**15.65**	**15.60**	**15.51**	*15.37*	*16.35*	*16.77*	*15.79*	*15.06*	*16.69*	*16.97*	*15.85*	**15.15**	*16.07*	*16.14*
Other Supply															
Refinery Processing Gain	**0.84**	**0.97**	**0.97**	**1.04**	*1.04*	*1.03*	*1.05*	*1.06*	*1.03*	*1.00*	*1.02*	*1.01*	**0.95**	*1.05*	*1.01*
Natural Gas Plant Liquids Production	**4.86**	**5.46**	**5.52**	**5.74**	*5.65*	*5.79*	*5.95*	*6.09*	*6.07*	*6.20*	*6.21*	*6.24*	**5.40**	*5.87*	*6.18*
Renewables and Oxygenate Production (e)	**1.03**	**1.13**	**1.10**	**1.24**	*1.17*	*1.18*	*1.19*	*1.21*	*1.17*	*1.20*	*1.21*	*1.26*	**1.12**	*1.19*	*1.21*
Fuel Ethanol Production	**0.90**	**0.99**	**0.96**	**1.06**	*1.00*	*1.00*	*1.01*	*1.02*	*0.98*	*1.01*	*1.00*	*1.02*	**0.98**	*1.01*	*1.00*
Petroleum Products Adjustment (f)	**0.19**	**0.22**	**0.22**	**0.23**	*0.21*	*0.22*	*0.22*	*0.22*	*0.21*	*0.22*	*0.22*	*0.22*	**0.22**	*0.22*	*0.22*
Product Net Imports (c)	**-2.94**	**-3.13**	**-3.24**	**-3.86**	*-3.49*	*-3.22*	*-4.01*	*-3.80*	*-3.53*	*-3.90*	*-4.29*	*-3.86*	**-3.29**	*-3.63*	*-3.90*
Hydrocarbon Gas Liquids	**-2.02**	**-2.23**	**-2.16**	**-2.19**	*-2.20*	*-2.14*	*-2.26*	*-2.34*	*-2.44*	*-2.50*	*-2.59*	*-2.53*	**-2.15**	*-2.24*	*-2.52*
Unfinished Oils	**0.14**	**0.25**	**0.22**	**0.08**	*0.23*	*0.28*	*0.30*	*0.20*	*0.18*	*0.23*	*0.29*	*0.20*	**0.17**	*0.25*	*0.23*
Other HC/Oxygenates	**-0.08**	**-0.04**	**-0.03**	**-0.06**	*-0.05*	*-0.03*	*-0.05*	*-0.03*	*-0.04*	*-0.03*	*-0.03*	*-0.02*	**-0.05**	*-0.04*	*-0.03*
Motor Gasoline Blend Comp.	**0.55**	**0.79**	**0.66**	**0.40**	*0.35*	*0.75*	*0.40*	*0.21*	*0.37*	*0.60*	*0.39*	*0.41*	**0.60**	*0.43*	*0.44*
Finished Motor Gasoline	**-0.66**	**-0.66**	**-0.68**	**-0.85**	*-0.65*	*-0.56*	*-0.66*	*-0.56*	*-0.66*	*-0.63*	*-0.63*	*-0.73*	**-0.71**	*-0.61*	*-0.66*
Jet Fuel	**0.03**	**0.09**	**0.09**	**0.00**	*0.00*	*0.04*	*-0.01*	*0.01*	*0.01*	*0.02*	*0.04*	*0.08*	**0.05**	*0.01*	*0.04*
Distillate Fuel Oil	**-0.49**	**-0.90**	**-0.94**	**-0.89**	*-0.65*	*-1.05*	*-1.17*	*-0.89*	*-0.58*	*-1.05*	*-1.18*	*-0.91*	**-0.80**	*-0.94*	*-0.93*
Residual Fuel Oil	**0.08**	**0.05**	**0.08**	**0.16**	*0.10*	*0.05*	*0.01*	*0.09*	*-0.01*	*0.01*	*-0.02*	*0.09*	**0.09**	*0.06*	*0.02*
Other Oils (g)	**-0.49**	**-0.49**	**-0.50**	**-0.50**	*-0.63*	*-0.55*	*-0.58*	*-0.48*	*-0.36*	*-0.54*	*-0.56*	*-0.45*	**-0.49**	*-0.56*	*-0.48*
Product Inventory Net Withdrawals	**0.65**	**-0.26**	**0.03**	**0.52**	*0.43*	*-0.77*	*-0.40*	*0.29*	*0.35*	*-0.54*	*-0.30*	*0.39*	**0.23**	*-0.11*	*-0.02*
Total Supply	**18.43**	**20.03**	**20.21**	**20.41**	*20.38*	*20.58*	*20.77*	*20.85*	*20.36*	*20.86*	*21.03*	*21.11*	**19.78**	*20.65*	*20.84*
Consumption (million barrels per day)															
Hydrocarbon Gas Liquids	**3.40**	**3.33**	**3.31**	**3.60**	*3.97*	*3.41*	*3.41*	*3.84*	*3.93*	*3.51*	*3.46*	*3.85*	**3.41**	*3.66*	*3.69*
Other HC/Oxygenates	**0.11**	**0.13**	**0.11**	**0.16**	*0.17*	*0.17*	*0.16*	*0.21*	*0.20*	*0.19*	*0.19*	*0.26*	**0.13**	*0.18*	*0.21*
Unfinished Oils	**0.05**	**0.03**	**-0.05**	**-0.01**	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*-0.03*	*-0.01*	*0.01*	**0.00**	*0.00*	*-0.01*
Motor Gasoline	**8.00**	**9.07**	**9.13**	**8.96**	*8.45*	*9.11*	*9.17*	*8.91*	*8.44*	*9.14*	*9.20*	*8.97*	**8.80**	*8.91*	*8.94*
Fuel Ethanol blended into Motor Gasoline	**0.82**	**0.93**	**0.94**	**0.95**	*0.87*	*0.94*	*0.94*	*0.93*	*0.87*	*0.94*	*0.94*	*0.94*	**0.91**	*0.92*	*0.92*
Jet Fuel	**1.13**	**1.34**	**1.52**	**1.49**	*1.48*	*1.58*	*1.63*	*1.61*	*1.52*	*1.65*	*1.71*	*1.67*	**1.37**	*1.58*	*1.64*
Distillate Fuel Oil	**3.97**	**3.93**	**3.87**	**4.00**	*4.26*	*4.02*	*3.95*	*4.06*	*4.20*	*4.07*	*4.02*	*4.10*	**3.94**	*4.07*	*4.10*
Residual Fuel Oil	**0.26**	**0.25**	**0.33**	**0.41**	*0.32*	*0.26*	*0.29*	*0.29*	*0.25*	*0.26*	*0.28*	*0.30*	**0.31**	*0.29*	*0.27*
Other Oils (g)	**1.53**	**1.95**	**1.98**	**1.81**	*1.73*	*2.03*	*2.16*	*1.93*	*1.82*	*2.07*	*2.19*	*1.96*	**1.82**	*1.96*	*2.01*
Total Consumption	**18.45**	**20.03**	**20.21**	**20.41**	*20.38*	*20.58*	*20.77*	*20.85*	*20.36*	*20.86*	*21.03*	*21.11*	**19.78**	*20.65*	*20.84*
Total Petroleum and Other Liquids Net Imports	**-0.07**	**-0.16**	**0.35**	**-0.77**	*0.18*	*0.73*	*0.18*	*-0.68*	*-1.17*	*-0.34*	*-0.64*	*-1.60*	**-0.16**	*0.10*	*-0.94*
End-of-period Inventories (million barrels)															
Commercial Inventory															
Crude Oil (excluding SPR)	**501.9**	**448.0**	**420.4**	**421.4**	*433.9*	*445.4*	*427.0*	*432.9*	*465.3*	*473.4*	*467.6*	*461.7*	**421.4**	*432.9*	*461.7*
Hydrocarbon Gas Liquids	**168.6**	**195.8**	**225.6**	**188.4**	*133.5*	*188.5*	*237.3*	*199.7*	*161.3*	*209.2*	*246.8*	*203.8*	**188.4**	*199.7*	*203.8*
Unfinished Oils	**93.3**	**93.0**	**90.2**	**80.3**	*90.3*	*90.4*	*89.8*	*83.0*	*92.3*	*90.4*	*89.7*	*82.6*	**80.3**	*83.0*	*82.6*
Other HC/Oxygenates	**29.1**	**27.5**	**25.4**	**28.6**	*31.8*	*30.6*	*30.3*	*30.6*	*32.6*	*31.4*	*31.1*	*31.4*	**28.6**	*30.6*	*31.4*
Total Motor Gasoline	**237.6**	**237.2**	**227.0**	**232.2**	*237.7*	*245.4*	*233.5*	*249.0*	*247.0*	*246.6*	*238.4*	*250.5*	**232.2**	*249.0*	*250.5*
Finished Motor Gasoline	**20.3**	**18.6**	**18.5**	**17.7**	*16.8*	*20.9*	*23.1*	*26.6*	*23.2*	*24.3*	*25.4*	*27.9*	**17.7**	*26.6*	*27.9*
Motor Gasoline Blend Comp.	**217.4**	**218.6**	**208.5**	**214.5**	*221.0*	*224.5*	*210.5*	*222.4*	*223.8*	*222.3*	*213.0*	*222.6*	**214.5**	*222.4*	*222.6*
Jet Fuel	**39.0**	**44.7**	**42.0**	**35.8**	*37.8*	*39.0*	*41.8*	*38.8*	*38.3*	*39.3*	*41.9*	*38.8*	**35.8**	*38.8*	*38.8*
Distillate Fuel Oil	**145.5**	**140.1**	**131.7**	**129.9**	*113.7*	*120.6*	*128.8*	*130.7*	*119.4*	*124.5*	*131.4*	*133.3*	**129.9**	*130.7*	*133.3*
Residual Fuel Oil	**30.9**	**31.1**	**28.0**	**25.4**	*27.7*	*30.1*	*29.2*	*30.8*	*30.5*	*31.2*	*29.9*	*31.3*	**25.4**	*30.8*	*31.3*
Other Oils (g)	**55.8**	**54.1**	**50.5**	**51.8**	*60.8*	*58.7*	*49.5*	*51.0*	*60.2*	*58.1*	*48.9*	*50.2*	**51.8**	*51.0*	*50.2*
Total Commercial Inventory	**1301.7**	**1271.5**	**1240.7**	**1193.8**	*1167.2*	*1248.7*	*1267.1*	*1246.4*	*1246.9*	*1304.1*	*1325.7*	*1283.7*	**1193.8**	*1246.4*	*1283.7*
Crude Oil in SPR	**637.8**	**621.3**	**617.8**	**593.7**	*566.8*	*528.1*	*528.1*	*520.3*	*512.5*	*504.7*	*508.1*	*497.6*	**593.7**	*520.3*	*497.6*

(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) "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

SPR: Strategic Petroleum Reserve

HC: Hydrocarbons

Notes: EIA completed modeling and analysis for this report on March 3, 2022.

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 - March 2022

	2021				2022				2023				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2021	2022	2023
HGL Production															
Natural Gas Processing Plants															
Ethane	**1.87**	**2.19**	**2.18**	**2.32**	*2.28*	*2.38*	*2.47*	*2.59*	*2.57*	*2.61*	*2.56*	*2.60*	**2.14**	*2.43*	*2.58*
Propane	**1.62**	**1.74**	**1.75**	**1.82**	*1.81*	*1.81*	*1.84*	*1.87*	*1.87*	*1.90*	*1.92*	*1.94*	**1.73**	*1.83*	*1.91*
Butanes	**0.85**	**0.92**	**0.93**	**0.96**	*0.96*	*0.97*	*0.99*	*1.00*	*1.02*	*1.04*	*1.05*	*1.06*	**0.92**	*0.98*	*1.04*
Natural Gasoline (Pentanes Plus)	**0.53**	**0.61**	**0.65**	**0.64**	*0.60*	*0.63*	*0.66*	*0.63*	*0.61*	*0.65*	*0.68*	*0.65*	**0.61**	*0.63*	*0.65*
Refinery and Blender Net Production															
Ethane/Ethylene	**0.00**	**0.00**	**0.00**	**0.01**	*0.00*	*0.01*	*0.01*	*0.01*	*0.00*	*0.01*	*0.01*	*0.01*	**0.00**	*0.01*	*0.01*
Propane	**0.25**	**0.29**	**0.28**	**0.29**	*0.30*	*0.29*	*0.30*	*0.29*	*0.28*	*0.28*	*0.29*	*0.29*	**0.28**	*0.29*	*0.29*
Propylene (refinery-grade)	**0.27**	**0.31**	**0.29**	**0.29**	*0.27*	*0.28*	*0.28*	*0.28*	*0.27*	*0.29*	*0.28*	*0.28*	**0.29**	*0.28*	*0.28*
Butanes/Butylenes	**-0.09**	**0.24**	**0.18**	**-0.16**	*-0.07*	*0.27*	*0.19*	*-0.19*	*-0.08*	*0.26*	*0.19*	*-0.19*	**0.04**	*0.05*	*0.05*
Renewable Fuels and Oxygenate Plant Net Production															
Natural Gasoline (Pentanes Plus)	**-0.02**	**-0.02**	**-0.02**	**-0.02**	*-0.02*	*-0.02*	*-0.02*	*-0.02*	*-0.02*	*-0.02*	*-0.02*	*-0.02*	**-0.02**	*-0.02*	*-0.02*
HGL Net Imports															
Ethane	**-0.35**	**-0.39**	**-0.41**	**-0.47**	*-0.40*	*-0.34*	*-0.38*	*-0.44*	*-0.47*	*-0.46*	*-0.46*	*-0.47*	**-0.40**	*-0.39*	*-0.47*
Propane/Propylene	**-1.11**	**-1.23**	**-1.19**	**-1.20**	*-1.15*	*-1.10*	*-1.18*	*-1.25*	*-1.27*	*-1.30*	*-1.37*	*-1.39*	**-1.18**	*-1.17*	*-1.33*
Butanes/Butylenes	**-0.35**	**-0.40**	**-0.38**	**-0.34**	*-0.43*	*-0.48*	*-0.48*	*-0.44*	*-0.46*	*-0.51*	*-0.52*	*-0.46*	**-0.37**	*-0.46*	*-0.49*
Natural Gasoline (Pentanes Plus)	**-0.22**	**-0.21**	**-0.18**	**-0.18**	*-0.22*	*-0.22*	*-0.23*	*-0.21*	*-0.25*	*-0.23*	*-0.24*	*-0.22*	**-0.20**	*-0.22*	*-0.23*
HGL Refinery and Blender Net Inputs															
Butanes/Butylenes	**0.39**	**0.29**	**0.31**	**0.52**	*0.41*	*0.28*	*0.32*	*0.49*	*0.41*	*0.29*	*0.32*	*0.51*	**0.38**	*0.37*	*0.38*
Natural Gasoline (Pentanes Plus)	**0.14**	**0.14**	**0.16**	**0.23**	*0.17*	*0.18*	*0.19*	*0.19*	*0.18*	*0.18*	*0.19*	*0.18*	**0.17**	*0.18*	*0.18*
HGL Consumption															
Ethane/Ethylene	**1.54**	**1.83**	**1.80**	**1.90**	*2.00*	*2.03*	*2.08*	*2.13*	*2.10*	*2.10*	*2.10*	*2.13*	**1.77**	*2.06*	*2.11*
Propane	**1.09**	**0.65**	**0.66**	**0.96**	*1.27*	*0.67*	*0.63*	*1.00*	*1.17*	*0.67*	*0.63*	*0.98*	**0.84**	*0.89*	*0.86*
Propylene (refinery-grade)	**0.29**	**0.32**	**0.30**	**0.30**	*0.29*	*0.30*	*0.29*	*0.29*	*0.30*	*0.30*	*0.29*	*0.29*	**0.31**	*0.29*	*0.30*
Butanes/Butylenes	**0.22**	**0.29**	**0.25**	**0.21**	*0.20*	*0.21*	*0.19*	*0.19*	*0.17*	*0.23*	*0.21*	*0.21*	**0.24**	*0.20*	*0.21*
Natural Gasoline (Pentanes Plus)	**0.26**	**0.24**	**0.30**	**0.22**	*0.21*	*0.20*	*0.22*	*0.23*	*0.20*	*0.20*	*0.22*	*0.23*	**0.25**	*0.21*	*0.21*
HGL Inventories (million barrels)															
Ethane	**65.8**	**67.4**	**64.6**	**64.0**	*51.5*	*51.1*	*51.2*	*54.8*	*54.5*	*59.2*	*58.9*	*61.3*	**65.4**	*52.1*	*58.5*
Propane	**39.3**	**53.2**	**68.6**	**62.1**	*32.4*	*60.2*	*89.0*	*78.8*	*52.0*	*69.7*	*88.4*	*74.4*	**62.1**	*78.8*	*74.4*
Propylene (at refineries only)	**1.1**	**1.2**	**1.3**	**1.4**	*1.3*	*1.6*	*1.9*	*1.8*	*1.6*	*1.8*	*2.0*	*1.9*	**1.4**	*1.8*	*1.9*
Butanes/Butylenes	**37.2**	**53.9**	**69.4**	**44.4**	*31.2*	*55.6*	*73.5*	*44.6*	*34.8*	*59.2*	*77.1*	*47.9*	**44.4**	*44.6*	*47.9*
Natural Gasoline (Pentanes Plus)	**22.8**	**22.3**	**22.3**	**20.7**	*18.7*	*19.8*	*20.7*	*20.0*	*17.5*	*18.8*	*19.7*	*19.0*	**20.7**	*20.0*	*19.0*
Refinery and Blender Net Inputs															
Crude Oil	**13.81**	**15.65**	**15.60**	**15.51**	*15.37*	*16.35*	*16.77*	*15.79*	*15.06*	*16.69*	*16.97*	*15.85*	**15.15**	*16.07*	*16.14*
Hydrocarbon Gas Liquids	**0.53**	**0.43**	**0.47**	**0.75**	*0.57*	*0.46*	*0.51*	*0.68*	*0.59*	*0.47*	*0.51*	*0.69*	**0.54**	*0.56*	*0.57*
Other Hydrocarbons/Oxygenates	**1.05**	**1.19**	**1.20**	**1.18**	*1.10*	*1.19*	*1.19*	*1.16*	*1.10*	*1.19*	*1.19*	*1.17*	**1.15**	*1.16*	*1.16*
Unfinished Oils	**-0.08**	**0.22**	**0.31**	**0.20**	*0.12*	*0.28*	*0.31*	*0.27*	*0.08*	*0.28*	*0.31*	*0.27*	**0.16**	*0.25*	*0.24*
Motor Gasoline Blend Components	**0.71**	**0.92**	**0.81**	**0.28**	*0.35*	*0.81*	*0.65*	*0.30*	*0.48*	*0.72*	*0.59*	*0.53*	**0.68**	*0.53*	*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	**16.01**	**18.41**	**18.39**	**17.91**	*17.52*	*19.09*	*19.43*	*18.20*	*17.31*	*19.35*	*19.56*	*18.51*	**17.69**	*18.56*	*18.69*
Refinery Processing Gain	**0.84**	**0.97**	**0.97**	**1.04**	*1.04*	*1.03*	*1.05*	*1.06*	*1.03*	*1.00*	*1.02*	*1.01*	**0.95**	*1.05*	*1.01*
Refinery and Blender Net Production															
Hydrocarbon Gas Liquids	**0.44**	**0.85**	**0.76**	**0.42**	*0.50*	*0.84*	*0.78*	*0.38*	*0.48*	*0.84*	*0.77*	*0.38*	**0.62**	*0.63*	*0.62*
Finished Motor Gasoline	**8.74**	**9.82**	**9.83**	**9.69**	*9.12*	*9.79*	*9.91*	*9.68*	*9.15*	*9.85*	*9.91*	*9.90*	**9.52**	*9.63*	*9.70*
Jet Fuel	**1.10**	**1.32**	**1.41**	**1.42**	*1.49*	*1.55*	*1.67*	*1.57*	*1.51*	*1.64*	*1.69*	*1.55*	**1.31**	*1.57*	*1.60*
Distillate Fuel	**4.29**	**4.77**	**4.72**	**4.87**	*4.73*	*5.15*	*5.21*	*4.98*	*4.66*	*5.18*	*5.27*	*5.04*	**4.66**	*5.02*	*5.04*
Residual Fuel	**0.19**	**0.20**	**0.21**	**0.22**	*0.25*	*0.23*	*0.27*	*0.22*	*0.25*	*0.26*	*0.29*	*0.22*	**0.21**	*0.24*	*0.26*
Other Oils (a)	**2.09**	**2.42**	**2.44**	**2.33**	*2.46*	*2.56*	*2.64*	*2.43*	*2.28*	*2.59*	*2.65*	*2.42*	**2.32**	*2.52*	*2.49*
Total Refinery and Blender Net Production	**16.86**	**19.38**	**19.36**	**18.94**	*18.56*	*20.12*	*20.48*	*19.26*	*18.33*	*20.35*	*20.58*	*19.51*	**18.64**	*19.61*	*19.70*
Refinery Distillation Inputs	**14.25**	**16.17**	**16.22**	**16.02**	*15.76*	*16.57*	*17.02*	*16.10*	*15.42*	*16.87*	*17.19*	*16.16*	**15.67**	*16.37*	*16.41*
Refinery Operable Distillation Capacity	**18.11**	**18.13**	**18.13**	**18.05**	*17.88*	*17.88*	*17.88*	*17.88*	*17.88*	*17.88*	*17.88*	*17.88*	**18.10**	*17.88*	*17.88*
Refinery Distillation Utilization Factor	**0.79**	**0.89**	**0.89**	**0.89**	*0.88*	*0.93*	*0.95*	*0.90*	*0.86*	*0.94*	*0.96*	*0.90*	**0.87**	*0.92*	*0.92*

(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 March 3, 2022.

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 - March 2022

	2021				2022				2023				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2021	2022	2023
Prices (cents per gallon)															
Refiner Wholesale Price	**180**	**216**	**232**	**243**	*285*	*327*	*303*	*265*	*257*	*262*	*252*	*231*	**219**	*295*	*250*
Gasoline Regular Grade Retail Prices Including Taxes															
PADD 1	**252**	**287**	**304**	**327**	*356*	*400*	*383*	*348*	*331*	*336*	*326*	*310*	**294**	*372*	*326*
PADD 2	**247**	**288**	**304**	**315**	*344*	*394*	*368*	*333*	*323*	*331*	*323*	*300*	**290**	*360*	*319*
PADD 3	**228**	**267**	**282**	**298**	*330*	*377*	*353*	*315*	*299*	*305*	*297*	*277*	**271**	*344*	*295*
PADD 4	**247**	**311**	**360**	**351**	*349*	*409*	*398*	*357*	*335*	*349*	*342*	*318*	**319**	*379*	*336*
PADD 5	**312**	**366**	**391**	**410**	*439*	*487*	*460*	*440*	*416*	*414*	*405*	*381*	**372**	*457*	*404*
U.S. Average	**256**	**297**	**316**	**333**	*362*	*410*	*388*	*354*	*338*	*344*	*335*	*314*	**302**	*379*	*333*
Gasoline All Grades Including Taxes	**265**	**306**	**325**	**343**	*372*	*421*	*400*	*368*	*352*	*357*	*348*	*328*	**311**	*391*	*346*
End-of-period Inventories (million barrels)															
Total Gasoline Inventories															
PADD 1	**65.1**	**69.9**	**59.0**	**61.8**	*61.0*	*67.2*	*62.9*	*68.7*	*67.1*	*68.1*	*63.1*	*68.6*	**61.8**	*68.7*	*68.6*
PADD 2	**50.7**	**50.6**	**46.9**	**50.9**	*56.2*	*52.8*	*50.2*	*50.6*	*53.1*	*51.8*	*51.2*	*50.0*	**50.9**	*50.6*	*50.0*
PADD 3	**81.9**	**81.6**	**82.9**	**81.7**	*84.0*	*88.6*	*83.7*	*90.1*	*89.2*	*89.9*	*87.4*	*91.1*	**81.7**	*90.1*	*91.1*
PADD 4	**8.6**	**6.2**	**7.6**	**8.1**	*8.0*	*7.9*	*7.5*	*8.1*	*8.0*	*8.0*	*7.6*	*8.4*	**8.1**	*8.1*	*8.4*
PADD 5	**31.4**	**29.0**	**30.6**	**29.6**	*28.5*	*28.9*	*29.3*	*31.5*	*29.7*	*28.8*	*29.1*	*32.4*	**29.6**	*31.5*	*32.4*
U.S. Total	**237.6**	**237.2**	**227.0**	**232.2**	*237.7*	*245.4*	*233.5*	*249.0*	*247.0*	*246.6*	*238.4*	*250.5*	**232.2**	*249.0*	*250.5*
Finished Gasoline Inventories															
U.S. Total	**20.3**	**18.6**	**18.5**	**17.7**	*16.8*	*20.9*	*23.1*	*26.6*	*23.2*	*24.3*	*25.4*	*27.9*	**17.7**	*26.6*	*27.9*
Gasoline Blending Components Inventories															
U.S. Total	**217.4**	**218.6**	**208.5**	**214.5**	*221.0*	*224.5*	*210.5*	*222.4*	*223.8*	*222.3*	*213.0*	*222.6*	**214.5**	*222.4*	*222.6*

- = no data available

Notes: EIA completed modeling and analysis for this report on March 3, 2022.

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 - March 2022

	2021				2022				2023				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2021	2022	2023
Supply (billion cubic feet per day)															
Total Marketed Production	**97.65**	**101.12**	**101.89**	**104.90**	*103.93*	*104.36*	*105.32*	*106.44*	*106.70*	*107.38*	*108.30*	*108.84*	**101.41**	*105.02*	*107.81*
Alaska	**1.02**	**0.95**	**0.90**	**1.02**	*0.93*	*0.75*	*0.71*	*0.85*	*0.90*	*0.75*	*0.71*	*0.87*	**0.97**	*0.81*	*0.81*
Federal GOM (a)	**2.26**	**2.25**	**1.82**	**2.12**	*2.29*	*2.25*	*2.12*	*2.12*	*2.14*	*2.08*	*1.95*	*1.92*	**2.11**	*2.20*	*2.02*
Lower 48 States (excl GOM)	**94.37**	**97.92**	**99.17**	**101.76**	*100.71*	*101.36*	*102.50*	*103.47*	*103.66*	*104.55*	*105.63*	*106.05*	**98.33**	*102.02*	*104.98*
Total Dry Gas Production	**90.59**	**93.15**	**93.86**	**96.57**	*95.69*	*96.09*	*96.97*	*98.00*	*98.11*	*98.75*	*99.60*	*100.10*	**93.56**	*96.69*	*99.15*
LNG Gross Imports	**0.15**	**0.02**	**0.03**	**0.04**	*0.32*	*0.18*	*0.18*	*0.20*	*0.32*	*0.18*	*0.18*	*0.20*	**0.06**	*0.22*	*0.22*
LNG Gross Exports	**9.27**	**9.81**	**9.60**	**10.32**	*10.99*	*10.84*	*11.33*	*12.18*	*12.72*	*11.86*	*11.73*	*12.23*	**9.76**	*11.34*	*12.13*
Pipeline Gross Imports	**8.68**	**6.81**	**7.24**	**7.82**	*8.04*	*6.44*	*6.38*	*6.71*	*7.75*	*6.44*	*6.32*	*6.50*	**7.63**	*6.89*	*6.75*
Pipeline Gross Exports	**8.31**	**8.67**	**8.50**	**8.41**	*8.84*	*8.41*	*9.25*	*9.21*	*9.12*	*9.03*	*9.33*	*9.24*	**8.47**	*8.93*	*9.18*
Supplemental Gaseous Fuels	**0.17**	**0.15**	**0.15**	**0.17**	*0.17*	*0.17*	*0.17*	*0.17*	*0.17*	*0.17*	*0.17*	*0.17*	**0.16**	*0.17*	*0.17*
Net Inventory Withdrawals	**17.18**	**-9.12**	**-7.87**	**1.03**	*18.64*	*-11.10*	*-7.51*	*3.88*	*15.02*	*-11.49*	*-8.59*	*2.64*	**0.24**	*0.92*	*-0.66*
Total Supply	**99.18**	**72.53**	**75.31**	**86.90**	*103.02*	*72.52*	*75.61*	*87.58*	*99.52*	*73.17*	*76.62*	*88.14*	**83.43**	*84.61*	*84.31*
Balancing Item (b)	**0.26**	**-0.58**	**-0.22**	**-1.27**	*0.31*	*-0.50*	*0.54*	*-0.44*	*0.95*	*-0.19*	*0.11*	*-1.06*	**-0.46**	*-0.02*	*-0.05*
Total Primary Supply	**99.44**	**71.95**	**75.09**	**85.64**	*103.32*	*72.03*	*76.15*	*87.13*	*100.47*	*72.98*	*76.73*	*87.08*	**82.97**	*84.59*	*84.26*
Consumption (billion cubic feet per day)															
Residential	**25.67**	**7.49**	**3.62**	**14.43**	*26.48*	*7.96*	*3.73*	*16.17*	*25.29*	*8.02*	*3.79*	*16.09*	**12.75**	*13.53*	*13.25*
Commercial	**14.87**	**6.23**	**4.69**	**10.08**	*15.81*	*6.64*	*4.79*	*10.26*	*15.05*	*6.67*	*4.78*	*10.24*	**8.94**	*9.35*	*9.16*
Industrial	**23.81**	**21.46**	**21.13**	**23.45**	*24.70*	*22.14*	*22.21*	*24.91*	*24.75*	*22.29*	*22.33*	*25.20*	**22.46**	*23.49*	*23.64*
Electric Power (c)	**26.79**	**29.20**	**37.94**	**29.47**	*27.57*	*27.57*	*37.51*	*27.46*	*26.57*	*28.10*	*37.75*	*27.10*	**30.88**	*30.05*	*29.90*
Lease and Plant Fuel	**4.87**	**5.04**	**5.08**	**5.23**	*5.18*	*5.20*	*5.25*	*5.31*	*5.32*	*5.35*	*5.40*	*5.43*	**5.06**	*5.24*	*5.37*
Pipeline and Distribution Use	**3.29**	**2.38**	**2.48**	**2.83**	*3.42*	*2.35*	*2.49*	*2.87*	*3.33*	*2.38*	*2.51*	*2.87*	**2.74**	*2.78*	*2.77*
Vehicle Use	**0.14**	**0.15**	**0.15**	**0.15**	*0.16*	*0.16*	*0.16*	*0.16*	*0.16*	*0.16*	*0.16*	*0.16*	**0.15**	*0.16*	*0.16*
Total Consumption	**99.44**	**71.95**	**75.09**	**85.64**	*103.32*	*72.03*	*76.15*	*87.13*	*100.47*	*72.98*	*76.73*	*87.08*	**82.97**	*84.59*	*84.26*
End-of-period Inventories (billion cubic feet)															
Working Gas Inventory	**1,801**	**2,583**	**3,305**	**3,208**	*1,530*	*2,540*	*3,231*	*2,874*	*1,522*	*2,567*	*3,357*	*3,114*	**3,208**	*2,874*	*3,114*
East Region (d)	**313**	**515**	**804**	**766**	*262*	*535*	*786*	*649*	*264*	*572*	*848*	*752*	**766**	*649*	*752*
Midwest Region (d)	**395**	**630**	**966**	**887**	*328*	*586*	*907*	*799*	*333*	*623*	*949*	*842*	**887**	*799*	*842*
South Central Region (d)	**760**	**991**	**1,052**	**1,141**	*673*	*979*	*1,036*	*973*	*636*	*935*	*1,021*	*1,035*	**1,141**	*973*	*1,035*
Mountain Region (d)	**113**	**175**	**205**	**171**	*81*	*128*	*181*	*169*	*101*	*144*	*207*	*187*	**171**	*169*	*187*
Pacific Region (d)	**197**	**246**	**248**	**218**	*164*	*289*	*300*	*261*	*165*	*272*	*309*	*277*	**218**	*261*	*277*
Alaska	**23**	**27**	**30**	**25**	*22*	*22*	*22*	*22*	*22*	*22*	*22*	*22*	**25**	*22*	*22*

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

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

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

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

- = no data available

LNG: liquefied natural gas.

Notes: EIA completed modeling and analysis for this report on March 3, 2022.

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 - March 2022

	2021				2022				2023				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2021	2022	2023
Wholesale/Spot															
Henry Hub Spot Price	**3.70**	**3.06**	**4.53**	**4.96**	*4.56*	*3.98*	*3.98*	*3.88*	*3.89*	*3.58*	*3.65*	*3.80*	**4.06**	*4.10*	*3.73*
Residential Retail															
New England	**14.66**	**16.24**	**20.41**	**17.61**	*16.12*	*16.29*	*18.58*	*14.30*	*13.85*	*14.74*	*17.64*	*13.79*	**16.12**	*15.78*	*14.22*
Middle Atlantic	**10.43**	**13.49**	**19.81**	**14.29**	*11.91*	*13.74*	*17.99*	*11.85*	*10.84*	*12.99*	*17.45*	*11.43*	**12.55**	*12.57*	*11.80*
E. N. Central	**7.41**	**12.69**	**22.36**	**11.40**	*9.51*	*12.38*	*17.69*	*9.25*	*8.49*	*11.38*	*17.07*	*8.95*	**10.19**	*10.31*	*9.59*
W. N. Central	**7.49**	**11.63**	**20.31**	**12.62**	*10.40*	*12.89*	*18.44*	*10.21*	*8.84*	*11.62*	*17.67*	*9.77*	**10.23**	*11.11*	*10.03*
S. Atlantic	**11.95**	**18.04**	**27.54**	**16.57**	*13.58*	*18.22*	*23.90*	*13.48*	*12.02*	*17.04*	*23.17*	*13.06*	**15.23**	*14.98*	*13.84*
E. S. Central	**9.35**	**14.78**	**22.94**	**14.14**	*11.77*	*16.32*	*23.16*	*14.17*	*12.15*	*17.12*	*23.62*	*14.67*	**11.99**	*13.85*	*14.37*
W. S. Central	**9.23**	**15.85**	**23.76**	**17.89**	*11.77*	*16.07*	*21.42*	*12.17*	*9.23*	*14.79*	*20.79*	*11.95*	**13.23**	*13.56*	*11.76*
Mountain	**7.90**	**10.64**	**15.58**	**10.85**	*9.58*	*11.13*	*14.61*	*9.18*	*8.59*	*10.28*	*14.07*	*8.90*	**9.77**	*10.08*	*9.36*
Pacific	**14.20**	**15.01**	**15.90**	**16.47**	*16.15*	*16.13*	*16.43*	*15.05*	*15.04*	*15.51*	*16.15*	*15.09*	**15.25**	*15.85*	*15.27*
U.S. Average	**9.75**	**13.87**	**20.38**	**13.82**	*11.80*	*14.25*	*18.54*	*11.52*	*10.50*	*13.37*	*18.03*	*11.23*	**12.27**	*12.54*	*11.70*
Commercial Retail															
New England	**10.39**	**11.13**	**12.24**	**12.59**	*11.95*	*11.80*	*11.23*	*10.84*	*11.10*	*11.08*	*10.68*	*10.45*	**11.33**	*11.49*	*10.85*
Middle Atlantic	**7.92**	**8.00**	**7.98**	**10.11**	*10.04*	*9.36*	*8.48*	*8.66*	*8.84*	*8.43*	*7.78*	*8.17*	**8.56**	*9.30*	*8.44*
E. N. Central	**6.11**	**8.60**	**11.03**	**8.70**	*8.09*	*8.95*	*9.78*	*7.45*	*7.36*	*8.18*	*9.32*	*7.27*	**7.61**	*8.13*	*7.59*
W. N. Central	**6.32**	**7.69**	**9.94**	**10.19**	*8.93*	*9.01*	*9.90*	*7.84*	*7.70*	*8.18*	*9.41*	*7.61*	**7.91**	*8.67*	*7.87*
S. Atlantic	**8.69**	**9.84**	**10.37**	**11.01**	*10.37*	*10.85*	*10.84*	*9.58*	*9.23*	*10.06*	*10.39*	*9.45*	**9.75**	*10.27*	*9.58*
E. S. Central	**8.33**	**9.90**	**11.95**	**11.80**	*10.90*	*11.14*	*11.19*	*9.77*	*9.14*	*10.04*	*10.52*	*9.39*	**9.89**	*10.60*	*9.50*
W. S. Central	**6.91**	**8.57**	**10.12**	**10.84**	*9.12*	*9.08*	*9.16*	*8.18*	*7.45*	*8.04*	*8.52*	*7.83*	**8.61**	*8.86*	*7.81*
Mountain	**6.50**	**7.76**	**9.26**	**9.00**	*8.69*	*8.84*	*9.44*	*8.07*	*7.74*	*7.99*	*8.76*	*7.57*	**7.74**	*8.59*	*7.83*
Pacific	**10.46**	**10.31**	**11.31**	**12.12**	*12.00*	*11.10*	*11.06*	*10.37*	*9.88*	*9.34*	*9.48*	*9.01*	**11.09**	*11.17*	*9.44*
U.S. Average	**7.54**	**8.85**	**10.12**	**10.27**	*9.58*	*9.75*	*9.83*	*8.66*	*8.42*	*8.78*	*9.12*	*8.24*	**8.82**	*9.37*	*8.51*
Industrial Retail															
New England	**8.59**	**8.08**	**7.85**	**10.08**	*9.98*	*9.10*	*7.89*	*8.71*	*9.05*	*8.40*	*7.44*	*8.54*	**8.73**	*9.09*	*8.50*
Middle Atlantic	**7.66**	**7.36**	**7.90**	**10.36**	*9.84*	*8.87*	*8.33*	*8.53*	*8.78*	*8.17*	*7.81*	*8.11*	**8.24**	*9.15*	*8.39*
E. N. Central	**5.43**	**8.14**	**8.48**	**7.88**	*7.28*	*6.91*	*6.60*	*6.41*	*6.71*	*6.37*	*6.23*	*6.28*	**6.89**	*6.88*	*6.46*
W. N. Central	**5.13**	**4.34**	**5.25**	**6.95**	*6.38*	*5.59*	*5.32*	*5.67*	*5.92*	*5.09*	*4.92*	*5.45*	**5.48**	*5.78*	*5.38*
S. Atlantic	**5.12**	**4.75**	**6.01**	**7.68**	*6.74*	*5.89*	*5.67*	*5.78*	*6.06*	*5.40*	*5.33*	*5.68*	**5.91**	*6.06*	*5.65*
E. S. Central	**4.72**	**4.28**	**5.37**	**7.21**	*6.35*	*5.56*	*5.22*	*5.41*	*5.69*	*5.04*	*4.83*	*5.26*	**5.39**	*5.66*	*5.23*
W. S. Central	**5.75**	**3.20**	**4.36**	**5.95**	*4.51*	*4.17*	*4.17*	*4.05*	*4.07*	*3.76*	*3.83*	*3.94*	**4.79**	*4.22*	*3.90*
Mountain	**4.98**	**5.31**	**6.66**	**7.27**	*7.04*	*6.68*	*6.70*	*6.39*	*6.40*	*6.09*	*6.20*	*6.03*	**5.99**	*6.71*	*6.19*
Pacific	**8.28**	**7.24**	**8.88**	**9.21**	*8.36*	*7.71*	*7.77*	*7.69*	*7.55*	*6.95*	*6.82*	*6.94*	**8.54**	*7.89*	*7.07*
U.S. Average	**5.73**	**4.09**	**5.10**	**6.87**	*5.88*	*5.09*	*4.91*	*5.15*	*5.35*	*4.62*	*4.52*	*4.95*	**5.50**	*5.27*	*4.88*

- = no data available

Notes: EIA completed modeling and analysis for this report on March 3, 2022.

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 - March 2022

	2021				2022				2023				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2021	2022	2023
Supply (million short tons)															
Production	**140.3**	**142.7**	**148.3**	**147.1**	*147.4*	*144.8*	*155.7*	*156.0*	*152.5*	*146.0*	*159.7*	*154.5*	**578.4**	*603.9*	*612.6*
Appalachia	**40.8**	**39.5**	**36.6**	**41.3**	*43.4*	*42.0*	*39.1*	*40.6*	*42.0*	*40.1*	*38.9*	*37.1*	**158.2**	*165.2*	*158.1*
Interior	**25.0**	**23.3**	**22.7**	**24.7**	*24.7*	*22.8*	*23.9*	*24.0*	*25.0*	*22.5*	*23.9*	*23.3*	**95.7**	*95.4*	*94.7*
Western	**74.5**	**80.0**	**89.0**	**81.0**	*79.4*	*80.0*	*92.7*	*91.3*	*85.5*	*83.4*	*96.9*	*94.1*	**324.6**	*343.3*	*359.8*
Primary Inventory Withdrawals	**-4.5**	**2.1**	**2.6**	**-1.8**	*-1.3*	*-2.2*	*-0.9*	*-5.3*	*-2.1*	*-1.3*	*1.5*	*-1.8*	**-1.7**	*-9.8*	*-3.8*
Imports	**1.1**	**1.5**	**1.1**	**1.7**	*1.4*	*1.1*	*1.2*	*1.2*	*1.0*	*1.2*	*1.6*	*1.4*	**5.4**	*4.9*	*5.2*
Exports	**20.7**	**22.1**	**20.7**	**21.7**	*26.5*	*17.9*	*18.7*	*24.9*	*21.6*	*23.0*	*22.7*	*24.1*	**85.2**	*88.0*	*91.4*
Metallurgical Coal	**10.3**	**11.7**	**11.4**	**11.9**	*13.7*	*10.3*	*11.9*	*13.4*	*13.0*	*14.0*	*13.6*	*14.1*	**45.3**	*49.3*	*54.7*
Steam Coal	**10.4**	**10.4**	**9.3**	**9.7**	*12.8*	*7.5*	*6.8*	*11.5*	*8.5*	*9.0*	*9.1*	*10.0*	**39.9**	*38.7*	*36.7*
Total Primary Supply	**116.2**	**124.2**	**131.3**	**125.2**	*121.0*	*125.9*	*137.2*	*126.9*	*129.8*	*122.8*	*140.1*	*130.0*	**496.9**	*511.0*	*522.6*
Secondary Inventory Withdrawals	**22.3**	**0.3**	**30.4**	**-15.1**	*3.9*	*-9.0*	*23.3*	*-1.8*	*-2.5*	*-9.6*	*15.4*	*-7.4*	**37.9**	*16.4*	*-4.1*
Waste Coal (a)	**2.2**	**1.7**	**2.0**	**2.0**	*1.8*	*1.8*	*1.8*	*1.8*	*1.4*	*1.4*	*1.4*	*1.4*	**7.9**	*7.4*	*5.5*
Total Supply	**140.6**	**126.2**	**163.7**	**112.1**	*126.8*	*118.7*	*162.3*	*126.9*	*128.7*	*114.6*	*156.8*	*124.0*	**542.7**	*534.7*	*524.1*
Consumption (million short tons)															
Coke Plants	**4.4**	**4.5**	**4.4**	**4.6**	*5.4*	*4.9*	*4.7*	*5.2*	*5.2*	*5.3*	*5.4*	*5.4*	**17.8**	*20.2*	*21.2*
Electric Power Sector (b)	**128.0**	**113.8**	**157.0**	**102.7**	*118.5*	*107.3*	*151.2*	*115.1*	*116.8*	*103.4*	*145.6*	*111.9*	**501.4**	*492.1*	*477.7*
Retail and Other Industry	**6.8**	**6.3**	**6.5**	**7.0**	*6.9*	*6.6*	*6.4*	*6.7*	*6.7*	*5.9*	*5.9*	*6.7*	**26.7**	*26.5*	*25.2*
Residential and Commercial	**0.3**	**0.2**	**0.2**	**0.2**	*0.2*	*0.1*	*0.2*	*0.2*	*0.3*	*0.2*	*0.1*	*0.3*	**0.8**	*0.7*	*0.9*
Other Industrial	**6.6**	**6.2**	**6.3**	**6.8**	*6.7*	*6.4*	*6.3*	*6.5*	*6.4*	*5.7*	*5.7*	*6.4*	**25.8**	*25.8*	*24.3*
Total Consumption	**139.2**	**124.6**	**167.9**	**114.3**	*130.8*	*118.7*	*162.3*	*126.9*	*128.7*	*114.6*	*156.8*	*124.0*	**545.9**	*538.8*	*524.1*
Discrepancy (c)	**1.4**	**1.6**	**-4.1**	**-2.2**	*-4.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	**-3.3**	*-4.0*	*0.0*
End-of-period Inventories (million short tons)															
Primary Inventories (d)	**28.1**	**26.1**	**23.4**	**25.3**	*26.6*	*28.8*	*29.7*	*35.1*	*37.2*	*38.5*	*37.0*	*38.8*	**25.3**	*35.1*	*38.8*
Secondary Inventories	**115.8**	**115.5**	**85.1**	**100.2**	*96.3*	*105.3*	*82.0*	*83.9*	*86.3*	*96.0*	*80.6*	*88.0*	**100.2**	*83.9*	*88.0*
Electric Power Sector	**111.5**	**110.9**	**80.4**	**94.7**	*90.9*	*99.6*	*76.2*	*78.3*	*81.5*	*90.9*	*75.3*	*82.6*	**94.7**	*78.3*	*82.6*
Retail and General Industry	**2.6**	**2.6**	**2.7**	**3.4**	*3.6*	*3.5*	*3.4*	*3.3*	*2.7*	*2.8*	*3.0*	*3.0*	**3.4**	*3.3*	*3.0*
Coke Plants	**1.5**	**1.9**	**1.8**	**2.0**	*1.6*	*2.1*	*2.2*	*2.2*	*2.0*	*2.2*	*2.2*	*2.2*	**2.0**	*2.2*	*2.2*
Commercial & Institutional	**0.2**	**0.2**	**0.2**	**0.2**	*0.2*	*0.2*	*0.2*	*0.2*	*0.1*	*0.1*	*0.1*	*0.1*	**0.2**	*0.2*	*0.1*
Coal Market Indicators															
Coal Miner Productivity (Tons per hour)	**6.32**	**6.32**	**6.32**	**6.32**	*6.30*	*6.30*	*6.30*	*6.30*	*6.21*	*6.21*	*6.21*	*6.21*	**6.32**	*6.30*	*6.21*
Total Raw Steel Production (Million short tons per day)	**0.246**	**0.258**	**0.267**	**0.260**	*0.258*	*0.259*	*0.269*	*0.277*	*0.289*	*0.290*	*0.300*	*0.308*	**0.258**	*0.266*	*0.297*
Cost of Coal to Electric Utilities (Dollars per million Btu)	**1.91**	**1.92**	**2.03**	**2.05**	*1.80*	*1.74*	*1.58*	*1.58*	*1.59*	*1.61*	*1.60*	*1.59*	**1.98**	*1.67*	*1.60*

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

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

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

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

- = no data available

Notes: EIA completed modeling and analysis for this report on March 3, 2022.

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 - March 2022

	2021				2022				2023				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2021	2022	2023
Electricity Supply (billion kilowatthours)															
Electricity Generation	**989**	**985**	**1,166**	**975**	*1,015*	*996*	*1,172*	*983*	*1,008*	*1,007*	*1,184*	*993*	**4,116**	*4,165*	*4,192*
Electric Power Sector (a)	**952**	**949**	**1,127**	**935**	*976*	*958*	*1,132*	*944*	*969*	*970*	*1,143*	*954*	**3,963**	*4,010*	*4,036*
Industrial Sector (b)	**34**	**33**	**36**	**36**	*35*	*34*	*37*	*36*	*35*	*34*	*37*	*36*	**140**	*142*	*143*
Commercial Sector (b)	**3**	**3**	**4**	**3**	*3*	*3*	*4*	*3*	*3*	*3*	*4*	*3*	**13**	*13*	*14*
Net Imports	**11**	**13**	**15**	**12**	*13*	*13*	*15*	*12*	*12*	*13*	*15*	*12*	**51**	*53*	*52*
Total Supply	**1,000**	**998**	**1,181**	**987**	*1,028*	*1,009*	*1,187*	*994*	*1,020*	*1,020*	*1,199*	*1,005*	**4,166**	*4,218*	*4,244*
Losses and Unaccounted for (c)	**54**	**67**	**57**	**57**	*58*	*64*	*53*	*51*	*42*	*65*	*54*	*51*	**236**	*226*	*213*
Electricity Consumption (billion kilowatthours unless noted)															
Retail Sales	**913**	**898**	**1,089**	**894**	*936*	*911*	*1,098*	*909*	*944*	*921*	*1,108*	*919*	**3,795**	*3,854*	*3,892*
Residential Sector	**379**	**329**	**446**	**324**	*372*	*325*	*443*	*330*	*373*	*330*	*448*	*335*	**1,477**	*1,470*	*1,486*
Commercial Sector	**304**	**321**	**377**	**322**	*319*	*330*	*382*	*325*	*321*	*332*	*383*	*326*	**1,325**	*1,357*	*1,362*
Industrial Sector	**229**	**247**	**264**	**247**	*244*	*254*	*271*	*252*	*248*	*259*	*276*	*256*	**987**	*1,021*	*1,038*
Transportation Sector	**2**	**2**	**2**	**2**	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	**6**	*6*	*6*
Direct Use (d)	**33**	**32**	**35**	**35**	*34*	*33*	*36*	*35*	*34*	*33*	*36*	*35*	**136**	*138*	*139*
Total Consumption	**946**	**931**	**1,124**	**929**	*970*	*944*	*1,134*	*943*	*978*	*955*	*1,145*	*953*	**3,930**	*3,992*	*4,031*
Average residential electricity usage per customer (kWh)	**2,744**	**2,381**	**3,232**	**2,346**	*2,664*	*2,331*	*3,173*	*2,367*	*2,645*	*2,335*	*3,171*	*2,376*	**10,703**	*10,535*	*10,528*
End-of-period Fuel Inventories Held by Electric Power Sector															
Coal (mmst)	**111.5**	**110.9**	**80.4**	**94.7**	*90.9*	*99.6*	*76.2*	*78.3*	*81.5*	*90.9*	*75.3*	*82.6*	**94.7**	*78.3*	*82.6*
Residual Fuel (mmb)	**8.0**	**7.4**	**6.9**	**7.0**	*6.6*	*6.6*	*6.6*	*6.9*	*4.8*	*4.8*	*3.0*	*3.7*	**7.0**	*6.9*	*3.7*
Distillate Fuel (mmb)	**16.0**	**15.5**	**15.3**	**16.0**	*15.7*	*15.5*	*15.4*	*15.7*	*15.5*	*15.4*	*15.3*	*15.6*	**16.0**	*15.7*	*15.6*
Prices															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	**1.91**	**1.92**	**2.03**	**2.05**	*1.80*	*1.74*	*1.58*	*1.58*	*1.59*	*1.61*	*1.60*	*1.59*	**1.98**	*1.67*	*1.60*
Natural Gas	**7.23**	**3.26**	**4.36**	**5.42**	*4.84*	*3.98*	*3.91*	*4.00*	*4.23*	*3.56*	*3.58*	*3.93*	**4.97**	*4.16*	*3.80*
Residual Fuel Oil	**11.28**	**13.08**	**14.21**	**16.10**	*15.74*	*20.52*	*19.72*	*17.95*	*17.18*	*17.30*	*15.97*	*15.30*	**13.66**	*18.16*	*16.42*
Distillate Fuel Oil	**13.54**	**15.20**	**16.20**	**18.03**	*20.96*	*24.88*	*23.25*	*21.52*	*20.68*	*19.95*	*19.42*	*19.06*	**15.50**	*22.34*	*19.85*
Retail Prices (cents per kilowatthour)															
Residential Sector	**13.10**	**13.84**	**13.99**	**13.97**	*13.85*	*14.46*	*14.43*	*14.22*	*14.02*	*14.52*	*14.47*	*14.25*	**13.72**	*14.24*	*14.32*
Commercial Sector	**10.99**	**11.07**	**11.59**	**11.37**	*11.60*	*11.59*	*11.91*	*11.60*	*11.75*	*11.62*	*11.93*	*11.61*	**11.27**	*11.68*	*11.74*
Industrial Sector	**7.09**	**6.92**	**7.62**	**7.38**	*7.28*	*7.04*	*7.58*	*7.24*	*7.22*	*7.02*	*7.53*	*7.21*	**7.26**	*7.29*	*7.25*
Wholesale Electricity Prices (dollars per megawatthour)															
ERCOT North hub	**616.34**	**39.74**	**52.31**	**49.79**	*40.02*	*35.61*	*42.24*	*32.01*	*32.01*	*31.73*	*35.34*	*31.28*	**189.54**	*37.47*	*32.59*
CAISO SP15 zone	**44.74**	**36.90**	**72.02**	**60.47**	*48.06*	*43.07*	*53.40*	*44.30*	*41.50*	*36.48*	*44.74*	*38.95*	**53.53**	*47.21*	*40.42*
ISO-NE Internal hub	**55.26**	**33.67**	**52.57**	**65.75**	*119.15*	*81.37*	*83.80*	*39.35*	*79.22*	*71.43*	*72.85*	*39.09*	**51.81**	*80.92*	*65.65*
NYISO Hudson Valley zone	**44.74**	**31.85**	**50.42**	**57.54**	*103.36*	*72.96*	*76.25*	*35.30*	*73.01*	*65.56*	*66.37*	*35.26*	**46.14**	*71.97*	*60.05*
PJM Western hub	**35.09**	**33.71**	**51.32**	**62.57**	*57.21*	*45.60*	*54.86*	*44.77*	*47.98*	*45.79*	*51.43*	*44.98*	**45.67**	*50.61*	*47.55*
Midcontinent ISO Illinois hub	**44.97**	**33.82**	**49.36**	**57.71**	*47.17*	*43.79*	*50.97*	*41.23*	*44.28*	*43.45*	*48.49*	*40.98*	**46.47**	*45.79*	*44.30*
SPP ISO South hub	**250.31**	**30.86**	**48.63**	**45.72**	*36.80*	*35.61*	*41.30*	*35.36*	*35.21*	*37.35*	*43.40*	*34.81*	**93.88**	*37.27*	*37.69*
SERC index, Into Southern	**41.10**	**32.93**	**44.18**	**51.34**	*40.29*	*39.89*	*43.34*	*37.23*	*38.54*	*37.39*	*40.72*	*35.91*	**42.39**	*40.19*	*38.14*
FRCC index, Florida Reliability	**27.73**	**32.17**	**42.76**	**49.02**	*39.11*	*37.05*	*38.11*	*35.42*	*35.96*	*34.36*	*35.37*	*34.73*	**37.92**	*37.42*	*35.10*
Northwest index, Mid-Columbia	**34.56**	**51.51**	**91.61**	**60.46**	*43.10*	*35.84*	*41.39*	*38.03*	*38.16*	*30.55*	*37.79*	*36.02*	**59.53**	*39.59*	*35.63*
Southwest index, Palo Verde	**41.72**	**46.57**	**79.86**	**53.60**	*40.69*	*35.85*	*42.08*	*37.25*	*34.82*	*33.79*	*38.72*	*34.07*	**55.44**	*38.97*	*35.35*

Notes: EIA completed modeling and analysis for this report on March 3, 2022.

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

kWh = kilowatthours. Btu = British thermal units.

Prices are not adjusted for inflation.

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

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

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

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

Historical data sources:

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

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

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

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

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 - March 2022

	2021				2022				2023				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2021	2022	2023
Residential Sector															
New England	**12.9**	**10.8**	**14.0**	**11.0**	*12.9*	*10.1*	*13.6*	*11.1*	*12.7*	*10.0*	*13.6*	*11.2*	**48.7**	*47.7*	*47.5*
Middle Atlantic	**36.0**	**30.3**	**41.9**	**30.5**	*36.2*	*28.9*	*40.3*	*30.7*	*35.8*	*29.1*	*40.6*	*31.0*	**138.7**	*136.1*	*136.4*
E. N. Central	**50.1**	**43.1**	**56.3**	**43.2**	*50.5*	*41.1*	*53.9*	*44.0*	*49.6*	*41.6*	*54.6*	*44.5*	**192.6**	*189.5*	*190.2*
W. N. Central	**29.9**	**23.7**	**31.0**	**24.0**	*30.9*	*23.9*	*30.9*	*26.0*	*30.8*	*24.7*	*31.3*	*26.2*	**108.6**	*111.7*	*113.0*
S. Atlantic	**95.2**	**85.1**	**111.5**	**83.1**	*93.1*	*85.4*	*113.0*	*84.0*	*93.7*	*86.8*	*114.3*	*85.8*	**374.9**	*375.5*	*380.7*
E. S. Central	**33.5**	**25.3**	**35.8**	**25.9**	*31.7*	*25.9*	*36.3*	*26.6*	*32.1*	*26.2*	*36.3*	*27.0*	**120.5**	*120.5*	*121.7*
W. S. Central	**56.8**	**50.0**	**76.2**	**47.5**	*53.6*	*52.1*	*78.4*	*49.4*	*55.0*	*52.9*	*79.5*	*50.9*	**230.5**	*233.5*	*238.4*
Mountain	**23.7**	**26.9**	**35.2**	**22.3**	*23.6*	*25.2*	*35.1*	*23.0*	*23.8*	*25.8*	*35.9*	*23.4*	**108.1**	*106.9*	*108.9*
Pacific contiguous	**39.0**	**32.2**	**43.0**	**34.8**	*37.8*	*31.3*	*40.1*	*34.1*	*38.4*	*31.3*	*40.3*	*34.2*	**149.0**	*143.3*	*144.1*
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*
Total	**378.5**	**328.5**	**445.8**	**323.7**	*371.6*	*325.1*	*442.7*	*330.2*	*373.3*	*329.5*	*447.5*	*335.4*	**1,476.6**	*1,469.6*	*1,485.8*
Commercial Sector															
New England	**11.7**	**11.7**	**13.5**	**11.5**	*12.2*	*11.8*	*13.5*	*11.7*	*12.2*	*11.8*	*13.5*	*11.6*	**48.5**	*49.2*	*49.1*
Middle Atlantic	**34.6**	**33.2**	**39.7**	**34.3**	*35.9*	*33.8*	*39.7*	*34.6*	*36.1*	*33.9*	*39.7*	*34.5*	**141.9**	*144.0*	*144.3*
E. N. Central	**41.7**	**42.1**	**48.9**	**42.1**	*43.0*	*42.8*	*48.9*	*42.5*	*43.0*	*42.9*	*49.0*	*42.5*	**174.8**	*177.2*	*177.4*
W. N. Central	**24.0**	**23.7**	**27.6**	**24.0**	*24.8*	*24.3*	*28.4*	*24.9*	*25.2*	*24.6*	*28.5*	*24.9*	**99.3**	*102.5*	*103.2*
S. Atlantic	**70.8**	**77.3**	**89.6**	**75.3**	*74.1*	*79.3*	*91.1*	*75.9*	*74.5*	*79.9*	*91.6*	*76.2*	**313.1**	*320.4*	*322.2*
E. S. Central	**20.7**	**21.5**	**26.0**	**20.9**	*21.6*	*22.5*	*26.8*	*21.1*	*22.0*	*22.6*	*26.9*	*21.1*	**89.0**	*92.1*	*92.7*
W. S. Central	**42.4**	**50.5**	**58.7**	**49.5**	*45.6*	*53.4*	*61.0*	*49.8*	*45.9*	*53.6*	*61.5*	*50.2*	**201.0**	*209.8*	*211.1*
Mountain	**21.9**	**24.8**	**28.8**	**23.2**	*23.0*	*24.9*	*29.0*	*23.6*	*23.2*	*25.1*	*29.2*	*23.8*	**98.7**	*100.5*	*101.3*
Pacific contiguous	**35.2**	**35.3**	**43.1**	**39.6**	*37.3*	*36.1*	*42.4*	*39.8*	*37.5*	*36.0*	*42.2*	*39.5*	**153.2**	*155.7*	*155.3*
AK and HI	**1.3**	**1.3**	**1.3**	**1.4**	*1.3*	*1.4*	*1.4*	*1.4*	*1.4*	*1.4*	*1.4*	*1.4*	**5.3**	*5.5*	*5.6*
Total	**304.3**	**321.5**	**377.2**	**321.8**	*318.9*	*330.3*	*382.3*	*325.4*	*321.0*	*331.8*	*383.5*	*325.8*	**1,324.8**	*1,356.9*	*1,362.1*
Industrial Sector															
New England	**3.8**	**4.0**	**4.2**	**3.9**	*3.9*	*4.0*	*4.2*	*3.9*	*3.9*	*4.0*	*4.2*	*3.8*	**15.8**	*15.9*	*15.8*
Middle Atlantic	**17.6**	**17.9**	**19.4**	**18.1**	*18.6*	*18.4*	*19.8*	*18.2*	*18.8*	*18.7*	*20.1*	*18.5*	**73.1**	*75.1*	*76.0*
E. N. Central	**44.5**	**46.4**	**48.6**	**46.0**	*47.2*	*47.4*	*49.9*	*46.9*	*47.9*	*48.2*	*50.7*	*47.6*	**185.5**	*191.3*	*194.5*
W. N. Central	**23.0**	**24.2**	**26.0**	**24.6**	*24.5*	*25.4*	*27.1*	*25.3*	*25.1*	*26.1*	*27.9*	*26.0*	**97.9**	*102.2*	*105.2*
S. Atlantic	**33.4**	**35.9**	**38.2**	**36.1**	*35.7*	*36.9*	*39.1*	*36.6*	*36.2*	*37.5*	*39.8*	*37.2*	**143.7**	*148.4*	*150.8*
E. S. Central	**23.7**	**24.9**	**26.1**	**25.0**	*25.8*	*25.8*	*26.7*	*25.3*	*25.9*	*25.9*	*26.8*	*25.4*	**99.7**	*103.5*	*104.0*
W. S. Central	**44.1**	**49.7**	**54.3**	**51.5**	*48.3*	*52.9*	*57.5*	*54.1*	*50.4*	*55.1*	*59.9*	*56.4*	**199.7**	*212.9*	*221.9*
Mountain	**19.2**	**21.6**	**23.2**	**20.4**	*19.9*	*21.8*	*23.5*	*20.7*	*20.1*	*22.1*	*23.9*	*21.0*	**84.4**	*85.9*	*87.1*
Pacific contiguous	**18.2**	**20.9**	**23.1**	**20.4**	*18.9*	*20.5*	*22.2*	*19.5*	*18.2*	*19.7*	*21.4*	*18.8*	**82.5**	*81.1*	*78.1*
AK and HI	**1.1**	**1.2**	**1.2**	**1.2**	*1.1*	*1.1*	*1.2*	*1.2*	*1.1*	*1.1*	*1.2*	*1.2*	**4.6**	*4.6*	*4.6*
Total	**228.5**	**246.7**	**264.4**	**247.2**	*243.8*	*254.1*	*271.2*	*251.7*	*247.7*	*258.5*	*275.8*	*255.9*	**986.8**	*1,020.9*	*1,038.0*
Total All Sectors (a)															
New England	**28.5**	**26.6**	**31.7**	**26.5**	*29.2*	*26.0*	*31.4*	*26.7*	*29.0*	*25.9*	*31.4*	*26.7*	**113.4**	*113.3*	*112.9*
Middle Atlantic	**89.1**	**82.3**	**101.8**	**83.7**	*91.5*	*81.9*	*100.6*	*84.4*	*91.5*	*82.5*	*101.2*	*84.7*	**356.9**	*358.4*	*359.9*
E. N. Central	**136.4**	**131.7**	**154.0**	**131.3**	*140.9*	*131.4*	*152.8*	*133.5*	*140.6*	*132.8*	*154.3*	*134.8*	**553.4**	*558.5*	*562.5*
W. N. Central	**77.0**	**71.6**	**84.6**	**72.6**	*80.2*	*73.6*	*86.4*	*76.2*	*81.1*	*75.4*	*87.6*	*77.1*	**305.8**	*316.4*	*321.3*
S. Atlantic	**199.7**	**198.6**	**239.6**	**194.9**	*203.2*	*201.9*	*243.5*	*196.8*	*204.8*	*204.6*	*246.0*	*199.5*	**832.7**	*845.4*	*854.8*
E. S. Central	**77.8**	**71.8**	**87.8**	**71.9**	*79.1*	*74.2*	*89.7*	*73.1*	*80.0*	*74.8*	*90.0*	*73.5*	**309.2**	*316.0*	*318.3*
W. S. Central	**143.4**	**150.2**	**189.2**	**148.5**	*147.6*	*158.4*	*196.9*	*153.4*	*151.4*	*161.7*	*201.0*	*157.5*	**631.4**	*656.3*	*671.6*
Mountain	**64.9**	**73.3**	**87.3**	**66.0**	*66.5*	*71.9*	*87.7*	*67.4*	*67.2*	*73.0*	*89.0*	*68.2*	**291.4**	*293.5*	*297.5*
Pacific contiguous	**92.5**	**88.6**	**109.3**	**95.0**	*94.2*	*88.0*	*105.0*	*93.6*	*94.3*	*87.2*	*104.0*	*92.6*	**385.5**	*380.8*	*378.2*
AK and HI	**3.7**	**3.6**	**3.7**	**3.9**	*3.7*	*3.6*	*3.8*	*3.9*	*3.7*	*3.6*	*3.8*	*3.9*	**14.9**	*15.1*	*15.1*
Total	**913.0**	**898.2**	**1,089.1**	**894.3**	*936.0*	*911.0*	*1,097.9*	*908.8*	*943.7*	*921.4*	*1,108.4*	*918.6*	**3,794.5**	*3,853.7*	*3,892.2*

(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 March 3, 2022.

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 - March 2022

	2021				2022				2023				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2021	2022	2023
Residential Sector															
New England	**21.39**	**21.34**	**21.43**	**21.95**	*23.71*	*24.44*	*24.93*	*25.53*	*27.01*	*27.08*	*26.79*	*26.66*	**21.51**	*24.64*	*26.88*
Middle Atlantic	**15.63**	**16.52**	**16.94**	**16.85**	*16.75*	*17.74*	*18.00*	*17.45*	*16.94*	*17.59*	*17.82*	*17.40*	**16.49**	*17.49*	*17.45*
E. N. Central	**13.39**	**14.50**	**14.14**	**14.48**	*14.03*	*15.26*	*14.78*	*14.88*	*14.32*	*15.39*	*14.90*	*15.00*	**14.10**	*14.71*	*14.88*
W. N. Central	**10.89**	**12.77**	**13.29**	**11.90**	*10.88*	*12.34*	*12.32*	*10.95*	*10.48*	*12.08*	*12.62*	*11.24*	**12.21**	*11.61*	*11.60*
S. Atlantic	**11.66**	**12.34**	**12.47**	**12.48**	*12.46*	*13.10*	*13.04*	*12.73*	*12.41*	*12.87*	*12.79*	*12.57*	**12.24**	*12.84*	*12.66*
E. S. Central	**11.20**	**12.24**	**11.99**	**12.02**	*11.62*	*12.49*	*12.13*	*12.03*	*11.60*	*12.50*	*12.22*	*12.11*	**11.83**	*12.05*	*12.09*
W. S. Central	**11.85**	**11.69**	**11.80**	**12.28**	*12.90*	*12.04*	*11.85*	*12.04*	*12.68*	*11.88*	*11.73*	*11.99*	**11.89**	*12.18*	*12.04*
Mountain	**11.53**	**12.09**	**12.33**	**12.27**	*12.19*	*12.68*	*12.74*	*12.49*	*12.26*	*12.64*	*12.70*	*12.47*	**12.08**	*12.55*	*12.54*
Pacific	**16.75**	**18.15**	**19.43**	**17.55**	*16.96*	*19.03*	*20.45*	*18.39*	*17.91*	*20.19*	*21.07*	*18.59*	**18.01**	*18.73*	*19.45*
U.S. Average	**13.10**	**13.84**	**13.99**	**13.97**	*13.85*	*14.46*	*14.43*	*14.22*	*14.02*	*14.52*	*14.47*	*14.25*	**13.72**	*14.24*	*14.32*
Commercial Sector															
New England	**16.31**	**15.97**	**16.78**	**16.88**	*17.71*	*17.55*	*18.52*	*18.49*	*19.03*	*18.38*	*18.97*	*18.63*	**16.49**	*18.08*	*18.76*
Middle Atlantic	**12.51**	**13.24**	**14.31**	**13.52**	*13.55*	*14.20*	*15.04*	*14.06*	*13.78*	*14.12*	*14.85*	*13.77*	**13.43**	*14.24*	*14.15*
E. N. Central	**10.40**	**10.70**	**10.67**	**10.92**	*11.05*	*11.32*	*11.08*	*11.07*	*11.05*	*11.26*	*11.09*	*11.17*	**10.67**	*11.13*	*11.14*
W. N. Central	**9.10**	**10.19**	**10.83**	**9.61**	*9.11*	*9.59*	*9.65*	*8.61*	*8.58*	*9.39*	*9.93*	*8.93*	**9.97**	*9.25*	*9.23*
S. Atlantic	**9.29**	**9.19**	**9.53**	**9.95**	*9.98*	*9.71*	*9.82*	*10.01*	*9.86*	*9.57*	*9.76*	*9.94*	**9.49**	*9.87*	*9.78*
E. S. Central	**10.98**	**11.24**	**11.27**	**11.27**	*11.20*	*11.46*	*11.42*	*11.36*	*11.24*	*11.49*	*11.51*	*11.50*	**11.19**	*11.36*	*11.44*
W. S. Central	**10.37**	**8.90**	**8.55**	**8.65**	*10.10*	*8.86*	*8.56*	*8.79*	*10.41*	*9.02*	*8.77*	*9.01*	**9.05**	*9.03*	*9.25*
Mountain	**9.11**	**9.76**	**10.20**	**9.60**	*9.48*	*10.07*	*10.37*	*9.61*	*9.43*	*9.94*	*10.25*	*9.58*	**9.70**	*9.91*	*9.83*
Pacific	**14.52**	**16.00**	**18.08**	**16.12**	*16.00*	*17.55*	*19.44*	*17.14*	*16.84*	*18.01*	*19.49*	*17.07*	**16.28**	*17.59*	*17.89*
U.S. Average	**10.99**	**11.07**	**11.59**	**11.37**	*11.60*	*11.59*	*11.91*	*11.60*	*11.75*	*11.62*	*11.93*	*11.61*	**11.27**	*11.68*	*11.74*
Industrial Sector															
New England	**13.50**	**12.99**	**13.71**	**14.12**	*14.71*	*13.78*	*14.42*	*14.73*	*15.13*	*13.98*	*14.49*	*14.76*	**13.58**	*14.40*	*14.59*
Middle Atlantic	**6.52**	**6.60**	**7.11**	**7.30**	*6.87*	*6.71*	*7.05*	*6.90*	*6.59*	*6.54*	*6.83*	*6.74*	**6.89**	*6.89*	*6.68*
E. N. Central	**6.97**	**6.96**	**7.38**	**7.69**	*7.36*	*7.18*	*7.46*	*7.59*	*7.36*	*7.22*	*7.48*	*7.64*	**7.26**	*7.40*	*7.43*
W. N. Central	**6.97**	**7.30**	**8.00**	**7.06**	*7.02*	*7.45*	*8.09*	*7.08*	*7.10*	*7.56*	*8.20*	*7.18*	**7.35**	*7.42*	*7.53*
S. Atlantic	**6.24**	**6.31**	**7.04**	**6.89**	*6.42*	*6.40*	*6.99*	*6.70*	*6.38*	*6.36*	*6.95*	*6.69*	**6.64**	*6.64*	*6.60*
E. S. Central	**5.75**	**5.86**	**6.27**	**6.26**	*5.94*	*5.96*	*6.26*	*6.13*	*5.91*	*5.92*	*6.22*	*6.10*	**6.04**	*6.07*	*6.04*
W. S. Central	**7.22**	**5.45**	**6.00**	**6.13**	*6.91*	*5.43*	*5.77*	*5.79*	*6.61*	*5.24*	*5.54*	*5.60*	**6.17**	*5.95*	*5.72*
Mountain	**6.27**	**6.63**	**7.39**	**6.54**	*6.61*	*6.74*	*7.36*	*6.53*	*6.63*	*6.78*	*7.39*	*6.55*	**6.74**	*6.83*	*6.86*
Pacific	**9.69**	**10.72**	**12.62**	**11.06**	*10.17*	*11.02*	*12.81*	*11.27*	*10.43*	*11.35*	*13.16*	*11.58*	**11.10**	*11.37*	*11.68*
U.S. Average	**7.09**	**6.92**	**7.62**	**7.38**	*7.28*	*7.04*	*7.58*	*7.24*	*7.22*	*7.02*	*7.53*	*7.21*	**7.26**	*7.29*	*7.25*
All Sectors (a)															
New England	**18.20**	**17.67**	**18.40**	**18.55**	*19.94*	*19.62*	*20.72*	*20.84*	*21.98*	*21.03*	*21.74*	*21.40*	**18.21**	*20.29*	*21.56*
Middle Atlantic	**12.57**	**12.98**	**14.00**	**13.37**	*13.44*	*13.75*	*14.64*	*13.74*	*13.54*	*13.62*	*14.44*	*13.56*	**13.26**	*13.92*	*13.82*
E. N. Central	**10.38**	**10.62**	**10.89**	**10.96**	*10.88*	*11.05*	*11.20*	*11.10*	*10.94*	*11.08*	*11.25*	*11.18*	**10.72**	*11.06*	*11.12*
W. N. Central	**9.16**	**10.07**	**10.86**	**9.50**	*9.16*	*9.75*	*10.11*	*8.90*	*8.84*	*9.64*	*10.34*	*9.12*	**9.92**	*9.49*	*9.51*
S. Atlantic	**9.91**	**10.02**	**10.50**	**10.46**	*10.49*	*10.53*	*10.86*	*10.56*	*10.41*	*10.38*	*10.71*	*10.46*	**10.23**	*10.62*	*10.50*
E. S. Central	**9.48**	**9.72**	**10.08**	**9.79**	*9.65*	*9.91*	*10.17*	*9.79*	*9.66*	*9.92*	*10.22*	*9.86*	**9.78**	*9.89*	*9.93*
W. S. Central	**9.99**	**8.69**	**9.13**	**8.94**	*10.07*	*8.76*	*9.06*	*8.78*	*9.97*	*8.67*	*8.98*	*8.75*	**9.17**	*9.15*	*9.07*
Mountain	**9.16**	**9.69**	**10.31**	**9.55**	*9.58*	*9.98*	*10.51*	*9.64*	*9.59*	*9.94*	*10.47*	*9.64*	**9.73**	*9.97*	*9.95*
Pacific	**14.50**	**15.52**	**17.45**	**15.55**	*15.20*	*16.55*	*18.40*	*16.36*	*16.03*	*17.27*	*18.78*	*16.50*	**15.83**	*16.68*	*17.19*
U.S. Average	**10.88**	**10.94**	**11.61**	**11.21**	*11.36*	*11.35*	*11.85*	*11.34*	*11.46*	*11.36*	*11.86*	*11.35*	**11.18**	*11.49*	*11.52*

(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 March 3, 2022.

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 - March 2022

	2021				2022				2023				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2021	2022	2023
United States															
Natural Gas	**319.3**	**345.7**	**453.9**	**354.7**	*327.7*	*325.4*	*447.0*	*329.9*	*315.1*	*329.8*	*447.6*	*323.8*	**1,473.6**	*1,429.9*	*1,416.3*
Coal	**230.0**	**203.8**	**280.9**	**178.1**	*215.0*	*193.3*	*270.6*	*200.7*	*211.4*	*186.2*	*260.2*	*194.6*	**892.8**	*879.6*	*852.4*
Nuclear	**198.4**	**186.6**	**202.8**	**190.4**	*195.7*	*191.3*	*204.3*	*192.1*	*194.9*	*188.1*	*208.0*	*198.6*	**778.2**	*783.4*	*789.6*
Renewable Energy Sources:	**197.9**	**207.3**	**183.3**	**206.6**	*230.4*	*243.1*	*204.5*	*215.6*	*241.0*	*260.4*	*221.8*	*231.3*	**795.2**	*893.6*	*954.5*
Conventional Hydropower	**68.7**	**65.8**	**60.7**	**63.8**	*75.0*	*80.3*	*64.2*	*58.0*	*70.9*	*82.0*	*66.0*	*60.2*	**259.0**	*277.6*	*279.1*
Wind	**97.0**	**96.1**	**76.8**	**108.8**	*117.0*	*108.3*	*84.9*	*117.4*	*123.0*	*112.4*	*88.5*	*122.5*	**378.6**	*427.6*	*446.3*
Solar (a)	**21.3**	**34.7**	**34.6**	**23.3**	*27.9*	*44.3*	*44.5*	*29.8*	*36.4*	*56.3*	*56.4*	*38.4*	**113.9**	*146.5*	*187.5*
Biomass	**7.2**	**6.8**	**7.2**	**6.7**	*6.6*	*6.2*	*6.8*	*6.4*	*6.7*	*6.3*	*6.8*	*6.4*	**27.9**	*26.1*	*26.2*
Geothermal	**3.8**	**3.9**	**4.0**	**4.0**	*4.0*	*3.9*	*4.0*	*4.0*	*4.0*	*3.5*	*4.0*	*3.9*	**15.7**	*15.9*	*15.4*
Pumped Storage Hydropower	**-1.1**	**-1.0**	**-1.8**	**-1.2**	*-0.9*	*-1.1*	*-1.8*	*-1.1*	*-0.8*	*-1.0*	*-1.7*	*-1.0*	**-5.1**	*-4.8*	*-4.5*
Petroleum (b)	**5.2**	**3.5**	**4.7**	**4.4**	*5.6*	*3.7*	*4.4*	*3.9*	*4.8*	*3.6*	*4.4*	*4.1*	**17.8**	*17.6*	*16.9*
Other Gases	**0.7**	**0.8**	**0.9**	**0.7**	*0.9*	*0.8*	*0.9*	*0.8*	*0.9*	*0.7*	*0.9*	*0.8*	**3.2**	*3.4*	*3.3*
Other Nonrenewable Fuels (c)	**1.8**	**1.8**	**1.8**	**1.8**	*1.9*	*1.8*	*1.8*	*1.8*	*1.9*	*1.8*	*1.8*	*1.8*	**7.2**	*7.2*	*7.3*
Total Generation	**952.2**	**948.5**	**1,126.6**	**935.5**	*976.4*	*958.2*	*1,131.7*	*943.7*	*969.3*	*969.7*	*1,142.8*	*954.1*	**3,962.8**	*4,009.9*	*4,035.8*
New England (ISO-NE)															
Natural Gas	**12.2**	**11.0**	**15.7**	**12.6**	*12.3*	*12.3*	*15.5*	*13.0*	*13.7*	*12.9*	*15.4*	*14.2*	**51.5**	*53.0*	*56.2*
Coal	**0.5**	**0.0**	**0.0**	**0.0**	*0.3*	*0.1*	*0.1*	*0.0*	*0.3*	*0.4*	*0.1*	*0.0*	**0.6**	*0.5*	*0.8*
Nuclear	**7.1**	**7.1**	**7.3**	**5.6**	*7.1*	*6.2*	*7.3*	*7.3*	*7.1*	*5.7*	*7.3*	*6.3*	**27.1**	*27.8*	*26.3*
Conventional hydropower	**1.7**	**1.5**	**1.5**	**1.5**	*1.9*	*2.2*	*1.2*	*1.8*	*2.0*	*2.2*	*1.2*	*1.8*	**6.3**	*7.0*	*7.2*
Nonhydro renewables (d)	**2.8**	**2.9**	**2.6**	**2.8**	*3.0*	*3.1*	*2.7*	*2.9*	*3.1*	*3.2*	*2.8*	*2.9*	**11.2**	*11.7*	*12.0*
Other energy sources (e)	**0.4**	**0.3**	**0.3**	**0.4**	*1.4*	*0.3*	*0.3*	*0.4*	*0.7*	*0.4*	*0.3*	*0.4*	**1.5**	*2.5*	*1.8*
Total generation	**24.7**	**22.9**	**27.6**	**23.1**	*26.0*	*24.2*	*27.0*	*25.3*	*26.9*	*24.7*	*27.0*	*25.6*	**98.2**	*102.6*	*104.3*
Net energy for load (f)	**29.4**	**27.0**	**32.5**	**27.6**	*29.6*	*27.2*	*32.4*	*28.3*	*30.0*	*27.5*	*32.6*	*28.6*	**116.4**	*117.5*	*118.7*
New York (NYISO)															
Natural Gas	**12.9**	**14.1**	**19.7**	**15.2**	*15.3*	*14.1*	*21.3*	*15.4*	*14.5*	*14.2*	*20.9*	*14.5*	**61.9**	*66.2*	*64.1*
Coal	**0.0**	**0.0**	**0.0**	**0.0**	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	**0.0**	*0.0*	*0.0*
Nuclear	**9.3**	**7.7**	**7.2**	**7.0**	*6.5*	*6.9*	*6.6*	*6.9*	*6.7*	*6.5*	*7.0*	*7.0*	**31.1**	*26.8*	*27.1*
Conventional hydropower	**6.9**	**6.8**	**6.9**	**7.2**	*7.0*	*6.9*	*6.9*	*7.1*	*7.3*	*7.3*	*7.3*	*7.5*	**27.9**	*27.9*	*29.5*
Nonhydro renewables (d)	**1.8**	**1.8**	**1.6**	**1.9**	*2.0*	*2.0*	*1.7*	*2.1*	*2.2*	*2.5*	*2.1*	*2.7*	**7.1**	*7.7*	*9.4*
Other energy sources (e)	**0.6**	**0.2**	**0.4**	**0.1**	*0.4*	*0.1*	*0.2*	*0.1*	*0.4*	*0.2*	*0.3*	*0.1*	**1.3**	*0.9*	*1.0*
Total generation	**31.5**	**30.6**	**35.8**	**31.4**	*31.2*	*30.1*	*36.7*	*31.5*	*31.0*	*30.6*	*37.5*	*31.8*	**129.3**	*129.5*	*131.0*
Net energy for load (f)	**36.6**	**34.7**	**42.8**	**34.9**	*37.0*	*35.4*	*43.3*	*36.1*	*37.6*	*36.0*	*43.8*	*36.6*	**149.0**	*151.8*	*154.1*
Mid-Atlantic (PJM)															
Natural Gas	**72.7**	**70.8**	**88.9**	**78.5**	*73.6*	*70.0*	*88.2*	*74.9*	*76.6*	*72.9*	*94.5*	*74.7*	**310.9**	*306.7*	*318.8*
Coal	**50.5**	**39.9**	**55.4**	**29.5**	*47.2*	*35.5*	*50.1*	*36.6*	*44.7*	*35.6*	*48.2*	*36.0*	**175.4**	*169.4*	*164.4*
Nuclear	**68.3**	**64.6**	**70.5**	**68.3**	*68.5*	*67.9*	*72.3*	*66.8*	*67.9*	*67.2*	*71.9*	*69.4*	**271.7**	*275.5*	*276.4*
Conventional hydropower	**2.6**	**2.3**	**2.2**	**2.2**	*2.5*	*2.6*	*1.7*	*2.1*	*2.6*	*2.6*	*1.7*	*2.1*	**9.3**	*8.9*	*9.1*
Nonhydro renewables (d)	**11.0**	**10.7**	**9.2**	**11.5**	*12.0*	*12.2*	*10.2*	*12.3*	*13.3*	*13.7*	*11.8*	*13.6*	**42.4**	*46.7*	*52.5*
Other energy sources (e)	**0.9**	**0.6**	**0.4**	**0.6**	*0.8*	*0.6*	*0.4*	*0.6*	*0.8*	*0.6*	*0.4*	*0.6*	**2.5**	*2.3*	*2.4*
Total generation	**206.0**	**188.9**	**226.7**	**190.6**	*204.6*	*188.8*	*222.8*	*193.3*	*205.9*	*192.6*	*228.4*	*196.5*	**812.1**	*809.5*	*823.5*
Net energy for load (f)	**194.5**	**177.6**	**215.3**	**182.9**	*196.2*	*176.5*	*209.5*	*182.4*	*197.4*	*180.0*	*212.6*	*185.4*	**770.2**	*764.6*	*775.3*
Southeast (SERC)															
Natural Gas	**57.6**	**57.2**	**73.2**	**64.3**	*59.0*	*56.9*	*71.0*	*56.9*	*57.1*	*59.1*	*71.8*	*56.4*	**252.3**	*243.9*	*244.3*
Coal	**36.3**	**33.7**	**44.3**	**23.3**	*35.0*	*35.8*	*50.6*	*32.6*	*35.8*	*35.3*	*49.1*	*32.2*	**137.7**	*153.9*	*152.4*
Nuclear	**53.8**	**52.2**	**54.1**	**52.0**	*51.6*	*52.6*	*56.1*	*53.3*	*53.6*	*54.3*	*58.7*	*58.1*	**212.2**	*213.5*	*224.6*
Conventional hydropower	**11.6**	**10.4**	**10.9**	**11.0**	*11.3*	*8.3*	*7.3*	*8.2*	*11.0*	*8.3*	*7.4*	*8.5*	**43.9**	*35.0*	*35.2*
Nonhydro renewables (d)	**3.9**	**5.7**	**5.4**	**4.1**	*4.2*	*6.7*	*6.4*	*4.7*	*4.9*	*7.8*	*7.3*	*5.1*	**19.1**	*22.0*	*25.2*
Other energy sources (e)	**0.0**	**-0.2**	**-0.5**	**-0.2**	*0.0*	*-0.3*	*-0.5*	*-0.2*	*0.0*	*-0.2*	*-0.5*	*-0.2*	**-0.9**	*-1.0*	*-1.0*
Total generation	**163.2**	**159.0**	**187.3**	**154.6**	*161.0*	*159.9*	*190.9*	*155.5*	*162.3*	*164.5*	*193.8*	*160.1*	**664.2**	*667.3*	*680.7*
Net energy for load (f)	**163.7**	**162.3**	**186.4**	**155.7**	*166.6*	*161.6*	*192.3*	*158.5*	*167.0*	*165.0*	*195.4*	*161.6*	**668.0**	*679.0*	*689.1*
Florida (FRCC)															
Natural Gas	**34.5**	**43.8**	**52.5**	**40.9**	*35.6*	*46.3*	*51.9*	*40.4*	*36.3*	*47.2*	*52.4*	*40.6*	**171.8**	*174.2*	*176.6*
Coal	**4.7**	**5.3**	**5.6**	**2.8**	*3.2*	*2.9*	*4.0*	*2.8*	*3.2*	*2.9*	*4.0*	*2.8*	**18.3**	*12.9*	*12.8*
Nuclear	**7.8**	**7.2**	**7.2**	**5.8**	*7.6*	*7.2*	*8.0*	*7.1*	*7.0*	*6.9*	*8.0*	*7.3*	**28.1**	*29.9*	*29.2*
Conventional hydropower	**0.1**	**0.1**	**0.1**	**0.1**	*0.1*	*0.0*	*0.0*	*0.0*	*0.1*	*0.0*	*0.0*	*0.0*	**0.2**	*0.2*	*0.2*
Nonhydro renewables (d)	**2.4**	**3.1**	**2.9**	**2.6**	*3.1*	*3.6*	*3.5*	*2.9*	*3.6*	*4.1*	*3.8*	*3.2*	**11.0**	*13.1*	*14.7*
Other energy sources (e)	**0.8**	**0.7**	**0.7**	**0.6**	*0.8*	*0.8*	*0.8*	*0.7*	*0.8*	*0.8*	*0.8*	*0.7*	**2.8**	*3.1*	*3.1*
Total generation	**50.3**	**60.2**	**68.9**	**52.8**	*50.4*	*60.8*	*68.2*	*54.0*	*51.0*	*61.9*	*69.1*	*54.6*	**232.2**	*233.4*	*236.5*
Net energy for load (f)	**50.6**	**55.0**	**71.1**	**55.1**	*49.0*	*58.4*	*67.7*	*52.3*	*48.8*	*59.2*	*68.5*	*53.0*	**231.8**	*227.4*	*229.5*

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

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

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

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

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

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

Notes: EIA completed modeling and analysis for this report on March 3, 2022.

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 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 - March 2022

	2021				2022				2023				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2021	2022	2023
Midwest (MISO)															
Natural Gas	**35.4**	**41.1**	**50.2**	**43.1**	*40.7*	*37.6*	*49.9*	*34.0*	*38.4*	*43.7*	*55.3*	*38.2*	**169.7**	*162.1*	*175.6*
Coal	**69.7**	**60.1**	**83.2**	**54.7**	*65.2*	*62.7*	*81.6*	*62.7*	*67.3*	*58.0*	*74.9*	*59.8*	**267.7**	*272.3*	*259.9*
Nuclear	**23.6**	**22.6**	**25.2**	**24.4**	*23.7*	*22.4*	*24.1*	*23.5*	*22.2*	*21.0*	*24.2*	*21.4*	**95.7**	*93.8*	*88.9*
Conventional hydropower	**2.8**	**2.7**	**2.5**	**2.7**	*3.0*	*3.0*	*2.4*	*2.2*	*2.5*	*2.9*	*2.4*	*2.2*	**10.7**	*10.5*	*10.1*
Nonhydro renewables (d)	**24.1**	**23.2**	**18.5**	**27.3**	*26.0*	*25.0*	*20.1*	*29.1*	*27.5*	*26.3*	*21.5*	*30.2*	**93.2**	*100.2*	*105.5*
Other energy sources (e)	**1.8**	**1.3**	**1.7**	**1.7**	*1.7*	*1.4*	*1.5*	*1.2*	*1.6*	*1.4*	*1.5*	*1.4*	**6.4**	*5.8*	*5.8*
Total generation	**157.4**	**150.9**	**181.2**	**153.8**	*160.2*	*152.1*	*179.6*	*152.7*	*159.6*	*153.4*	*179.8*	*153.3*	**643.4**	*644.7*	*646.0*
Net energy for load (f)	**159.0**	**154.0**	**180.7**	**153.5**	*159.9*	*157.4*	*182.1*	*157.8*	*161.2*	*160.1*	*184.8*	*160.5*	**647.3**	*657.2*	*666.5*
Central (Southwest Power Pool)															
Natural Gas	**12.4**	**14.3**	**18.8**	**10.9**	*10.8*	*13.3*	*20.6*	*11.8*	*11.8*	*14.5*	*21.7*	*11.3*	**56.3**	*56.5*	*59.3*
Coal	**21.8**	**19.8**	**31.3**	**19.2**	*20.0*	*15.9*	*28.7*	*19.7*	*17.7*	*15.6*	*27.7*	*19.2*	**92.0**	*84.3*	*80.2*
Nuclear	**4.1**	**2.8**	**4.2**	**4.3**	*4.3*	*4.3*	*4.1*	*2.5*	*4.3*	*4.3*	*4.4*	*4.4*	**15.5**	*15.3*	*17.3*
Conventional hydropower	**4.2**	**3.9**	**3.6**	**3.9**	*4.3*	*4.5*	*3.9*	*3.1*	*3.9*	*4.7*	*4.3*	*3.5*	**15.5**	*15.8*	*16.4*
Nonhydro renewables (d)	**22.9**	**23.8**	**20.5**	**26.4**	*31.3*	*26.8*	*23.4*	*29.4*	*33.6*	*28.0*	*24.5*	*30.4*	**93.6**	*110.9*	*116.5*
Other energy sources (e)	**0.3**	**0.1**	**0.1**	**0.2**	*0.2*	*0.1*	*0.1*	*0.2*	*0.2*	*0.1*	*0.1*	*0.2*	**0.7**	*0.6*	*0.6*
Total generation	**65.7**	**64.7**	**78.5**	**64.7**	*71.0*	*64.9*	*80.7*	*66.7*	*71.5*	*67.3*	*82.7*	*68.9*	**273.6**	*283.3*	*290.3*
Net energy for load (f)	**65.0**	**66.7**	**77.2**	**61.4**	*66.1*	*64.6*	*78.8*	*63.5*	*66.2*	*67.1*	*80.6*	*65.1*	**270.3**	*272.9*	*279.0*
Texas (ERCOT)															
Natural Gas	**32.8**	**39.7**	**57.3**	**34.5**	*30.4*	*32.4*	*51.0*	*26.8*	*21.0*	*26.1*	*44.0*	*22.9*	**164.2**	*140.6*	*113.9*
Coal	**16.3**	**18.5**	**22.7**	**17.0**	*14.6*	*20.2*	*23.5*	*18.4*	*16.4*	*19.4*	*23.4*	*18.0*	**74.5**	*76.6*	*77.3*
Nuclear	**10.5**	**9.8**	**11.0**	**8.9**	*10.9*	*10.0*	*10.6*	*10.8*	*10.7*	*9.0*	*11.0*	*10.2*	**40.2**	*42.4*	*40.8*
Conventional hydropower	**0.2**	**0.2**	**0.1**	**0.1**	*0.2*	*0.2*	*0.1*	*0.1*	*0.2*	*0.2*	*0.1*	*0.1*	**0.6**	*0.6*	*0.6*
Nonhydro renewables (d)	**25.2**	**27.8**	**23.8**	**29.4**	*34.8*	*37.8*	*30.9*	*34.4*	*39.0*	*43.1*	*35.8*	*37.8*	**106.3**	*137.9*	*155.7*
Other energy sources (e)	**0.2**	**0.3**	**0.4**	**0.4**	*0.3*	*0.3*	*0.4*	*0.4*	*0.3*	*0.3*	*0.4*	*0.4*	**1.4**	*1.4*	*1.4*
Total generation	**85.2**	**96.2**	**115.3**	**90.4**	*91.2*	*101.0*	*116.5*	*90.9*	*87.6*	*98.2*	*114.7*	*89.3*	**387.1**	*399.5*	*389.8*
Net energy for load (f)	**85.2**	**96.2**	**115.3**	**90.4**	*91.2*	*101.0*	*116.5*	*90.9*	*87.6*	*98.2*	*114.7*	*89.3*	**387.1**	*399.5*	*389.8*
Northwest															
Natural Gas	**20.9**	**20.1**	**28.2**	**21.0**	*21.8*	*17.4*	*31.4*	*25.6*	*21.2*	*16.5*	*29.0*	*23.4*	**90.2**	*96.2*	*90.1*
Coal	**22.5**	**19.1**	**26.6**	**22.2**	*22.1*	*14.4*	*23.1*	*20.6*	*20.8*	*14.3*	*23.8*	*19.0*	**90.5**	*80.2*	*77.9*
Nuclear	**2.5**	**1.2**	**2.5**	**2.3**	*2.4*	*2.4*	*2.4*	*2.4*	*2.3*	*1.2*	*2.4*	*2.4*	**8.5**	*9.6*	*8.3*
Conventional hydropower	**33.8**	**31.0**	**25.7**	**30.4**	*39.0*	*42.1*	*30.9*	*27.7*	*34.0*	*41.7*	*30.6*	*27.9*	**121.0**	*139.7*	*134.2*
Nonhydro renewables (d)	**15.9**	**17.0**	**15.2**	**17.4**	*16.9*	*17.8*	*16.3*	*18.3*	*18.6*	*19.2*	*17.6*	*20.4*	**65.5**	*69.2*	*75.8*
Other energy sources (e)	**0.2**	**0.2**	**0.2**	**0.2**	*0.2*	*0.2*	*0.3*	*0.2*	*0.2*	*0.2*	*0.3*	*0.2*	**0.7**	*0.8*	*0.8*
Total generation	**95.8**	**88.7**	**98.5**	**93.5**	*102.5*	*94.2*	*104.4*	*94.8*	*97.1*	*93.1*	*103.6*	*93.3*	**376.4**	*395.8*	*387.1*
Net energy for load (f)	**89.3**	**84.4**	**97.1**	**89.4**	*95.7*	*85.3*	*96.3*	*88.4*	*90.9*	*85.5*	*96.7*	*88.5*	**360.3**	*365.7*	*361.6*
Southwest															
Natural Gas	**10.9**	**15.7**	**20.1**	**12.1**	*9.5*	*11.8*	*19.5*	*10.5*	*8.0*	*10.8*	*17.8*	*9.0*	**58.7**	*51.3*	*45.7*
Coal	**5.5**	**5.6**	**8.3**	**7.4**	*5.1*	*4.2*	*6.4*	*5.0*	*2.9*	*3.3*	*6.5*	*5.2*	**26.8**	*20.7*	*17.9*
Nuclear	**8.5**	**7.1**	**8.6**	**7.5**	*8.2*	*7.4*	*8.6*	*7.4*	*8.4*	*7.5*	*8.6*	*7.5*	**31.6**	*31.6*	*32.0*
Conventional hydropower	**2.5**	**3.2**	**3.2**	**2.0**	*2.4*	*3.7*	*3.7*	*2.4*	*2.8*	*3.9*	*3.8*	*2.6*	**10.9**	*12.2*	*13.1*
Nonhydro renewables (d)	**3.1**	**3.9**	**3.2**	**3.7**	*4.7*	*5.2*	*4.2*	*5.0*	*5.2*	*5.8*	*4.6*	*5.5*	**14.0**	*19.1*	*21.0*
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*	**0.1**	*0.2*	*0.1*
Total generation	**30.4**	**35.7**	**43.4**	**32.6**	*29.9*	*32.4*	*42.5*	*30.3*	*27.2*	*31.4*	*41.4*	*29.8*	**142.1**	*135.1*	*129.8*
Net energy for load (f)	**19.7**	**25.8**	**32.0**	**20.7**	*22.0*	*25.8*	*33.5*	*21.8*	*21.0*	*25.8*	*33.6*	*21.7*	**98.2**	*103.2*	*102.0*
California															
Natural Gas	**16.5**	**17.5**	**28.8**	**21.0**	*18.0*	*12.5*	*26.0*	*19.9*	*15.7*	*11.1*	*24.2*	*17.8*	**83.8**	*76.4*	*68.9*
Coal	**1.8**	**1.4**	**3.0**	**1.4**	*2.0*	*1.2*	*2.1*	*1.8*	*2.1*	*1.1*	*2.2*	*1.8*	**7.6**	*7.1*	*7.2*
Nuclear	**2.9**	**4.2**	**5.0**	**4.3**	*4.8*	*3.9*	*4.4*	*4.0*	*4.6*	*4.7*	*4.7*	*4.7*	**16.5**	*17.1*	*18.7*
Conventional hydropower	**2.0**	**3.2**	**3.7**	**2.4**	*3.1*	*6.4*	*5.8*	*3.0*	*4.2*	*7.5*	*6.7*	*3.6*	**11.2**	*18.3*	*22.0*
Nonhydro renewables (d)	**15.5**	**21.2**	**19.2**	**15.2**	*17.0*	*22.2*	*20.3*	*16.2*	*18.7*	*24.2*	*23.3*	*18.8*	**71.1**	*75.7*	*85.0*
Other energy sources (e)	**0.0**	**-0.1**	**0.0**	**-0.1**	*0.1*	*-0.1*	*-0.1*	*0.0*	*0.2*	*0.0*	*-0.1*	*0.1*	**-0.2**	*-0.1*	*0.2*
Total generation	**38.7**	**47.4**	**59.6**	**44.3**	*44.9*	*46.1*	*58.6*	*44.9*	*45.5*	*48.6*	*61.0*	*47.0*	**190.0**	*194.5*	*202.0*
Net energy for load (f)	**56.3**	**63.7**	**77.3**	**60.0**	*60.8*	*61.5*	*75.6*	*59.8*	*57.9*	*61.7*	*75.8*	*59.8*	**257.2**	*257.7*	*255.3*

(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 March 3, 2022.

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 - March 2022

	2021				2022				2023				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2021	2022	2023
Electric Power Sector															
Geothermal	**0.034**	**0.035**	**0.035**	**0.035**	*0.035*	*0.034*	*0.035*	*0.035*	*0.035*	*0.031*	*0.035*	*0.034*	**0.138**	*0.139*	*0.135*
Hydroelectric Power (a)	**0.603**	**0.577**	**0.533**	**0.551**	*0.668*	*0.715*	*0.572*	*0.516*	*0.632*	*0.730*	*0.588*	*0.536*	**2.263**	*2.472*	*2.485*
Solar (b)	**0.189**	**0.309**	**0.308**	**0.207**	*0.248*	*0.395*	*0.396*	*0.265*	*0.324*	*0.501*	*0.503*	*0.342*	**1.014**	*1.304*	*1.670*
Waste Biomass (c)	**0.060**	**0.059**	**0.059**	**0.058**	*0.058*	*0.057*	*0.058*	*0.057*	*0.058*	*0.058*	*0.057*	*0.056*	**0.236**	*0.231*	*0.229*
Wood Biomass	**0.051**	**0.046**	**0.054**	**0.048**	*0.044*	*0.040*	*0.049*	*0.043*	*0.046*	*0.041*	*0.050*	*0.044*	**0.199**	*0.176*	*0.180*
Wind	**0.863**	**0.856**	**0.684**	**0.969**	*1.042*	*0.964*	*0.756*	*1.045*	*1.096*	*1.001*	*0.788*	*1.090*	**3.372**	*3.808*	*3.975*
Subtotal	**1.800**	**1.881**	**1.673**	**1.867**	*2.095*	*2.206*	*1.866*	*1.963*	*2.190*	*2.361*	*2.020*	*2.103*	**7.222**	*8.129*	*8.674*
Industrial Sector															
Biofuel Losses and Co-products (d)	**0.169**	**0.188**	**0.185**	**0.201**	*0.186*	*0.190*	*0.194*	*0.197*	*0.184*	*0.192*	*0.193*	*0.197*	**0.744**	*0.767*	*0.766*
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)	**0.002**	**0.002**	**0.002**	**0.002**	*0.002*	*0.002*	*0.002*	*0.002*	*0.002*	*0.002*	*0.002*	*0.002*	**0.008**	*0.009*	*0.009*
Solar (b)	**0.007**	**0.011**	**0.011**	**0.007**	*0.008*	*0.011*	*0.011*	*0.008*	*0.009*	*0.012*	*0.013*	*0.009*	**0.036**	*0.039*	*0.042*
Waste Biomass (c)	**0.042**	**0.040**	**0.037**	**0.042**	*0.040*	*0.039*	*0.039*	*0.041*	*0.040*	*0.040*	*0.039*	*0.041*	**0.160**	*0.160*	*0.160*
Wood Biomass	**0.334**	**0.340**	**0.344**	**0.334**	*0.334*	*0.343*	*0.358*	*0.360*	*0.350*	*0.348*	*0.360*	*0.362*	**1.351**	*1.395*	*1.421*
Subtotal (e)	**0.559**	**0.586**	**0.586**	**0.593**	*0.576*	*0.593*	*0.611*	*0.614*	*0.591*	*0.600*	*0.613*	*0.617*	**2.324**	*2.394*	*2.422*
Commercial Sector															
Geothermal	**0.006**	**0.006**	**0.006**	**0.006**	*0.006*	*0.006*	*0.006*	*0.006*	*0.006*	*0.006*	*0.006*	*0.006*	**0.024**	*0.024*	*0.024*
Solar (b)	**0.028**	**0.042**	**0.042**	**0.028**	*0.032*	*0.047*	*0.047*	*0.033*	*0.037*	*0.053*	*0.054*	*0.037*	**0.140**	*0.159*	*0.181*
Waste Biomass (c)	**0.009**	**0.008**	**0.009**	**0.009**	*0.009*	*0.008*	*0.009*	*0.009*	*0.009*	*0.008*	*0.009*	*0.009*	**0.035**	*0.035*	*0.035*
Wood Biomass	**0.020**	**0.020**	**0.021**	**0.021**	*0.020*	*0.020*	*0.021*	*0.021*	*0.020*	*0.020*	*0.021*	*0.021*	**0.083**	*0.083*	*0.083*
Subtotal (e)	**0.070**	**0.084**	**0.086**	**0.072**	*0.075*	*0.089*	*0.091*	*0.076*	*0.080*	*0.096*	*0.098*	*0.081*	**0.312**	*0.332*	*0.355*
Residential Sector															
Geothermal	**0.010**	**0.010**	**0.010**	**0.010**	*0.010*	*0.010*	*0.010*	*0.010*	*0.010*	*0.010*	*0.010*	*0.010*	**0.040**	*0.040*	*0.040*
Solar (f)	**0.065**	**0.099**	**0.097**	**0.068**	*0.074*	*0.115*	*0.115*	*0.079*	*0.085*	*0.128*	*0.127*	*0.086*	**0.329**	*0.382*	*0.426*
Wood Biomass	**0.112**	**0.113**	**0.115**	**0.115**	*0.112*	*0.113*	*0.115*	*0.115*	*0.112*	*0.113*	*0.115*	*0.115*	**0.454**	*0.454*	*0.454*
Subtotal	**0.187**	**0.222**	**0.222**	**0.193**	*0.196*	*0.238*	*0.239*	*0.203*	*0.207*	*0.251*	*0.251*	*0.211*	**0.824**	*0.876*	*0.920*
Transportation Sector															
Biodiesel, Renewable Diesel, and Other (g)	**0.080**	**0.095**	**0.089**	**0.108**	*0.112*	*0.118*	*0.112*	*0.133*	*0.126*	*0.127*	*0.128*	*0.158*	**0.372**	*0.475*	*0.538*
Ethanol (g)	**0.243**	**0.281**	**0.285**	**0.285**	*0.259*	*0.283*	*0.286*	*0.285*	*0.258*	*0.285*	*0.287*	*0.287*	**1.094**	*1.112*	*1.118*
Subtotal	**0.322**	**0.376**	**0.374**	**0.394**	*0.371*	*0.401*	*0.398*	*0.417*	*0.384*	*0.412*	*0.415*	*0.445*	**1.466**	*1.587*	*1.656*
All Sectors Total															
Biodiesel, Renewable Diesel, and Other (g)	**0.080**	**0.095**	**0.089**	**0.108**	*0.112*	*0.118*	*0.112*	*0.133*	*0.126*	*0.127*	*0.128*	*0.158*	**0.372**	*0.475*	*0.538*
Biofuel Losses and Co-products (d)	**0.169**	**0.188**	**0.185**	**0.201**	*0.186*	*0.190*	*0.194*	*0.197*	*0.184*	*0.192*	*0.193*	*0.197*	**0.744**	*0.767*	*0.766*
Ethanol (f)	**0.253**	**0.293**	**0.298**	**0.301**	*0.271*	*0.296*	*0.298*	*0.298*	*0.270*	*0.298*	*0.300*	*0.300*	**1.146**	*1.162*	*1.168*
Geothermal	**0.050**	**0.052**	**0.052**	**0.051**	*0.052*	*0.051*	*0.052*	*0.052*	*0.052*	*0.048*	*0.052*	*0.051*	**0.205**	*0.207*	*0.203*
Hydroelectric Power (a)	**0.605**	**0.580**	**0.535**	**0.553**	*0.671*	*0.718*	*0.574*	*0.519*	*0.635*	*0.733*	*0.590*	*0.538*	**2.274**	*2.483*	*2.496*
Solar (b)(f)	**0.290**	**0.461**	**0.458**	**0.283**	*0.362*	*0.567*	*0.570*	*0.384*	*0.454*	*0.695*	*0.696*	*0.475*	**1.491**	*1.884*	*2.320*
Waste Biomass (c)	**0.110**	**0.107**	**0.105**	**0.108**	*0.107*	*0.105*	*0.106*	*0.107*	*0.107*	*0.105*	*0.105*	*0.106*	**0.430**	*0.425*	*0.424*
Wood Biomass	**0.517**	**0.519**	**0.534**	**0.514**	*0.511*	*0.517*	*0.542*	*0.538*	*0.528*	*0.523*	*0.546*	*0.541*	**2.084**	*2.108*	*2.138*
Wind	**0.863**	**0.856**	**0.684**	**0.969**	*1.042*	*0.964*	*0.756*	*1.045*	*1.096*	*1.001*	*0.788*	*1.090*	**3.372**	*3.808*	*3.975*
Total Consumption	**2.939**	**3.150**	**2.941**	**3.125**	*3.307*	*3.527*	*3.205*	*3.274*	*3.452*	*3.720*	*3.397*	*3.457*	**12.154**	*13.313*	*14.026*

(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) distrib

(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) Subtotals for the industrial and commercial sectors might not equal the sum of the components. The subtotal for the industrial sector includes ethanol consumption that is not shown separately. The subtotal for the commercial sector includes ethanol and hydroelectric consumption that are not shown separately.

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

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

- = no data available

Notes: EIA completed modeling and analysis for this report on March 3, 2022.

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

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

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 - March 2022

	2021				2022				2023				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2021	2022	2023
Renewable Energy Electric Generating Capacity (megawatts, end of period)															
Electric Power Sector (a)															
Biomass	**6,263**	**6,099**	**6,082**	**6,080**	*6,077*	*6,110*	*6,112*	*6,114*	*6,090*	*6,109*	*6,050*	*6,050*	**6,080**	*6,114*	*6,050*
Waste	**3,759**	**3,738**	**3,736**	**3,735**	*3,731*	*3,764*	*3,766*	*3,768*	*3,744*	*3,763*	*3,704*	*3,704*	**3,735**	*3,768*	*3,704*
Wood	**2,504**	**2,361**	**2,346**	**2,346**	*2,346*	*2,346*	*2,346*	*2,346*	*2,346*	*2,346*	*2,346*	*2,346*	**2,346**	*2,346*	*2,346*
Conventional Hydroelectric	**78,689**	**78,760**	**78,763**	**78,763**	*78,783*	*78,808*	*78,853*	*78,853*	*78,848*	*78,858*	*78,880*	*78,928*	**78,763**	*78,853*	*78,928*
Geothermal	**2,483**	**2,483**	**2,483**	**2,483**	*2,500*	*2,500*	*2,500*	*2,525*	*2,525*	*2,525*	*2,525*	*2,525*	**2,483**	*2,525*	*2,525*
Large-Scale Solar (b)	**50,330**	**52,320**	**55,558**	**60,487**	*65,541*	*69,932*	*72,949*	*82,147*	*85,200*	*91,163*	*93,516*	*106,414*	**60,487**	*82,147*	*106,414*
Wind	**120,947**	**124,489**	**126,442**	**131,990**	*136,426*	*138,519*	*138,744*	*141,756*	*141,906*	*143,422*	*143,422*	*146,936*	**131,990**	*141,756*	*146,936*
Other Sectors (c)															
Biomass	**6,216**	**6,219**	**6,224**	**6,224**	*6,224*	*6,224*	*6,216*	*6,216*	*6,216*	*6,228*	*6,228*	*6,228*	**6,224**	*6,216*	*6,228*
Waste	**775**	**779**	**778**	**778**	*778*	*778*	*778*	*778*	*778*	*778*	*778*	*778*	**778**	*778*	*778*
Wood	**5,441**	**5,441**	**5,446**	**5,446**	*5,446*	*5,446*	*5,438*	*5,438*	*5,438*	*5,450*	*5,450*	*5,450*	**5,446**	*5,438*	*5,450*
Conventional Hydroelectric	**291**	**291**	**289**	**289**	*291*	*291*	*291*	*291*	*291*	*291*	*291*	*291*	**289**	*291*	*291*
Large-Scale Solar (b)	**475**	**477**	**510**	**528**	*553*	*562*	*565*	*579*	*581*	*581*	*582*	*582*	**528**	*579*	*582*
Small-Scale Solar (d)	**28,846**	**30,325**	**31,515**	**32,972**	*33,769*	*34,829*	*35,940*	*37,022*	*38,048*	*39,109*	*40,203*	*41,333*	**32,972**	*37,022*	*41,333*
Residential Sector	**18,023**	**19,102**	**20,039**	**21,022**	*21,654*	*22,384*	*23,079*	*23,732*	*24,334*	*24,958*	*25,602*	*26,266*	**21,022**	*23,732*	*26,266*
Commercial Sector	**8,734**	**9,086**	**9,300**	**9,728**	*9,848*	*10,124*	*10,480*	*10,849*	*11,212*	*11,588*	*11,976*	*12,379*	**9,728**	*10,849*	*12,379*
Industrial Sector	**2,089**	**2,137**	**2,176**	**2,223**	*2,267*	*2,321*	*2,381*	*2,442*	*2,502*	*2,563*	*2,625*	*2,688*	**2,223**	*2,442*	*2,688*
Wind	**347**	**347**	**347**	**347**	*347*	*347*	*347*	*347*	*347*	*347*	*347*	*347*	**347**	*347*	*347*
Renewable Electricity Generation (billion kilowatthours)															
Electric Power Sector (a)															
Biomass	**7.2**	**6.8**	**7.2**	**6.7**	*6.6*	*6.2*	*6.8*	*6.4*	*6.7*	*6.3*	*6.8*	*6.4*	**27.9**	*26.1*	*26.2*
Waste	**4.0**	**3.9**	**3.8**	**3.8**	*3.8*	*3.8*	*3.8*	*3.8*	*3.8*	*3.8*	*3.7*	*3.7*	**15.5**	*15.2*	*15.0*
Wood	**3.2**	**2.8**	**3.4**	**2.9**	*2.7*	*2.5*	*3.0*	*2.7*	*2.8*	*2.5*	*3.1*	*2.7*	**12.4**	*10.9*	*11.2*
Conventional Hydroelectric	**68.7**	**65.8**	**60.7**	**63.8**	*75.0*	*80.3*	*64.2*	*58.0*	*70.9*	*82.0*	*66.0*	*60.2*	**259.0**	*277.6*	*279.1*
Geothermal	**3.8**	**3.9**	**4.0**	**4.0**	*4.0*	*3.9*	*4.0*	*4.0*	*4.0*	*3.5*	*4.0*	*3.9*	**15.7**	*15.9*	*15.4*
Large-Scale Solar (b)	**21.3**	**34.7**	**34.6**	**23.3**	*27.9*	*44.3*	*44.5*	*29.8*	*36.4*	*56.3*	*56.4*	*38.4*	**113.9**	*146.5*	*187.5*
Wind	**97.0**	**96.1**	**76.8**	**108.8**	*117.0*	*108.3*	*84.9*	*117.4*	*123.0*	*112.4*	*88.5*	*122.5*	**378.6**	*427.6*	*446.3*
Other Sectors (c)															
Biomass	**6.9**	**6.8**	**7.1**	**6.8**	*6.9*	*6.8*	*7.1*	*6.8*	*6.9*	*6.8*	*7.1*	*6.8*	**27.6**	*27.6*	*27.6*
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*	**2.8**	*2.8*	*2.8*
Wood	**6.2**	**6.1**	**6.4**	**6.1**	*6.2*	*6.1*	*6.4*	*6.1*	*6.2*	*6.1*	*6.4*	*6.1*	**24.8**	*24.8*	*24.8*
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*	*0.3*	*0.3*	*0.2*	**0.8**	*0.9*	*0.9*
Small-Scale Solar (d)	**9.8**	**14.7**	**14.5**	**10.0**	*11.2*	*16.9*	*17.0*	*11.6*	*12.9*	*19.2*	*19.2*	*13.1*	**49.0**	*56.7*	*64.4*
Residential Sector	**5.9**	**9.1**	**8.9**	**6.1**	*6.9*	*10.6*	*10.7*	*7.3*	*8.0*	*12.1*	*12.0*	*8.1*	**30.1**	*35.4*	*40.2*
Commercial Sector	**3.1**	**4.5**	**4.5**	**3.0**	*3.5*	*5.0*	*5.1*	*3.5*	*4.0*	*5.8*	*5.8*	*4.0*	**15.1**	*17.1*	*19.5*
Industrial Sector	**0.8**	**1.1**	**1.1**	**0.8**	*0.8*	*1.2*	*1.3*	*0.9*	*0.9*	*1.4*	*1.4*	*1.0*	**3.8**	*4.2*	*4.7*
Wind	**0.3**	**0.3**	**0.2**	**0.4**	*0.3*	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	**1.1**	*1.0*	*0.8*

(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 March 3, 2022.

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 - March 2022

	2021				2022				2023				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2021	2022	2023
Macroeconomic															
Real Gross Domestic Product															
(billion chained 2012 dollars - SAAR)	**19,056**	**19,368**	**19,479**	**19,806**	*19,884*	*20,079*	*20,218*	*20,352*	*20,475*	*20,609*	*20,749*	*20,901*	**19,427**	*20,133*	*20,684*
Real Personal Consumption Expend.															
(billion chained 2012 dollars - SAAR)	**13,283**	**13,666**	**13,732**	**13,843**	*13,913*	*14,028*	*14,089*	*14,172*	*14,270*	*14,381*	*14,493*	*14,611*	**13,631**	*14,051*	*14,439*
Real Private Fixed Investment															
(billion chained 2012 dollars - SAAR)	**3,564**	**3,593**	**3,585**	**3,596**	*3,667*	*3,702*	*3,726*	*3,738*	*3,748*	*3,765*	*3,791*	*3,828*	**3,585**	*3,708*	*3,783*
Business Inventory Change															
(billion chained 2012 dollars - SAAR)	**-94**	**-174**	**-60**	**225**	*119*	*144*	*160*	*167*	*157*	*147*	*144*	*143*	**-26**	*148*	*148*
Real Government Expenditures															
(billion chained 2012 dollars - SAAR)	**3,391**	**3,374**	**3,382**	**3,357**	*3,364*	*3,377*	*3,391*	*3,401*	*3,413*	*3,424*	*3,432*	*3,442*	**3,376**	*3,384*	*3,428*
Real Exports of Goods & Services															
(billion chained 2012 dollars - SAAR)	**2,262**	**2,304**	**2,273**	**2,401**	*2,453*	*2,505*	*2,554*	*2,595*	*2,633*	*2,668*	*2,699*	*2,730*	**2,310**	*2,527*	*2,683*
Real Imports of Goods & Services															
(billion chained 2012 dollars - SAAR)	**3,488**	**3,549**	**3,590**	**3,739**	*3,793*	*3,834*	*3,855*	*3,868*	*3,895*	*3,927*	*3,964*	*4,010*	**3,591**	*3,838*	*3,949*
Real Disposable Personal Income															
(billion chained 2012 dollars - SAAR)	**17,219**	**15,807**	**15,633**	**15,401**	*15,236*	*15,370*	*15,513*	*15,617*	*15,761*	*15,875*	*15,991*	*16,112*	**16,015**	*15,434*	*15,935*
Non-Farm Employment															
(millions)	**143.7**	**145.2**	**146.9**	**148.6**	*150.0*	*151.1*	*152.0*	*152.7*	*153.2*	*153.7*	*154.0*	*154.3*	**146.1**	*151.5*	*153.8*
Civilian Unemployment Rate															
(percent)	**6.2**	**5.9**	**5.1**	**4.2**	*3.9*	*3.6*	*3.5*	*3.5*	*3.5*	*3.5*	*3.6*	*3.7*	**5.4**	*3.6*	*3.6*
Housing Starts															
(millions - SAAR)	**1.60**	**1.59**	**1.56**	**1.64**	*1.59*	*1.50*	*1.44*	*1.38*	*1.34*	*1.32*	*1.32*	*1.33*	**1.60**	*1.48*	*1.33*
Industrial Production Indices (Index, 2017=100)															
Total Industrial Production	**98.3**	**99.9**	**100.7**	**101.7**	*103.3*	*105.0*	*105.6*	*106.2*	*106.8*	*107.4*	*108.0*	*108.5*	**100.2**	*105.0*	*107.7*
Manufacturing	**97.3**	**98.7**	**99.7**	**100.9**	*101.9*	*103.6*	*104.5*	*105.5*	*106.4*	*107.3*	*108.0*	*108.8*	**99.2**	*103.9*	*107.6*
Food	**101.2**	**100.5**	**99.4**	**101.1**	*102.4*	*102.7*	*102.7*	*102.9*	*103.3*	*103.7*	*104.0*	*104.5*	**100.6**	*102.7*	*103.9*
Paper	**93.9**	**95.0**	**95.1**	**95.7**	*96.1*	*96.0*	*96.2*	*96.4*	*96.8*	*97.2*	*97.4*	*97.5*	**94.9**	*96.2*	*97.2*
Petroleum and Coal Products	**90.5**	**95.9**	**94.7**	**95.8**	*96.7*	*97.2*	*97.6*	*98.1*	*98.4*	*98.7*	*98.7*	*98.8*	**94.2**	*97.4*	*98.7*
Chemicals	**91.8**	**99.3**	**99.6**	**101.4**	*102.5*	*103.0*	*103.5*	*104.1*	*104.7*	*105.3*	*105.7*	*106.3*	**98.0**	*103.3*	*105.5*
Nonmetallic Mineral Products	**97.4**	**95.4**	**96.5**	**98.2**	*100.3*	*100.2*	*100.2*	*100.1*	*100.2*	*100.7*	*101.3*	*102.2*	**96.9**	*100.2*	*101.1*
Primary Metals	**92.4**	**96.7**	**98.0**	**98.9**	*99.3*	*98.4*	*98.7*	*99.2*	*100.1*	*101.4*	*101.9*	*102.5*	**96.5**	*98.9*	*101.5*
Coal-weighted Manufacturing (a)	**92.3**	**96.4**	**96.3**	**97.5**	*98.6*	*98.4*	*98.7*	*99.1*	*99.6*	*100.3*	*100.6*	*101.1*	**95.6**	*98.7*	*100.4*
Distillate-weighted Manufacturing (a)	**101.2**	**102.5**	**102.7**	**104.2**	*105.8*	*106.2*	*106.6*	*106.9*	*107.2*	*107.6*	*108.0*	*108.5*	**102.6**	*106.4*	*107.8*
Electricity-weighted Manufacturing (a)	**94.2**	**97.6**	**97.7**	**99.0**	*100.3*	*100.7*	*101.3*	*102.0*	*102.6*	*103.4*	*103.8*	*104.3*	**97.1**	*101.1*	*103.5*
Natural Gas-weighted Manufacturing (a)	**90.7**	**96.8**	**95.8**	**97.2**	*98.5*	*98.7*	*99.3*	*99.9*	*100.5*	*101.2*	*101.4*	*101.8*	**95.1**	*99.1*	*101.2*
Price Indexes															
Consumer Price Index (all urban consumers)															
(index, 1982-1984=1.00)	**2.64**	**2.69**	**2.73**	**2.78**	*2.82*	*2.83*	*2.85*	*2.85*	*2.87*	*2.88*	*2.90*	*2.91*	**2.71**	*2.84*	*2.89*
Producer Price Index: All Commodities															
(index, 1982=1.00)	**2.10**	**2.24**	**2.33**	**2.42**	*2.40*	*2.41*	*2.41*	*2.40*	*2.40*	*2.40*	*2.41*	*2.41*	**2.27**	*2.40*	*2.41*
Producer Price Index: Petroleum															
(index, 1982=1.00)	**2.00**	**2.36**	**2.55**	**2.72**	*2.81*	*3.25*	*3.06*	*2.76*	*2.68*	*2.66*	*2.59*	*2.46*	**2.41**	*2.97*	*2.60*
GDP Implicit Price Deflator															
(index, 2012=100)	**115.8**	**117.5**	**119.3**	**121.3**	*122.5*	*123.7*	*124.6*	*125.3*	*125.9*	*126.6*	*127.4*	*128.1*	**118.5**	*124.0*	*127.0*
Miscellaneous															
Vehicle Miles Traveled (b)															
(million miles/day)	**7,928**	**9,139**	**9,368**	**8,933**	*8,386*	*9,373*	*9,531*	*9,068*	*8,526*	*9,507*	*9,684*	*9,258*	**8,846**	*9,092*	*9,247*
Air Travel Capacity															
(Available ton-miles/day, thousands)	**553**	**596**	**659**	**674**	*648*	*719*	*725*	*693*	*688*	*702*	*730*	*710*	**621**	*697*	*707*
Aircraft Utilization															
(Revenue ton-miles/day, thousands)	**258**	**340**	**372**	**379**	*375*	*412*	*415*	*389*	*378*	*421*	*423*	*398*	**338**	*398*	*405*
Airline Ticket Price Index															
(index, 1982-1984=100)	**198.4**	**243.3**	**218.5**	**210.0**	*212.6*	*232.5*	*227.2*	*239.9*	*209.1*	*238.9*	*242.2*	*254.0*	**217.5**	*228.0*	*236.1*
Raw Steel Production															
(million short tons per day)	**0.246**	**0.258**	**0.267**	**0.260**	*0.258*	*0.259*	*0.269*	*0.277*	*0.289*	*0.290*	*0.300*	*0.308*	**0.258**	*0.266*	*0.297*
Carbon Dioxide (CO2) Emissions (million metric tons)															
Petroleum	**517**	**559**	**569**	**575**	*563*	*573*	*583*	*582*	*562*	*577*	*588*	*588*	**2,221**	*2,301*	*2,315*
Natural Gas	**485**	**353**	**373**	**419**	*503*	*354*	*378*	*433*	*489*	*358*	*381*	*433*	**1,629**	*1,668*	*1,662*
Coal	**255**	**228**	**306**	**233**	*238*	*217*	*296*	*236*	*236*	*210*	*287*	*231*	**1,022**	*987*	*963*
Total Energy (c)	**1,260**	**1,143**	**1,251**	**1,230**	*1,307*	*1,146*	*1,260*	*1,255*	*1,290*	*1,148*	*1,258*	*1,255*	**4,883**	*4,968*	*4,951*

(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 March 3, 2022.

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 S&P Global model of the U.S. Economy.

Table 9b. U.S. Regional Macroeconomic Data

U.S. Energy Information Administration | Short-Term Energy Outlook - March 2022

	2021				2022				2023				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2021	2022	2023
Real Gross State Product (Billion $2012)															
New England	**976**	**993**	**999**	**1,016**	*1,019*	*1,031*	*1,038*	*1,044*	*1,050*	*1,056*	*1,063*	*1,070*	**996**	*1,033*	*1,059*
Middle Atlantic	**2,740**	**2,788**	**2,806**	**2,845**	*2,864*	*2,886*	*2,909*	*2,929*	*2,946*	*2,964*	*2,984*	*3,005*	**2,795**	*2,897*	*2,975*
E. N. Central	**2,482**	**2,521**	**2,526**	**2,569**	*2,577*	*2,602*	*2,618*	*2,636*	*2,649*	*2,665*	*2,681*	*2,698*	**2,525**	*2,608*	*2,673*
W. N. Central	**1,201**	**1,220**	**1,222**	**1,240**	*1,243*	*1,254*	*1,262*	*1,269*	*1,275*	*1,283*	*1,291*	*1,300*	**1,221**	*1,257*	*1,287*
S. Atlantic	**3,381**	**3,433**	**3,458**	**3,516**	*3,526*	*3,562*	*3,584*	*3,606*	*3,626*	*3,648*	*3,672*	*3,698*	**3,447**	*3,570*	*3,661*
E. S. Central	**834**	**845**	**848**	**861**	*864*	*871*	*876*	*881*	*885*	*890*	*895*	*900*	**847**	*873*	*893*
W. S. Central	**2,332**	**2,365**	**2,380**	**2,429**	*2,442*	*2,470*	*2,492*	*2,511*	*2,533*	*2,554*	*2,574*	*2,595*	**2,376**	*2,479*	*2,564*
Mountain	**1,264**	**1,284**	**1,291**	**1,313**	*1,319*	*1,333*	*1,342*	*1,353*	*1,363*	*1,375*	*1,387*	*1,400*	**1,288**	*1,337*	*1,381*
Pacific	**3,675**	**3,746**	**3,774**	**3,840**	*3,853*	*3,891*	*3,915*	*3,942*	*3,965*	*3,991*	*4,018*	*4,047*	**3,759**	*3,900*	*4,005*
Industrial Output, Manufacturing (Index, Year 2017=100)															
New England	**95.1**	**96.4**	**97.8**	**93.5**	*94.3*	*95.8*	*96.6*	*97.5*	*98.3*	*99.1*	*99.7*	*100.4*	**95.7**	*96.1*	*99.4*
Middle Atlantic	**93.0**	**94.3**	**95.7**	**91.9**	*92.9*	*94.5*	*95.3*	*96.1*	*96.9*	*97.6*	*98.1*	*98.7*	**93.8**	*94.7*	*97.8*
E. N. Central	**95.0**	**95.8**	**96.8**	**100.2**	*101.3*	*103.2*	*104.3*	*105.6*	*106.5*	*107.6*	*108.3*	*109.1*	**97.0**	*103.6*	*107.9*
W. N. Central	**98.0**	**99.3**	**100.9**	**101.1**	*102.2*	*103.6*	*104.6*	*105.4*	*106.2*	*107.0*	*107.7*	*108.5*	**99.8**	*103.9*	*107.3*
S. Atlantic	**98.9**	**100.3**	**101.2**	**106.1**	*107.1*	*108.8*	*109.8*	*110.7*	*111.5*	*112.4*	*113.1*	*113.9*	**101.6**	*109.1*	*112.7*
E. S. Central	**97.8**	**98.9**	**99.9**	**106.2**	*106.8*	*108.4*	*109.1*	*110.1*	*110.7*	*111.6*	*112.3*	*113.1*	**100.7**	*108.6*	*111.9*
W. S. Central	**98.8**	**100.4**	**101.3**	**95.6**	*96.8*	*98.6*	*99.5*	*100.4*	*101.2*	*102.2*	*103.0*	*103.8*	**99.0**	*98.8*	*102.6*
Mountain	**105.2**	**107.6**	**108.0**	**114.9**	*115.9*	*117.6*	*118.6*	*119.7*	*120.6*	*121.7*	*122.6*	*123.5*	**108.9**	*118.0*	*122.1*
Pacific	**93.5**	**94.7**	**95.2**	**96.5**	*97.7*	*99.6*	*100.7*	*101.9*	*103.1*	*103.9*	*104.7*	*105.4*	**95.0**	*100.0*	*104.3*
Real Personal Income (Billion $2012)															
New England	**997**	**947**	**937**	**927**	*922*	*933*	*941*	*947*	*955*	*961*	*967*	*974*	**952**	*936*	*964*
Middle Atlantic	**2,624**	**2,460**	**2,444**	**2,409**	*2,402*	*2,417*	*2,440*	*2,455*	*2,475*	*2,489*	*2,505*	*2,523*	**2,484**	*2,428*	*2,498*
E. N. Central	**2,744**	**2,524**	**2,502**	**2,461**	*2,441*	*2,468*	*2,490*	*2,507*	*2,528*	*2,545*	*2,563*	*2,580*	**2,558**	*2,476*	*2,554*
W. N. Central	**1,278**	**1,196**	**1,182**	**1,165**	*1,155*	*1,166*	*1,177*	*1,185*	*1,196*	*1,205*	*1,215*	*1,224*	**1,205**	*1,171*	*1,210*
S. Atlantic	**3,719**	**3,441**	**3,420**	**3,397**	*3,374*	*3,411*	*3,445*	*3,470*	*3,503*	*3,531*	*3,561*	*3,590*	**3,494**	*3,425*	*3,546*
E. S. Central	**1,023**	**925**	**920**	**910**	*902*	*911*	*918*	*924*	*932*	*938*	*944*	*950*	**945**	*914*	*941*
W. S. Central	**2,246**	**2,086**	**2,076**	**2,069**	*2,061*	*2,085*	*2,108*	*2,124*	*2,146*	*2,165*	*2,183*	*2,203*	**2,119**	*2,095*	*2,174*
Mountain	**1,377**	**1,277**	**1,272**	**1,260**	*1,252*	*1,266*	*1,278*	*1,288*	*1,300*	*1,313*	*1,325*	*1,338*	**1,296**	*1,271*	*1,319*
Pacific	**3,256**	**3,076**	**3,055**	**3,020**	*2,990*	*3,022*	*3,047*	*3,067*	*3,091*	*3,114*	*3,137*	*3,162*	**3,102**	*3,032*	*3,126*
Households (Thousands)															
New England	**6,054**	**6,061**	**6,058**	**6,069**	*6,083*	*6,098*	*6,113*	*6,126*	*6,137*	*6,149*	*6,159*	*6,169*	**6,069**	*6,126*	*6,169*
Middle Atlantic	**16,405**	**16,405**	**16,395**	**16,419**	*16,451*	*16,492*	*16,526*	*16,562*	*16,596*	*16,626*	*16,653*	*16,678*	**16,419**	*16,562*	*16,678*
E. N. Central	**19,076**	**19,090**	**19,092**	**19,135**	*19,182*	*19,226*	*19,262*	*19,298*	*19,334*	*19,367*	*19,399*	*19,430*	**19,135**	*19,298*	*19,430*
W. N. Central	**8,717**	**8,729**	**8,734**	**8,758**	*8,784*	*8,815*	*8,843*	*8,865*	*8,887*	*8,910*	*8,930*	*8,951*	**8,758**	*8,865*	*8,951*
S. Atlantic	**26,284**	**26,358**	**26,405**	**26,516**	*26,634*	*26,765*	*26,880*	*26,987*	*27,092*	*27,191*	*27,286*	*27,383*	**26,516**	*26,987*	*27,383*
E. S. Central	**7,816**	**7,830**	**7,839**	**7,864**	*7,891*	*7,921*	*7,948*	*7,970*	*7,992*	*8,012*	*8,032*	*8,052*	**7,864**	*7,970*	*8,052*
W. S. Central	**15,332**	**15,379**	**15,415**	**15,484**	*15,558*	*15,637*	*15,708*	*15,770*	*15,831*	*15,890*	*15,948*	*16,005*	**15,484**	*15,770*	*16,005*
Mountain	**9,612**	**9,653**	**9,687**	**9,742**	*9,798*	*9,854*	*9,907*	*9,953*	*9,998*	*10,044*	*10,086*	*10,130*	**9,742**	*9,953*	*10,130*
Pacific	**19,002**	**18,992**	**18,976**	**19,004**	*19,047*	*19,095*	*19,137*	*19,167*	*19,197*	*19,226*	*19,255*	*19,287*	**19,004**	*19,167*	*19,287*
Total Non-farm Employment (Millions)															
New England	**7.0**	**7.1**	**7.2**	**7.3**	*7.3*	*7.4*	*7.4*	*7.5*	*7.5*	*7.5*	*7.5*	*7.5*	**7.1**	*7.4*	*7.5*
Middle Atlantic	**18.4**	**18.5**	**18.7**	**18.9**	*19.1*	*19.3*	*19.5*	*19.5*	*19.6*	*19.7*	*19.7*	*19.8*	**18.6**	*19.4*	*19.7*
E. N. Central	**21.0**	**21.1**	**21.3**	**21.6**	*21.8*	*21.9*	*22.0*	*22.1*	*22.2*	*22.2*	*22.3*	*22.3*	**21.3**	*22.0*	*22.2*
W. N. Central	**10.3**	**10.4**	**10.5**	**10.6**	*10.7*	*10.7*	*10.8*	*10.8*	*10.8*	*10.9*	*10.9*	*10.9*	**10.5**	*10.8*	*10.9*
S. Atlantic	**28.0**	**28.2**	**28.6**	**28.9**	*29.2*	*29.4*	*29.6*	*29.7*	*29.8*	*29.9*	*30.0*	*30.1*	**28.4**	*29.5*	*30.0*
E. S. Central	**8.1**	**8.1**	**8.2**	**8.2**	*8.3*	*8.3*	*8.4*	*8.4*	*8.4*	*8.5*	*8.5*	*8.5*	**8.1**	*8.4*	*8.5*
W. S. Central	**17.2**	**17.4**	**17.6**	**17.8**	*18.0*	*18.1*	*18.2*	*18.3*	*18.4*	*18.4*	*18.5*	*18.5*	**17.5**	*18.1*	*18.5*
Mountain	**10.8**	**10.9**	**11.1**	**11.2**	*11.3*	*11.4*	*11.4*	*11.5*	*11.5*	*11.6*	*11.6*	*11.7*	**11.0**	*11.4*	*11.6*
Pacific	**22.0**	**22.5**	**22.8**	**23.1**	*23.4*	*23.6*	*23.7*	*23.9*	*24.0*	*24.0*	*24.1*	*24.1*	**22.6**	*23.7*	*24.0*

- = no data available

Notes: EIA completed modeling and analysis for this report on March 3, 2022.

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 S&P Global model of the U.S. Economy.

Table 9c. U.S. Regional Weather Data

U.S. Energy Information Administration | Short-Term Energy Outlook - March 2022

	2021				2022				2023				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2021	2022	2023
Heating Degree Days															
New England	**3,017**	**783**	**86**	**1,924**	*3,203*	*860*	*132*	*2,138*	*3,088*	*848*	*132*	*2,138*	**5,811**	*6,333*	*6,207*
Middle Atlantic	**2,819**	**667**	**56**	**1,724**	*2,983*	*678*	*83*	*1,964*	*2,835*	*668*	*83*	*1,964*	**5,267**	*5,707*	*5,549*
E. N. Central	**3,086**	**709**	**69**	**1,888**	*3,281*	*702*	*122*	*2,251*	*3,071*	*705*	*122*	*2,251*	**5,752**	*6,356*	*6,149*
W. N. Central	**3,228**	**718**	**88**	**2,028**	*3,419*	*685*	*163*	*2,473*	*3,238*	*709*	*163*	*2,473*	**6,063**	*6,739*	*6,583*
South Atlantic	**1,345**	**211**	**10**	**798**	*1,387*	*189*	*13*	*949*	*1,373*	*189*	*13*	*947*	**2,364**	*2,538*	*2,522*
E. S. Central	**1,789**	**312**	**19**	**1,032**	*1,841*	*240*	*20*	*1,307*	*1,789*	*247*	*20*	*1,307*	**3,152**	*3,407*	*3,363*
W. S. Central	**1,296**	**121**	**1**	**495**	*1,256*	*72*	*4*	*825*	*1,204*	*90*	*4*	*825*	**1,913**	*2,158*	*2,124*
Mountain	**2,308**	**663**	**110**	**1,636**	*2,288*	*686*	*144*	*1,862*	*2,259*	*708*	*144*	*1,861*	**4,716**	*4,980*	*4,971*
Pacific	**1,555**	**484**	**78**	**1,206**	*1,439*	*628*	*92*	*1,205*	*1,542*	*613*	*92*	*1,206*	**3,322**	*3,364*	*3,454*
U.S. Average	**2,106**	**472**	**51**	**1,306**	*2,160*	*483*	*74*	*1,531*	*2,094*	*484*	*74*	*1,529*	**3,935**	*4,247*	*4,182*
Heating Degree Days, Prior 10-year Average															
New England	**3,133**	**855**	**107**	**2,100**	*3,101*	*853*	*108*	*2,104*	*3,158*	*866*	*108*	*2,110*	**6,195**	*6,165*	*6,242*
Middle Atlantic	**2,912**	**677**	**71**	**1,911**	*2,887*	*684*	*71*	*1,908*	*2,949*	*693*	*71*	*1,911*	**5,572**	*5,550*	*5,624*
E. N. Central	**3,157**	**731**	**104**	**2,170**	*3,133*	*728*	*97*	*2,162*	*3,216*	*736*	*96*	*2,171*	**6,161**	*6,119*	*6,219*
W. N. Central	**3,248**	**728**	**133**	**2,368**	*3,219*	*726*	*125*	*2,357*	*3,311*	*744*	*126*	*2,369*	**6,477**	*6,427*	*6,549*
South Atlantic	**1,395**	**181**	**11**	**916**	*1,380*	*187*	*11*	*905*	*1,405*	*190*	*10*	*901*	**2,503**	*2,483*	*2,507*
E. S. Central	**1,771**	**231**	**16**	**1,249**	*1,763*	*243*	*15*	*1,227*	*1,811*	*249*	*14*	*1,226*	**3,267**	*3,248*	*3,301*
W. S. Central	**1,140**	**86**	**3**	**786**	*1,145*	*93*	*3*	*754*	*1,180*	*97*	*3*	*765*	**2,015**	*1,995*	*2,045*
Mountain	**2,188**	**704**	**135**	**1,850**	*2,181*	*685*	*132*	*1,817*	*2,200*	*696*	*135*	*1,826*	**4,877**	*4,816*	*4,856*
Pacific	**1,461**	**553**	**81**	**1,147**	*1,454*	*523*	*79*	*1,136*	*1,443*	*525*	*80*	*1,140*	**3,242**	*3,192*	*3,187*
U.S. Average	**2,112**	**483**	**65**	**1,487**	*2,095*	*479*	*62*	*1,473*	*2,134*	*485*	*62*	*1,475*	**4,147**	*4,109*	*4,157*
Cooling Degree Days															
New England	**0**	**141**	**452**	**6**	*0*	*82*	*409*	*2*	*0*	*83*	*409*	*2*	**599**	*493*	*494*
Middle Atlantic	**0**	**182**	**630**	**24**	*0*	*152*	*540*	*5*	*0*	*153*	*540*	*5*	**835**	*697*	*698*
E. N. Central	**2**	**249**	**627**	**30**	*0*	*223*	*540*	*6*	*0*	*221*	*540*	*6*	**908**	*770*	*768*
W. N. Central	**8**	**311**	**745**	**23**	*3*	*272*	*666*	*9*	*3*	*265*	*666*	*9*	**1,088**	*951*	*943*
South Atlantic	**152**	**617**	**1,171**	**284**	*125*	*654*	*1,167*	*238*	*126*	*652*	*1,167*	*239*	**2,224**	*2,184*	*2,184*
E. S. Central	**40**	**435**	**1,018**	**127**	*23*	*520*	*1,051*	*65*	*28*	*511*	*1,051*	*65*	**1,620**	*1,661*	*1,656*
W. S. Central	**90**	**769**	**1,473**	**315**	*90*	*917*	*1,523*	*196*	*83*	*861*	*1,524*	*196*	**2,646**	*2,725*	*2,664*
Mountain	**10**	**528**	**961**	**67**	*14*	*426*	*929*	*77*	*17*	*425*	*930*	*77*	**1,566**	*1,447*	*1,448*
Pacific	**24**	**250**	**697**	**58**	*28*	*162*	*567*	*61*	*27*	*163*	*567*	*60*	**1,029**	*818*	*817*
U.S. Average	**49**	**410**	**901**	**127**	*44*	*408*	*856*	*94*	*43*	*400*	*857*	*95*	**1,488**	*1,401*	*1,395*
Cooling Degree Days, Prior 10-year Average															
New England	**0**	**80**	**474**	**1**	*0*	*87*	*471*	*2*	*0*	*87*	*464*	*2*	**555**	*560*	*553*
Middle Atlantic	**0**	**163**	**610**	**6**	*0*	*162*	*608*	*8*	*0*	*159*	*600*	*8*	**779**	*779*	*767*
E. N. Central	**3**	**234**	**572**	**7**	*3*	*237*	*571*	*10*	*1*	*230*	*559*	*10*	**816**	*821*	*801*
W. N. Central	**7**	**294**	**686**	**10**	*7*	*299*	*681*	*11*	*4*	*288*	*667*	*12*	**997**	*998*	*971*
South Atlantic	**143**	**679**	**1,194**	**260**	*147*	*668*	*1,189*	*269*	*141*	*670*	*1,189*	*274*	**2,276**	*2,272*	*2,274*
E. S. Central	**42**	**532**	**1,065**	**74**	*44*	*518*	*1,057*	*84*	*35*	*513*	*1,058*	*86*	**1,713**	*1,703*	*1,693*
W. S. Central	**114**	**881**	**1,568**	**210**	*113*	*853*	*1,536*	*224*	*105*	*843*	*1,534*	*225*	**2,772**	*2,726*	*2,707*
Mountain	**24**	**441**	**949**	**85**	*23*	*458*	*945*	*84*	*23*	*451*	*942*	*83*	**1,499**	*1,511*	*1,499*
Pacific	**31**	**193**	**648**	**86**	*31*	*208*	*664*	*85*	*31*	*208*	*655*	*84*	**959**	*988*	*978*
U.S. Average	**52**	**413**	**892**	**104**	*53*	*412*	*889*	*109*	*50*	*410*	*884*	*110*	**1,461**	*1,463*	*1,454*

- = no data available

Notes: EIA completed modeling and analysis for this report on March 3, 2022.

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

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) 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).