Short-Term Energy Outlook (STEO)

Forecast highlights

Global liquid fuels

- The September Short-Term Energy Outlook (STEO) remains subject to heightened levels of uncertainty because mitigation and reopening efforts related to the 2019 novel coronavirus disease (COVID-19) continue to evolve. Reduced economic activity related to the COVID-19 pandemic has caused changes in energy demand and supply patterns in 2020. This STEO assumes U.S. gross domestic product declined by 4.6% in the first half of 2020 from the same period a year ago and will rise beginning in the third quarter of 2020, with year-over-year growth of 3.1% in 2021. The U.S. macroeconomic assumptions in this outlook are based on forecasts by IHS Markit.

- Brent crude oil spot prices averaged $45 per barrel (b) in August, up $2/b from the average in July. Brent prices in August were up $26/b from the multiyear low monthly average price in April. The increase in oil prices has occurred as EIA estimates global oil markets have shifted from global liquid fuels inventories building at a rate of 7.2 million barrels per day (b/d) in the second quarter to drawing at a rate of 3.7 million b/d in the third quarter. EIA expects inventory draws in the fourth quarter of 3.1 million b/d before markets become relatively balanced in 2021, with forecast draws of 0.3 million b/d. Despite expected inventory draws in the coming months, EIA expects high inventory levels and surplus crude oil production capacity will limit upward pressure on oil prices. EIA forecasts monthly Brent spot prices will average $44/b during the fourth quarter of 2020 and rise to an average of $49/b in 2021 as oil markets become more balanced.

- EIA estimates that global consumption of petroleum and liquid fuels averaged 94.3 million b/d in August. Liquid fuels consumption was down 8.2 million b/d from August 2019, but it was up from an average of 85.1 million b/d during the second quarter of 2020 and 93.3 million b/d in July. EIA forecasts that consumption of petroleum and liquid fuels globally will average 93.1 million b/d for all of 2020, down 8.3 million b/d from 2019, before increasing by 6.5 million b/d in 2021. EIA’s forecast for growth in 2021 is 0.5 million b/d less than in the August STEO. The downward revision is largely a result of lower expected consumption growth in China, which EIA now forecasts to grow by 1.0 million b/d in 2021.

- EIA estimates that global liquid fuels production averaged 91.5 million b/d in August, down 9.7 million b/d year over year. The decline largely reflects voluntary production
cuts by the Organization of the Petroleum Exporting Countries (OPEC) and partner countries (OPEC+), along with reductions in drilling activity and production curtailments in the United States because of low oil prices. EIA expects global liquid fuels production will rise to an annual average of 99.3 million b/d in 2021.

- Crude oil production in the United States has risen in recent months after declining from 12.7 million b/d in the first quarter of 2020 to a recent low of 10.0 million b/d in May. EIA estimates U.S. crude oil production increased to 10.8 million b/d in August. Production has risen as tight oil operators have brought wells back online in response to rising prices after curtailing production amid low oil prices in the second quarter. The increase in total U.S. production occurred despite shut-in production in the Gulf of Mexico as a result of Hurricane Laura. EIA expects production to rise to 11.2 million b/d in September as production in the Gulf of Mexico returns. However, after September, EIA expects U.S. crude oil production to decline slightly, averaging just under 11.0 million b/d during the first half of 2021 because EIA expects that new drilling activity will not generate enough production to offset declines from existing wells. EIA expects drilling activity to rise later in 2021, contributing to U.S. crude oil production reaching an average of 11.3 million b/d in the fourth quarter of 2021. On an annual average basis, EIA expects U.S. crude oil production to fall from an average of 12.2 million b/d in 2019 to 11.4 million b/d in 2020 and 11.1 million b/d in 2021.

- U.S. regular gasoline retail prices averaged $2.18 per gallon (gal) in August, largely unchanged from the average in July but 44 cents/gal lower than at the same time last year. EIA expects that gasoline prices will decrease through the rest of the year, falling to an average of $2.03/gal in December. Forecast U.S. regular gasoline retail prices average $2.16/gal in 2020 and $2.28/gal in 2021.

**Natural Gas**

- In August, the Henry Hub natural gas spot price averaged $2.30 per million British thermal units (MMBtu), up from an average of $1.77/MMBtu in July. Higher natural gas spot prices reflect rising demand for natural gas from the U.S. electric power sector as a result of warmer-than-normal temperatures during August and rising demand for U.S. liquefied natural gas (LNG) exports amid declining U.S. natural gas production. EIA expects that rising domestic demand and demand for LNG exports heading into winter, combined with reduced production, will cause Henry Hub spot prices to rise to a monthly average of $3.40/MMBtu in January 2021. EIA expects that monthly average spot prices will remain higher than $3.00/MMBtu for all of 2021, averaging $3.19/MMBtu for the year, up from a forecast average of $2.16/MMBtu in 2020.

- EIA estimates that total U.S. working natural gas in storage ended August at 3.5 trillion cubic feet (Tcf), 13% more than the five-year (2015–19) average. In the forecast, EIA expects inventories to reach almost 4.0 Tcf on October 31, which would be 6% more than the five-year average.
The U.S. Energy Information Administration expects that total U.S. consumption of natural gas will average 82.7 billion cubic feet per day (Bcf/d) in 2020, down 2.7% from 2019. The largest decline in consumption occurs in the industrial sector. EIA forecasts industrial consumption will average 21.9 Bcf/d in 2020, down 1.0 Bcf/d from 2019 as a result of reduced manufacturing activity. The decline in total U.S. consumption also reflects lower heating demand in early 2020, contributing to residential and commercial demand in 2020 averaging 12.9 Bcf/d (down 0.8 Bcf/d from 2019) and 8.8 Bcf/d (down 0.8 Bcf/d from 2019), respectively. EIA expects U.S. natural gas consumption will average 79.1 Bcf/d in 2021, a 4.3% decline from 2020. The expected decline is the result of rising natural gas prices that will reduce demand for natural gas in the electric power sector.

EIA forecasts U.S. dry natural gas production will average 89.9 Bcf/d in 2020 and monthly average production will fall from a record 96.2 Bcf/d in November 2019 to 85.5 Bcf/d in February 2021, before increasing slightly. Natural gas production declines the most in the Permian region, where EIA expects low crude oil prices will reduce associated natural gas output from oil-directed rigs. EIA’s forecast of dry natural gas production in the United States averages 86.6 Bcf/d in 2021. EIA expects production to begin rising in the second quarter of 2021 in response to higher natural gas and crude oil prices.

EIA estimates that U.S. LNG exports averaged 3.7 Bcf/d in August, a 19% increase from July. This increase occurred amid rising spot and forward natural gas prices in Europe and Asia, which had fallen to record lows in late May and June as COVID-19 mitigation efforts reduced global natural gas consumption. Higher global forward prices indicate improving netbacks for buyers of U.S. LNG in European and Asian markets for the upcoming fall and winter seasons amid expectations of natural gas demand recovery and potential LNG supply reduction because of maintenance at the Gorgon LNG plant in Australia. EIA forecasts that U.S. LNG exports will return to pre-COVID levels by November 2020 and will average more than 9 Bcf/d from December 2020 through February 2021.

Electricity, coal, renewables, and emissions

EIA forecasts 2.4% less electricity consumption in the United States in 2020 compared with 2019. EIA expects retail sales of electricity to fall by 6.4% this year in the commercial sector and by 6.0% in the industrial sector. EIA forecasts residential sector retail sales will increase by 3.5% in 2020. Milder winter temperatures earlier in the year led to lower consumption for space heating, but that factor is offset by increased summer cooling demand and an increase in electricity use by more people working from home. In 2021, EIA forecasts total U.S. electricity consumption will be similar to the 2020 level of consumption.

EIA expects the share of U.S. electric power sector generation from natural gas-fired power plants will increase from 37% in 2019 to 39% this year. In 2021, the forecast
natural gas share declines to 34% in response to higher natural gas prices. Coal’s forecast share of electricity generation falls from 24% in 2019 to 20% in 2020 and then increases to 22% in 2021. Electricity generation from renewable energy sources rises from 17% in 2019 to 20% in 2020 and to 22% in 2021. The increase in the share from renewables is the result of planned additions to wind and solar generating capacity. EIA expects a decline in nuclear generation in both 2020 and 2021, reflecting recent and planned retirements of nuclear generating capacity.

- EIA forecasts that renewable energy will be the fastest-growing source of electricity generation in 2020. EIA expects the electric power sector will add 23.3 gigawatts (GW) of new wind capacity and 13.7 GW of utility-scale solar capacity in 2020.

- EIA expects total U.S. coal production in 2020 to be 511 million short tons (MMst), 194 MMst (28%) lower than in 2019. Mitigation efforts related to COVID-19 and reduced demand from the U.S. electric power sector amid low natural gas prices have both contributed to mine idling and mine closures. EIA expects production to rise to 600 MMst in 2021, up 89 MMst (17%) from 2020. This forecast increase reflects rising demand for coal from U.S. electricity generators because of higher natural gas prices compared with 2020.

- EIA forecasts that U.S. energy-related carbon dioxide (CO2) emissions, after decreasing by 2.8% in 2019, will decrease by 10.0% (512 million metric tons) in 2020 with reduced consumption of all fossil fuels, particularly coal (18.3%) and petroleum (11.7%). This decline in emissions is the result of less energy consumption related to restrictions on business and travel activity and slowing economic growth related to COVID-19 mitigation efforts. In 2021, EIA forecasts that energy-related CO2 emissions will increase by 4.8% as the economy recovers and energy use increases.
Petroleum and natural gas markets review

Crude oil

**Prices:** The front-month futures price for Brent crude oil settled at $44.07 per barrel (b) on September 3, 2020, a decrease of 8 cents/b from August 3, 2020. The front-month futures price for West Texas Intermediate (WTI) crude oil for delivery at Cushing, Oklahoma, increased by 36 cents/b during the same period, settling at $41.37/b on September 3. (Figure 1)

Brent crude oil prices increased for the fourth-consecutive month, driven by continued increases in global oil consumption amid reduced oil supply. As of the end of August, oil prices had moved into an increasingly narrow trading range with some of the lowest levels of price volatility since 2015. Although considerable uncertainty in the global economy and oil markets remains, price volatility may have declined primarily as a result of the large volume of oil inventories accumulated during the first half of 2020 and a slowing rate of oil consumption growth. EIA estimates that total commercial petroleum inventories in the Organization for Economic Cooperation and Development (OECD) as of the end of August 2020 were sufficient to meet 71 days of current OECD oil demand, compared with 63 days on average for August over the past five years (2015–19). However, crude oil prices fell on September 4 and 8, breaking out of the narrow trading range amid heightened volatility.

Indicators of economic activity have largely been higher than market participants’ expectations, particularly in sectors such as housing and in indicators like new durable goods orders. Nonetheless, economic recovery in some sectors that are important for oil consumption, such as personal travel and tourism, has been slower. EIA estimates that global oil consumption in August grew by 1.0 million barrels per day (b/d) from July, the slowest month-over-month increase since consumption began to recover in May and the first time during that period that consumption growth was surpassed by growth in world oil production. Despite the different pace of increase between global oil production and consumption during August, EIA forecasts oil...
market balances to continue tightening for the remainder of 2020 as a result of continued demand recovery, restrained production from members of the Organization of the Petroleum Exporting Countries and partner countries (OPEC+), and price-related declines in production from the United States.

Although crude oil prices have increased slightly since mid-July, crude oil futures price spreads have developed a wider contango (when near-term prices are lower than longer-dated ones) during the same period. The five-day moving average of the Brent 1st–13th spread widened by 93 cents/b since July 15 to settle at -$3.41/b on September 3, 2020, and that of the WTI 1st–13th spread widened by 99 cents/b during the same period to settle at -$2.83/b (Figure 2). A wider contango can indicate reduced refiner purchases or increased oil supply availability, which could suggest some slower growth in the outlook for global oil consumption and smaller inventory withdrawals. EIA forecasts that the large inventory withdrawals during the second half of 2020, averaging 3.4 million b/d, will subside in 2021 into a more balanced market and that global inventory withdrawals will average 0.3 million b/d for the year.

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

<table>
<thead>
<tr>
<th>Month</th>
<th>Brent 1st–13th Spread</th>
<th>WTI 1st–13th Spread</th>
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<tr>
<td>May-20</td>
<td>-12.5</td>
<td>-15.0</td>
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<tr>
<td>Jun-20</td>
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Source: CME Group and Intercontinental Exchange, as compiled by Bloomberg L.P. Note: WTI = West Texas Intermediate

**Commodity and equity prices:** Certain sectors of the global economy have recovered faster than others, which is reflected in the price trends of different assets. The S&P 500 index, for example, is up 6% year-to-date through September 3 after having declined, at one point, by 31% in March. In addition, the S&P Goldman Sachs (GSCI) nonenergy commodity price index has recovered nearly all losses from the first and second quarters of 2020, down 5% through September 3, whereas the GSCI energy commodity index remains down 52% (Figure 3). These differences in price changes likely reflect the different pace of economic recovery in various sectors. The S&P 500 index of equities is heavily weighted toward information technology and consumer discretionary companies, ones that were likely less affected or even had increases in revenue and activity as a result of the recession, such as internet-based retailers or cloud computing services.
The GSCI nonenergy commodity index has primarily been driven by increases in precious metals prices, which have likely increased as a result of low interest rates and increased inflation expectations. Other nonenergy commodity prices, such as copper and other industrial metals, have also increased as a result of expectations that government stimulus would likely be directed to infrastructure or construction. On the other hand, little recovery and low expectations of increased transportation, travel, and tourism has likely contributed to the subdued growth in the GSCI energy commodities index, which primarily represents crude oil and petroleum products prices.

**Oil company bond yields:** Bond yields for companies with a credit rating lower than investment grade, called high yield bonds, have declined for both oil exploration and production companies as well as broadly across all sectors. The Bloomberg Barclays Energy High Yield Corporate Bond Index’s yield-to-worst (YTW), which represents the minimum achievable yield on the bonds after accounting for early prepayment, decreased to 8.31% as of September 3, 2020, and the broader high yield index declined to 5.35% (Figure 4). The decline in the overall level of interest rates among other corporate bonds and government bonds has contributed to the decline in high yield bonds. More specifically, however, some companies that used to be rated as investment grade may have been reclassified as high yield, and other companies that defaulted on bonds may have been removed from these indexes. Such changes to the holdings of the high yield index would, as a result, remove higher credit risk companies and add lower credit risk companies, which would also contribute to a reduction in the YTW of the index. Nonetheless, the decline in bond yields suggests an improvement in borrowing conditions and lower risk of default for high yield companies. The YTW for high yield energy companies has declined to levels even lower than the end of 2019, when WTI crude oil prices reached $60/b or higher on some days. The lower YTW when WTI prices are near $40/b suggests some of the reduction in capital expenditures or other cost cutting announcements from U.S. oil companies are contributing to improved investor sentiment in the energy sector.
Petroleum products

Gasoline prices: The front-month futures price of reformulated blendstock for oxygenate blending (RBOB, the petroleum component of gasoline used in many parts of the country) settled at $1.20 per gallon (gal) on September 3, down 1 cent/gal from August 3, 2020 (Figure 5). The RBOB–Brent crack spread (the difference between the price of RBOB and the price of Brent crude oil) decreased by 1 cent/gal to settle at 16 cents/gal during the same period.

On August 24, the crack spread increased by more than 6 cents/gal, the largest one-day increase since April 22. The RBOB–Brent crack spread reached 30 cents/gal on August 25, its highest point since before the March 13 proclamation of a national state of emergency and the fifth highest for any day of the past year. The increase in the crack spread reflected expectation of lost gasoline production because of storm-related refinery closures. Hurricane Laura, which
made landfall as a Category 4 hurricane near Lake Charles, Louisiana, on early August 27, caused Gulf Coast refiners to reduce gross inputs by 1.0 million b/d for the week ending August 28 compared with a week earlier. Crack spreads declined to 14 cents/gal on September 1, reflecting both the passage of the hurricane and the front-month RBOB contract rolling to October delivery, which reflects winter grade gasoline that is cheaper for refineries to produce.

U.S. gasoline inventories decreased in August by 15 million barrels (6%) from July as finished motor gasoline consumption and net exports grew. EIA estimates that finished motor gasoline consumption increased to 8.9 million b/d for August, up 2% from 8.7 million b/d in July. Despite the larger-than-average inventory withdrawal, the August monthly average gasoline crack spread remained lower than the month’s five-year (2015–2019) minimum for the sixth-consecutive month.

European gasoline: Although Northwest Europe’s gasoline spot prices have risen from negative monthly average crack spreads with Brent crude oil in April and May, August’s average crack spread was 4 cents/gal, which is 20 cents/gal lower than in August 2019. Furthermore, Europe’s daily gasoline crack spreads during the past six months have averaged less than 1 cent/gal. Eurobob gasoline spot prices have been much lower than U.S. gasoline spot prices in New York Harbor. New York Harbor gasoline spot prices traded at a 12 to 25 cent/gal premium to Northwest Europe in August (Figure 6). Since the start of 2018, only two instances of a wider crack spread have occurred. With a high premium for New York Harbor gasoline compared with Eurobob, imports of gasoline into the U.S. East Coast (Petroleum Administration for Defense District—PADD—1) averaged 613,000 b/d for the four weeks ending August 28, which would make it the first month since March in which imports were within the five-year range, if confirmed in EIA’s Petroleum Supply Monthly. Imports from Europe to the East Coast could increase more in the coming weeks. Gulf Coast (PADD 3) refinery outages in late August and early September could contribute to reductions in supply to the East Coast via the Colonial and Plantation Pipelines, which could further increase demand for gasoline imports from Europe.

Figure 6. Gasoline spot price differentials

cents per gallon

-20  -10   0    10    20    30
Dec-19  Jan-20  Feb-20  Mar-20  Apr-20  May-20  Jun-20  Jul-20  Aug-20

— New York Harbor minus Europe

Source: Bloomberg L.P.
**Ultra-low sulfur diesel prices:** The ultra-low sulfur diesel (ULSD) front-month futures price for delivery in New York Harbor settled at $1.17/gal on September 3, 2020, down 7 cents/gal from August 3, 2020 (*Figure 7*). The ULSD–Brent crack spread (the difference between the price of ULSD and the price of Brent crude oil) decreased by 7 cents/gal to settle at 12 cents/gal during the same period. The ULSD–Brent crack spread fell sharply in the last week of August.

 Crack spreads likely fell in August, counter to typical seasonal patterns, as inventories during July and August remained at the highest levels since December 1982. EIA estimates that distillate consumption increased to 3.7 million b/d for August, up 6% from July’s estimate of 3.5 million b/d but down 7% from a year ago.

**Petroleum product trading volume:** Trading volume for all futures contracts of RBOB and ULSD hit more-than-five-year lows in July and remained low in August. The monthly average numbers for all RBOB and ULSD contracts in August were 172,000 and 139,000, respectively (*Figure 8*). Relative to their August five-year averages, trading volumes for RBOB were down 13%, and trading volumes for ULSD were down 15%. For their respective front-month contracts, volumes for RBOB and ULSD were down 19% and 21%, respectively. The reduction possibly reflects the significant decline in physical petroleum product market activity, including lower refinery runs and end-user hedging. Airlines, for example, regularly use the ULSD futures contract for hedging, and the significant declines in flight activity are likely contributing to a reduction in futures market participation among commercial airlines.
U.S. and international jet fuel: Analysis of flight-level data provided by Cirium on commercial passenger flights suggest that demand for jet fuel in the United States is rising faster than in most other major aviation markets. EIA estimates that as of August 16, 2020, consumption of jet fuel by U.S. commercial passenger flights—a category of aircraft that EIA estimates accounted for 73% of total U.S. jet fuel consumption in January 2020—was about 612,000 b/d. This volume is 43% of the estimated amount consumed on the same date one year earlier (Figure 9). U.S. year-on-year consumption is higher than consumption in Europe (36%), the rest of Africa (31%), the Middle East and North Africa (30%), the rest of Asia (28%), and in the rest of the Americas (24%). Year-on-year consumption in the United States was, however, lower than year-on-year consumption in China (including its Special Administrative Regions Hong Kong and Macau) (60%) and the countries of the Former Soviet Union (63%).
EIA assumes that the speed of each country’s jet fuel demand recovery will depend on several factors, including the timing and intensity of each initial COVID-19 outbreak, the extent of government-required restrictions, and other non-aviation trends, such as gross domestic product growth and changes in energy intensity. Within the United States, EIA currently projects that jet fuel demand will rise from 1.1 million b/d in August 2020 to 1.5 million b/d in December 2020—59% and 85%, respectively, of the amount consumed in August and December 2019.

**Natural Gas**

**Prices:** The front-month natural gas futures contract for delivery at the Henry Hub settled at $2.49 per million British thermal units (MMBtu) on September 3, up 39 cents/MMBtu from August 3 ([Figure 10](#)). The closing price on August 28 of $2.66/MMBtu was the highest price since November 22, 2019. The front-month futures price traded in a range of 89 cents/MMBtu in August, the widest trading range for August since 2010.

Higher-than-normal temperatures continued to contribute to increased consumption of natural gas for power generation. EIA estimates that natural gas consumption from the electric power sector totaled 41.0 billion cubic feet per day (Bcf/d) in August 2020, the second-highest on record for the month of August. Low natural gas prices in recent months have contributed to increased consumption for power generation, but they have also contributed to decreasing natural gas production, which declined to 88.4 Bcf/d in August, 4.9 Bcf/d lower than August 2019. EIA forecasts that production will decline by about the same amount in 2021 as consumption declines, but that liquefied natural gas (LNG) exports will increase, which will tend to lower inventories compared with 2020 and provide upward pressure on Henry Hub prices. Rising international natural gas prices are further indications of increasing international demand for natural gas and LNG. The LNG Japan/Korea Marker and Title Transfer Facility price in the Netherlands both increased in August to the highest levels since January 2020.
Natural gas spot prices and inventory changes: The monthly average Henry Hub natural gas spot price rose to $2.30/MMBtu in August 2020, 53 cents/MMBtu higher than July and the first year-on-year increase in the monthly average price since March 2019. Natural gas inventories have shown year-on-year increases since April 2019 (Figure 11). However, EIA forecasts that natural gas production will decline until March 2021, averaging 3.3 Bcf/d lower in 2021 than in 2020, and that natural gas inventories will begin showing year-on-year decreases in December 2020. The decline in inventories is expected to contribute to higher prices. EIA forecasts that Henry Hub spot prices will remain higher than $3.00/MMBtu throughout 2021, averaging $3.19/MMBtu, which would be $1.02/MMBtu higher than in 2020.

Notable forecast changes

- Because of the rapidly changing situation in energy markets, the U.S. Energy Information Administration’s (EIA) current forecast includes a significant number of notable forecast changes. You can find more information in the detailed table of forecast changes.

- The macroeconomic forecast EIA used for this STEO assumes U.S. gross domestic product (GDP) declines by 4.8% in 2020 compared with an assumed decline of 6.1% in the August STEO. EIA also assumes a smaller increase in GDP in 2021 of 3.1%, compared with 3.7% growth assumed in the previous forecast. The U.S. macroeconomic assumptions in this outlook are based on forecasts by IHS Markit.

- EIA expects global consumption of petroleum and other liquid fuels will average 99.6 million barrels per day (b/d) in 2021, a reduction of 0.6 million b/d from the August STEO. The downward revision primarily reflects lower expected growth in China, where EIA forecasts liquid fuels consumption to rise by 1.0 million b/d in 2021 to average 15.0
million b/d. The revised petroleum consumption reflects a more plausible assessment of the country’s energy intensity of economic growth.

- Recently released EIA data show that U.S. crude oil production for June was 10.4 million b/d, 0.7 million b/d more than estimated in last month’s STEO forecast. The higher-than-expected production indicates a faster return of curtailed production than previously assumed. Despite the higher realized production levels, EIA’s forecast for U.S. crude oil production for the fourth quarter of 2020 and 2021 is relatively unchanged.

- EIA forecasts U.S. dry natural gas production will average 86.6 billion cubic feet per day (Bcf/d) in 2021, which is 2.6 Bcf/d (3%) higher than forecast in the August STEO. The higher forecast largely reflects higher expected natural gas prices in the second half of 2020 because prices typically affect production with a lag.

- EIA expects Henry Hub natural gas spot prices to average $2.52 per million British thermal units (MMBtu) in the second half of 2020, compared with $2.26/MMBtu forecast in last month’s STEO. The higher prices reflect an increase in demand for natural gas for use in power generation during a relatively hot August and also an increase in demand for U.S. exports of liquefied natural gas.

- EIA forecasts U.S. production of coal will total 600 MMst in 2021, which is 36 MMst (6%) higher than forecast in the August STEO. The higher forecast reflects higher expected natural gas prices in 2021 that will make coal more competitive in the U.S. electric power sector.

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