

Short-Term Energy Outlook

STEO

November 2024



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Short-Term Energy Outlook

Overview

| U.S. energy market indicators | 2023 | 2024 | 2025 |
|---|---------------|---------------|---------------|
| Brent crude oil spot price (dollars per barrel) | \$82 | \$81 | \$76 |
| Retail gasoline price (dollars per gallon) | \$3.50 | \$3.30 | \$3.20 |
| U.S. crude oil production (million barrels per day) | 12.9 | 13.2 | 13.5 |
| Natural gas price at Henry Hub (dollars per million British thermal units) | \$2.50 | \$2.20 | \$2.90 |
| U.S. liquefied natural gas gross exports (billion cubic feet per day) | 12 | 12 | 14 |
| Shares of U.S. electricity generation | | | |
| Natural gas | 42% | 42% | 40% |
| Coal | 17% | 15% | 15% |
| Renewables | 22% | 23% | 25% |
| Nuclear | 19% | 19% | 19% |
| U.S. GDP (percentage change) | 2.9% | 2.7% | 2.1% |
| U.S. CO₂ emissions (billion metric tons) | 4.8 | 4.8 | 4.8 |

Data source: U.S. Energy Information Administration, *Short-Term Energy Outlook*, November 2024

- Global oil consumption.** India has emerged as the leading source of growth in global oil consumption in our forecast. Over 2024 and 2025, India accounts for 25% of total oil consumption growth globally. We expect an increase of 1.0 million barrels per day (b/d) in global consumption of liquid fuels in 2024. We expect even more growth next year, with global oil consumption rising by 1.2 million b/d.
- Global oil inventories and prices.** We expect that ongoing geopolitical risks and withdrawals from global oil inventories stemming from OPEC+ production cuts will place upward pressure on oil prices over the next few months, with the Brent crude oil price averaging \$78 per barrel (b) in the first quarter of 2025 (1Q25). However, we forecast that global oil production growth means inventories will begin building in 2Q25, reducing crude oil prices through the end of the year. We expect the Brent price will fall to an average of \$74/b in the second half of 2025.
- Natural gas prices.** We expect the Henry Hub natural gas spot price to rise in the coming months to average \$2.80 per million British thermal units (MMBtu) in 1Q25, following seasonal patterns during which prices typically rise during the winter. The monthly average Henry Hub daily spot price fell to \$2.20/MMBtu in October and below \$2.00/MMBtu in early November. Low prices reflected warm temperatures, which could delay the beginning of withdrawals of natural gas from storage until mid-November. We expect the Henry Hub price to average around \$2.90/MMBtu in 2025, as global demand for U.S. liquefied natural gas exports, a component of U.S. natural gas demand, continues to increase.

- **Natural gas production.** Marketed U.S. natural gas production in our forecast averages 113 billion cubic feet per day (Bcf/d) in 2024. Production in 2024 is relatively unchanged from 2023, a contrast to the production growth in the previous three years, as low natural gas prices curtailed production in some regions. We expect U.S. marketed natural gas production to increase by 1% next year, averaging 114 Bcf/d, led by a 6% increase in the Permian region.
- **Electricity generation.** We expect U.S. electric power sector generation to increase by 3% in 2024. The increase in generation is mostly to supply increased air-conditioning demand compared with last year, driven by hotter summer temperatures this year. The increase in consumption in 2024 is being supplied primarily from growth in use of natural gas (up 3% from 2023) and solar power (up 34%). We forecast that U.S. solar generation will continue growing by another 31% in 2025 as solar generating capacity expands, while higher natural gas prices reduce electricity demand from the natural gas sector.

Notable forecast changes

Current forecast: November 13, 2024; previous forecast: October 8, 2024

| | 2024 | 2025 |
|---|---------------|---------------|
| Mont Belvieu propane spot price (dollars per gallon) | \$0.80 | \$0.80 |
| Previous forecast | \$0.80 | \$0.70 |
| Percentage change | 3.4% | 13.4% |
| Henry Hub spot price (dollars per million British thermal units) | \$2.20 | \$2.90 |
| Previous forecast | \$2.30 | \$3.10 |
| Percentage change | -4.8% | -5.2% |

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

Note: Percentages are calculated from unrounded values.

Global Oil Markets

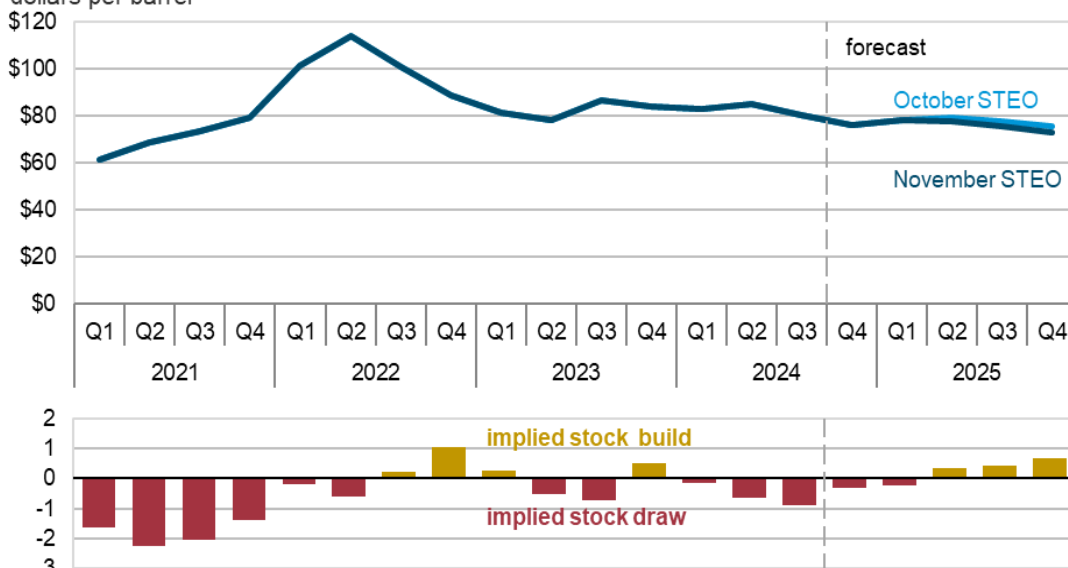
Global oil prices and inventories

The Brent crude oil spot price averaged \$76 per barrel (b) in October, up \$2/b from the average in September. Crude oil prices increased in October in part because of market concerns that an Israeli response to Iran's missile attack on October 1 would reduce Iran's ability to produce or market oil. However, Brent fell to \$71/b on October 29 after Israel's military response did not target Iran's oil infrastructure.

Despite the drop in oil prices in late October, we still expect that ongoing withdrawals from global oil inventories stemming from OPEC+ production cuts, along with potential for further geopolitical risk, will put upward pressure on oil prices through the first quarter of 2025 (1Q25). We estimate that global oil inventories fell by 0.9 million barrels per day (b/d) in 3Q24, and we estimate they will fall by an average of 0.3 million b/d in 4Q24 and 1Q25. As a result, we expect the Brent price will rise from \$72/b on November 11 to an average of \$78/b in 1Q25.

Brent crude oil price and global oil inventory change

dollars per barrel



Data source: U.S. Energy Information Administration, *Short-Term Energy Outlook* (STEO), November 2024



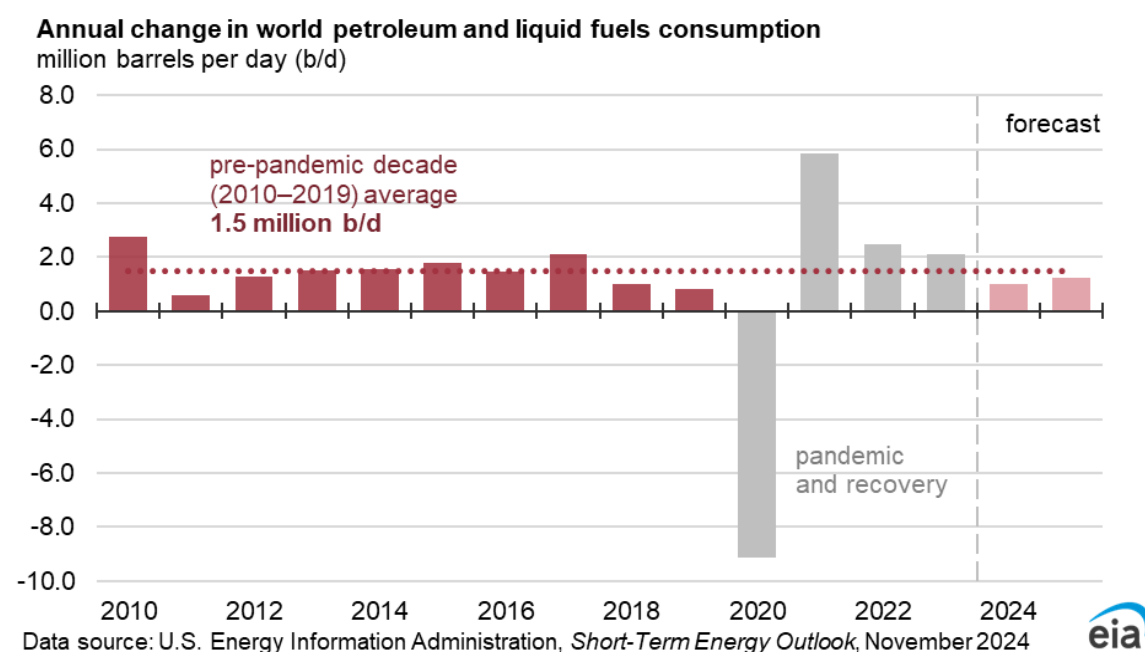
By 2Q25, we expect OPEC+ production increases and supply growth from countries outside of OPEC+ will outweigh global oil demand growth and cause oil to be put into inventory. We expect that global oil inventories will increase by an average of 0.4 million b/d in 2Q25, before inventories rise by an average of 0.6 million b/d in the second half of 2025 (2H25). We forecast that inventory builds will put downward pressure on crude oil prices, with Brent falling to an average of \$74/b in 2H25. In our forecast, the Brent price averages \$76/b for the full year of 2025.

We see at least two main sources of oil price uncertainty: the future course of the ongoing Middle East conflict and OPEC+ members' willingness to adhere to voluntary production cuts. First, although the volatility and risk premium associated with the conflict in the Middle East has moderated in recent

weeks, the duration and severity of the ongoing conflict remain uncertain, as is the potential for escalation to reduce oil supplies. Second, although we assess that OPEC+ producers will likely continue to limit production below recently announced targets in 2025, the potential for weakening commitment among OPEC+ producers to continue cutting production adds downside risk to oil prices.

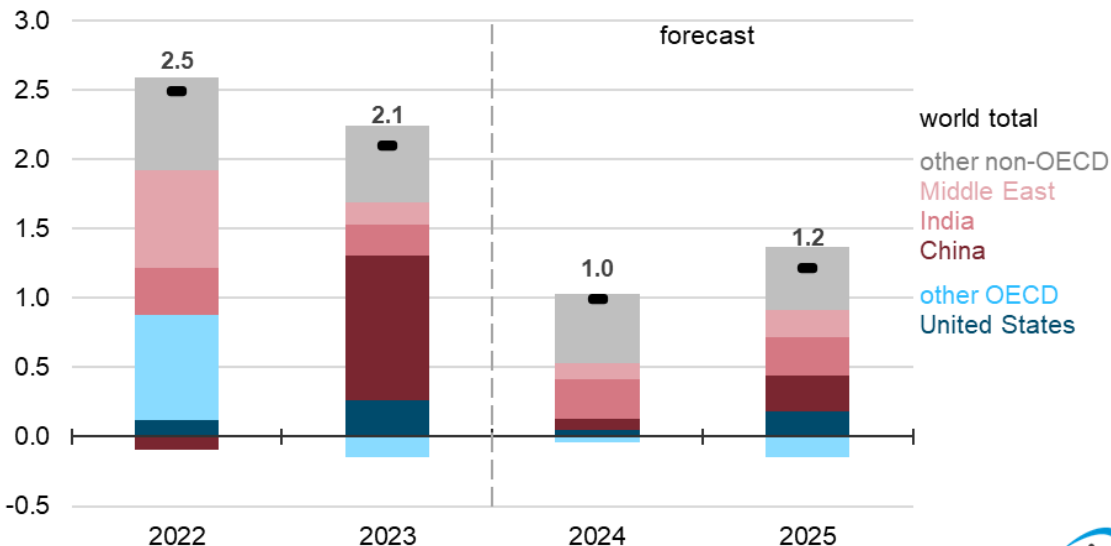
Global oil consumption and production

Despite pledges by OPEC+ members to restrict oil production, crude oil prices have been relatively flat this year because of weak growth in oil demand. We forecast that global consumption of liquid fuels will increase by 1.0 million b/d in 2024 and 1.2 million b/d in 2025, which are both below the pre-pandemic 10-year average of 1.5 million b/d of annual growth, as well as below the oil demand growth seen in the pandemic recovery from 2021 to 2023.



Non-OECD countries drive almost all global oil consumption growth in our forecast. Much of this growth is in Asia, where India is now the leading source of global oil demand growth in our forecast. We expect consumption of liquid fuels in India to increase by 0.3 million b/d in both 2024 and 2025, driven by rising demand for transportation fuels. We forecast China's petroleum and liquid fuels consumption will grow by less than 0.1 million b/d in 2024 before recovering to almost 0.3 million b/d 2025. We have revised China's 2024 consumption downward several times over the past year. In China, rapidly expanding electric vehicle ownership, rising use of liquefied natural gas for trucking goods, and decelerating economic growth have limited consumption growth for transportation fuels.

Annual change in world liquid fuels consumption
million barrels per day



Data source: U.S. Energy Information Administration, *Short-Term Energy Outlook*, November 2024

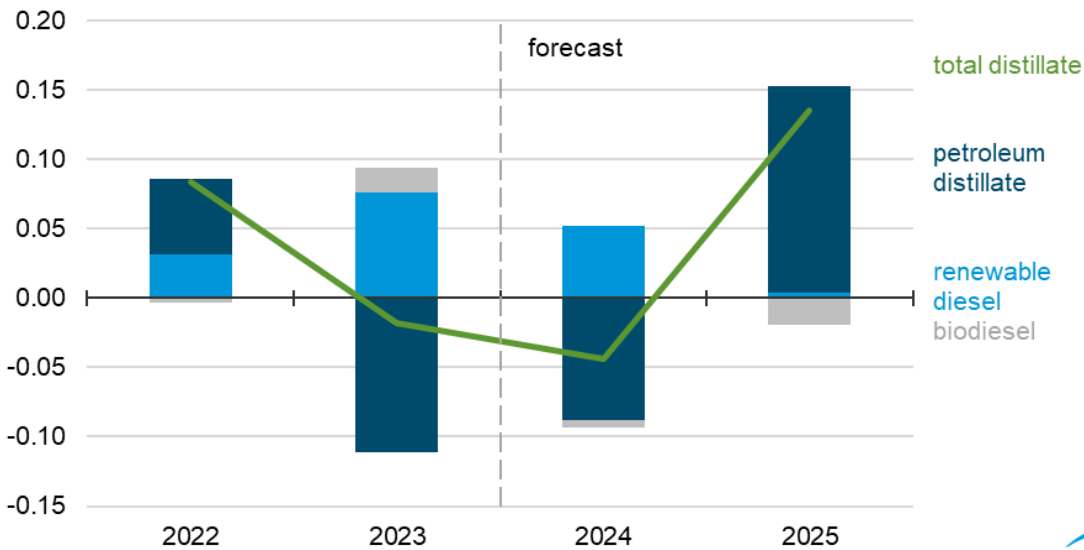


U.S. Petroleum Products

U.S. distillate fuel consumption

We forecast more distillate fuel consumption in the United States next year after two years of declines, largely because we expect manufacturing activity to increase. Over the past two years, a slight decline in U.S. manufacturing activity has reduced total distillate fuel use in the United States. In 2024, we forecast U.S. distillate consumption will average 3.8 million barrels per day (b/d), down 2% from last year and down 5% from 2022. However, we forecast U.S. consumption in 2025 will increase by 4% (150,000 b/d). Our forecast increase in U.S. distillate consumption is driven by more industrial activity in 2025, supported by a lower Federal Funds rate. The increased consumption largely results from increased demand from manufacturers and truckers that ship goods.

Annual change in U.S. total distillate consumption million barrels per day



Data source: U.S. Energy Information Administration, *Short-Term Energy Outlook*, November 2024



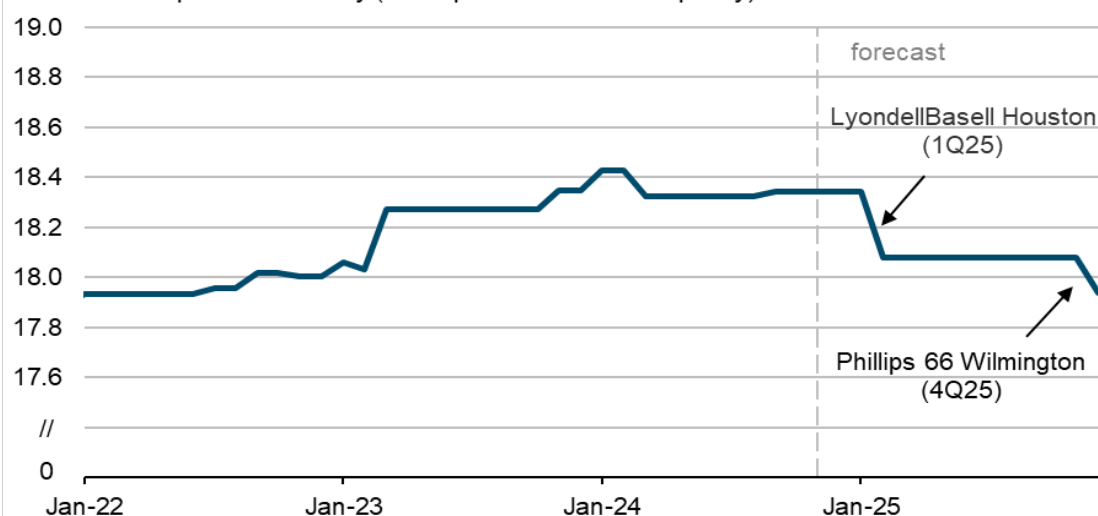
U.S. distillate consumption is made up of petroleum distillate fuel, renewable diesel, and biodiesel. In 2023 and 2024, U.S. distillate fuel consumption declined in response to a slight reduction in U.S. manufacturing activity. The petroleum component of distillate consumption declined by even more than the total because of [increased substitution from biofuels](#). Both renewable diesel and biodiesel are biofuels that can be used in place of petroleum distillate fuel oil. Unlike conventional biodiesel, renewable diesel is chemically identical to petroleum diesel and can be blended as a drop-in replacement fuel. More renewable diesel is consumed in the U.S. West Coast (PADD 5) than in any other region of the United States, as measured by product supply, and accounts for 86% of total U.S. renewable diesel fuel consumption as of August 2024 in our [Petroleum Supply Monthly](#) (PSM). We forecast U.S. renewable diesel consumption will increase to 240,000 b/d by 2025, more than double the consumption level in 2022.

U.S. refinery capacity

Closure announcements from refiners have reduced U.S. refinery capacity in our current STEO forecast. [LyondellBasell](#) Industries plans to close its 263,800-b/d Houston Refinery in the first quarter of 2025, citing the high cost of needed overhauls. On October 16, [Phillips 66](#) announced it will stop operations at its 138,700-b/d refinery in the Los Angeles area in 4Q25. We now forecast U.S. operable refinery capacity will average 17.9 million b/d by the end of 2025, down by 0.4 million b/d from the end of 2024. Our STEO forecast does not include temporary reductions in capacity because of maintenance or unplanned outages.

U.S. operable refinery capacity

million barrels per calendar day (atmospheric distillation capacity)



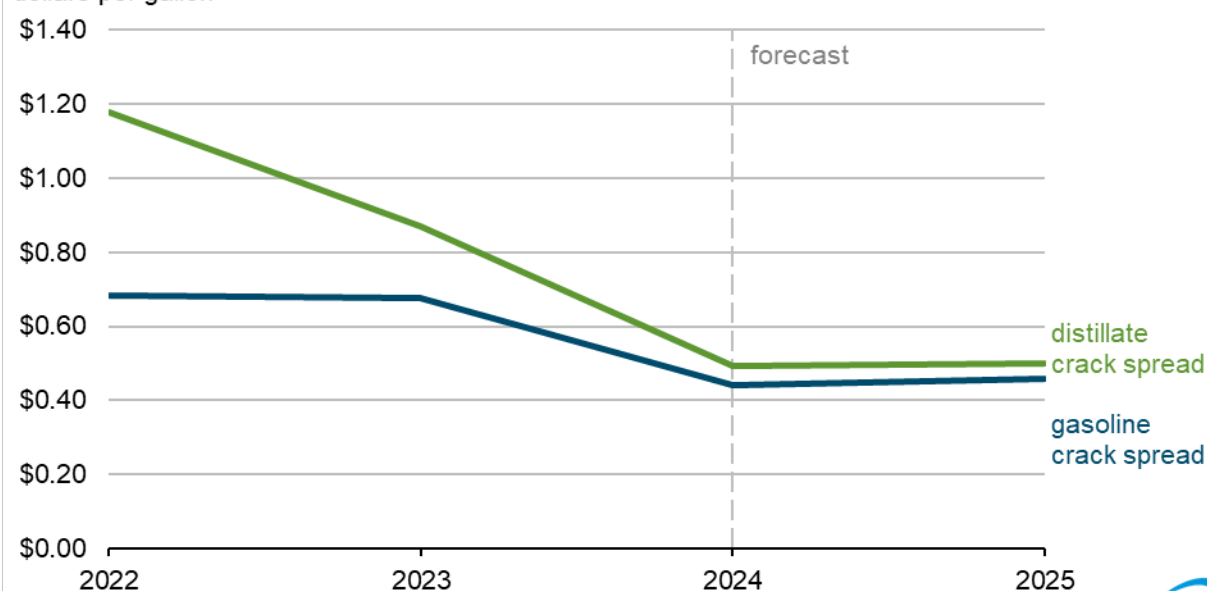
Data source: U.S. Energy Information Administration, *Short-Term Energy Outlook*, November 2024
 Note: 1Q25=first-quarter 2025. 4Q25=fourth-quarter 2025



Single-product crack spreads for gasoline and diesel are indicators of refining margins. Other factors equal, lower refinery capacity reduces the production of fuels such as gasoline and diesel. We expect crack spreads for both gasoline and distillate fuel will increase slightly next year. U.S. refinery capacity reductions are one factor that we expect will raise crack spreads. We also expect rising demand for gasoline and diesel in the United States will put upward pressure on margins. However, we assume that refinery capacity additions outside of the United States will limit increases in crack spreads in 2025.

U.S. distillate and gasoline crack spreads

dollars per gallon



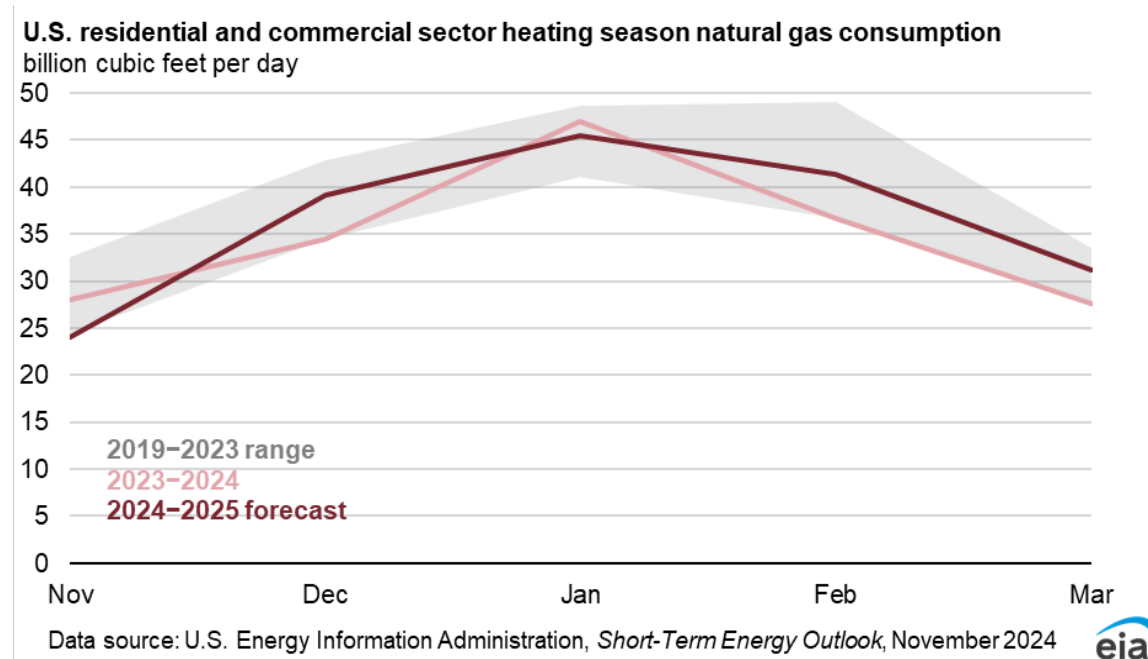
Data source: U.S. Energy Information Administration, *Short-Term Energy Outlook*, November 2024



Natural Gas

Natural gas consumption

A slightly colder weather forecast for this winter increases the amount of natural gas we expect to be consumed during the 2024–25 winter heating season (November–March). We forecast U.S. natural gas consumption in the residential and commercial sectors this winter, which largely reflects space heating, to average 36 billion cubic feet per day (Bcf/d), 4% more than last winter and close to the five-year (2019–2023) average.



The winter has gotten off to a warm start. Temperatures across much of the country were above normal the first week of November, and forecasts from the National Oceanic and Atmospheric Administration show the eastern half of the United States will be warmer-than-average for much of the month. As a result, we revised our assumption of total heating [degree days](#) (HDDs) for this winter down slightly from our October STEO. Our forecast includes 3% more HDDs than last winter but 4% fewer HDDs than the prior 10-year average. Winter weather events or prolonged low temperatures could increase consumption of natural gas by the residential and commercial sectors more than we forecast. At the same time, if temperatures are higher than we forecast, the residential and commercial sectors will likely consume less natural gas than we forecast.

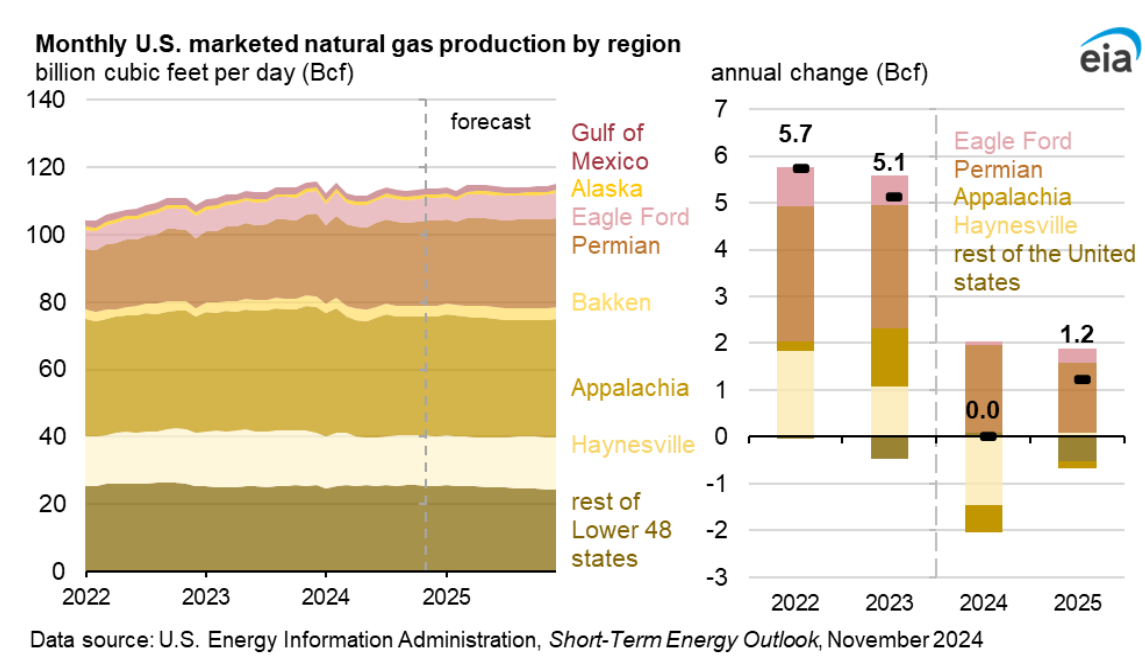
Natural gas production

Annual U.S. marketed natural gas production remained flat in 2024 after growing over the past two years. We estimate marketed natural gas production will average 113 Bcf/d in 2024, relatively unchanged from 2023. Average monthly production peaked this year at 115 Bcf/d in February and has averaged between 111 Bcf/d and 114 Bcf/d for much of the rest of the year. Production cuts announced by natural gas producers early in 2024 resulted in less [production from the shale and tight formations](#) so

far this year compared with 2023. At the same time, production in the Permian Basin has increased in 2024.

Production in the Haynesville and Appalachia regions is driven by natural gas prices, which reached [record lows in early 2024](#). Low natural gas prices encouraged producers in the Appalachia and Haynesville regions, in particular, to [curtail production](#) until market conditions changed. Natural gas production in the Permian region, which is mostly [associated natural gas](#) from oil wells, is driven by crude oil production and has continued to grow amid low natural gas prices.

We expect U.S. marketed natural gas production will resume growing in 2025 and average more than 114 Bcf/d for the year, up 1% from this year's annual average. Growth is led by a 6% increase in the Permian region and a 5% increase in the Eagle Ford compared with 2024. We expect production will decline slightly in the Appalachian Basin and much of the rest of the United States.



Natural gas prices

U.S. natural gas prices fell in October as natural gas consumption declined from September, production remained relatively unchanged, and storage inventories ended the month 6% above the five-year (2019–2023) average. The U.S. benchmark Henry Hub natural gas spot price averaged \$2.20 per million British thermal units (MMBtu) in October, 4% lower than the September average of \$2.28/MMBtu. Natural gas consumption declined last month, led by a 14% (6 Bcf/d) decline in consumption in the electric power sector, offsetting an increase in consumption in the residential and commercial sectors. Even though consumption in the electric power sector was down month over month in October, it was 13% higher than the month's five-year average. High power sector demand for natural gas reflected lower natural gas prices and higher air-conditioning use in parts of the United States experiencing extended summer-like conditions.

We expect the Henry Hub price to rise in the next three months and to average more than \$2.80/MMBtu in the first quarter of 2025. We expect prices to average \$2.90/MMBtu for all of 2025, or 33% higher than the 2024 average of \$2.20/MMBtu, mainly because of increased liquefied natural gas (LNG) exports. Our forecast includes LNG exports increasing by nearly 2 Bcf/d next year with continued strong international demand for LNG as [export capacity expands](#).

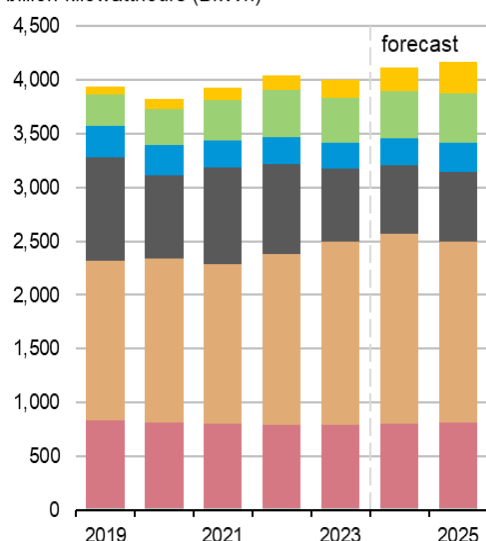
Electricity, Coal, and Renewables

Electricity generation

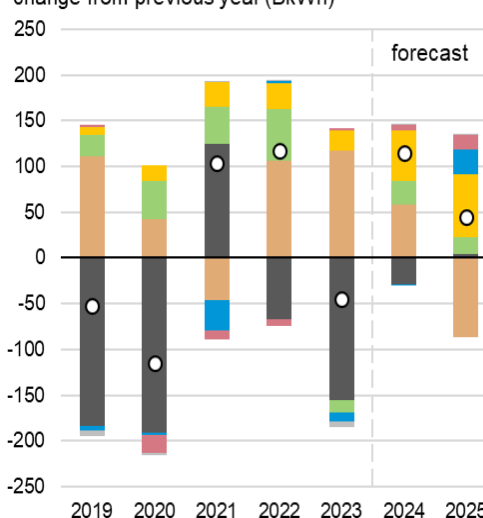
Hotter temperatures this past summer compared with last year, which increased U.S. air-conditioning demand, are helping to drive up generation in the U.S. electric power sector. We expect 3% more U.S. generation in 2024 than in 2023. Increasing electricity demand from the industrial sector and commercial data centers contributes to forecast U.S. generation growth of 1% in 2025. Growth from data centers raises overall consumption of electricity in the commercial sector, offsetting the effects of milder summer temperatures next year and longer-term trends of less commercial sector electricity consumption. Although data centers are rapidly expanding, those facilities currently account for a relatively small share of total U.S. electricity demand.

U.S. electric power sector net generation by source

billion kilowatthours (BkWh)



change from previous year (BkWh)



Data source: U.S. Energy Information Administration, *Short-Term Energy Outlook*, November 2024



We expect natural gas and solar power to be the largest sources of growth in U.S. electricity generation in 2024. Natural gas use for power generation has risen this year as a result of relatively low fuel prices, while solar is powering more generation as U.S. generating capacity grows. We expect U.S. natural gas generation will grow by 3% in 2024.

Slower growth in U.S. electricity demand and higher natural gas prices in most regions next year is likely to reduce generation from natural gas, which we expect will fall by 5% between 2024 and 2025. Natural gas generation in the Northwest region falls by 13% in 2025 in response to our forecast increase in

hydropower generation, which grows by 23%. The large increase in forecast generation from hydropower next year reflects a return to more normal conditions [following drought conditions this year](#).

U.S. solar generation grows in the forecast by 34% in 2024 and 31% in 2025. Rising solar generation also cuts into natural gas generation next year. Solar generating capacity is growing fastest in Texas along with [associated battery storage](#) projects. The forecast regional increase in solar generation, which is growing faster than overall electricity demand, will require less electricity generation from natural gas in Texas.

Wholesale power prices

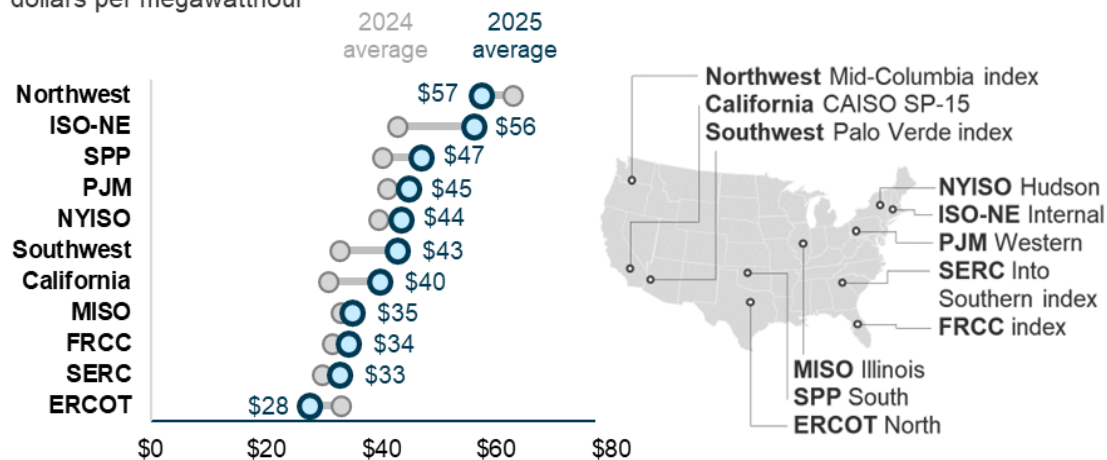
Prices for wholesale power are likely to trade higher next year in most regions of the United States as a result of higher natural gas prices. We forecast the price of natural gas delivered to electric generators will average almost \$3.20 per million British thermal units in 2025, up 18% from 2024.

We expect wholesale electricity prices in the Northwest region to come down by 9% in 2025 because of an increase in hydropower generation. Despite the increase, hydropower generation in the Northwest remains below the historical average, which along with [increased exports of power to Canada](#) and high natural gas prices in the region keep prices in the region the highest in the country, averaging \$57 per megawatthour (MWh) next year.

We expect that the wholesale market operated by the Electric Reliability Council of Texas (ERCOT) will have the lowest prices in the country in 2025, averaging \$28/MWh, which would be down 17% from our forecast price in 2024. Increasing generation from solar power in that region helps to keep wholesale electricity prices low because that energy source does not incur fuel costs and receives tax incentives.

Average annual wholesale electricity prices at selected price hubs

dollars per megawatthour



Data source: U.S. Energy Information Administration, *Short-Term Energy Outlook*, November 2024

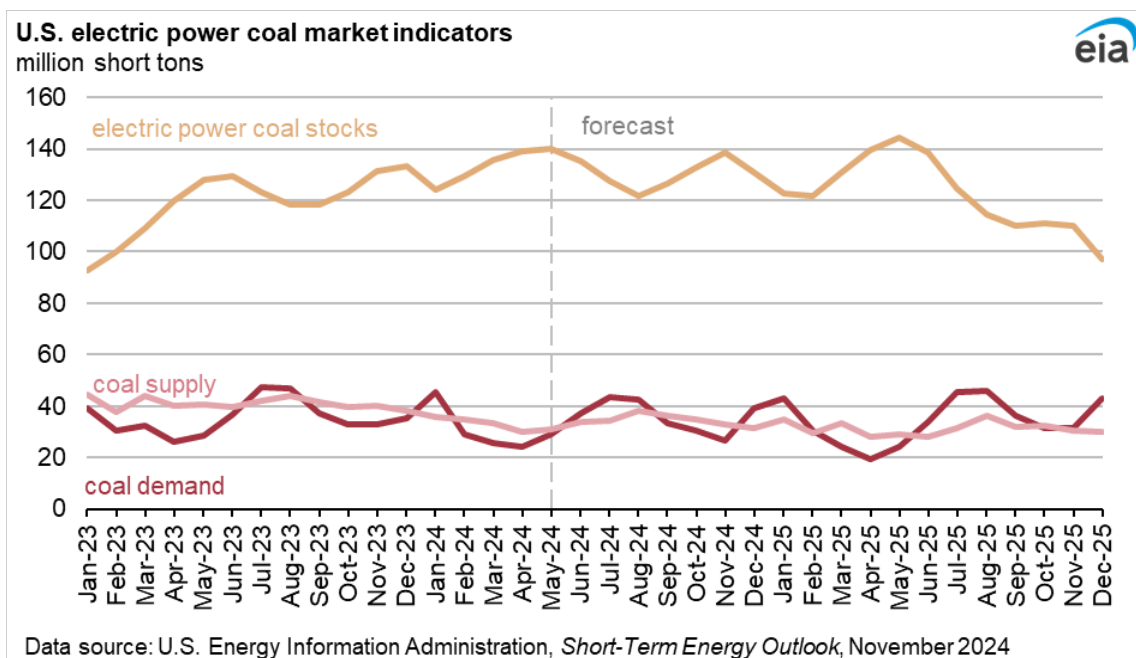


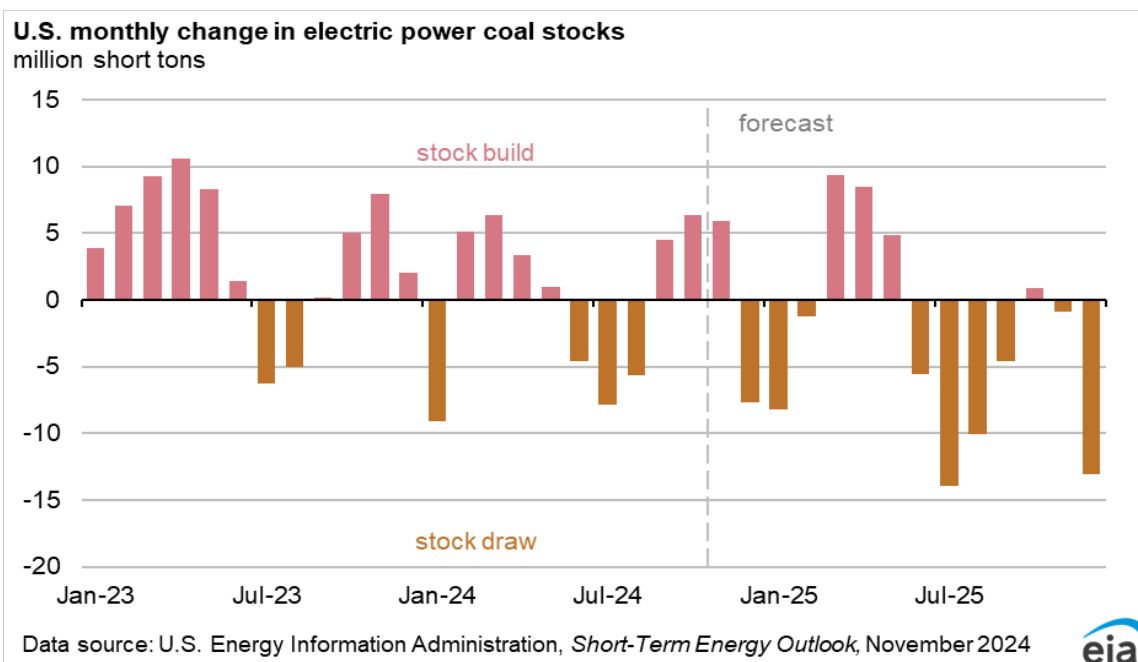
Coal markets

Heading into early winter, we expect U.S. coal production will decline slightly at the same time electricity generators consume more coal to service increasing electricity loads, pushing coal stocks held by U.S. power plants down from 139 million short tons (MMst) in November to 131 MMst in December.

We expect coal inventories will be a key source of U.S. supply next year. We forecast that about 370 MMst of coal will be consumed in the U.S. electric power sector in both 2024 and 2025. Power sector coal consumption remains flat as we expect that more overall demand for power next year and higher natural gas prices, which encourage coal dispatch at the margin, will be offset by more renewables generation and some coal plant retirements. However, we expect coal production will drop as electricity generators work down inventories. U.S. coal production in our forecast declines from 505 MMst in 2024 to 469 MMst in 2025. As production falls and consumption remains steady, we expect coal stocks to fall to 101 MMst by the end of 2025.

The September report on exports from the U.S. Census Bureau showed more coal exports than we had forecast. As a result, we increased our expectation of U.S. coal exports. We now forecast coal exports to total 108 MMst in 2024 and then to fall to 104 MMst in 2025. Stronger-than-expected exports in September were driven by an increase in metallurgical exports and likely reflects in part a recovery from a [mechanical failure at the Curtis Bay coal terminal in Maryland](#) that disrupted operations in August. We expect U.S. steam and metallurgical coal exports to fall slightly in 2025, but recent [fiscal stimulus measures](#) by the Chinese government and [continued economic development in India](#) should otherwise limit any major declines in U.S. coal exports. Considerable uncertainty around trade policies and geopolitical developments could affect demand for U.S. metallurgical coal.



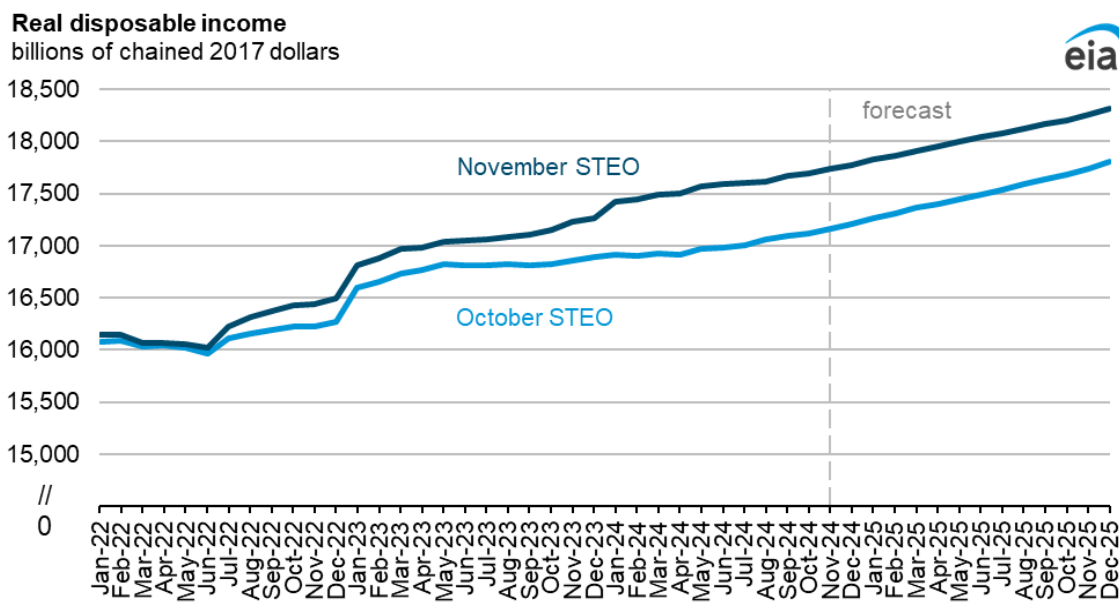


Economy, CO₂, and Weather

U.S. macroeconomics

The U.S. Bureau of Economic Analysis (BEA) released its annual update to the National Economic Accounts at the end of September, and several of the updates changed our assumptions regarding the macroeconomic forecasts used to produce the STEO. The macroeconomic forecasts in the STEO are based on S&P Global's macroeconomic model. We incorporate STEO energy price forecasts into the model to obtain the final macroeconomic assumptions.

The [BEA's annual update](#) showed that real disposable income grew faster than was previously reported. The largest difference occurred in 1Q24. Real disposable income grew at an annual rate of 5.6%, up from the 1.3% initially reported during that quarter. Through 2Q24, real personal disposable income was \$606 billion higher than previously reported, and our forecast now assumes that by the end of 2025 it will be \$506 billion higher than in last month's STEO.



We expect the upward revision to real disposable income to support additional consumer spending, one factor that drove the upward revision to GDP growth in 2025, from 1.9% in the October STEO to 2.1%. Total employment was also higher than we assumed in last month's STEO. The upward revision to household disposable income and employment both support gasoline consumption and price; however, demand for gasoline is determined by many factors, and price is determined by both demand for and supply of gasoline.

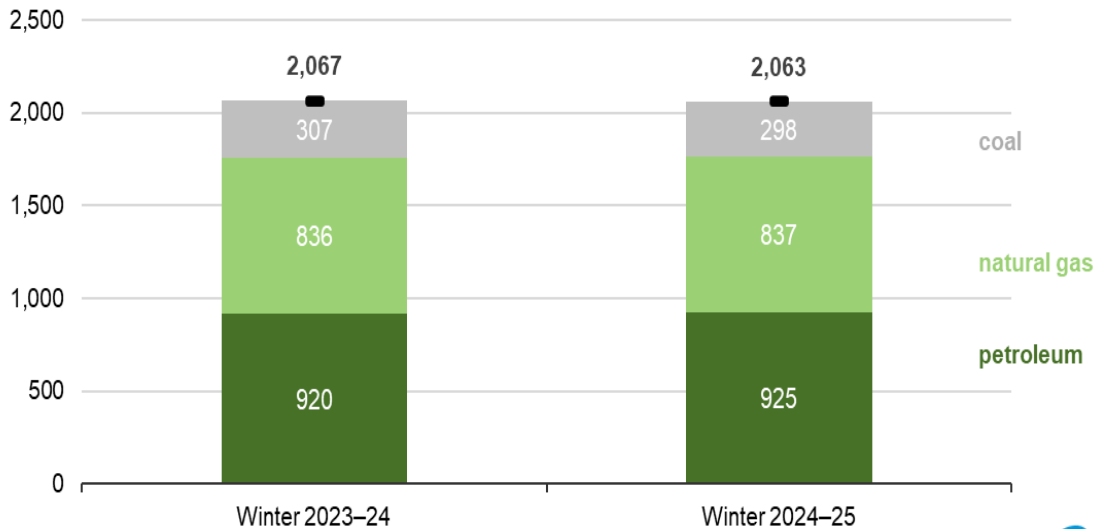
Emissions

We expect total U.S. energy-related carbon dioxide (CO₂) emissions to be relatively unchanged this winter (November—March) compared with last winter. In our forecast, petroleum-related emissions increase slightly with increased consumption of petroleum products but are offset by a small net decrease coal emissions this winter. Petroleum emissions grow with more consumption of distillate fuel, notably heating oil, which we expect to increase by 4% relative to last year based on our recent [Winter Fuels Outlook](#), as well as increasing growth in industrial production. Total CO₂ emissions from natural gas remain unchanged relative to last winter, although some changes have occurred at the sector level. We expect residential and commercial sector natural gas emissions to increase as relatively colder winter weather results in more use of the fuel for space heating, but this increase is offset by less natural gas-fired generation in the electric power sector.

Looking beyond this winter, we forecast total U.S. energy-related CO₂ emissions to remain flat during 2024 and 2025 because of small, counteracting changes in emissions from coal, natural gas, and petroleum products. In 2024, increases in electricity generation and CO₂ emissions from natural gas are offset by decreasing generation and CO₂ emissions from coal. In 2025, less electricity generation and emissions from natural gas are offset by more generation and emissions from coal, as well as rising CO₂ emissions from petroleum, associated mostly with higher diesel consumption.

U.S. winter (November–March) energy-related CO₂ emissions

million metric tons

Data source: U.S. Energy Information Administration, *Short-Term Energy Outlook*, November 2024

Weather

The United States will likely experience a warm November this year. Based on initial forecasts and data from NOAA, we expect 420 [heating degree days](#) (HDDs) across the United States in November, 17% fewer than November 2023 and 18% fewer than the 10-year monthly average. We expect the warmer start to the 2024–2025 winter heating season (November–March) will be offset by 7% more HDDs from December to March compared with the same period last year, resulting in a slightly cooler winter than the previous winter with an average of about 3,130 HDDs (3% more HDDs). Despite our expected colder weather this season, overall we assume this winter will be a bit milder than normal, with 4% fewer HDDs than the previous 10-winter average, consistent with the observed warming trend in weather patterns.

Short-Term Energy Outlook

Chart Gallery



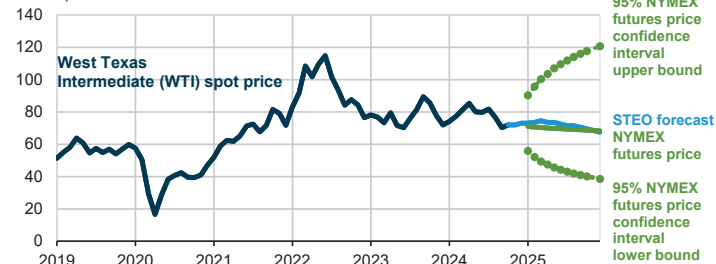
November 13, 2024



U.S. Energy Information Administration

Independent Statistics & Analysis | www.eia.gov

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

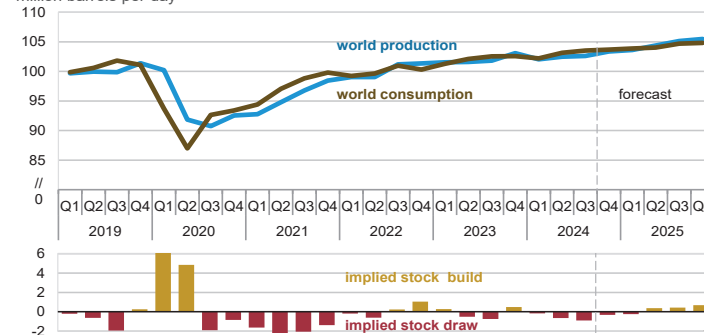


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024, CME Group, Bloomberg, L.P., and Refinitiv an LSEG Business

Note: Confidence interval derived from options market information for the five trading days ending November 7, 2024. Intervals not calculated for months with sparse trading in near-the-money options contracts.



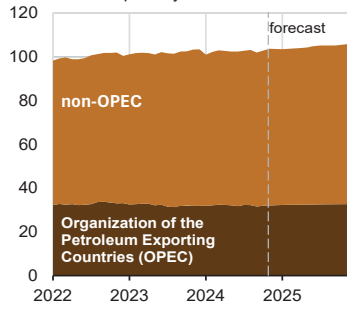
World liquid fuels production and consumption balance
million barrels per day



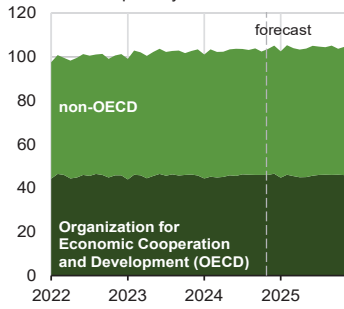
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024




World liquid fuels production
million barrels per day

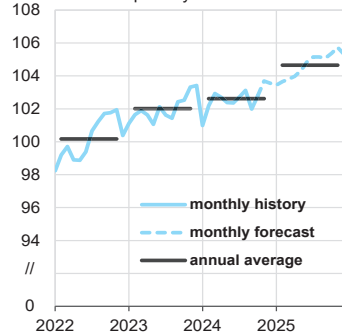


World liquid fuels consumption
million barrels per day

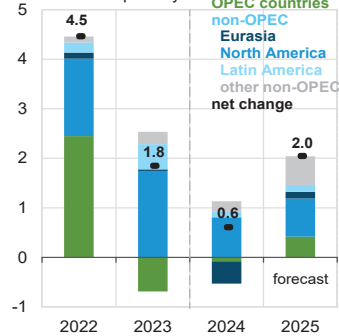



Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024 

World crude oil and liquid fuels production
million barrels per day

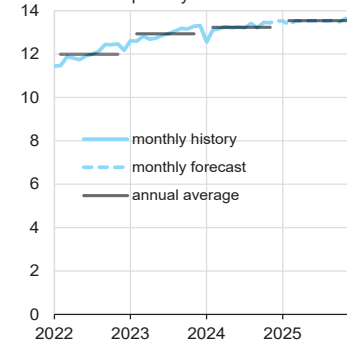


Components of annual change
million barrels per day

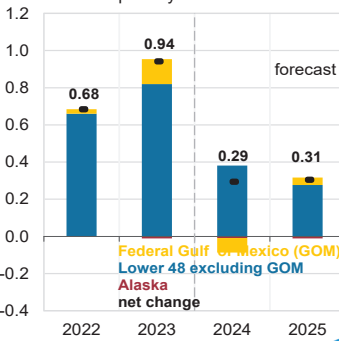



Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024 

U.S. crude oil production
million barrels per day

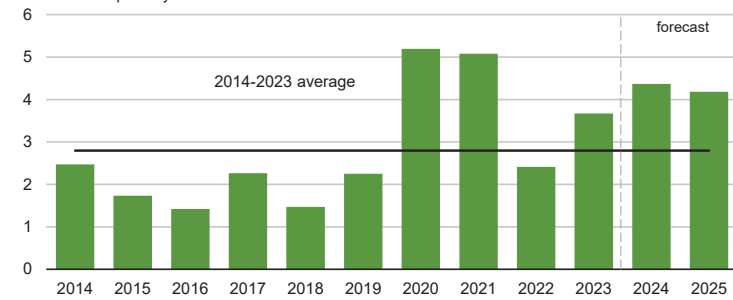


Components of annual change
million barrels per day



Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024 

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

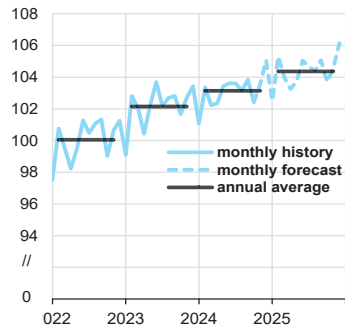


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024

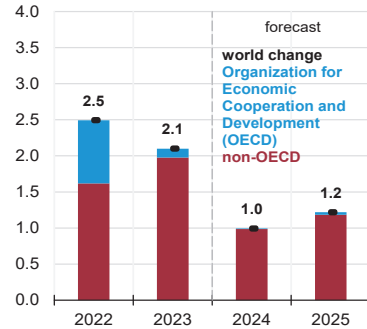
Note: Black line represents 2014-2023 average (2.8 million barrels per day).



World liquid fuels consumption
million barrels per day



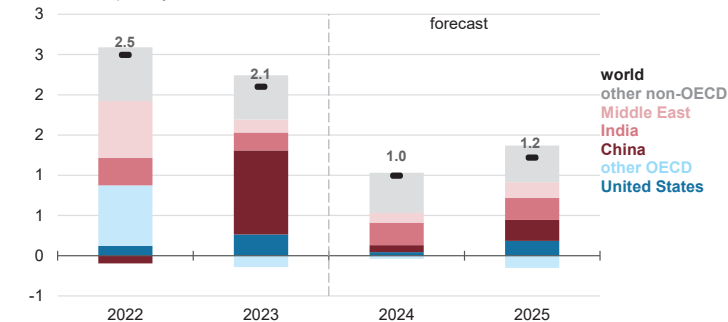
Components of annual change
million barrels per day



Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024



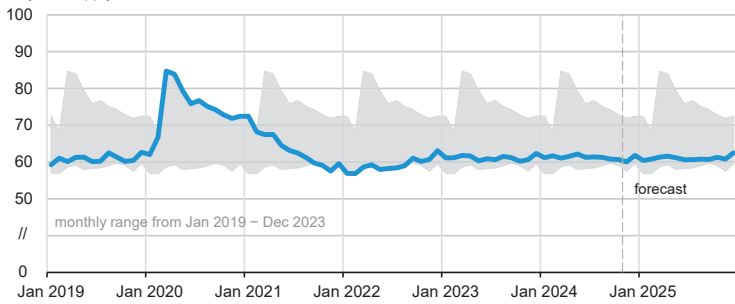
Annual change in world liquid fuels consumption
million barrels per day



Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024



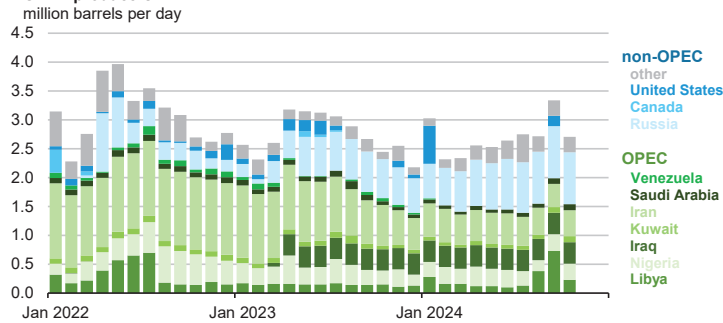
Organization for Economic Cooperation and Development (OECD)
commercial inventories of crude oil and other liquids
days of supply



Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024



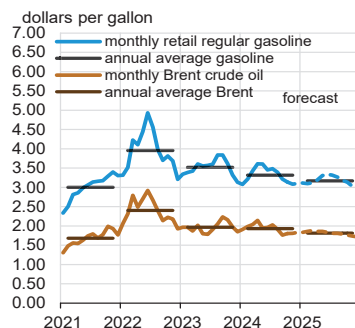
Estimated unplanned liquid fuels production outages among OPEC and non-OPEC producers



Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024

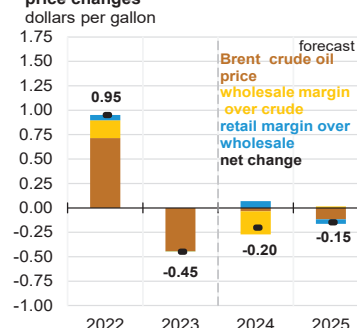


U.S. gasoline and crude oil prices

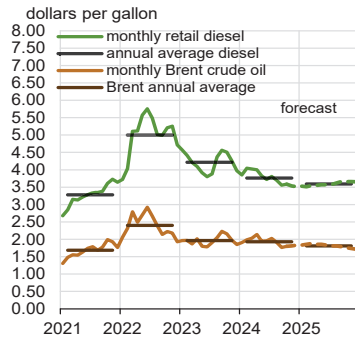


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024, and Refinitiv an LSEG Business

Components of annual gasoline price changes

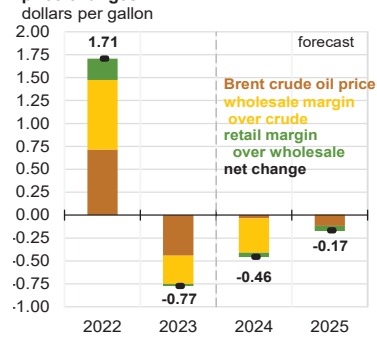


U.S. diesel and crude oil prices



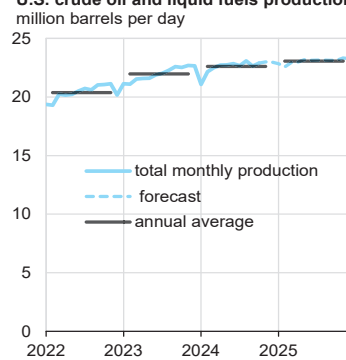
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024, and Refinitiv an LSEG Business

Components of annual diesel price changes



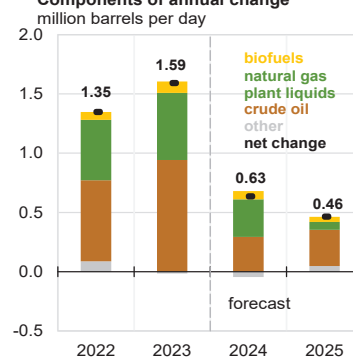
eia

U.S. crude oil and liquid fuels production



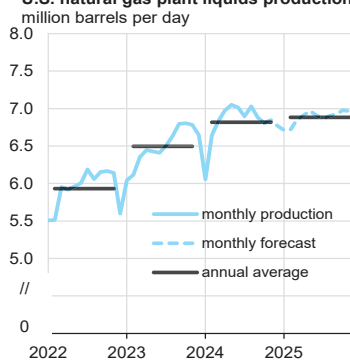
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024

Components of annual change



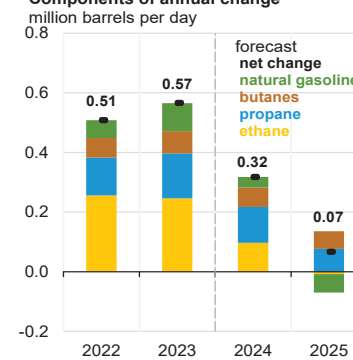
eia

U.S. natural gas plant liquids production



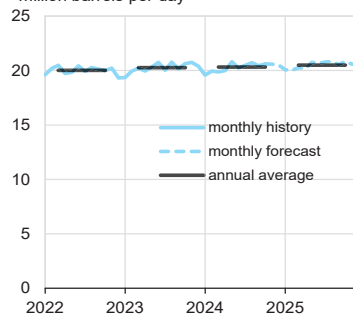
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024

Components of annual change



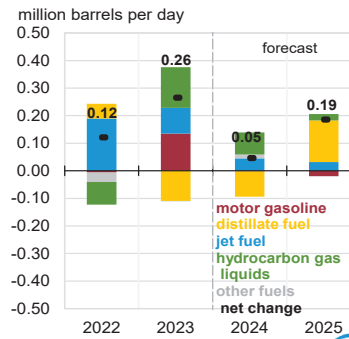
eia

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



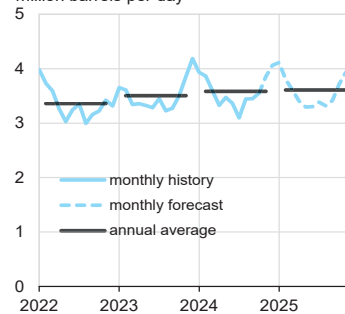
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024

Components of annual change



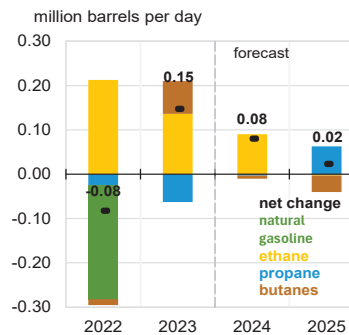
eia

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



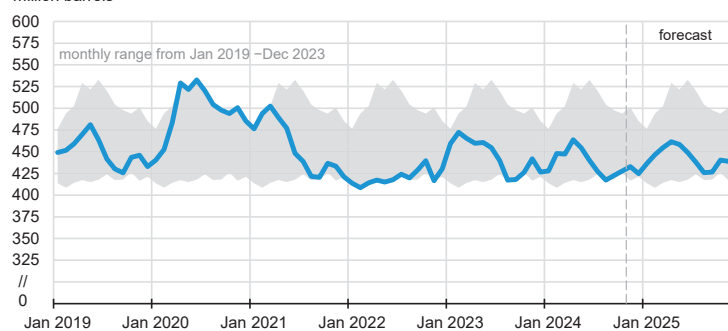
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024

Components of annual change



eia

U.S. commercial crude oil inventories
million barrels

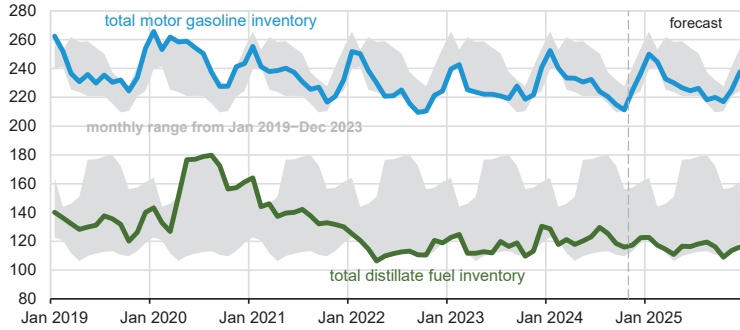


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024

eia

U.S. gasoline and distillate inventories

million barrels

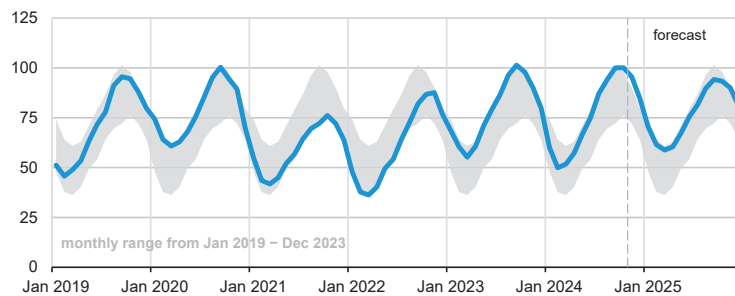


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024



U.S. commercial propane inventories

million barrels



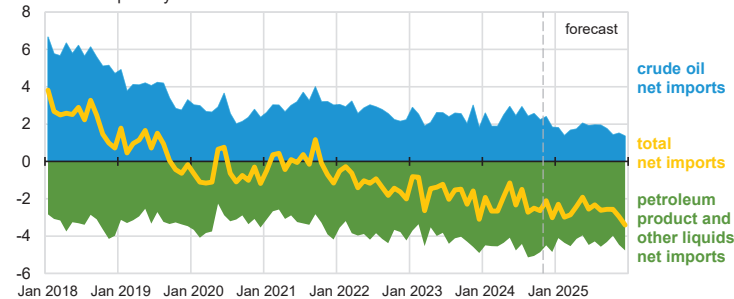
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024

Note: Excludes propylene.



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

million barrels per day



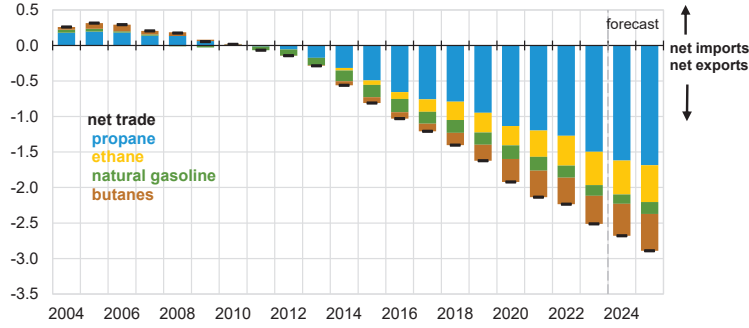
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024

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.



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

million barrels per day

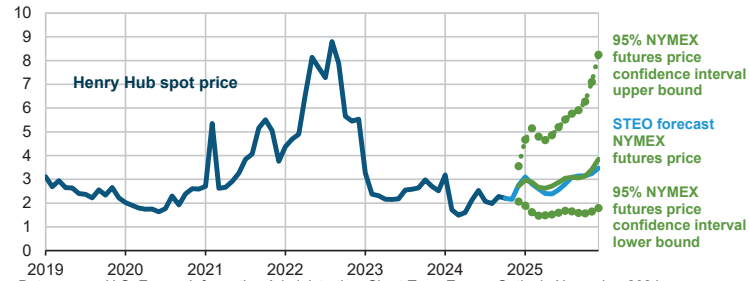


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024



Henry Hub natural gas price and NYMEX confidence intervals

dollars per million British thermal units



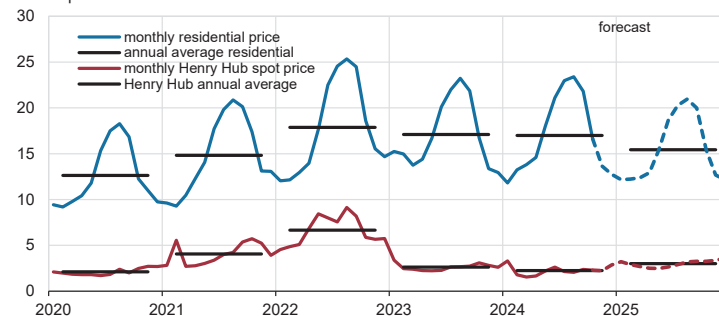
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024, CME Group, and Refinitiv an LSEG Business

Note: Confidence interval derived from options market information for the five trading days ending November 7, 2024. Intervals not calculated for months with sparse trading in near-the-money options contracts.



U.S. natural gas prices

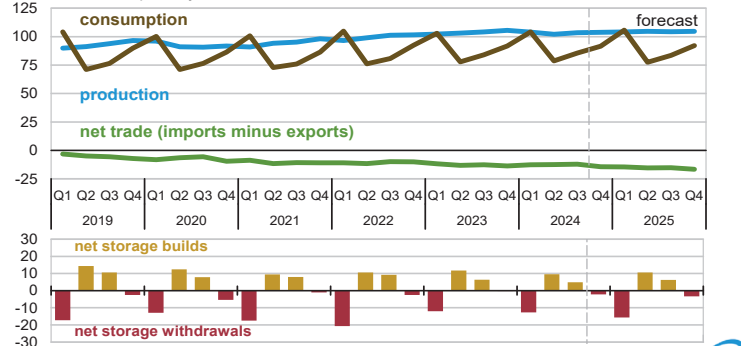
dollars per thousand cubic feet



Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024, and Refinitiv an LSEG Business

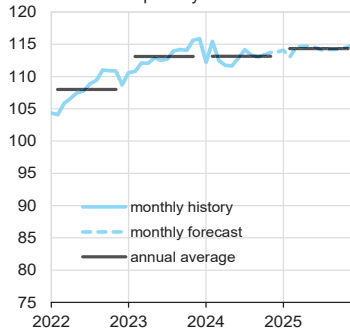


U.S. natural gas production, consumption, and net imports
billion cubic feet per day



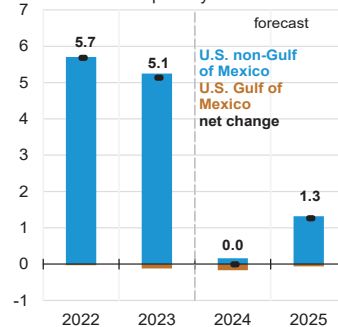
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024

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

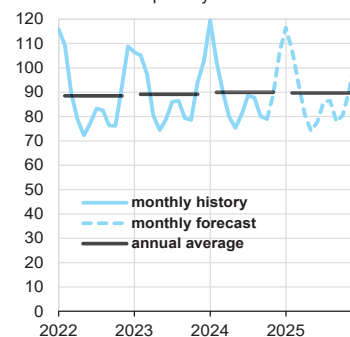


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024

Components of annual change
billion cubic feet per day

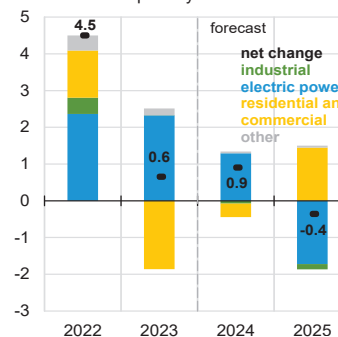


U.S. natural gas consumption
billion cubic feet per day



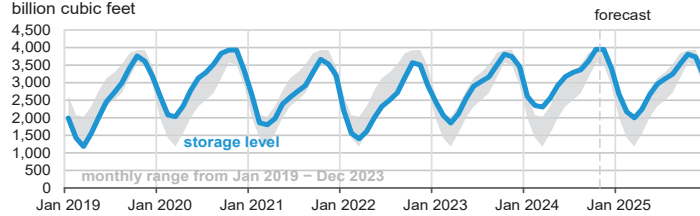
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024

Components of annual change
billion cubic feet per day

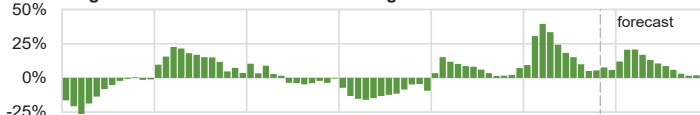



U.S. working natural gas in storage

billion cubic feet



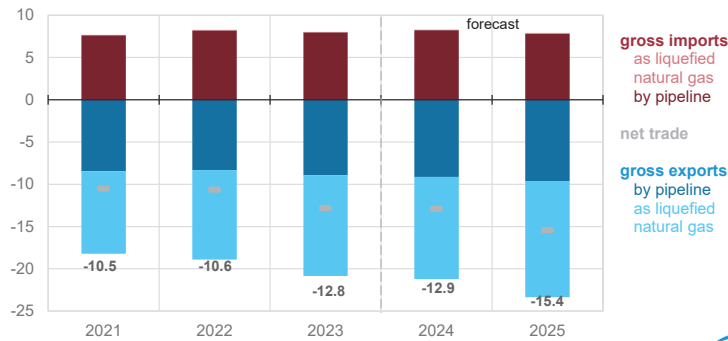
Percentage deviation from 2019 – 2023 average



Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024 

U.S. annual natural gas trade

billion cubic feet per day

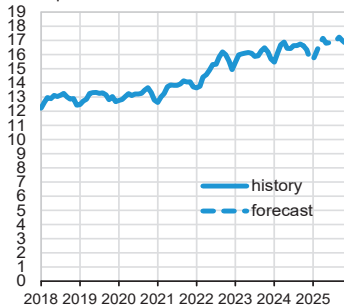


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024



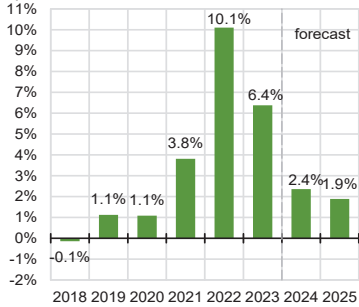
U.S. monthly nominal residential electricity price

cents per kilowatthour



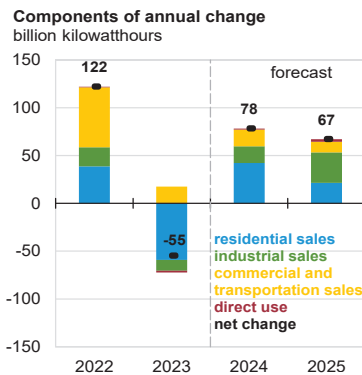
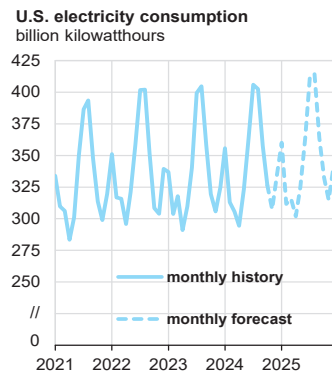
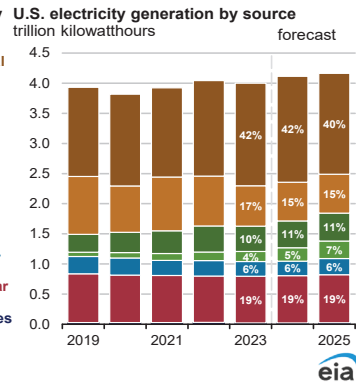
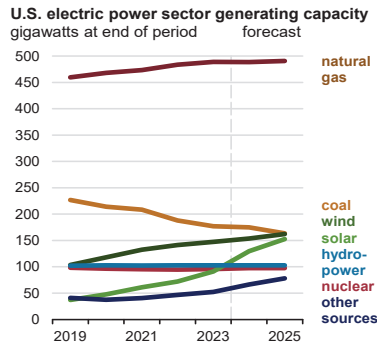
Annual growth in nominal residential electricity prices

percent

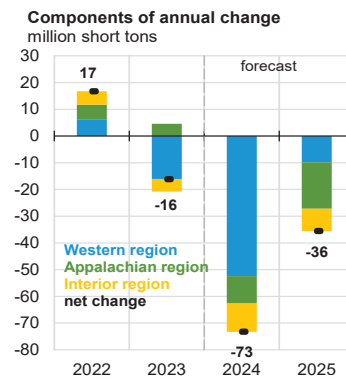
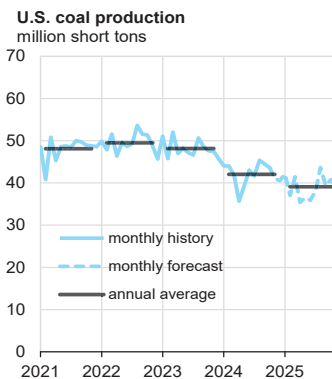


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024

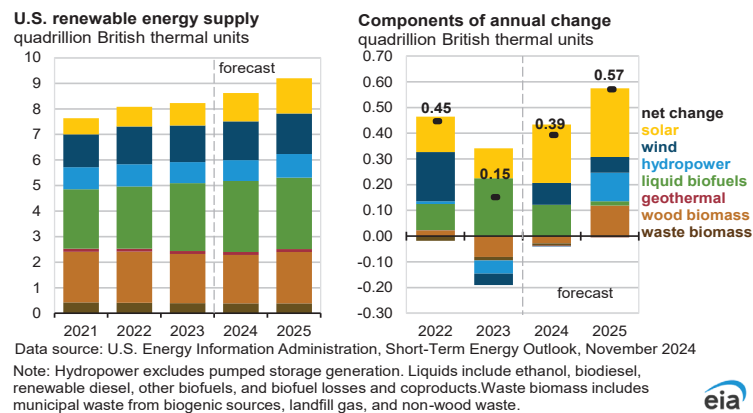
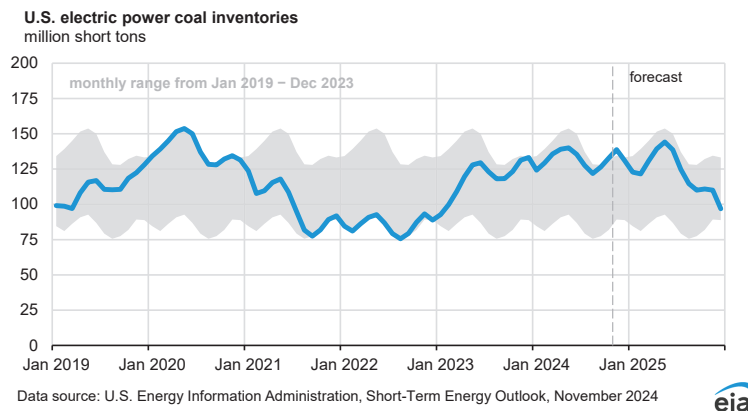
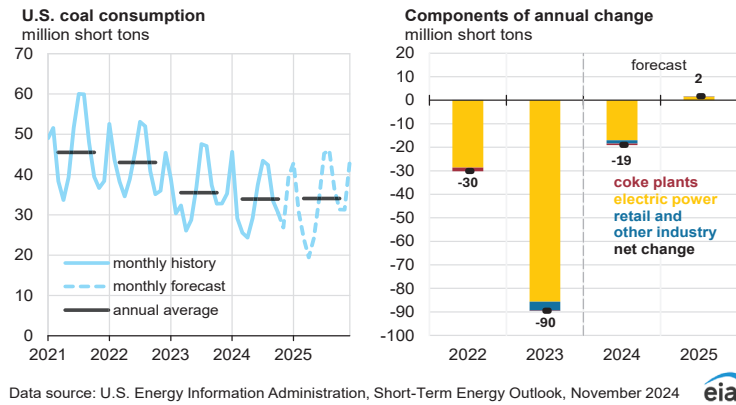




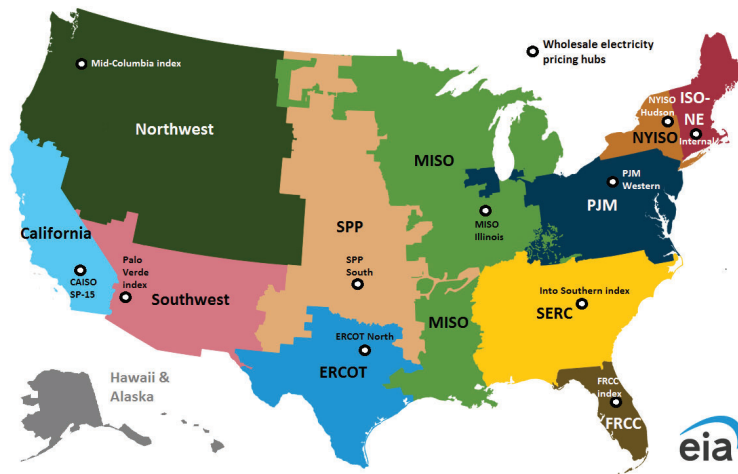
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024 eia



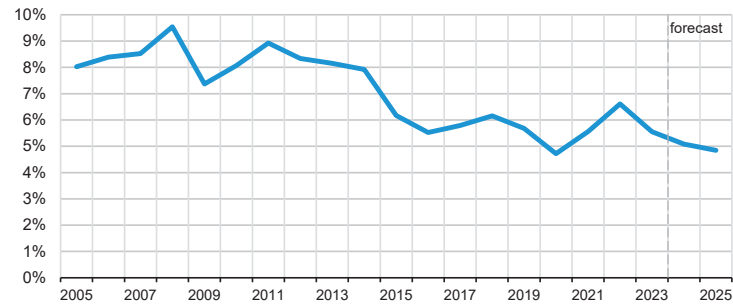
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024 eia



Short-Term Energy Outlook electricity supply regions



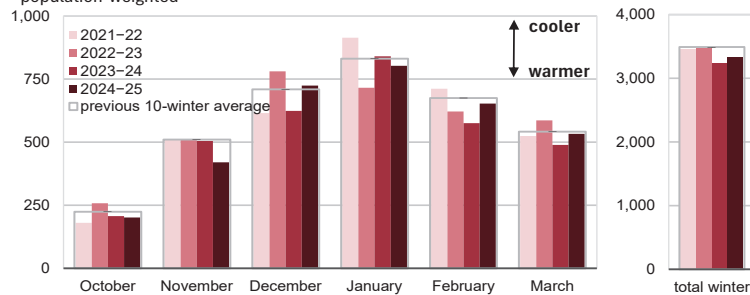
U.S. annual energy expenditures share of gross domestic product



Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024



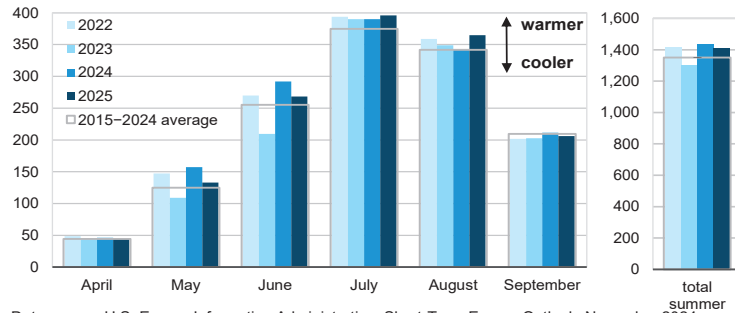
U.S. winter heating degree days population-weighted



Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024
Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data. Projections reflect NOAA's 14-16 month outlook.



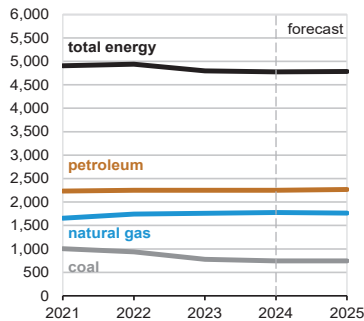
U.S. summer cooling degree days population-weighted



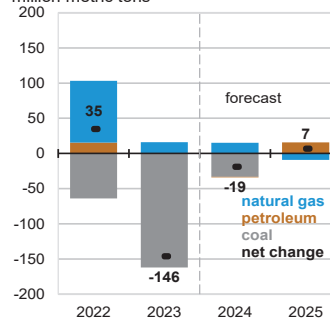
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024
 Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data.
 Projections reflect NOAA's 14-16 month outlook.



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



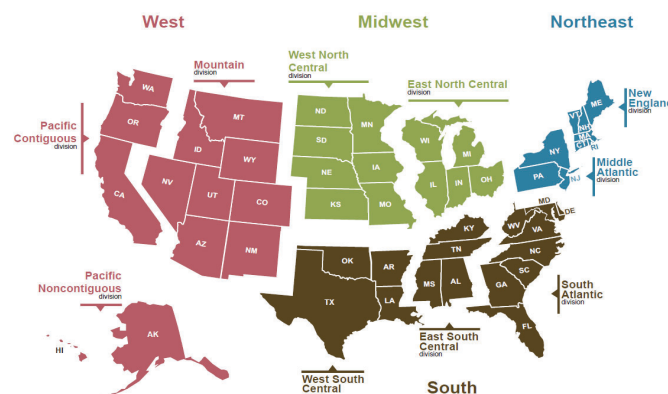
Components of annual change million metric tons



Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024



U.S. Census regions and divisions

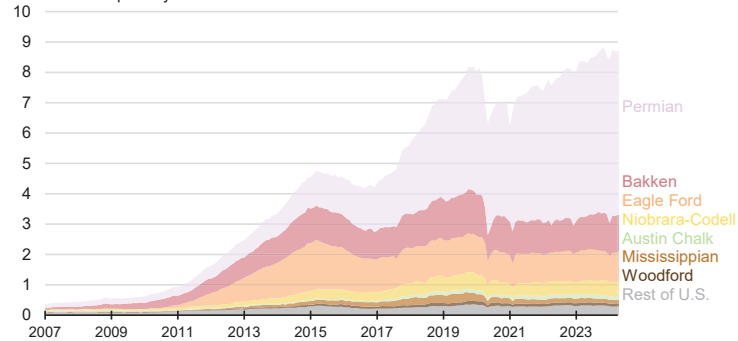


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook



Monthly U.S. tight oil production by formation

million barrels per day

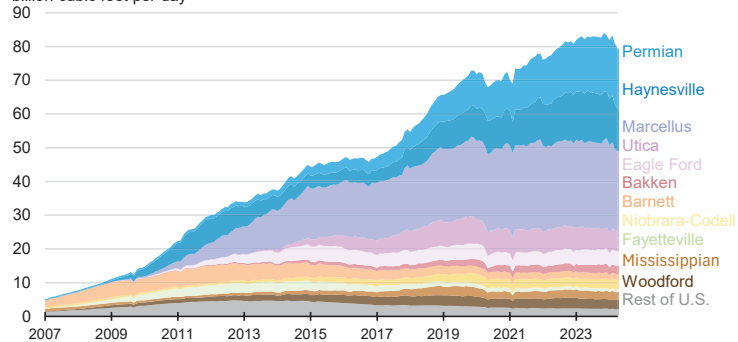


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024



Monthly U.S. dry shale natural gas production by formation

billion cubic feet per day

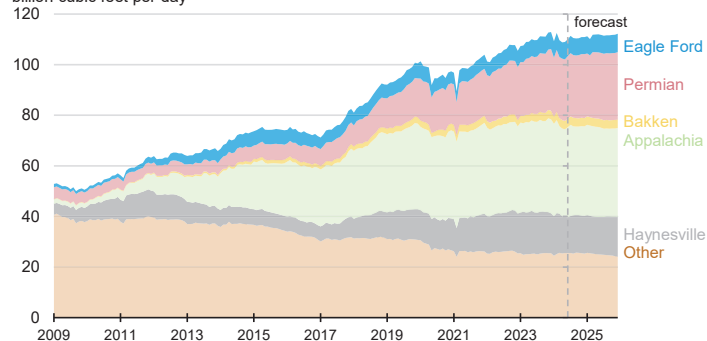


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024



Monthly U.S. marketed natural gas production by region

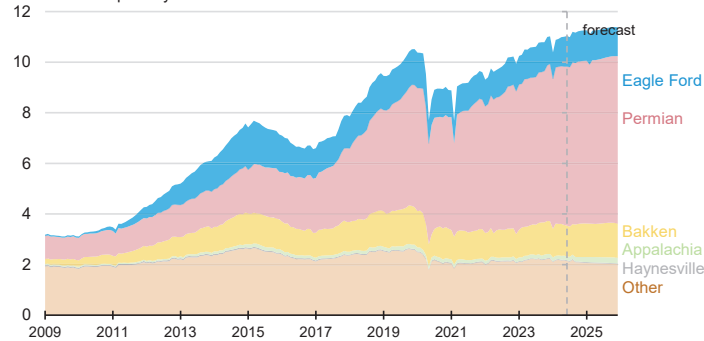
billion cubic feet per day



Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024



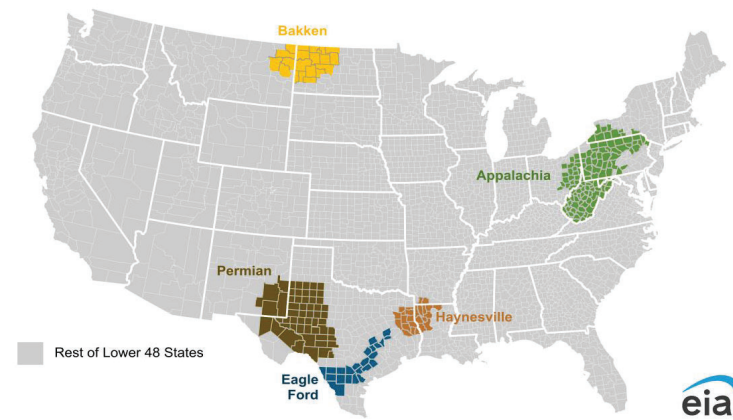
Monthly U.S. crude oil production by region
million barrels per day



Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, November 2024



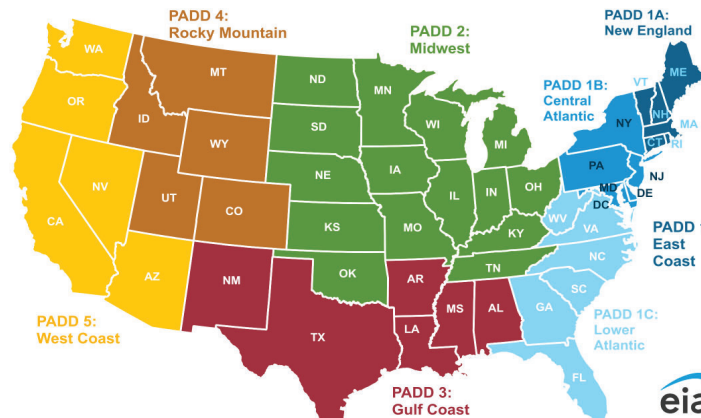
U.S. production regions



Data source: U.S. Energy Information Administration, *Short-Term Energy Outlook*, and the U.S. Census Bureau



U.S. Petroleum Administration for Defense Districts (PADD) regions



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



Table 1. U.S. Energy Markets Summary

U.S. Energy Information Administration | Short-Term Energy Outlook - November 2024

| | 2023 | | | | 2024 | | | | 2025 | | | | Year | | |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2023 | 2024 | 2025 |
| Energy Production | | | | | | | | | | | | | | | |
| Crude Oil Production (a) (million barrels per day) | 12.67 | 12.76 | 13.05 | 13.25 | 12.94 | 13.23 | 13.27 | 13.47 | 13.47 | 13.53 | 13.54 | 13.60 | 12.93 | 13.23 | 13.53 |
| Dry Natural Gas Production (billion cubic feet per day) | 102.2 | 103.2 | 104.1 | 105.5 | 104.0 | 102.0 | 103.5 | 103.8 | 104.2 | 104.7 | 104.3 | 104.7 | 103.8 | 103.3 | 104.5 |
| Coal Production (million short tons) | 149 | 142 | 146 | 141 | 130 | 118 | 132 | 125 | 121 | 108 | 121 | 120 | 578 | 505 | 469 |
| Energy Consumption | | | | | | | | | | | | | | | |
| Liquid Fuels (million barrels per day) | 19.83 | 20.35 | 20.32 | 20.59 | 19.80 | 20.36 | 20.55 | 20.57 | 20.12 | 20.53 | 20.72 | 20.64 | 20.28 | 20.32 | 20.51 |
| Natural Gas (billion cubic feet per day) | 102.9 | 77.9 | 84.0 | 91.8 | 104.1 | 78.7 | 85.6 | 91.6 | 105.7 | 77.5 | 83.6 | 92.1 | 89.1 | 90.0 | 89.6 |
| Coal (b) (million short tons) | 102 | 91 | 132 | 101 | 100 | 91 | 119 | 97 | 98 | 77 | 128 | 106 | 426 | 407 | 408 |
| Electricity (billion kilowatt hours per day) | 10.65 | 10.34 | 12.64 | 10.33 | 10.71 | 10.79 | 12.67 | 10.53 | 10.97 | 10.89 | 12.95 | 10.74 | 10.99 | 11.18 | 11.39 |
| Renewables (c) (quadrillion Btu) | 2.03 | 2.10 | 2.04 | 2.05 | 2.09 | 2.23 | 2.14 | 2.17 | 2.20 | 2.44 | 2.30 | 2.25 | 8.23 | 8.62 | 9.19 |
| Total Energy Consumption (d) (quadrillion Btu) | 24.20 | 22.01 | 23.69 | 23.75 | 24.39 | 22.21 | 23.74 | 23.75 | 24.61 | 22.18 | 24.01 | 24.11 | 93.65 | 94.08 | 94.90 |
| Energy Prices | | | | | | | | | | | | | | | |
| Crude Oil West Texas Intermediate Spo (dollars per barrel) | 75.96 | 73.49 | 82.25 | 78.63 | 77.50 | 81.77 | 76.43 | 72.32 | 73.67 | 73.17 | 71.17 | 68.52 | 77.58 | 77.00 | 71.60 |
| Natural Gas Henry Hub Spot (dollars per million Btu) | 2.65 | 2.16 | 2.59 | 2.74 | 2.13 | 2.08 | 2.11 | 2.37 | 2.84 | 2.45 | 3.01 | 3.29 | 2.54 | 2.17 | 2.90 |
| Coal (dollars per million Btu) | 2.56 | 2.48 | 2.50 | 2.50 | 2.50 | 2.54 | 2.45 | 2.40 | 2.42 | 2.41 | 2.41 | 2.38 | 2.51 | 2.47 | 2.40 |
| Macroeconomic | | | | | | | | | | | | | | | |
| Real Gross Domestic Product (billion chained 2017 dollars - SAAR) ... | 22,403 | 22,539 | 22,781 | 22,961 | 23,054 | 23,224 | 23,381 | 23,493 | 23,601 | 23,715 | 23,830 | 23,960 | 22,671 | 23,288 | 23,776 |
| Percent change from prior year | 2.3 | 2.8 | 3.2 | 3.2 | 2.9 | 3.0 | 2.6 | 2.3 | 2.4 | 2.1 | 1.9 | 2.0 | 2.9 | 2.7 | 2.1 |
| GDP Implicit Price Deflator (Index, 2017=100) | 121.2 | 121.8 | 122.8 | 123.2 | 124.2 | 124.9 | 125.4 | 125.9 | 126.7 | 127.4 | 128.1 | 128.9 | 122.3 | 125.1 | 127.8 |
| Percent change from prior year | 5.3 | 3.4 | 3.1 | 2.6 | 2.4 | 2.6 | 2.1 | 2.2 | 2.0 | 1.9 | 2.2 | 2.3 | 3.6 | 2.3 | 2.1 |
| Real Disposable Personal Income (billion chained 2017 dollars - SAAR) ... | 16,885 | 17,025 | 17,083 | 17,217 | 17,452 | 17,554 | 17,628 | 17,734 | 17,868 | 17,997 | 18,122 | 18,259 | 17,052 | 17,592 | 18,061 |
| Percent change from prior year | 4.8 | 6.1 | 4.8 | 4.6 | 3.4 | 3.1 | 3.2 | 3.0 | 2.4 | 2.5 | 2.8 | 3.0 | 5.1 | 3.2 | 2.7 |
| Manufacturing Production Index (Index, 2017=100) | 100.0 | 100.1 | 100.0 | 99.7 | 99.5 | 99.9 | 99.8 | 100.1 | 100.4 | 101.0 | 101.5 | 102.3 | 100.0 | 99.8 | 101.3 |
| Percent change from prior year | 0.0 | -0.6 | -0.7 | -0.3 | -0.6 | -0.2 | -0.2 | 0.4 | 0.9 | 1.1 | 1.7 | 2.2 | -0.4 | -0.2 | 1.5 |
| Weather | | | | | | | | | | | | | | | |
| U.S. Heating Degree-Days | 1,923 | 485 | 61 | 1,335 | 1,906 | 414 | 50 | 1,345 | 1,989 | 469 | 74 | 1,443 | 3,804 | 3,714 | 3,975 |
| U.S. Cooling Degree-Days | 68 | 362 | 941 | 104 | 53 | 496 | 943 | 130 | 51 | 446 | 967 | 106 | 1,476 | 1,622 | 1,569 |

(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.

Notes:

EIA completed modeling and analysis for this report on November 7, 2024.

- = no data available

The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray.

Prices are not adjusted for inflation.

Sources:

 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.

Table 2. Energy Prices

U.S. Energy Information Administration | Short-Term Energy Outlook - November 2024

| | 2023 | | | | 2024 | | | | 2025 | | | | Year | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2023 | 2024 | 2025 |
| Crude Oil (dollars per barrel) | | | | | | | | | | | | | | | |
| West Texas Intermediate Spot Average | 75.96 | 73.49 | 82.25 | 78.63 | 77.50 | 81.77 | 76.43 | 72.32 | 73.67 | 73.17 | 71.17 | 68.52 | 77.58 | 77.00 | 71.60 |
| Brent Spot Average | 81.04 | 78.02 | 86.64 | 83.93 | 82.96 | 84.72 | 80.03 | 76.20 | 78.00 | 77.67 | 75.67 | 73.02 | 82.41 | 80.95 | 76.06 |
| U.S. Imported Average | 69.63 | 71.34 | 81.09 | 76.21 | 72.40 | 79.62 | 74.60 | 69.53 | 70.91 | 70.42 | 68.45 | 65.76 | 74.62 | 74.34 | 69.01 |
| U.S. Refiner Average Acquisition Cost | 74.49 | 74.10 | 82.38 | 79.37 | 76.42 | 81.75 | 76.37 | 71.83 | 73.17 | 72.66 | 70.68 | 67.98 | 77.68 | 76.61 | 71.11 |
| U.S. Liquid Fuels (dollars per gallon) | | | | | | | | | | | | | | | |
| Wholesale Petroleum Product Prices | | | | | | | | | | | | | | | |
| Gasoline | 2.62 | 2.65 | 2.96 | 2.33 | 2.46 | 2.58 | 2.34 | 2.10 | 2.17 | 2.40 | 2.37 | 2.12 | 2.64 | 2.37 | 2.27 |
| Diesel Fuel | 2.95 | 2.45 | 3.09 | 2.84 | 2.70 | 2.51 | 2.30 | 2.18 | 2.24 | 2.27 | 2.37 | 2.36 | 2.83 | 2.42 | 2.31 |
| Fuel Oil | 2.77 | 2.30 | 2.88 | 2.80 | 2.64 | 2.42 | 2.08 | 2.01 | 2.13 | 2.13 | 2.22 | 2.25 | 2.69 | 2.28 | 2.18 |
| Jet Fuel | 3.05 | 2.33 | 2.91 | 2.73 | 2.68 | 2.52 | 2.26 | 2.10 | 2.15 | 2.19 | 2.24 | 2.21 | 2.75 | 2.38 | 2.20 |
| No. 6 Residual Fuel Oil (a) | 1.97 | 1.89 | 2.02 | 2.05 | 1.98 | 2.06 | 1.99 | 1.86 | 1.90 | 1.87 | 1.84 | 1.79 | 1.99 | 1.97 | 1.85 |
| Propane Mont Belvieu Spot | 0.82 | 0.68 | 0.68 | 0.67 | 0.84 | 0.75 | 0.74 | 0.78 | 0.80 | 0.82 | 0.82 | 0.80 | 0.71 | 0.78 | 0.81 |
| Retail Prices Including Taxes | | | | | | | | | | | | | | | |
| Gasoline Regular Grade (b) | 3.38 | 3.58 | 3.76 | 3.36 | 3.24 | 3.56 | 3.37 | 3.11 | 3.11 | 3.28 | 3.26 | 3.03 | 3.52 | 3.32 | 3.17 |
| Gasoline All Grades (b) | 3.49 | 3.69 | 3.87 | 3.48 | 3.36 | 3.68 | 3.48 | 3.23 | 3.23 | 3.40 | 3.38 | 3.16 | 3.64 | 3.44 | 3.30 |
| On-highway Diesel Fuel | 4.40 | 3.94 | 4.28 | 4.25 | 3.97 | 3.85 | 3.69 | 3.54 | 3.53 | 3.56 | 3.62 | 3.66 | 4.22 | 3.76 | 3.59 |
| Heating Oil | 4.06 | 3.51 | 3.82 | 3.98 | 3.79 | 3.66 | 3.54 | 3.60 | 3.56 | 3.54 | 3.54 | 3.59 | 3.84 | 3.65 | 3.56 |
| Propane Residential | 2.70 | 2.61 | 2.44 | 2.43 | 2.58 | 2.48 | 2.38 | 2.45 | 2.51 | 2.53 | 2.54 | 2.56 | 2.54 | 2.47 | 2.53 |
| Natural Gas | | | | | | | | | | | | | | | |
| Henry Hub Spot (dollars per thousand cubic feet) | 2.75 | 2.25 | 2.69 | 2.84 | 2.21 | 2.16 | 2.19 | 2.46 | 2.94 | 2.54 | 3.12 | 3.41 | 2.63 | 2.26 | 3.01 |
| Henry Hub Spot (dollars per million Btu) | 2.65 | 2.16 | 2.59 | 2.74 | 2.13 | 2.08 | 2.11 | 2.37 | 2.84 | 2.45 | 3.01 | 3.29 | 2.54 | 2.17 | 2.90 |
| U.S. Retail Prices (dollars per thousand cubic feet) | | | | | | | | | | | | | | | |
| Industrial Sector | 6.12 | 3.76 | 3.87 | 4.38 | 4.47 | 3.35 | 3.22 | 3.36 | 4.01 | 3.22 | 3.62 | 4.20 | 4.59 | 3.62 | 3.78 |
| Commercial Sector | 11.82 | 10.48 | 10.89 | 9.82 | 9.81 | 10.42 | 10.93 | 9.00 | 8.67 | 9.09 | 9.76 | 8.66 | 10.89 | 9.79 | 8.86 |
| Residential Sector | 14.72 | 16.19 | 22.33 | 13.72 | 12.75 | 16.86 | 22.73 | 13.59 | 12.24 | 14.81 | 20.38 | 12.86 | 15.19 | 14.32 | 13.41 |
| U.S. Electricity | | | | | | | | | | | | | | | |
| Power Generation Fuel Costs (dollars per million Btu) | | | | | | | | | | | | | | | |
| Coal | 2.56 | 2.48 | 2.50 | 2.50 | 2.50 | 2.54 | 2.45 | 2.40 | 2.42 | 2.41 | 2.41 | 2.38 | 2.51 | 2.47 | 2.40 |
| Natural Gas | 4.96 | 2.61 | 2.94 | 3.20 | 3.37 | 2.37 | 2.40 | 2.73 | 3.34 | 2.68 | 3.06 | 3.58 | 3.36 | 2.69 | 3.16 |
| Residual Fuel Oil (c) | 19.21 | 17.89 | 19.32 | 20.87 | 18.84 | 18.55 | 17.43 | 13.96 | 14.07 | 14.97 | 14.28 | 13.91 | 19.36 | 17.25 | 14.26 |
| Distillate Fuel Oil | 22.96 | 19.97 | 22.30 | 22.18 | 20.14 | 19.55 | 18.15 | 16.81 | 17.11 | 17.52 | 18.08 | 18.21 | 21.87 | 18.54 | 17.70 |
| Prices to Ultimate Customers (cents per kilowatthour) | | | | | | | | | | | | | | | |
| Industrial Sector | 7.99 | 7.76 | 8.57 | 7.81 | 7.86 | 8.02 | 8.65 | 7.82 | 7.98 | 8.12 | 8.69 | 7.86 | 8.04 | 8.10 | 8.17 |
| Commercial Sector | 12.50 | 12.30 | 13.02 | 12.47 | 12.69 | 12.74 | 13.43 | 12.57 | 12.80 | 13.11 | 13.87 | 12.95 | 12.59 | 12.88 | 13.21 |
| Residential Sector | 15.81 | 16.11 | 16.00 | 16.10 | 16.02 | 16.55 | 16.66 | 16.19 | 16.13 | 16.91 | 17.01 | 16.62 | 16.00 | 16.38 | 16.69 |

(a) Average for all sulfur contents.

(b) Average self-service cash price.

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

Notes:

EIA completed modeling and analysis for this report on November 7, 2024.

- = no data available

The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray.

Prices are not adjusted for inflation; prices exclude taxes unless otherwise noted.

Sources:

 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; *Monthly Energy Review*, DOE/EIA-0035; *Heating Oil and Propane Update*.

 WTI and Brent crude oil spot prices, the Mt. Belvieu propane spot price, and the Henry Hub natural gas spot price are from Refinitiv, an LSEG company, via EIA (https://www.eia.gov/dnav/pet/pet_pri_spt_s1_d.htm).

 Retail heating oil prices are from the Bureau of Labor Statistics, *Consumer Price Index*.

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

Forecasts: EIA Short-Term Integrated Forecasting System.

Table 3a. World Petroleum and Other Liquid Fuels Production, Consumption, and Inventories
U.S. Energy Information Administration | Short-Term Energy Outlook - November 2024

| | 2023 | | | | 2024 | | | | 2025 | | | | Year | | |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2023 | 2024 | 2025 |
| Production (million barrels per day) (a) | | | | | | | | | | | | | | | |
| World total | 101.55 | 101.60 | 101.82 | 103.09 | 102.03 | 102.48 | 102.62 | 103.35 | 103.64 | 104.38 | 105.13 | 105.48 | 102.02 | 102.62 | 104.66 |
| Crude oil | 76.93 | 76.32 | 75.93 | 77.08 | 76.70 | 76.19 | 76.10 | 77.04 | 77.78 | 77.88 | 78.48 | 78.96 | 76.57 | 76.51 | 78.28 |
| Other liquids | 24.62 | 25.28 | 25.89 | 26.00 | 25.34 | 26.29 | 26.52 | 26.32 | 25.85 | 26.50 | 26.65 | 26.52 | 25.45 | 26.12 | 26.38 |
| World total | 101.55 | 101.60 | 101.82 | 103.09 | 102.03 | 102.48 | 102.62 | 103.35 | 103.64 | 104.38 | 105.13 | 105.48 | 102.02 | 102.62 | 104.66 |
| OPEC total (b) | 32.71 | 32.44 | 31.63 | 31.93 | 32.16 | 32.09 | 32.03 | 32.10 | 32.34 | 32.51 | 32.60 | 32.60 | 32.17 | 32.09 | 32.51 |
| Crude oil | 27.38 | 27.23 | 26.37 | 26.63 | 26.77 | 26.82 | 26.69 | 26.72 | 27.00 | 27.18 | 27.27 | 27.27 | 26.90 | 26.75 | 27.18 |
| Other liquids | 5.33 | 5.21 | 5.26 | 5.30 | 5.40 | 5.26 | 5.34 | 5.38 | 5.33 | 5.33 | 5.33 | 5.33 | 5.27 | 5.35 | 5.33 |
| Non-OPEC total | 68.85 | 69.16 | 70.19 | 71.16 | 69.87 | 70.39 | 70.59 | 71.26 | 71.30 | 71.87 | 72.54 | 72.88 | 69.84 | 70.53 | 72.15 |
| Crude oil | 49.56 | 49.09 | 49.56 | 50.45 | 49.93 | 49.37 | 49.41 | 50.32 | 50.78 | 50.70 | 51.22 | 51.69 | 49.67 | 49.76 | 51.10 |
| Other liquids | 19.29 | 20.07 | 20.63 | 20.70 | 19.94 | 21.03 | 21.18 | 20.94 | 20.52 | 21.17 | 21.32 | 21.19 | 20.18 | 20.77 | 21.05 |
| Consumption (million barrels per day) (c) | | | | | | | | | | | | | | | |
| World total | 101.27 | 102.12 | 102.56 | 102.59 | 102.20 | 103.13 | 103.52 | 103.68 | 103.87 | 104.02 | 104.70 | 104.80 | 102.14 | 103.13 | 104.35 |
| OECD total (d) | 45.26 | 45.52 | 45.90 | 46.00 | 44.80 | 45.55 | 46.15 | 46.22 | 45.44 | 45.22 | 46.05 | 46.16 | 45.67 | 45.68 | 45.72 |
| Canada | 2.34 | 2.48 | 2.63 | 2.37 | 2.37 | 2.28 | 2.56 | 2.50 | 2.43 | 2.38 | 2.49 | 2.46 | 2.45 | 2.43 | 2.44 |
| Europe | 13.12 | 13.57 | 13.69 | 13.39 | 12.85 | 13.62 | 13.88 | 13.51 | 13.14 | 13.30 | 13.71 | 13.47 | 13.45 | 13.47 | 13.40 |
| Japan | 3.68 | 3.05 | 3.06 | 3.38 | 3.44 | 2.96 | 3.01 | 3.38 | 3.48 | 2.89 | 2.99 | 3.31 | 3.29 | 3.20 | 3.17 |
| United States | 19.83 | 20.35 | 20.32 | 20.59 | 19.80 | 20.36 | 20.55 | 20.57 | 20.12 | 20.53 | 20.72 | 20.64 | 20.28 | 20.32 | 20.51 |
| U.S. Territories | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Other OECD | 6.19 | 5.96 | 6.09 | 6.16 | 6.22 | 6.21 | 6.04 | 6.14 | 6.15 | 6.01 | 6.03 | 6.16 | 6.10 | 6.16 | 6.09 |
| Non-OECD total | 56.01 | 56.60 | 56.66 | 56.59 | 57.40 | 57.59 | 57.37 | 57.46 | 58.44 | 58.80 | 58.66 | 58.65 | 56.47 | 57.45 | 58.64 |
| China | 16.33 | 16.55 | 16.24 | 16.48 | 16.75 | 16.65 | 16.10 | 16.45 | 16.87 | 16.91 | 16.49 | 16.72 | 16.40 | 16.49 | 16.75 |
| Eurasia | 4.66 | 4.82 | 5.16 | 5.06 | 4.71 | 4.87 | 5.21 | 5.11 | 4.74 | 4.91 | 5.26 | 5.16 | 4.93 | 4.98 | 5.02 |
| Europe | 0.74 | 0.76 | 0.77 | 0.77 | 0.75 | 0.77 | 0.77 | 0.77 | 0.75 | 0.77 | 0.78 | 0.78 | 0.76 | 0.76 | 0.77 |
| Other Asia | 14.57 | 14.44 | 13.91 | 14.14 | 15.04 | 14.89 | 14.44 | 14.74 | 15.51 | 15.49 | 14.85 | 15.19 | 14.26 | 14.77 | 15.26 |
| Other non-OECD | 19.71 | 20.02 | 20.59 | 20.13 | 20.15 | 20.41 | 20.84 | 20.39 | 20.56 | 20.72 | 21.28 | 20.81 | 20.12 | 20.45 | 20.84 |
| Total crude oil and other liquids inventory net withdrawals (million barrels per day) | | | | | | | | | | | | | | | |
| World total | -0.28 | 0.52 | 0.74 | -0.49 | 0.16 | 0.65 | 0.90 | 0.32 | 0.24 | -0.36 | -0.43 | -0.68 | 0.12 | 0.51 | -0.31 |
| United States | -0.07 | -0.10 | -0.26 | 0.30 | 0.13 | -0.64 | 0.01 | 0.10 | -0.11 | -0.38 | 0.02 | 0.28 | -0.03 | -0.10 | -0.05 |
| Other OECD | 0.33 | 0.01 | -0.17 | 0.21 | -0.13 | -0.32 | 0.28 | 0.07 | 0.11 | 0.00 | -0.13 | -0.29 | 0.09 | -0.03 | -0.08 |
| Other inventory draws and balance | -0.54 | 0.62 | 1.17 | -1.00 | 0.16 | 1.62 | 0.62 | 0.15 | 0.24 | 0.01 | -0.31 | -0.67 | 0.06 | 0.64 | -0.18 |
| End-of-period commercial crude oil and other liquids inventories (million barrels) | | | | | | | | | | | | | | | |
| OECD total | 2,748 | 2,781 | 2,816 | 2,766 | 2,757 | 2,836 | 2,800 | 2,768 | 2,758 | 2,789 | 2,800 | 2,801 | 2,766 | 2,768 | 2,801 |
| United States | 1,230 | 1,263 | 1,282 | 1,251 | 1,230 | 1,280 | 1,269 | 1,243 | 1,243 | 1,275 | 1,273 | 1,247 | 1,251 | 1,243 | 1,247 |
| Other OECD | 1,518 | 1,518 | 1,534 | 1,515 | 1,527 | 1,556 | 1,531 | 1,525 | 1,515 | 1,515 | 1,527 | 1,554 | 1,515 | 1,525 | 1,554 |

(a) Includes crude oil, lease condensate, natural gas plant liquids, other liquids, refinery processing gain, and other unaccounted-for liquids. Differences in the reported historical production data across countries could result in some inconsistencies in the delineation between crude oil and other liquid fuels.

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

(c) Consumption of petroleum by the OECD countries is the same as "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.

(d) OECD = Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Latvia, Lithuania, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, Türkiye, United Kingdom, and United States.

Notes:

EIA completed modeling and analysis for this report on November 7, 2024.

- = no data available

The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray.

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

Sources:

Historical data: Energy Information Administration *International Energy Statistics* (<https://www.eia.gov/international/data/world>).

Forecasts: EIA Short-Term Integrated Forecasting System.

Table 3b. Non-OPEC Petroleum and Other Liquid Fuels Production (million barrels per day)

U.S. Energy Information Administration | Short-Term Energy Outlook - November 2024

| | 2023 | | | | 2024 | | | | 2025 | | | | Year | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2023 | 2024 | 2025 |
| Petroleum and other liquid fuels production (a) | | | | | | | | | | | | | | | |
| Non-OPEC total (b) | 68.85 | 69.16 | 70.19 | 71.16 | 69.87 | 70.39 | 70.59 | 71.26 | 71.30 | 71.87 | 72.54 | 72.88 | 69.84 | 70.53 | 72.15 |
| North America total | 29.15 | 29.22 | 30.19 | 30.82 | 29.91 | 30.59 | 30.83 | 31.30 | 31.24 | 31.24 | 31.48 | 31.76 | 29.85 | 30.66 | 31.43 |
| Canada | 5.77 | 5.37 | 5.79 | 6.10 | 5.95 | 5.82 | 5.99 | 6.37 | 6.46 | 6.18 | 6.40 | 6.61 | 5.76 | 6.03 | 6.41 |
| Mexico | 2.12 | 2.16 | 2.11 | 2.09 | 2.05 | 2.00 | 2.03 | 1.99 | 1.99 | 1.96 | 1.94 | 1.91 | 2.12 | 2.02 | 1.95 |
| United States | 21.26 | 21.69 | 22.30 | 22.63 | 21.91 | 22.77 | 22.80 | 22.95 | 22.79 | 23.10 | 23.14 | 23.24 | 21.97 | 22.61 | 23.07 |
| Central and South America total | 6.39 | 7.01 | 7.60 | 7.40 | 7.01 | 7.49 | 7.72 | 7.53 | 7.17 | 7.75 | 8.19 | 7.85 | 7.11 | 7.44 | 7.74 |
| Argentina | 0.81 | 0.81 | 0.82 | 0.84 | 0.86 | 0.87 | 0.91 | 0.90 | 0.91 | 0.91 | 0.93 | 0.93 | 0.82 | 0.88 | 0.92 |
| Brazil | 3.60 | 4.21 | 4.82 | 4.49 | 3.90 | 4.39 | 4.68 | 4.42 | 4.07 | 4.53 | 4.84 | 4.51 | 4.28 | 4.35 | 4.49 |
| Colombia | 0.80 | 0.81 | 0.81 | 0.81 | 0.80 | 0.82 | 0.80 | 0.79 | 0.79 | 0.79 | 0.78 | 0.77 | 0.81 | 0.80 | 0.78 |
| Guyana | 0.39 | 0.38 | 0.36 | 0.44 | 0.64 | 0.62 | 0.54 | 0.62 | 0.62 | 0.74 | 0.87 | 0.87 | 0.39 | 0.60 | 0.77 |
| Europe total | 4.02 | 3.95 | 3.85 | 3.96 | 3.95 | 3.87 | 3.74 | 3.94 | 4.03 | 3.98 | 3.92 | 4.10 | 3.94 | 3.87 | 4.01 |
| Norway | 2.03 | 2.03 | 1.98 | 2.06 | 2.06 | 2.00 | 1.94 | 2.10 | 2.15 | 2.11 | 2.13 | 2.23 | 2.02 | 2.03 | 2.16 |
| United Kingdom | 0.87 | 0.80 | 0.74 | 0.78 | 0.77 | 0.74 | 0.71 | 0.74 | 0.78 | 0.77 | 0.69 | 0.77 | 0.80 | 0.74 | 0.75 |
| Eurasia total | 14.20 | 13.82 | 13.60 | 13.87 | 13.81 | 13.41 | 13.23 | 13.26 | 13.51 | 13.49 | 13.52 | 13.73 | 13.87 | 13.43 | 13.56 |
| Azerbaijan | 0.65 | 0.62 | 0.62 | 0.61 | 0.60 | 0.59 | 0.59 | 0.60 | 0.61 | 0.62 | 0.64 | 0.64 | 0.62 | 0.60 | 0.63 |
| Kazakhstan | 2.02 | 1.97 | 1.85 | 1.99 | 2.00 | 1.89 | 1.91 | 1.85 | 1.96 | 1.97 | 1.95 | 2.03 | 1.96 | 1.91 | 1.98 |
| Russia | 11.15 | 10.84 | 10.75 | 10.89 | 10.83 | 10.55 | 10.34 | 10.42 | 10.55 | 10.51 | 10.54 | 10.66 | 10.91 | 10.53 | 10.57 |
| Middle East total | 3.19 | 3.23 | 3.20 | 3.23 | 3.19 | 3.21 | 3.20 | 3.20 | 3.22 | 3.26 | 3.28 | 3.29 | 3.21 | 3.20 | 3.26 |
| Oman | 1.07 | 1.06 | 1.05 | 1.05 | 1.01 | 1.00 | 1.00 | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.00 | 1.03 |
| Qatar | 1.82 | 1.82 | 1.83 | 1.84 | 1.86 | 1.87 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.83 | 1.87 | 1.88 |
| Africa total | 2.55 | 2.62 | 2.63 | 2.70 | 2.64 | 2.51 | 2.58 | 2.68 | 2.77 | 2.78 | 2.77 | 2.74 | 2.62 | 2.60 | 2.77 |
| Angola | 1.12 | 1.18 | 1.18 | 1.22 | 1.20 | 1.16 | 1.17 | 1.15 | 1.13 | 1.12 | 1.11 | 1.09 | 1.17 | 1.17 | 1.12 |
| Egypt | 0.66 | 0.67 | 0.67 | 0.66 | 0.66 | 0.65 | 0.65 | 0.66 | 0.65 | 0.65 | 0.65 | 0.65 | 0.67 | 0.65 | 0.65 |
| Asia and Oceania total | 9.34 | 9.30 | 9.12 | 9.18 | 9.36 | 9.31 | 9.29 | 9.33 | 9.35 | 9.38 | 9.37 | 9.41 | 9.23 | 9.33 | 9.38 |
| China | 5.32 | 5.32 | 5.18 | 5.22 | 5.39 | 5.36 | 5.30 | 5.36 | 5.33 | 5.35 | 5.34 | 5.39 | 5.26 | 5.35 | 5.35 |
| India | 0.93 | 0.95 | 0.94 | 0.93 | 0.95 | 0.95 | 0.96 | 0.95 | 0.98 | 0.97 | 0.97 | 0.97 | 0.94 | 0.95 | 0.97 |
| Indonesia | 0.89 | 0.89 | 0.87 | 0.87 | 0.86 | 0.88 | 0.87 | 0.87 | 0.88 | 0.87 | 0.87 | 0.87 | 0.88 | 0.87 | 0.87 |
| Malaysia | 0.61 | 0.58 | 0.58 | 0.61 | 0.59 | 0.58 | 0.56 | 0.58 | 0.58 | 0.59 | 0.59 | 0.59 | 0.60 | 0.58 | 0.59 |
| Unplanned production outages | | | | | | | | | | | | | | | |
| Non-OPEC total | 0.56 | 1.02 | 0.92 | 0.87 | 1.04 | 1.11 | 1.29 | - | - | - | - | - | 0.84 | - | - |

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

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

Notes:

EIA completed modeling and analysis for this report on November 7, 2024.

- = no data available

The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray.

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

Sources:

 Historical data: Energy Information Administration *International Energy Statistics* (<https://www.eia.gov/international/data/world>).

Forecasts: EIA Short-Term Integrated Forecasting System.

Table 3c. World Petroleum and Other Liquid Fuels Production (million barrels per day)
U.S. Energy Information Administration | Short-Term Energy Outlook - November 2024

| | 2023 | | | | 2024 | | | | 2025 | | | | Year | | |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2023 | 2024 | 2025 |
| Petroleum and other liquid fuels production (a) | | | | | | | | | | | | | | | |
| World total | 101.55 | 101.60 | 101.82 | 103.09 | 102.03 | 102.48 | 102.62 | 103.35 | 103.64 | 104.38 | 105.13 | 105.48 | 102.02 | 102.62 | 104.66 |
| OPEC+ total (b) | 45.06 | 44.36 | 42.99 | 43.35 | 43.27 | 42.62 | 42.51 | 42.39 | 43.05 | 43.20 | 43.29 | 43.47 | 43.93 | 42.70 | 43.26 |
| United States | 21.26 | 21.69 | 22.30 | 22.63 | 21.91 | 22.77 | 22.80 | 22.95 | 22.79 | 23.10 | 23.14 | 23.24 | 21.97 | 22.61 | 23.07 |
| Non-OPEC+ excluding United States | 35.24 | 35.55 | 36.54 | 37.11 | 36.86 | 37.09 | 37.31 | 38.01 | 37.79 | 38.09 | 38.69 | 38.77 | 36.11 | 37.32 | 38.34 |
| | | | | | | | | | | | | | | | |
| OPEC total (c) | 32.71 | 32.44 | 31.63 | 31.93 | 32.16 | 32.09 | 32.03 | 32.10 | 32.34 | 32.51 | 32.60 | 32.60 | 32.17 | 32.09 | 32.51 |
| Algeria | 1.48 | 1.45 | 1.42 | 1.43 | 1.38 | 1.37 | 1.38 | - | - | - | - | - | 1.44 | - | - |
| Congo (Brazzaville) | 0.27 | 0.26 | 0.26 | 0.27 | 0.26 | 0.26 | 0.25 | - | - | - | - | - | 0.27 | - | - |
| Equatorial Guinea | 0.10 | 0.10 | 0.10 | 0.09 | 0.10 | 0.09 | 0.10 | - | - | - | - | - | 0.10 | - | - |
| Gabon | 0.20 | 0.21 | 0.20 | 0.21 | 0.21 | 0.22 | 0.21 | - | - | - | - | - | 0.20 | - | - |
| Iran | 3.79 | 3.80 | 4.06 | 4.31 | 4.43 | 4.32 | 4.43 | - | - | - | - | - | 3.99 | - | - |
| Iraq | 4.52 | 4.30 | 4.44 | 4.48 | 4.54 | 4.57 | 4.56 | - | - | - | - | - | 4.44 | - | - |
| Kuwait | 3.00 | 2.90 | 2.88 | 2.85 | 2.77 | 2.81 | 2.76 | - | - | - | - | - | 2.91 | - | - |
| Libya | 1.24 | 1.22 | 1.25 | 1.27 | 1.20 | 1.28 | 0.99 | - | - | - | - | - | 1.24 | - | - |
| Nigeria | 1.50 | 1.48 | 1.49 | 1.60 | 1.57 | 1.52 | 1.59 | - | - | - | - | - | 1.52 | - | - |
| Saudi Arabia | 11.62 | 11.78 | 10.62 | 10.53 | 10.74 | 10.62 | 10.65 | - | - | - | - | - | 11.13 | - | - |
| United Arab Emirates | 4.27 | 4.15 | 4.12 | 4.11 | 4.15 | 4.17 | 4.18 | - | - | - | - | - | 4.16 | - | - |
| Venezuela | 0.73 | 0.78 | 0.79 | 0.78 | 0.81 | 0.85 | 0.93 | - | - | - | - | - | 0.77 | - | - |
| | | | | | | | | | | | | | | | |
| OPEC+ total (b) | 45.06 | 44.36 | 42.99 | 43.35 | 43.27 | 42.62 | 42.51 | 42.39 | 43.05 | 43.20 | 43.29 | 43.47 | 43.93 | 42.70 | 43.26 |
| OPEC members subject to OPEC+ agreements (d) | 26.95 | 26.64 | 25.54 | 25.57 | 25.72 | 25.63 | 25.69 | 25.54 | 25.88 | 26.05 | 26.13 | 26.12 | 26.17 | 25.64 | 26.05 |
| OPEC+ other participants total | 18.11 | 17.72 | 17.45 | 17.78 | 17.55 | 16.99 | 16.82 | 16.85 | 17.18 | 17.15 | 17.17 | 17.35 | 17.76 | 17.05 | 17.21 |
| Azerbaijan | 0.65 | 0.62 | 0.62 | 0.61 | 0.60 | 0.59 | 0.59 | 0.60 | 0.61 | 0.62 | 0.64 | 0.64 | 0.62 | 0.60 | 0.63 |
| Bahrain | 0.18 | 0.21 | 0.18 | 0.20 | 0.18 | 0.20 | 0.19 | 0.19 | 0.18 | 0.19 | 0.19 | 0.18 | 0.19 | 0.19 | 0.18 |
| Brunei | 0.11 | 0.08 | 0.09 | 0.10 | 0.10 | 0.08 | 0.11 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.09 | 0.10 | 0.09 |
| Kazakhstan | 2.02 | 1.97 | 1.85 | 1.99 | 2.00 | 1.89 | 1.91 | 1.85 | 1.96 | 1.97 | 1.95 | 2.03 | 1.96 | 1.91 | 1.98 |
| Malaysia | 0.61 | 0.58 | 0.58 | 0.61 | 0.59 | 0.58 | 0.56 | 0.58 | 0.58 | 0.59 | 0.59 | 0.59 | 0.60 | 0.58 | 0.59 |
| Mexico | 2.12 | 2.16 | 2.11 | 2.09 | 2.05 | 2.00 | 2.03 | 1.99 | 1.99 | 1.96 | 1.94 | 1.91 | 2.12 | 2.02 | 1.95 |
| Oman | 1.07 | 1.06 | 1.05 | 1.05 | 1.01 | 1.00 | 1.00 | 1.01 | 1.02 | 1.03 | 1.04 | 1.05 | 1.06 | 1.00 | 1.03 |
| Russia | 11.15 | 10.84 | 10.75 | 10.89 | 10.83 | 10.55 | 10.34 | 10.42 | 10.55 | 10.51 | 10.54 | 10.66 | 10.91 | 10.53 | 10.57 |
| South Sudan | 0.13 | 0.13 | 0.16 | 0.16 | 0.13 | 0.06 | 0.06 | 0.09 | 0.15 | 0.15 | 0.14 | 0.14 | 0.15 | 0.09 | 0.14 |
| Sudan | 0.07 | 0.07 | 0.07 | 0.07 | 0.06 | 0.04 | 0.03 | 0.04 | 0.05 | 0.05 | 0.05 | 0.04 | 0.07 | 0.04 | 0.05 |

(a) Includes crude oil, lease condensate, natural gas plant liquids, other liquids, refinery processing gain, and other unaccounted-for liquids.
(b) OPEC+ total = OPEC members subject to OPEC+ agreements plus Azerbaijan, Bahrain, Brunei, Kazakhstan, Malaysia, Mexico, Oman, Russia, South Sudan, and Sudan.
(c) OPEC = Organization of the Petroleum Exporting Countries: Algeria, Congo (Brazzaville), Equatorial Guinea, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Saudi Arabia, United Arab Emirates, and Venezuela.
(d) Iran, Libya, and Venezuela are not sbject to the OPEC+ agreements.

Notes:
EIA completed modeling and analysis for this report on November 7, 2024.
- = no data available
The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray.
Minor discrepancies with published historical data are due to independent rounding.

Sources:
Historical data: Energy Information Administration *International Energy Statistics* (<https://www.eia.gov/international/data/world>).
Forecasts: EIA Short-Term Integrated Forecasting System.

Table 3d. World Crude Oil Production (million barrels per day)
U.S. Energy Information Administration | Short-Term Energy Outlook - November 2024

| | 2023 | | | | 2024 | | | | 2025 | | | | Year | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2023 | 2024 | 2025 |
| Crude oil production (a) | | | | | | | | | | | | | | | |
| World total | 76.93 | 76.32 | 75.93 | 77.08 | 76.70 | 76.19 | 76.10 | 77.04 | 77.78 | 77.88 | 78.48 | 78.96 | 76.57 | 76.51 | 78.28 |
| OPEC+ total (b) | 38.18 | 37.50 | 36.24 | 36.42 | 36.30 | 35.75 | 35.66 | 35.41 | 36.07 | 36.34 | 36.52 | 36.55 | 37.08 | 35.78 | 36.37 |
| United States | 12.67 | 12.76 | 13.05 | 13.25 | 12.94 | 13.23 | 13.27 | 13.47 | 13.47 | 13.53 | 13.54 | 13.60 | 12.93 | 13.23 | 13.53 |
| Non-OPEC+ excluding United States | 26.08 | 26.06 | 26.64 | 27.42 | 27.46 | 27.21 | 27.16 | 28.16 | 28.25 | 28.01 | 28.43 | 28.81 | 26.55 | 27.50 | 28.38 |
| OPEC total (c) | | | | | | | | | | | | | | | |
| Algeria | 1.01 | 0.98 | 0.95 | 0.96 | 0.91 | 0.90 | 0.91 | - | - | - | - | - | 0.97 | - | - |
| Congo (Brazzaville) | 0.27 | 0.25 | 0.26 | 0.26 | 0.25 | 0.25 | 0.24 | - | - | - | - | - | 0.26 | - | - |
| Equatorial Guinea | 0.06 | 0.06 | 0.06 | 0.05 | 0.06 | 0.05 | 0.06 | - | - | - | - | - | 0.06 | - | - |
| Gabon | 0.20 | 0.21 | 0.20 | 0.21 | 0.21 | 0.22 | 0.21 | - | - | - | - | - | 0.20 | - | - |
| Iran | 2.60 | 2.74 | 2.97 | 3.18 | 3.24 | 3.26 | 3.34 | - | - | - | - | - | 2.87 | - | - |
| Iraq | 4.41 | 4.19 | 4.33 | 4.38 | 4.43 | 4.46 | 4.45 | - | - | - | - | - | 4.33 | - | - |
| Kuwait | 2.68 | 2.59 | 2.56 | 2.53 | 2.46 | 2.49 | 2.44 | - | - | - | - | - | 2.59 | - | - |
| Libya | 1.14 | 1.15 | 1.15 | 1.17 | 1.10 | 1.19 | 0.89 | - | - | - | - | - | 1.15 | - | - |
| Nigeria | 1.24 | 1.19 | 1.21 | 1.31 | 1.28 | 1.24 | 1.31 | - | - | 1.19 | - | - | 1.24 | - | - |
| Saudi Arabia | 10.02 | 10.18 | 9.02 | 8.93 | 9.12 | 9.00 | 9.03 | - | - | - | - | - | 9.53 | - | - |
| United Arab Emirates | 3.06 | 2.94 | 2.91 | 2.90 | 2.91 | 2.93 | 2.94 | - | - | - | - | - | 2.95 | - | - |
| Venezuela | 0.70 | 0.75 | 0.76 | 0.75 | 0.79 | 0.83 | 0.86 | - | - | - | - | - | 0.74 | - | - |
| OPEC+ total (b) | 38.18 | 37.50 | 36.24 | 36.42 | 36.30 | 35.75 | 35.66 | 35.41 | 36.07 | 36.34 | 36.52 | 36.55 | 37.08 | 35.78 | 36.37 |
| OPEC members subject to OPEC+ agreements (d) | 22.94 | 22.60 | 21.49 | 21.53 | 21.63 | 21.55 | 21.60 | 21.45 | 21.80 | 21.98 | 22.07 | 22.07 | 22.13 | 21.56 | 21.98 |
| OPEC+ other participants total | 15.24 | 14.90 | 14.75 | 14.89 | 14.67 | 14.20 | 14.07 | 13.96 | 14.26 | 14.36 | 14.45 | 14.48 | 14.95 | 14.22 | 14.39 |
| Azerbaijan | 0.52 | 0.50 | 0.49 | 0.49 | 0.47 | 0.47 | 0.48 | - | - | - | - | - | 0.50 | - | - |
| Bahrain | 0.17 | 0.20 | 0.17 | 0.19 | 0.17 | 0.18 | 0.18 | - | - | - | - | - | 0.18 | - | - |
| Brunei | 0.08 | 0.06 | 0.07 | 0.08 | 0.08 | 0.06 | 0.09 | - | - | - | - | - | 0.07 | - | - |
| Kazakhstan | 1.61 | 1.58 | 1.49 | 1.57 | 1.58 | 1.52 | 1.53 | - | - | - | - | - | 1.56 | - | - |
| Malaysia | 0.39 | 0.36 | 0.36 | 0.38 | 0.37 | 0.35 | 0.34 | - | - | - | - | - | 0.37 | - | - |
| Mexico | 1.65 | 1.67 | 1.65 | 1.63 | 1.60 | 1.56 | 1.57 | - | - | - | - | - | 1.65 | - | - |
| Oman | 0.84 | 0.82 | 0.80 | 0.80 | 0.76 | 0.76 | 0.76 | - | - | - | - | - | 0.81 | - | - |
| Russia | 9.78 | 9.52 | 9.49 | 9.53 | 9.44 | 9.19 | 9.03 | - | - | - | - | - | 9.58 | - | - |
| South Sudan | 0.13 | 0.13 | 0.16 | 0.16 | 0.13 | 0.06 | 0.06 | - | - | - | - | - | 0.15 | - | - |
| Sudan | 0.07 | 0.07 | 0.07 | 0.07 | 0.06 | 0.03 | 0.03 | - | - | - | - | - | 0.07 | - | - |
| Crude oil production capacity | | | | | | | | | | | | | | | |
| OPEC total | 30.45 | 30.33 | 30.58 | 30.91 | 31.06 | 31.17 | 31.04 | 31.20 | 31.20 | 31.34 | 31.46 | 31.45 | 30.57 | 31.12 | 31.36 |
| Middle East | 25.83 | 25.69 | 25.92 | 26.13 | 26.35 | 26.37 | 26.45 | 26.43 | 26.51 | 26.66 | 26.78 | 26.78 | 25.89 | 26.40 | 26.68 |
| Other | 4.63 | 4.64 | 4.67 | 4.78 | 4.71 | 4.80 | 4.59 | 4.77 | 4.69 | 4.68 | 4.67 | 4.67 | 4.68 | 4.72 | 4.68 |
| Surplus crude oil production capacity | | | | | | | | | | | | | | | |
| OPEC total | 3.08 | 3.09 | 4.21 | 4.28 | 4.29 | 4.34 | 4.35 | 4.48 | 4.19 | 4.16 | 4.19 | 4.18 | 3.67 | 4.37 | 4.18 |
| Middle East | 3.05 | 3.04 | 4.13 | 4.21 | 4.19 | 4.23 | 4.24 | 4.37 | 4.09 | 4.07 | 4.11 | 4.11 | 3.61 | 4.26 | 4.09 |
| Other | 0.02 | 0.05 | 0.08 | 0.07 | 0.11 | 0.12 | 0.11 | 0.11 | 0.10 | 0.09 | 0.08 | 0.07 | 0.06 | 0.11 | 0.09 |
| Unplanned production outages | | | | | | | | | | | | | | | |
| OPEC total | 1.94 | 2.13 | 1.95 | 1.52 | 1.52 | 1.47 | 1.64 | - | - | - | - | - | 1.88 | - | - |

(a) Differences in the reported historical production data across countries could result in some inconsistencies in the delineation between crude oil and other liquid fuels.
(b) OPEC+ total = OPEC members subject to OPEC+ agreements plus Azerbaijan, Bahrain, Brunei, Kazakhstan, Malaysia, Mexico, Oman, Russia, South Sudan, and Sudan.
(c) OPEC = Organization of the Petroleum Exporting Countries: Algeria, Congo (Brazzaville), Equatorial Guinea, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Saudi Arabia, United Arab Emirates, and Venezuela.
(d) Iran, Libya, and Venezuela are not subject to the OPEC+ agreements.

Notes:
EIA completed modeling and analysis for this report on November 7, 2024.
- = no data available
The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray.
Minor discrepancies with published historical data are due to independent rounding.

Sources:
Historical data: Energy Information Administration *International Energy Statistics* (<https://www.eia.gov/international/data/world>).
Forecasts: EIA Short-Term Integrated Forecasting System.

Table 3e. World Petroleum and Other Liquid Fuels Consumption (million barrels per day)

U.S. Energy Information Administration | Short-Term Energy Outlook - November 2024

| | 2023 | | | | 2024 | | | | 2025 | | | | 2023 | 2024 | 2025 |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | | | |
| Petroleum and other liquid fuels consumption (a) | | | | | | | | | | | | | | | |
| World total | 101.27 | 102.12 | 102.56 | 102.59 | 102.20 | 103.13 | 103.52 | 103.68 | 103.87 | 104.02 | 104.70 | 104.80 | 102.14 | 103.13 | 104.35 |
| OECD total (b) | 45.26 | 45.52 | 45.90 | 46.00 | 44.80 | 45.55 | 46.15 | 46.22 | 45.44 | 45.22 | 46.05 | 46.16 | 45.67 | 45.68 | 45.72 |
| Non-OECD total | 56.01 | 56.60 | 56.66 | 56.59 | 57.40 | 57.59 | 57.37 | 57.46 | 58.44 | 58.80 | 58.66 | 58.65 | 56.47 | 57.45 | 58.64 |
| World total | 101.27 | 102.12 | 102.56 | 102.59 | 102.20 | 103.13 | 103.52 | 103.68 | 103.87 | 104.02 | 104.70 | 104.80 | 102.14 | 103.13 | 104.35 |
| North America total | 23.89 | 24.56 | 24.72 | 24.71 | 23.90 | 24.43 | 24.86 | 24.81 | 24.25 | 24.63 | 24.93 | 24.84 | 24.47 | 24.50 | 24.66 |
| Canada | 2.34 | 2.48 | 2.63 | 2.37 | 2.37 | 2.28 | 2.56 | 2.50 | 2.43 | 2.38 | 2.49 | 2.46 | 2.45 | 2.43 | 2.44 |
| Mexico | 1.72 | 1.73 | 1.75 | 1.75 | 1.72 | 1.78 | 1.75 | 1.74 | 1.69 | 1.71 | 1.71 | 1.73 | 1.74 | 1.75 | 1.71 |
| United States | 19.83 | 20.35 | 20.32 | 20.59 | 19.80 | 20.36 | 20.55 | 20.57 | 20.12 | 20.53 | 20.72 | 20.64 | 20.28 | 20.32 | 20.51 |
| Central and South America total | 6.63 | 6.77 | 6.88 | 6.81 | 6.74 | 6.87 | 6.99 | 6.93 | 6.83 | 6.98 | 7.09 | 7.02 | 6.77 | 6.88 | 6.98 |
| Brazil | 3.05 | 3.11 | 3.19 | 3.17 | 3.15 | 3.21 | 3.29 | 3.27 | 3.21 | 3.27 | 3.35 | 3.33 | 3.13 | 3.23 | 3.29 |
| Europe total | 13.86 | 14.34 | 14.46 | 14.17 | 13.59 | 14.38 | 14.65 | 14.28 | 13.89 | 14.07 | 14.48 | 14.25 | 14.21 | 14.23 | 14.17 |
| Eurasia total | 4.66 | 4.82 | 5.16 | 5.06 | 4.71 | 4.87 | 5.21 | 5.11 | 4.74 | 4.91 | 5.26 | 5.16 | 4.93 | 4.98 | 5.02 |
| Russia | 3.54 | 3.64 | 3.95 | 3.80 | 3.57 | 3.67 | 3.98 | 3.83 | 3.59 | 3.69 | 4.01 | 3.85 | 3.73 | 3.77 | 3.78 |
| Middle East total | 9.25 | 9.39 | 9.94 | 9.34 | 9.46 | 9.56 | 9.98 | 9.41 | 9.68 | 9.67 | 10.22 | 9.62 | 9.48 | 9.60 | 9.80 |
| Africa total | 4.57 | 4.58 | 4.50 | 4.66 | 4.66 | 4.68 | 4.59 | 4.76 | 4.78 | 4.80 | 4.71 | 4.88 | 4.58 | 4.67 | 4.79 |
| Asia and Oceania total | 38.41 | 37.67 | 36.91 | 37.84 | 39.13 | 38.34 | 37.23 | 38.38 | 39.70 | 38.97 | 38.02 | 39.04 | 37.70 | 38.27 | 38.93 |
| China | 16.33 | 16.55 | 16.24 | 16.48 | 16.75 | 16.65 | 16.10 | 16.45 | 16.87 | 16.91 | 16.49 | 16.72 | 16.40 | 16.49 | 16.75 |
| India | 5.38 | 5.35 | 5.05 | 5.30 | 5.62 | 5.57 | 5.35 | 5.67 | 5.88 | 5.95 | 5.56 | 5.91 | 5.27 | 5.55 | 5.82 |
| Japan | 3.68 | 3.05 | 3.06 | 3.38 | 3.44 | 2.96 | 3.01 | 3.38 | 3.48 | 2.89 | 2.99 | 3.31 | 3.29 | 3.20 | 3.17 |
| Real gross domestic product (c) | | | | | | | | | | | | | | | |
| World index, 2015 Q1 = 100 | 126.3 | 127.4 | 128.4 | 129.4 | 130.4 | 131.4 | 132.3 | 133.5 | 134.4 | 135.5 | 136.7 | 137.9 | 127.9 | 131.9 | 136.1 |
| Percent change from prior year | 2.8 | 3.6 | 3.3 | 3.4 | 3.2 | 3.2 | 3.1 | 3.1 | 3.1 | 3.1 | 3.3 | 3.3 | 3.3 | 3.1 | 3.2 |
| OECD index, 2015 = 100 | - | - | - | - | - | - | - | - | - | - | - | - | 116.6 | 118.5 | 120.8 |
| Percent change from prior year | - | - | - | - | - | - | - | - | - | - | - | - | 1.8 | 1.7 | 1.9 |
| Non-OECD index, 2015 = 100 | - | - | - | - | - | - | - | - | - | - | - | - | 135.1 | 140.9 | 146.8 |
| Percent change from prior year | - | - | - | - | - | - | - | - | - | - | - | - | 4.4 | 4.3 | 4.2 |
| Nominal U.S. Dollar index (d) | | | | | | | | | | | | | | | |
| Index, 2015 Q1 = 100 | 114.1 | 113.4 | 114.0 | 115.6 | 114.8 | 116.6 | 116.6 | 116.4 | 116.3 | 116.1 | 115.8 | 115.5 | 114.3 | 116.1 | 115.9 |
| Percent change from prior year | 4.2 | 0.5 | -2.7 | -2.4 | 0.6 | 2.8 | 2.3 | 0.7 | 1.3 | -0.4 | -0.7 | -0.7 | -0.2 | 1.6 | -0.1 |

(a) Consumption of petroleum by the OECD countries is the same as "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.

(b) OECD = Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Latvia, Lithuania, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, Türkiye, United Kingdom, and United States.

(c) 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.

(d) 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 data source is the Board of Governors of the U.S. Federal Reserve System Nominal Broad Trade-Weighted Dollar Index accessed via Oxford Economics. Forecast data are from Oxford Economics, and quarterly values are reindexed to 2015 Q1 by EIA.

Notes:

EIA completed modeling and analysis for this report on November 7, 2024.

- = no data available

The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray.

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

Sources:

Historical data: Energy Information Administration *International Energy Statistics* (<https://www.eia.gov/international/data/world>) and Oxford Economics.

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 - November 2024

| | 2023 | | | | 2024 | | | | 2025 | | | | Year | | |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2023 | 2024 | 2025 |
| Supply (million barrels per day) | | | | | | | | | | | | | | | |
| U.S. total crude oil production (a) | 12.67 | 12.76 | 13.05 | 13.25 | 12.94 | 13.23 | 13.27 | 13.47 | 13.47 | 13.53 | 13.54 | 13.60 | 12.93 | 13.23 | 13.53 |
| Alaska | 0.44 | 0.43 | 0.40 | 0.43 | 0.43 | 0.42 | 0.40 | 0.42 | 0.42 | 0.40 | 0.39 | 0.41 | 0.43 | 0.42 | 0.41 |
| Federal Gulf of Mexico (b) | 1.88 | 1.77 | 1.92 | 1.88 | 1.78 | 1.80 | 1.75 | 1.81 | 1.85 | 1.85 | 1.80 | 1.81 | 1.87 | 1.79 | 1.83 |
| Lower 48 States (excl GOM) (c) | 10.35 | 10.56 | 10.72 | 10.94 | 10.73 | 11.01 | 11.12 | 11.24 | 11.20 | 11.27 | 11.35 | 11.38 | 10.64 | 11.02 | 11.30 |
| Appalachia region | 0.15 | 0.15 | 0.15 | 0.16 | 0.15 | 0.16 | 0.16 | 0.19 | 0.20 | 0.22 | 0.22 | 0.23 | 0.15 | 0.16 | 0.22 |
| Bakken region | 1.13 | 1.16 | 1.25 | 1.30 | 1.22 | 1.23 | 1.23 | 1.32 | 1.33 | 1.33 | 1.35 | 1.36 | 1.21 | 1.25 | 1.34 |
| Eagle Ford region | 1.15 | 1.18 | 1.18 | 1.11 | 1.07 | 1.18 | 1.20 | 1.20 | 1.18 | 1.17 | 1.16 | 1.14 | 1.16 | 1.16 | 1.16 |
| Haynesville region | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| Permian region | 5.76 | 5.82 | 5.91 | 6.12 | 6.11 | 6.26 | 6.36 | 6.42 | 6.40 | 6.49 | 6.54 | 6.60 | 5.91 | 6.29 | 6.51 |
| Rest of Lower 48 States | 2.12 | 2.20 | 2.20 | 2.21 | 2.15 | 2.15 | 2.13 | 2.08 | 2.06 | 2.04 | 2.04 | 2.02 | 2.18 | 2.13 | 2.04 |
| Total Supply | 19.83 | 20.35 | 20.32 | 20.59 | 19.79 | 20.36 | 20.55 | 20.58 | 20.12 | 20.53 | 20.72 | 20.64 | 20.27 | 20.32 | 20.51 |
| Crude oil input to refineries | 15.25 | 16.15 | 16.52 | 15.93 | 15.39 | 16.47 | 16.54 | 16.06 | 15.28 | 16.08 | 16.29 | 15.60 | 15.97 | 16.12 | 15.82 |
| U.S. total crude oil production (a) | 12.67 | 12.76 | 13.05 | 13.25 | 12.94 | 13.23 | 13.27 | 13.47 | 13.47 | 13.53 | 13.54 | 13.60 | 12.93 | 13.23 | 13.53 |
| Transfers to crude oil supply | 0.42 | 0.47 | 0.64 | 0.56 | 0.50 | 0.64 | 0.57 | 0.51 | 0.49 | 0.53 | 0.55 | 0.53 | 0.53 | 0.56 | 0.53 |
| Crude oil net imports (d) | 2.43 | 2.44 | 2.50 | 2.26 | 2.12 | 2.62 | 2.64 | 2.15 | 1.63 | 1.90 | 1.89 | 1.43 | 2.41 | 2.38 | 1.71 |
| SPR net withdrawals (e) | 0.01 | 0.26 | -0.04 | -0.04 | -0.10 | -0.10 | -0.11 | -0.17 | -0.12 | -0.03 | 0.00 | 0.00 | 0.05 | -0.12 | -0.04 |
| Commercial inventory net withdrawals | -0.39 | 0.12 | 0.40 | -0.09 | -0.23 | 0.08 | 0.19 | -0.02 | -0.33 | 0.06 | 0.24 | -0.05 | 0.01 | 0.00 | -0.02 |
| Crude oil adjustment (f) | 0.10 | 0.11 | -0.03 | -0.01 | 0.16 | 0.01 | -0.03 | 0.12 | 0.14 | 0.10 | 0.07 | 0.10 | 0.04 | 0.07 | 0.10 |
| Refinery processing gain | 0.97 | 1.00 | 1.06 | 1.05 | 0.91 | 0.97 | 0.98 | 1.05 | 0.97 | 1.04 | 1.08 | 1.05 | 1.02 | 0.98 | 1.04 |
| Natural Gas Plant Liquids Production | 6.17 | 6.43 | 6.64 | 6.74 | 6.51 | 7.01 | 6.94 | 6.81 | 6.76 | 6.93 | 6.90 | 6.94 | 6.50 | 6.82 | 6.88 |
| Renewables and oxygenate production (g) | 1.24 | 1.29 | 1.31 | 1.35 | 1.34 | 1.33 | 1.40 | 1.40 | 1.38 | 1.40 | 1.41 | 1.44 | 1.30 | 1.37 | 1.41 |
| Fuel ethanol production | 1.00 | 1.00 | 1.01 | 1.05 | 1.04 | 1.01 | 1.07 | 1.08 | 1.05 | 1.04 | 1.05 | 1.06 | 1.02 | 1.05 | 1.05 |
| Petroleum products adjustment (h) | 0.20 | 0.22 | 0.23 | 0.23 | 0.21 | 0.22 | 0.22 | 0.22 | 0.20 | 0.21 | 0.21 | 0.21 | 0.22 | 0.22 | 0.21 |
| Petroleum products transfers to crude oil supply | -0.42 | -0.47 | -0.64 | -0.56 | -0.50 | -0.64 | -0.57 | -0.51 | -0.49 | -0.53 | -0.55 | -0.53 | -0.53 | -0.56 | -0.53 |
| Petroleum product net imports (d) | -3.89 | -3.79 | -4.19 | -4.59 | -4.53 | -4.40 | -4.88 | -4.74 | -4.33 | -4.19 | -4.39 | -4.40 | -4.12 | -4.64 | -4.33 |
| Hydrocarbon gas liquids | -2.48 | -2.48 | -2.50 | -2.59 | -2.59 | -2.68 | -2.73 | -2.72 | -2.86 | -3.01 | -2.91 | -2.78 | -2.51 | -2.68 | -2.89 |
| Unfinished oils | 0.28 | 0.27 | 0.21 | 0.18 | 0.09 | 0.21 | 0.19 | 0.27 | 0.21 | 0.27 | 0.27 | 0.20 | 0.24 | 0.19 | 0.24 |
| Other hydrocarbons and oxygenates | -0.04 | -0.06 | -0.04 | -0.05 | -0.06 | -0.08 | -0.07 | -0.08 | -0.11 | -0.11 | -0.09 | -0.09 | -0.05 | -0.07 | -0.10 |
| Total motor gasoline | -0.28 | 0.08 | -0.11 | -0.40 | -0.36 | 0.00 | -0.19 | -0.25 | -0.19 | 0.21 | 0.08 | -0.16 | -0.18 | -0.20 | -0.01 |
| Jet fuel | -0.04 | 0.01 | -0.06 | -0.09 | -0.09 | -0.08 | -0.11 | -0.11 | -0.12 | -0.03 | -0.03 | -0.06 | -0.05 | -0.10 | -0.06 |
| Distillate fuel oil | -0.75 | -0.96 | -1.06 | -1.02 | -0.86 | -1.20 | -1.33 | -1.16 | -0.65 | -0.84 | -0.98 | -0.83 | -0.95 | -1.14 | -0.83 |
| Residual fuel oil | 0.01 | -0.03 | -0.03 | -0.01 | -0.03 | -0.04 | -0.05 | -0.02 | -0.01 | -0.01 | -0.05 | -0.03 | -0.02 | -0.03 | -0.03 |
| Other oils (i) | -0.59 | -0.61 | -0.60 | -0.62 | -0.64 | -0.54 | -0.59 | -0.67 | -0.60 | -0.67 | -0.68 | -0.65 | -0.60 | -0.61 | -0.65 |
| Petroleum product inventory net withdrawals | 0.31 | -0.48 | -0.61 | 0.43 | 0.46 | -0.62 | -0.07 | 0.30 | 0.34 | -0.41 | -0.23 | 0.33 | -0.09 | 0.02 | 0.01 |
| Consumption (million barrels per day) | | | | | | | | | | | | | | | |
| U.S. total petroleum products consumption | 19.83 | 20.35 | 20.32 | 20.59 | 19.80 | 20.36 | 20.55 | 20.57 | 20.12 | 20.53 | 20.72 | 20.64 | 20.28 | 20.32 | 20.51 |
| Hydrocarbon gas liquids | 3.53 | 3.32 | 3.32 | 3.85 | 3.80 | 3.39 | 3.33 | 3.82 | 3.84 | 3.33 | 3.37 | 3.88 | 3.50 | 3.58 | 3.61 |
| Other hydrocarbons and oxygenates | 0.22 | 0.28 | 0.28 | 0.29 | 0.30 | 0.33 | 0.33 | 0.31 | 0.30 | 0.32 | 0.32 | 0.33 | 0.27 | 0.32 | 0.32 |
| Motor gasoline | 8.69 | 9.13 | 9.02 | 8.94 | 8.57 | 9.12 | 9.18 | 8.90 | 8.60 | 9.11 | 9.16 | 8.82 | 8.94 | 8.94 | 8.92 |
| Jet fuel | 1.55 | 1.68 | 1.72 | 1.66 | 1.58 | 1.73 | 1.80 | 1.68 | 1.61 | 1.79 | 1.81 | 1.71 | 1.65 | 1.70 | 1.73 |
| Distillate fuel oil | 4.03 | 3.92 | 3.83 | 3.88 | 3.82 | 3.73 | 3.82 | 3.93 | 4.02 | 3.96 | 3.91 | 4.00 | 3.92 | 3.82 | 3.97 |
| Residual fuel oil | 0.29 | 0.22 | 0.26 | 0.32 | 0.28 | 0.30 | 0.29 | 0.30 | 0.26 | 0.28 | 0.26 | 0.27 | 0.27 | 0.29 | 0.27 |
| Other oils (i) | 1.52 | 1.79 | 1.88 | 1.65 | 1.44 | 1.77 | 1.80 | 1.63 | 1.49 | 1.73 | 1.88 | 1.63 | 1.71 | 1.66 | 1.68 |
| Total petroleum and other liquid fuels net imports (d) | -1.46 | -1.35 | -1.69 | -2.33 | -2.41 | -1.78 | -2.20 | -2.47 | -2.70 | -2.29 | -2.51 | -2.97 | -1.71 | -2.22 | -2.62 |
| End-of-period inventories (million barrels) | | | | | | | | | | | | | | | |
| Total commercial inventory | 1230.0 | 1263.1 | 1282.4 | 1251.4 | 1230.3 | 1279.6 | 1268.8 | 1243.4 | 1243.2 | 1274.5 | 1273.1 | 1247.4 | 1251.4 | 1243.4 | 1247.4 |
| Crude oil (excluding SPR) | 465.2 | 454.7 | 417.9 | 426.5 | 447.2 | 440.2 | 422.7 | 424.8 | 454.7 | 449.0 | 426.5 | 431.4 | 426.5 | 424.8 | 431.4 |
| Hydrocarbon gas liquids | 173.9 | 225.7 | 277.2 | 223.3 | 169.2 | 235.1 | 284.7 | 236.3 | 195.4 | 245.0 | 283.2 | 239.9 | 223.3 | 236.3 | 239.9 |
| Unfinished oils | 88.9 | 87.3 | 88.4 | 84.2 | 91.7 | 87.8 | 81.9 | 75.5 | 86.7 | 86.1 | 84.5 | 79.6 | 84.2 | 75.5 | 79.6 |
| Other hydrocarbons and oxygenates | 34.5 | 30.2 | 30.3 | 33.1 | 38.2 | 33.4 | 32.5 | 35.0 | 38.3 | 35.6 | 34.9 | 36.9 | 33.1 | 35.0 | 36.9 |
| Total motor gasoline | 225.2 | 222.1 | 227.9 | 240.7 | 233.4 | 232.4 | 214.9 | 236.8 | 232.7 | 224.6 | 219.9 | 237.5 | 240.7 | 236.8 | 237.5 |
| Jet fuel | 37.8 | 42.4 | 43.5 | 39.8 | 42.2 | 45.3 | 44.1 | 41.0 | 39.1 | 37.8 | 38.6 | 35.1 | 39.8 | 41.0 | 35.1 |
| Distillate fuel oil | 111.7 | 112.0 | 118.8 | 130.5 | 121.2 | 123.1 | 118.5 | 122.5 | 114.3 | 116.3 | 116.2 | 116.0 | 130.5 | 122.5 | 116.0 |
| Residual fuel oil | 29.6 | 30.5 | 27.8 | 24.1 | 29.9 | 27.5 | 24.1 | 23.4 | 24.8 | 24.9 | 23.2 | 23.1 | 24.1 | 23.4 | 23.1 |
| Other oils (i) | 63.2 | 58.2 | 50.6 | 49.3 | 57.3 | 54.9 | 45.4 | 48.0 | 57.3 | 55.3 | 46.2 | 47.8 | 49.3 | 48.0 | 47.8 |
| Crude oil in SPR (e) | 371.2 | 347.2 | 351.3 | 354.7 | 363.9 | 373.1 | 382.9 | 398.8 | 409.2 | 412.2 | 412.2 | 412.2 | 354.7 | 398.8 | 412.2 |

(a) Includes lease condensate.

(b) Crude oil production from U.S. Federal leases in the Gulf of Mexico (GOM).

(c) Regional production in this table is based on geographic regions and not geologic formations.

(d) Net imports equal gross imports minus gross exports.

(e) SPR: Strategic Petroleum Reserve

(f) The crude oil adjustment equals the sum of disposition items (e.g. refinery inputs) minus the sum of supply items (e.g. production).

(g) 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.

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

(i) Other oils includes aviation gasoline blending components, finished aviation gasoline, kerosene, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt and road oil, still gas, and miscellaneous products.

Notes:

EIA completed modeling and analysis for this report on November 7, 2024.

- = no data available

The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray.

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

Sources:

 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.

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 - November 2024

| | 2023 | | | | 2024 | | | | 2025 | | | | Year | | |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2023 | 2024 | 2025 |
| HGL production, consumption, and inventories | | | | | | | | | | | | | | | |
| Total HGL production | 6.62 | 7.24 | 7.37 | 7.09 | 6.95 | 7.81 | 7.65 | 7.16 | 7.23 | 7.76 | 7.66 | 7.31 | 7.08 | 7.39 | 7.49 |
| Natural gas processing plant production | 6.17 | 6.43 | 6.64 | 6.74 | 6.51 | 7.01 | 6.94 | 6.81 | 6.76 | 6.93 | 6.90 | 6.94 | 6.50 | 6.82 | 6.88 |
| Ethane | 2.56 | 2.64 | 2.67 | 2.74 | 2.63 | 2.92 | 2.74 | 2.71 | 2.69 | 2.76 | 2.72 | 2.80 | 2.65 | 2.75 | 2.74 |
| Propane | 1.93 | 1.99 | 2.05 | 2.11 | 2.05 | 2.14 | 2.18 | 2.20 | 2.19 | 2.24 | 2.22 | 2.22 | 2.02 | 2.14 | 2.22 |
| Butanes | 1.01 | 1.05 | 1.09 | 1.10 | 1.07 | 1.12 | 1.15 | 1.17 | 1.18 | 1.18 | 1.19 | 1.19 | 1.06 | 1.13 | 1.19 |
| Natural gasoline (pentanes plus) | 0.68 | 0.75 | 0.83 | 0.80 | 0.75 | 0.84 | 0.87 | 0.73 | 0.70 | 0.74 | 0.77 | 0.73 | 0.76 | 0.80 | 0.74 |
| Refinery and blender net production | 0.47 | 0.83 | 0.75 | 0.36 | 0.46 | 0.82 | 0.73 | 0.37 | 0.49 | 0.86 | 0.78 | 0.39 | 0.60 | 0.60 | 0.63 |
| Ethane/ethylene | 0.01 | 0.00 | 0.01 | 0.02 | 0.01 | -0.01 | -0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.01 |
| Propane | 0.27 | 0.29 | 0.28 | 0.27 | 0.27 | 0.28 | 0.29 | 0.27 | 0.28 | 0.30 | 0.30 | 0.29 | 0.28 | 0.27 | 0.29 |
| Propylene (refinery-grade) | 0.24 | 0.26 | 0.25 | 0.26 | 0.24 | 0.27 | 0.26 | 0.27 | 0.27 | 0.28 | 0.27 | 0.27 | 0.25 | 0.26 | 0.27 |
| Butanes/butylenes | -0.05 | 0.29 | 0.21 | -0.19 | -0.05 | 0.28 | 0.19 | -0.19 | -0.07 | 0.27 | 0.20 | -0.18 | 0.07 | 0.06 | 0.05 |
| Renewable/oxygenate plant net production of natural gasoli | -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 |
| Total HGL consumption | 3.53 | 3.32 | 3.32 | 3.85 | 3.80 | 3.39 | 3.33 | 3.82 | 3.84 | 3.33 | 3.37 | 3.88 | 3.50 | 3.58 | 3.61 |
| Ethane/Ethylene | 2.07 | 2.19 | 2.11 | 2.26 | 2.24 | 2.26 | 2.23 | 2.25 | 2.22 | 2.24 | 2.25 | 2.26 | 2.16 | 2.25 | 2.24 |
| Propane | 0.98 | 0.56 | 0.62 | 0.96 | 1.02 | 0.53 | 0.54 | 0.99 | 1.11 | 0.54 | 0.59 | 1.04 | 0.78 | 0.77 | 0.82 |
| Propylene (refinery-grade) | 0.25 | 0.27 | 0.27 | 0.28 | 0.26 | 0.28 | 0.27 | 0.29 | 0.29 | 0.29 | 0.28 | 0.29 | 0.27 | 0.28 | 0.29 |
| Butanes/butylenes | 0.23 | 0.30 | 0.33 | 0.34 | 0.28 | 0.31 | 0.29 | 0.29 | 0.22 | 0.25 | 0.25 | 0.30 | 0.30 | 0.29 | 0.26 |
| HGL net imports | -2.48 | -2.48 | -2.50 | -2.59 | -2.59 | -2.68 | -2.73 | -2.72 | -2.86 | -3.01 | -2.91 | -2.78 | -2.51 | -2.68 | -2.89 |
| Ethane | -0.48 | -0.49 | -0.50 | -0.41 | -0.48 | -0.46 | -0.47 | -0.50 | -0.50 | -0.51 | -0.51 | -0.55 | -0.47 | -0.48 | -0.52 |
| Propane/propylene | -1.44 | -1.44 | -1.46 | -1.64 | -1.60 | -1.61 | -1.64 | -1.63 | -1.63 | -1.79 | -1.71 | -1.60 | -1.50 | -1.62 | -1.69 |
| Butanes/butylenes | -0.39 | -0.38 | -0.40 | -0.41 | -0.41 | -0.47 | -0.49 | -0.43 | -0.53 | -0.55 | -0.54 | -0.47 | -0.40 | -0.45 | -0.52 |
| Natural gasoline (pentanes plus) | -0.16 | -0.17 | -0.13 | -0.14 | -0.11 | -0.13 | -0.13 | -0.16 | -0.19 | -0.16 | -0.15 | -0.16 | -0.15 | -0.13 | -0.17 |
| HGL inventories (million barrels) | 173.9 | 225.7 | 277.2 | 223.3 | 169.2 | 235.1 | 284.7 | 236.3 | 195.4 | 245.0 | 283.2 | 239.9 | 223.3 | 236.3 | 239.9 |
| Ethane | 54.5 | 51.5 | 57.3 | 65.8 | 58.3 | 75.3 | 78.8 | 76.0 | 73.6 | 75.1 | 72.6 | 72.5 | 65.8 | 76.0 | 72.5 |
| Propane | 55.22 | 79.2 | 101.4 | 79.7 | 51.7 | 75.1 | 100.1 | 84.6 | 58.7 | 75.4 | 94.2 | 80.7 | 79.7 | 84.6 | 80.7 |
| Propylene (at refineries only) | 1.13 | 1.1 | 1.2 | 0.9 | 0.9 | 1.3 | 1.2 | 1.3 | 1.2 | 1.5 | 1.7 | 1.5 | 0.9 | 1.3 | 1.5 |
| Butanes/butylenes | 40.3 | 70.5 | 90.0 | 50.1 | 35.1 | 59.2 | 76.8 | 49.0 | 39.4 | 69.5 | 90.7 | 62.0 | 50.1 | 49.0 | 62.0 |
| Natural gasoline (pentanes plus) | 22.9 | 23.4 | 27.3 | 26.8 | 23.2 | 24.2 | 27.8 | 25.5 | 22.5 | 23.5 | 24.1 | 23.1 | 26.8 | 25.5 | 23.1 |
| Refining | | | | | | | | | | | | | | | |
| Total refinery and blender net inputs | 17.58 | 18.89 | 18.91 | 18.24 | 17.61 | 19.03 | 19.16 | 18.54 | 17.30 | 18.74 | 18.82 | 17.85 | 18.41 | 18.58 | 18.18 |
| Crude oil | 15.25 | 16.15 | 16.52 | 15.93 | 15.39 | 16.47 | 16.54 | 16.06 | 15.28 | 16.08 | 16.29 | 15.60 | 15.97 | 16.12 | 15.82 |
| HGL | 0.66 | 0.49 | 0.56 | 0.78 | 0.69 | 0.56 | 0.57 | 0.74 | 0.62 | 0.47 | 0.53 | 0.71 | 0.62 | 0.64 | 0.58 |
| Other hydrocarbons/oxygenates | 1.13 | 1.20 | 1.21 | 1.18 | 1.12 | 1.20 | 1.20 | 1.18 | 1.12 | 1.18 | 1.19 | 1.16 | 1.18 | 1.18 | 1.17 |
| Unfinished oils | 0.19 | 0.20 | -0.01 | 0.11 | -0.03 | 0.09 | 0.16 | 0.22 | -0.04 | 0.15 | 0.17 | 0.13 | 0.12 | 0.11 | 0.10 |
| Motor gasoline blending components | 0.36 | 0.85 | 0.64 | 0.23 | 0.43 | 0.71 | 0.68 | 0.35 | 0.31 | 0.85 | 0.64 | 0.25 | 0.52 | 0.54 | 0.51 |
| Refinery Processing Gain | 0.97 | 1.00 | 1.06 | 1.05 | 0.91 | 0.97 | 0.98 | 1.05 | 0.97 | 1.04 | 1.08 | 1.05 | 1.02 | 0.98 | 1.04 |
| Total refinery and blender net production | 18.56 | 19.89 | 19.98 | 19.29 | 18.52 | 20.00 | 20.13 | 19.59 | 18.27 | 19.77 | 19.90 | 18.90 | 19.43 | 19.56 | 19.22 |
| HGL | 0.47 | 0.83 | 0.75 | 0.36 | 0.46 | 0.82 | 0.73 | 0.37 | 0.49 | 0.86 | 0.78 | 0.39 | 0.60 | 0.60 | 0.63 |
| Finished motor gasoline | 9.29 | 9.83 | 9.81 | 9.65 | 9.24 | 9.80 | 9.81 | 9.70 | 9.01 | 9.61 | 9.62 | 9.37 | 9.65 | 9.64 | 9.40 |
| Jet fuel | 1.62 | 1.72 | 1.78 | 1.71 | 1.70 | 1.84 | 1.89 | 1.76 | 1.71 | 1.80 | 1.85 | 1.73 | 1.71 | 1.80 | 1.78 |
| Distillate fuel oil | 4.69 | 4.89 | 4.96 | 5.03 | 4.57 | 4.95 | 5.10 | 5.13 | 4.58 | 4.83 | 4.89 | 4.83 | 4.89 | 4.94 | 4.78 |
| Residual fuel oil | 0.27 | 0.27 | 0.27 | 0.28 | 0.37 | 0.31 | 0.30 | 0.31 | 0.29 | 0.29 | 0.30 | 0.29 | 0.27 | 0.32 | 0.29 |
| Other oils (a) | 2.21 | 2.35 | 2.40 | 2.26 | 2.17 | 2.28 | 2.29 | 2.33 | 2.19 | 2.38 | 2.46 | 2.30 | 2.30 | 2.27 | 2.33 |
| Refinery distillation inputs | 15.76 | 16.74 | 17.02 | 16.47 | 15.80 | 16.96 | 16.92 | 16.42 | 15.72 | 16.50 | 16.75 | 16.03 | 16.50 | 16.53 | 16.25 |
| Refinery operable distillation capacity | 18.12 | 18.27 | 18.27 | 18.32 | 18.39 | 18.33 | 18.33 | 18.34 | 18.17 | 18.08 | 18.08 | 18.03 | 18.25 | 18.35 | 18.09 |
| Refinery distillation utilization factor | 0.87 | 0.92 | 0.93 | 0.90 | 0.86 | 0.93 | 0.92 | 0.90 | 0.87 | 0.91 | 0.93 | 0.89 | 0.90 | 0.90 | 0.90 |

(a) Other oils include aviation gasoline blending components, finished aviation gasoline, kerosene, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt and road oil, still gas, and miscellaneous products.

Notes:

EIA completed modeling and analysis for this report on November 7, 2024.

- = no data available

The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray.

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

Sources:

Table 4c. U.S. Regional Motor Gasoline Prices and Inventories
U.S. Energy Information Administration | Short-Term Energy Outlook - November 2024

| | 2023 | | | | 2024 | | | | 2025 | | | | Year | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2023 | 2024 | 2025 |
| Wholesale price (dollars per gallon) | | | | | | | | | | | | | | | |
| United States average | 2.62 | 2.65 | 2.96 | 2.33 | 2.46 | 2.58 | 2.34 | 2.10 | 2.17 | 2.40 | 2.37 | 2.12 | 2.64 | 2.37 | 2.27 |
| Retail prices (dollars per gallon) (a) | | | | | | | | | | | | | | | |
| All grades United States average | 3.49 | 3.69 | 3.87 | 3.48 | 3.36 | 3.68 | 3.48 | 3.23 | 3.23 | 3.40 | 3.38 | 3.16 | 3.64 | 3.44 | 3.30 |
| Regular grade United States average | 3.38 | 3.58 | 3.76 | 3.36 | 3.24 | 3.56 | 3.37 | 3.11 | 3.11 | 3.28 | 3.26 | 3.03 | 3.52 | 3.32 | 3.17 |
| PADD 1 | 3.30 | 3.44 | 3.61 | 3.25 | 3.19 | 3.45 | 3.29 | 3.02 | 2.98 | 3.16 | 3.14 | 2.93 | 3.40 | 3.24 | 3.06 |
| PADD 2 | 3.24 | 3.48 | 3.60 | 3.14 | 3.07 | 3.39 | 3.28 | 2.97 | 2.96 | 3.12 | 3.09 | 2.84 | 3.37 | 3.18 | 3.00 |
| PADD 3 | 3.02 | 3.15 | 3.34 | 2.85 | 2.86 | 3.12 | 2.94 | 2.65 | 2.66 | 2.89 | 2.88 | 2.63 | 3.09 | 2.89 | 2.77 |
| PADD 4 | 3.57 | 3.59 | 3.93 | 3.32 | 2.92 | 3.38 | 3.40 | 3.16 | 3.12 | 3.20 | 3.28 | 3.20 | 3.61 | 3.22 | 3.20 |
| PADD 5 | 4.18 | 4.52 | 4.80 | 4.55 | 4.13 | 4.59 | 4.11 | 3.98 | 4.03 | 4.18 | 4.12 | 3.91 | 4.52 | 4.20 | 4.06 |
| End-of-period inventories (million barrels) (b) | | | | | | | | | | | | | | | |
| Total U.S. gasoline inventories | 225.2 | 222.1 | 227.9 | 240.7 | 233.4 | 232.4 | 214.9 | 236.8 | 232.7 | 224.6 | 219.9 | 237.5 | 240.7 | 236.8 | 237.5 |
| PADD 1 | 52.7 | 57.0 | 58.8 | 60.1 | 54.9 | 56.8 | 59.7 | 60.0 | 58.7 | 55.6 | 57.8 | 60.3 | 60.1 | 60.0 | 60.3 |
| PADD 2 | 49.8 | 44.9 | 46.6 | 54.9 | 54.6 | 48.5 | 45.0 | 51.5 | 53.5 | 48.4 | 46.9 | 52.4 | 54.9 | 51.5 | 52.4 |
| PADD 3 | 83.7 | 84.4 | 85.5 | 89.2 | 85.4 | 86.4 | 76.9 | 87.7 | 82.5 | 83.5 | 78.2 | 86.8 | 89.2 | 87.7 | 86.8 |
| PADD 4 | 7.8 | 6.9 | 7.2 | 7.9 | 8.6 | 8.0 | 6.5 | 7.7 | 8.0 | 7.4 | 7.4 | 7.8 | 7.9 | 7.7 | 7.8 |
| PADD 5 | 31.2 | 28.9 | 29.9 | 28.6 | 29.9 | 32.7 | 26.8 | 30.0 | 30.1 | 29.8 | 29.6 | 30.2 | 28.6 | 30.0 | 30.2 |

(a) Retail prices include all federal, state, and local taxes.

(b) Inventories include both finished motor gasoline and motor gasoline blending components

Notes:

EIA completed modeling and analysis for this report on November 7, 2024.

- = no data available

The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray.

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

Prices are not adjusted for inflation.

PADD = Petroleum Administration for Defense District (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.

Sources:

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.

Forecasts: EIA Short-Term Integrated Forecasting System.

Table 4d. U.S. Biofuel Supply, Consumption, and Inventories
U.S. Energy Information Administration | Short-Term Energy Outlook - November 2024

| | 2023 | | | | 2024 | | | | 2025 | | | | Year | | |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2023 | 2024 | 2025 |
| Supply (million barrels per day) | | | | | | | | | | | | | | | |
| Total biofuels supply | 1.18 | 1.29 | 1.29 | 1.29 | 1.24 | 1.32 | 1.36 | 1.31 | 1.25 | 1.34 | 1.34 | 1.34 | 1.26 | 1.31 | 1.32 |
| Fuel ethanol production | 1.00 | 1.00 | 1.01 | 1.05 | 1.04 | 1.01 | 1.07 | 1.08 | 1.05 | 1.04 | 1.05 | 1.06 | 1.02 | 1.05 | 1.05 |
| Biodiesel production | 0.10 | 0.11 | 0.11 | 0.11 | 0.10 | 0.11 | 0.11 | 0.10 | 0.10 | 0.11 | 0.11 | 0.10 | 0.11 | 0.11 | 0.10 |
| Renewable diesel production | 0.14 | 0.17 | 0.18 | 0.18 | 0.19 | 0.21 | 0.21 | 0.22 | 0.23 | 0.23 | 0.23 | 0.24 | 0.17 | 0.21 | 0.23 |
| Other biofuel production (a) | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.04 | 0.05 | 0.05 | 0.02 | 0.02 | 0.04 |
| Fuel ethanol net imports | -0.09 | -0.09 | -0.08 | -0.10 | -0.12 | -0.13 | -0.11 | -0.12 | -0.13 | -0.12 | -0.11 | -0.12 | -0.09 | -0.12 | -0.12 |
| Biodiesel net imports | 0.02 | 0.00 | 0.01 | 0.02 | 0.03 | 0.02 | 0.00 | 0.01 | 0.00 | -0.01 | -0.01 | 0.00 | 0.02 | 0.01 | 0.00 |
| Renewable diesel net imports (b) | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.04 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.04 | 0.02 |
| Other biofuel net imports (b) | 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 |
| Biofuel stock draw | -0.03 | 0.05 | 0.00 | -0.03 | -0.06 | 0.05 | 0.01 | -0.03 | -0.04 | 0.03 | 0.01 | -0.02 | 0.00 | -0.01 | -0.01 |
| Total distillate fuel oil supply (c) | 4.23 | 4.19 | 4.10 | 4.16 | 4.10 | 4.04 | 4.14 | 4.22 | 4.30 | 4.26 | 4.20 | 4.30 | 4.17 | 4.13 | 4.26 |
| Distillate fuel production | 4.69 | 4.89 | 4.96 | 5.03 | 4.57 | 4.95 | 5.10 | 5.13 | 4.58 | 4.83 | 4.89 | 4.83 | 4.89 | 4.94 | 4.78 |
| Biodiesel production | 0.10 | 0.11 | 0.11 | 0.11 | 0.10 | 0.11 | 0.11 | 0.10 | 0.10 | 0.11 | 0.11 | 0.10 | 0.11 | 0.11 | 0.10 |
| Renewable diesel production | 0.14 | 0.17 | 0.18 | 0.18 | 0.19 | 0.21 | 0.21 | 0.22 | 0.23 | 0.23 | 0.23 | 0.24 | 0.17 | 0.21 | 0.23 |
| Distillate fuel oil net imports | -0.75 | -0.96 | -1.06 | -1.02 | -0.86 | -1.20 | -1.33 | -1.16 | -0.65 | -0.84 | -0.98 | -0.83 | -0.95 | -1.14 | -0.83 |
| Biodiesel net imports | 0.02 | 0.00 | 0.01 | 0.02 | 0.03 | 0.02 | 0.00 | 0.01 | 0.00 | -0.01 | -0.01 | 0.00 | 0.02 | 0.01 | 0.00 |
| Renewable diesel net imports | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.04 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.04 | 0.02 |
| Total distillate fuel stock draw | 0.06 | 0.01 | -0.08 | -0.14 | 0.09 | -0.02 | 0.06 | -0.06 | 0.08 | -0.02 | 0.00 | -0.01 | -0.04 | 0.02 | 0.01 |
| Consumption (million barrels per day) | | | | | | | | | | | | | | | |
| Total biofuels consumption | 1.18 | 1.29 | 1.29 | 1.29 | 1.24 | 1.32 | 1.36 | 1.31 | 1.25 | 1.34 | 1.34 | 1.34 | 1.26 | 1.31 | 1.32 |
| Fuel ethanol blended into motor gasoline | 0.90 | 0.94 | 0.94 | 0.94 | 0.88 | 0.93 | 0.96 | 0.94 | 0.89 | 0.94 | 0.95 | 0.94 | 0.93 | 0.93 | 0.93 |
| Biodiesel consumption | 0.11 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.12 | 0.11 | 0.09 | 0.11 | 0.11 | 0.10 | 0.13 | 0.12 | 0.10 |
| Biodiesel product supplied (d) | 0.07 | 0.08 | 0.09 | 0.09 | 0.08 | 0.08 | 0.07 | 0.06 | 0.05 | 0.06 | 0.06 | 0.06 | 0.08 | 0.08 | 0.06 |
| Biodiesel net inputs (e) | 0.04 | 0.05 | 0.05 | 0.04 | 0.04 | 0.05 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.04 | 0.05 | 0.04 | 0.05 |
| Renewable diesel consumption | 0.15 | 0.20 | 0.20 | 0.20 | 0.21 | 0.24 | 0.26 | 0.24 | 0.24 | 0.25 | 0.24 | 0.25 | 0.19 | 0.24 | 0.24 |
| Renewable diesel product supplied | 0.14 | 0.19 | 0.19 | 0.19 | 0.21 | 0.23 | 0.25 | 0.23 | 0.23 | 0.23 | 0.23 | 0.24 | 0.18 | 0.23 | 0.23 |
| Renewable diesel net inputs | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Other biofuel consumption | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.04 | 0.05 | 0.05 | 0.02 | 0.02 | 0.04 |
| Total motor gasoline consumption | 8.69 | 9.13 | 9.02 | 8.94 | 8.57 | 9.12 | 9.18 | 8.90 | 8.60 | 9.11 | 9.16 | 8.82 | 8.94 | 8.94 | 8.92 |
| Petroleum-based gasoline | 7.79 | 8.19 | 8.09 | 8.00 | 7.69 | 8.19 | 8.22 | 7.96 | 7.71 | 8.17 | 8.21 | 7.88 | 8.02 | 8.02 | 7.99 |
| Fuel ethanol blended into motor gasoline | 0.90 | 0.94 | 0.94 | 0.94 | 0.88 | 0.93 | 0.96 | 0.94 | 0.89 | 0.94 | 0.95 | 0.94 | 0.93 | 0.93 | 0.93 |
| Total distillate fuel oil consumption (f) | 4.23 | 4.19 | 4.10 | 4.16 | 4.11 | 4.04 | 4.14 | 4.22 | 4.30 | 4.26 | 4.20 | 4.30 | 4.17 | 4.13 | 4.26 |
| Distillate fuel oil | 4.03 | 3.92 | 3.83 | 3.88 | 3.82 | 3.73 | 3.82 | 3.93 | 4.02 | 3.96 | 3.91 | 4.00 | 3.92 | 3.82 | 3.97 |
| Petroleum-based distillate | 3.97 | 3.86 | 3.77 | 3.83 | 3.77 | 3.66 | 3.77 | 3.88 | 3.97 | 3.90 | 3.86 | 3.95 | 3.86 | 3.77 | 3.92 |
| Biodiesel net inputs (g) | 0.04 | 0.05 | 0.05 | 0.04 | 0.04 | 0.05 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.04 | 0.05 | 0.04 | 0.05 |
| Renewable diesel net inputs | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Biodiesel product supplied (h) | 0.07 | 0.08 | 0.09 | 0.09 | 0.08 | 0.08 | 0.07 | 0.06 | 0.05 | 0.06 | 0.06 | 0.06 | 0.08 | 0.08 | 0.06 |
| Renewable diesel product supplied (h) | 0.14 | 0.19 | 0.19 | 0.19 | 0.21 | 0.23 | 0.25 | 0.23 | 0.23 | 0.23 | 0.23 | 0.24 | 0.18 | 0.23 | 0.23 |
| End-of-period inventories (million barrels) | | | | | | | | | | | | | | | |
| Total biofuels inventories | 34.47 | 30.18 | 30.31 | 33.10 | 38.23 | 33.36 | 32.50 | 35.01 | 38.23 | 35.56 | 34.91 | 36.85 | 33.10 | 35.01 | 36.85 |
| Ethanol | 24.97 | 22.31 | 22.16 | 23.50 | 27.19 | 22.61 | 22.15 | 23.38 | 25.53 | 23.32 | 22.87 | 23.63 | 23.50 | 23.38 | 23.63 |
| Biodiesel | 5.13 | 4.00 | 3.63 | 3.81 | 4.40 | 3.73 | 3.45 | 4.05 | 4.39 | 3.52 | 2.93 | 3.31 | 3.81 | 4.05 | 3.31 |
| Renewable diesel | 3.80 | 3.81 | 4.13 | 4.71 | 6.32 | 6.38 | 6.23 | 6.70 | 7.59 | 8.06 | 8.45 | 9.01 | 4.11 | 6.41 | 8.28 |
| Other biofuels | 0.31 | 0.29 | 0.26 | 0.32 | 0.30 | 0.40 | 0.51 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.30 | 0.44 | 0.56 |
| Total distillate fuel oil inventories | 120.86 | 119.56 | 126.71 | 139.78 | 131.86 | 133.41 | 128.30 | 133.62 | 126.46 | 127.94 | 127.68 | 128.70 | 139.78 | 133.62 | 128.70 |
| Distillate fuel oil | 111.69 | 111.99 | 118.84 | 130.49 | 121.16 | 123.12 | 118.51 | 122.55 | 114.31 | 116.26 | 116.19 | 116.04 | 130.49 | 122.55 | 116.04 |
| Biodiesel | 5.13 | 4.00 | 3.63 | 3.81 | 4.40 | 3.73 | 3.45 | 4.05 | 4.39 | 3.52 | 2.93 | 3.31 | 3.81 | 4.05 | 3.31 |
| Renewable diesel | 3.80 | 3.81 | 4.13 | 4.71 | 6.32 | 6.38 | 6.23 | 6.70 | 7.59 | 8.06 | 8.45 | 9.01 | 4.11 | 6.41 | 8.28 |

(a) Includes renewable heating oil, renewable jet fuel (sustainable aviation fuel, alternative jet fuel, and biojet), renewable naphtha, renewable gasoline, and other emerging biofuels that are in various stages of development and commercialization

(b) Renewable diesel net imports and other biofuel net imports equal imports because we do not collect or receive export data for those fuels.

(c) Total distillate fuel oil supply equals the sum of the seven components shown minus refiner and blender net inputs of biodiesel and renewable diesel, which are listed in rows 44 and 45 of this table.

(d) The volumes of renewable fuels that are not reported as blended with petroleum fuels.

(e) The volumes of renewable fuels that are reported as blended with petroleum fuels.

(f) Equals the sum of distillate fuel oil, biodiesel product supplied, and renewable diesel product supplied.

(g) Prior to 2021, we did not publish biodiesel product supplied and instead included it as part of distillate fuel oil product supplied.

(h) Prior to 2021, we did not publish renewable diesel product supplied, and STEO values for that period are taken from the U.S. Environmental Protection Agency's Moderated Transaction System.

Notes:

EIA completed modeling and analysis for this report on November 7, 2024.

- = no data available

The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray.

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

Sources:

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.

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 - November 2024

| | 2023 | | | | 2024 | | | | 2025 | | | | Year | | |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2023 | 2024 | 2025 |
| Supply (billion cubic feet per day) | | | | | | | | | | | | | | | |
| U.S. total marketed natural gas production | 111.2 | 112.5 | 113.6 | 115.2 | 113.3 | 112.1 | 113.5 | 113.6 | 113.9 | 114.6 | 114.2 | 114.6 | 113.1 | 113.1 | 114.4 |
| Alaska | 1.1 | 1.0 | 0.9 | 1.0 | 1.1 | 1.0 | 0.9 | 1.0 | 1.0 | 1.0 | 0.9 | 1.0 | 1.0 | 1.0 | 1.0 |
| Federal Gulf of Mexico (a) | 2.1 | 1.9 | 2.0 | 1.9 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.7 | 2.0 | 1.8 | 1.8 |
| Lower 48 States (excl GOM) (b) | 108.0 | 109.6 | 110.7 | 112.2 | 110.4 | 109.3 | 110.8 | 110.8 | 111.1 | 111.9 | 111.6 | 111.9 | 110.1 | 110.3 | 111.6 |
| Appalachia region | 35.4 | 35.7 | 36.0 | 36.7 | 35.9 | 34.9 | 35.4 | 35.2 | 35.7 | 35.5 | 34.8 | 34.9 | 35.9 | 35.4 | 35.2 |
| Bakken region | 2.9 | 3.0 | 3.2 | 3.3 | 3.2 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.4 | 3.1 | 3.3 | 3.3 |
| Eagle Ford region | 6.5 | 6.6 | 6.7 | 6.7 | 6.6 | 6.7 | 6.8 | 6.7 | 6.7 | 7.1 | 7.1 | 7.2 | 6.6 | 6.7 | 7.0 |
| Haynesville region | 16.5 | 16.7 | 16.5 | 16.1 | 15.7 | 14.4 | 14.9 | 14.9 | 14.8 | 14.8 | 15.2 | 15.6 | 16.5 | 15.0 | 15.1 |
| Permian region | 21.5 | 22.4 | 23.0 | 23.9 | 23.9 | 24.5 | 24.8 | 25.1 | 25.1 | 26.2 | 26.4 | 26.5 | 22.7 | 24.6 | 26.1 |
| Rest of Lower 48 States | 25.1 | 25.2 | 25.2 | 25.5 | 25.1 | 25.5 | 25.5 | 25.5 | 25.4 | 25.0 | 24.7 | 24.3 | 25.3 | 25.4 | 24.9 |
| Total primary supply | 102.9 | 77.9 | 84.0 | 91.8 | 104.1 | 78.7 | 85.6 | 91.6 | 105.7 | 77.5 | 83.6 | 92.1 | 89.1 | 90.0 | 89.6 |
| Balancing item (c) | 0.4 | -0.6 | -1.2 | -0.5 | -0.2 | -1.6 | -1.3 | -0.3 | 0.0 | -1.4 | 0.5 | 0.3 | -0.5 | -0.8 | -0.1 |
| Total supply | 102.6 | 78.5 | 85.2 | 92.3 | 104.3 | 80.3 | 86.9 | 91.9 | 105.6 | 78.9 | 83.0 | 91.7 | 89.6 | 90.9 | 89.8 |
| U.S. total dry natural gas production | 102.2 | 103.2 | 104.1 | 105.5 | 104.0 | 102.0 | 103.5 | 103.8 | 104.2 | 104.7 | 104.3 | 104.7 | 103.8 | 103.3 | 104.5 |
| Net inventory withdrawals | 12.0 | -11.7 | -6.4 | 0.3 | 12.7 | -9.6 | -4.9 | 2.2 | 15.7 | -10.7 | -6.3 | 3.3 | -1.5 | 0.1 | 0.5 |
| Supplemental gaseous fuels | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 |
| Net imports | -11.8 | -13.2 | -12.6 | -13.7 | -12.7 | -12.4 | -12.1 | -14.4 | -14.5 | -15.4 | -15.3 | -16.5 | -12.8 | -12.9 | -15.4 |
| LNG gross imports (d) | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 |
| LNG gross exports (d) | 11.4 | 11.8 | 11.4 | 13.0 | 12.4 | 11.3 | 11.4 | 13.2 | 13.8 | 13.3 | 13.0 | 14.9 | 11.9 | 12.1 | 13.8 |
| Pipeline gross imports | 8.4 | 7.3 | 7.9 | 8.2 | 8.9 | 7.8 | 8.3 | 7.9 | 8.6 | 7.4 | 7.6 | 7.9 | 8.0 | 8.2 | 7.9 |
| Pipeline gross exports | 8.9 | 8.7 | 9.2 | 8.9 | 9.4 | 8.9 | 9.0 | 9.2 | 9.4 | 9.5 | 9.9 | 9.6 | 8.9 | 9.1 | 9.6 |
| Consumption (billion cubic feet per day) | | | | | | | | | | | | | | | |
| Total consumption | 102.9 | 77.9 | 84.0 | 91.8 | 104.1 | 78.7 | 85.6 | 91.6 | 105.7 | 77.5 | 83.6 | 92.1 | 89.1 | 90.0 | 89.6 |
| Residential | 23.5 | 7.3 | 3.6 | 15.0 | 22.8 | 6.7 | 3.5 | 14.8 | 24.2 | 7.3 | 3.8 | 16.1 | 12.3 | 11.9 | 12.8 |
| Commercial | 14.5 | 6.4 | 4.7 | 10.7 | 14.3 | 6.3 | 5.0 | 10.7 | 15.1 | 6.8 | 5.3 | 11.4 | 9.1 | 9.1 | 9.6 |
| Industrial | 24.8 | 22.4 | 22.0 | 24.3 | 24.9 | 22.3 | 22.2 | 23.9 | 24.9 | 22.1 | 21.7 | 24.1 | 23.4 | 23.3 | 23.2 |
| Electric power (e) | 30.7 | 33.3 | 45.0 | 32.7 | 32.7 | 34.9 | 46.1 | 33.2 | 31.9 | 32.8 | 43.9 | 31.3 | 35.5 | 36.7 | 35.0 |
| Lease and plant fuel | 5.3 | 5.4 | 5.4 | 5.5 | 5.4 | 5.4 | 5.4 | 5.4 | 5.4 | 5.5 | 5.5 | 5.5 | 5.4 | 5.4 | 5.5 |
| Pipeline and distribution | 3.9 | 2.9 | 3.1 | 3.4 | 3.9 | 3.0 | 3.2 | 3.5 | 4.0 | 2.9 | 3.1 | 3.5 | 3.3 | 3.4 | 3.4 |
| Vehicle | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| End-of-period working natural gas inventories (billion cubic feet) (f) | | | | | | | | | | | | | | | |
| United States total | 1,850 | 2,902 | 3,490 | 3,457 | 2,306 | 3,175 | 3,615 | 3,409 | 1,996 | 2,966 | 3,542 | 3,236 | 3,457 | 3,409 | 3,236 |
| East region | 334 | 646 | 853 | 787 | 369 | 670 | 858 | 790 | 341 | 610 | 835 | 748 | 787 | 790 | 748 |
| Midwest region | 417 | 701 | 993 | 950 | 507 | 781 | 1,025 | 919 | 420 | 696 | 993 | 888 | 950 | 919 | 888 |
| South Central region | 919 | 1,138 | 1,092 | 1,183 | 1,007 | 1,172 | 1,123 | 1,182 | 864 | 1,131 | 1,145 | 1,123 | 1,183 | 1,182 | 1,123 |
| Mountain region | 79 | 171 | 239 | 228 | 168 | 238 | 284 | 229 | 152 | 222 | 255 | 220 | 228 | 229 | 220 |
| Pacific region | 74 | 216 | 278 | 280 | 231 | 286 | 293 | 260 | 196 | 281 | 282 | 228 | 280 | 260 | 228 |
| Alaska | 27 | 30 | 35 | 30 | 24 | 28 | 32 | 29 | 24 | 27 | 32 | 28 | 30 | 29 | 28 |

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

(b) Regional production in this table is based on geographic regions and not geologic formations.

(c) The balancing item is the difference between total natural gas consumption (NGTCPUS) and total natural gas supply (NGPSUPP).

(d) LNG: liquefied natural gas

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

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

Notes:

EIA completed modeling and analysis for this report on November 7, 2024.

- = no data available

The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray.

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

Sources:

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

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 - November 2024

| | 2023 | | | | 2024 | | | | 2025 | | | | Year | | |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2023 | 2024 | 2025 |
| Wholesale price | | | | | | | | | | | | | | | |
| Henry Hub spot price | 2.75 | 2.25 | 2.69 | 2.84 | 2.21 | 2.16 | 2.19 | 2.46 | 2.94 | 2.54 | 3.12 | 3.41 | 2.63 | 2.26 | 3.01 |
| Residential retail (a) | | | | | | | | | | | | | | | |
| United States average | 14.72 | 16.19 | 22.33 | 13.72 | 12.75 | 16.86 | 22.73 | 13.59 | 12.24 | 14.81 | 20.38 | 12.86 | 15.19 | 14.32 | 13.41 |
| New England | 21.06 | 20.48 | 22.57 | 18.66 | 19.12 | 20.55 | 23.52 | 18.13 | 17.84 | 18.67 | 21.72 | 17.36 | 20.33 | 19.33 | 18.11 |
| Middle Atlantic | 15.60 | 16.03 | 20.74 | 14.33 | 13.44 | 15.93 | 21.35 | 14.21 | 12.76 | 14.07 | 18.96 | 13.26 | 15.64 | 14.57 | 13.56 |
| East North Central | 11.06 | 13.26 | 22.96 | 10.49 | 9.29 | 14.65 | 22.73 | 10.94 | 9.38 | 12.83 | 21.13 | 10.39 | 11.91 | 11.34 | 10.90 |
| West North Central | 13.24 | 15.41 | 22.07 | 11.29 | 10.61 | 15.63 | 22.60 | 11.64 | 10.17 | 13.19 | 19.73 | 10.51 | 13.42 | 12.29 | 11.23 |
| South Atlantic | 17.33 | 20.92 | 30.29 | 16.00 | 14.48 | 21.80 | 31.10 | 16.27 | 14.58 | 19.56 | 27.19 | 15.36 | 18.39 | 17.23 | 16.50 |
| East South Central | 13.63 | 16.66 | 23.41 | 13.47 | 11.57 | 16.14 | 25.12 | 13.64 | 11.66 | 15.14 | 21.51 | 12.34 | 14.56 | 13.50 | 12.92 |
| West South Central | 14.58 | 19.81 | 28.70 | 16.42 | 12.62 | 22.47 | 28.20 | 15.40 | 12.04 | 17.47 | 23.83 | 13.77 | 17.00 | 15.98 | 14.27 |
| Mountain | 12.61 | 13.86 | 18.75 | 12.88 | 12.56 | 13.92 | 17.56 | 11.70 | 10.93 | 12.58 | 17.10 | 11.42 | 13.29 | 12.86 | 11.80 |
| Pacific | 20.13 | 17.11 | 18.10 | 17.87 | 17.72 | 17.23 | 18.79 | 16.83 | 17.11 | 15.94 | 17.20 | 16.35 | 18.74 | 17.48 | 16.68 |
| Commercial retail (a) | | | | | | | | | | | | | | | |
| United States average | 11.82 | 10.48 | 10.89 | 9.82 | 9.81 | 10.42 | 10.93 | 9.00 | 8.67 | 9.09 | 9.76 | 8.66 | 10.89 | 9.79 | 8.86 |
| New England | 15.21 | 13.66 | 12.55 | 12.15 | 12.88 | 12.89 | 12.02 | 10.78 | 10.98 | 11.38 | 11.58 | 10.94 | 13.74 | 12.13 | 11.10 |
| Middle Atlantic | 11.94 | 9.25 | 8.06 | 9.48 | 10.49 | 10.16 | 9.27 | 8.63 | 8.95 | 8.12 | 7.66 | 8.27 | 10.23 | 9.75 | 8.45 |
| East North Central | 9.20 | 8.63 | 10.65 | 7.73 | 7.41 | 8.99 | 11.02 | 7.16 | 6.81 | 7.74 | 9.67 | 6.92 | 8.79 | 7.83 | 7.19 |
| West North Central | 11.58 | 11.33 | 11.77 | 8.39 | 8.53 | 9.83 | 11.21 | 8.09 | 7.89 | 8.39 | 9.63 | 7.46 | 10.66 | 8.81 | 7.97 |
| South Atlantic | 12.97 | 11.26 | 11.39 | 10.73 | 10.31 | 10.34 | 10.52 | 9.43 | 9.06 | 9.63 | 10.04 | 9.48 | 11.75 | 10.08 | 9.41 |
| East South Central | 11.89 | 10.94 | 11.80 | 10.55 | 9.91 | 10.09 | 11.42 | 9.63 | 8.88 | 9.70 | 10.70 | 9.49 | 11.30 | 10.02 | 9.41 |
| West South Central | 11.01 | 9.68 | 10.37 | 9.73 | 9.21 | 9.86 | 10.09 | 8.60 | 7.70 | 8.31 | 9.11 | 8.29 | 10.31 | 9.31 | 8.19 |
| Mountain | 10.89 | 10.77 | 12.16 | 10.66 | 10.30 | 10.14 | 10.40 | 8.90 | 8.72 | 9.09 | 9.92 | 8.59 | 10.92 | 9.85 | 8.86 |
| Pacific | 16.85 | 12.61 | 13.49 | 13.58 | 14.05 | 12.48 | 13.91 | 12.95 | 13.20 | 12.12 | 12.42 | 12.10 | 14.59 | 13.37 | 12.53 |
| Industrial retail (a) | | | | | | | | | | | | | | | |
| United States average | 6.12 | 3.76 | 3.87 | 4.38 | 4.47 | 3.35 | 3.22 | 3.36 | 4.01 | 3.22 | 3.62 | 4.20 | 4.59 | 3.62 | 3.78 |
| New England | 13.56 | 10.07 | 7.88 | 9.28 | 11.17 | 9.58 | 6.89 | 7.64 | 8.79 | 8.02 | 6.86 | 8.14 | 10.66 | 9.43 | 8.08 |
| Middle Atlantic | 11.94 | 8.97 | 7.89 | 9.35 | 10.14 | 9.19 | 8.30 | 7.92 | 8.37 | 7.58 | 7.53 | 8.34 | 10.34 | 9.37 | 8.13 |
| East North Central | 9.18 | 6.67 | 6.91 | 6.22 | 6.54 | 6.33 | 5.78 | 5.13 | 5.52 | 5.63 | 5.84 | 5.96 | 7.62 | 5.98 | 5.70 |
| West North Central | 8.23 | 4.54 | 4.33 | 4.69 | 5.21 | 3.39 | 3.59 | 4.00 | 4.91 | 3.95 | 4.11 | 4.89 | 5.64 | 4.09 | 4.51 |
| South Atlantic | 6.92 | 4.78 | 5.01 | 5.36 | 5.16 | 4.48 | 4.56 | 4.42 | 5.06 | 4.41 | 4.83 | 5.35 | 5.57 | 4.66 | 4.93 |
| East South Central | 5.46 | 3.74 | 4.09 | 4.32 | 4.13 | 3.40 | 3.74 | 3.88 | 4.54 | 3.87 | 4.29 | 4.83 | 4.44 | 3.80 | 4.40 |
| West South Central | 3.39 | 2.22 | 2.71 | 2.79 | 2.47 | 1.96 | 2.33 | 2.72 | 3.20 | 2.61 | 3.17 | 3.58 | 2.77 | 2.41 | 3.14 |
| Mountain | 8.90 | 7.73 | 8.05 | 7.76 | 8.17 | 6.84 | 6.23 | 5.67 | 5.65 | 5.55 | 5.91 | 5.84 | 8.19 | 6.85 | 5.72 |
| Pacific | 10.84 | 8.16 | 8.03 | 9.02 | 8.82 | 7.46 | 7.47 | 7.46 | 8.04 | 6.92 | 6.95 | 7.34 | 9.22 | 8.01 | 7.38 |

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

Notes:

EIA completed modeling and analysis for this report on November 7, 2024.

- = no data available

The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray.

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

Prices are not adjusted for inflation.

Regions refer to U.S. Census divisions.

Sources:

Historical data: Latest data available from Energy Information Administration databases supporting the *Natural Gas Monthly*, DOE/EIA-0130. Henry Hub spot price is from Refinitiv, an LSEG company, via EIA (https://www.eia.gov/dnav/pet/pet_pri_spt_s1_d.htm).

Forecasts: EIA Short-Term Integrated Forecasting System.

Table 6. U.S. Coal Supply, Consumption, and Inventories (million short tons)
U.S. Energy Information Administration | Short-Term Energy Outlook - November 2024

| | 2023 | | | | 2024 | | | | 2025 | | | | Year | | |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2023 | 2024 | 2025 |
| Supply | | | | | | | | | | | | | | | |
| Total supply | 105.6 | 100.2 | 139.1 | 102.8 | 101.9 | 95.5 | 117.9 | 94.8 | 97.6 | 77.3 | 127.8 | 105.7 | 447.8 | 410.2 | 408.5 |
| Secondary inventory withdrawals | -20.2 | -20.7 | 11.2 | -15.0 | -2.2 | 0.3 | 8.7 | -4.6 | 0.8 | -7.9 | 28.3 | 13.1 | -44.7 | 2.2 | 34.3 |
| Waste coal (a) | 2.0 | 1.9 | 2.2 | 2.3 | 2.3 | 2.0 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 8.3 | 6.8 | 4.8 |
| Total primary supply | 123.8 | 119.1 | 125.8 | 115.6 | 101.8 | 93.1 | 108.0 | 98.2 | 95.6 | 84.1 | 98.4 | 91.4 | 484.1 | 401.2 | 369.5 |
| U.S. total coal production | 148.8 | 142.5 | 145.8 | 140.8 | 129.9 | 118.1 | 131.5 | 125.2 | 120.6 | 107.8 | 121.0 | 119.6 | 578.0 | 504.7 | 469.1 |
| Appalachia | 43.1 | 42.6 | 40.2 | 39.6 | 39.6 | 39.8 | 38.4 | 37.5 | 37.8 | 33.9 | 32.4 | 33.9 | 165.6 | 155.3 | 138.0 |
| Interior | 25.3 | 23.5 | 22.6 | 22.3 | 22.2 | 20.3 | 20.4 | 20.2 | 21.0 | 17.5 | 18.1 | 18.0 | 93.7 | 83.1 | 74.7 |
| Western | 80.4 | 76.4 | 83.0 | 78.9 | 68.1 | 58.0 | 72.7 | 67.5 | 61.9 | 56.3 | 70.6 | 67.7 | 318.7 | 266.3 | 256.4 |
| Net imports | -23.5 | -23.7 | -23.6 | -25.4 | -26.5 | -25.3 | -26.6 | -26.9 | -24.5 | -23.8 | -24.8 | -28.2 | -96.2 | -105.2 | -101.3 |
| Gross imports | 1.0 | 1.0 | 1.0 | 1.0 | 0.3 | 0.5 | 0.7 | 0.8 | 0.6 | 0.7 | 1.1 | 0.8 | 4.0 | 2.3 | 3.1 |
| Gross exports | 24.5 | 24.7 | 24.6 | 26.3 | 26.8 | 25.8 | 27.3 | 27.7 | 25.1 | 24.5 | 25.9 | 28.9 | 100.2 | 107.6 | 104.4 |
| Metallurgical coal | 12.1 | 12.7 | 13.5 | 12.7 | 14.3 | 13.8 | 13.5 | 12.2 | 12.3 | 13.3 | 13.2 | 13.8 | 51.1 | 53.8 | 52.6 |
| Steam coal | 12.4 | 12.0 | 11.1 | 13.6 | 12.5 | 12.0 | 13.8 | 15.4 | 12.8 | 11.2 | 12.6 | 15.2 | 49.1 | 53.7 | 51.8 |
| Primary inventory withdrawals | -1.6 | 0.3 | 3.6 | 0.1 | -1.6 | 0.3 | 3.1 | -0.1 | -0.5 | 0.0 | 2.1 | 0.0 | 2.4 | 1.7 | 1.6 |
| Consumption | | | | | | | | | | | | | | | |
| U.S. total coal consumption | 101.8 | 91.5 | 132.0 | 100.8 | 100.3 | 90.9 | 119.1 | 96.5 | 97.6 | 77.3 | 127.8 | 105.7 | 426.0 | 406.9 | 408.5 |
| Coke plants | 4.0 | 3.9 | 4.0 | 4.0 | 3.9 | 3.9 | 3.7 | 3.7 | 3.7 | 3.8 | 3.8 | 3.9 | 15.8 | 15.2 | 15.2 |
| Electric power sector (b) | 91.2 | 82.0 | 122.7 | 91.3 | 90.8 | 82.0 | 110.4 | 87.1 | 88.1 | 68.6 | 119.0 | 96.0 | 387.2 | 370.2 | 371.7 |
| Retail and other industry | 6.5 | 5.6 | 5.3 | 5.5 | 5.7 | 5.0 | 5.0 | 5.8 | 5.8 | 4.9 | 5.0 | 5.8 | 22.9 | 21.5 | 21.5 |
| Residential and commercial | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.1 | 0.1 | 0.2 | 0.7 | 0.7 | 0.8 |
| Other industrial | 6.3 | 5.5 | 5.1 | 5.3 | 5.4 | 4.9 | 4.9 | 5.6 | 5.5 | 4.8 | 4.9 | 5.6 | 22.2 | 20.8 | 20.7 |
| Discrepancy (c) | 3.9 | 8.7 | 7.1 | 2.1 | 1.6 | 4.5 | -1.2 | -1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 21.8 | 3.3 | 0.0 |
| End-of-period inventories | | | | | | | | | | | | | | | |
| Primary inventories (d) | 22.4 | 22.1 | 18.5 | 18.4 | 20.0 | 19.7 | 16.6 | 16.7 | 17.2 | 17.2 | 15.0 | 15.1 | 18.4 | 16.7 | 15.1 |
| Secondary inventories | 113.3 | 134.0 | 122.8 | 137.8 | 140.0 | 139.7 | 131.0 | 135.6 | 134.8 | 142.7 | 114.4 | 101.3 | 137.8 | 135.6 | 101.3 |
| Electric power sector | 109.0 | 129.4 | 118.3 | 133.3 | 135.7 | 135.4 | 126.4 | 131.0 | 130.9 | 138.6 | 110.0 | 96.9 | 133.3 | 131.0 | 96.9 |
| Retail and general industry | 2.5 | 2.8 | 2.7 | 2.9 | 2.8 | 2.6 | 2.9 | 2.9 | 2.4 | 2.6 | 2.8 | 2.9 | 2.9 | 2.9 | 2.9 |
| Coke plants | 1.7 | 1.7 | 1.7 | 1.6 | 1.4 | 1.6 | 1.5 | 1.5 | 1.3 | 1.4 | 1.4 | 1.4 | 1.6 | 1.5 | 1.4 |
| Commercial & institutional | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 |
| Coal market indicators | | | | | | | | | | | | | | | |
| Coal miner productivity (tons per hour) | 6.75 | 6.75 | 6.75 | 6.75 | 6.56 | 6.56 | 6.56 | 6.56 | 6.27 | 6.27 | 6.27 | 6.27 | 6.75 | 6.56 | 6.27 |
| Total raw steel production (million short tons) | 21.23 | 22.17 | 22.51 | 22.30 | 22.22 | 22.36 | 22.72 | 21.81 | 22.15 | 23.18 | 23.59 | 24.16 | 88.20 | 89.11 | 93.08 |
| Cost of coal to electric utilities (dollars per million Btu) .. | 2.56 | 2.48 | 2.50 | 2.50 | 2.50 | 2.54 | 2.45 | 2.40 | 2.42 | 2.41 | 2.41 | 2.38 | 2.51 | 2.47 | 2.40 |

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

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

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

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

Notes:

EIA completed modeling and analysis for this report on November 7, 2024.

- = no data available

The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray.

Sources:

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

Table 7a. U.S. Electricity Industry Overview

U.S. Energy Information Administration | Short-Term Energy Outlook - November 2024

| | 2023 | | | | 2024 | | | | 2025 | | | | Year | | |
|---|--------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2023 | 2024 | 2025 |
| Electricity supply (billion kilowatthours) | | | | | | | | | | | | | | | |
| Total utility-scale power supply | 998 | 994 | 1,211 | 999 | 1,027 | 1,046 | 1,219 | 1,022 | 1,035 | 1,050 | 1,248 | 1,039 | 4,202 | 4,314 | 4,372 |
| Electricity generation (a) | 990 | 988 | 1,208 | 997 | 1,025 | 1,045 | 1,211 | 1,019 | 1,030 | 1,044 | 1,240 | 1,034 | 4,183 | 4,300 | 4,348 |
| Electric power sector | 952 | 951 | 1,167 | 957 | 986 | 1,008 | 1,171 | 979 | 991 | 1,005 | 1,199 | 994 | 4,029 | 4,144 | 4,189 |
| Industrial sector | 34 | 33 | 36 | 35 | 35 | 33 | 36 | 35 | 34 | 34 | 37 | 36 | 139 | 139 | 141 |
| Commercial sector | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 16 | 17 | 18 |
| Net imports | 8 | 6 | 3 | 2 | 2 | 1 | 8 | 4 | 5 | 6 | 8 | 5 | 19 | 14 | 24 |
| Small-scale solar generation (c) | | | | | | | | | | | | | | | |
| Residential sector | 14 | 22 | 22 | 16 | 17 | 25 | 25 | 17 | 19 | 28 | 28 | 19 | 74 | 84 | 94 |
| Commercial sector | 10 | 15 | 15 | 11 | 12 | 17 | 17 | 11 | 13 | 19 | 19 | 13 | 50 | 57 | 63 |
| Industrial sector | 4 | 6 | 6 | 4 | 5 | 7 | 7 | 5 | 5 | 8 | 8 | 5 | 19 | 22 | 26 |
| Industrial sector | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 4 | 5 | 5 |
| Losses and Unaccounted for (b) | 39 | 53 | 48 | 49 | 52 | 64 | 53 | 54 | 48 | 59 | 56 | 51 | 190 | 223 | 214 |
| Electricity consumption (billion kilowatthours) | | | | | | | | | | | | | | | |
| Total consumption | 958 | 941 | 1,162 | 950 | 974 | 982 | 1,166 | 968 | 988 | 991 | 1,191 | 988 | 4,012 | 4,090 | 4,158 |
| Sales to ultimate customers | 925 | 908 | 1,126 | 915 | 940 | 949 | 1,130 | 933 | 953 | 956 | 1,155 | 952 | 3,874 | 3,951 | 4,016 |
| Residential sector | 354 | 318 | 454 | 324 | 362 | 342 | 457 | 330 | 368 | 341 | 468 | 337 | 1,450 | 1,492 | 1,514 |
| Commercial sector | 329 | 338 | 401 | 339 | 331 | 348 | 401 | 346 | 335 | 348 | 405 | 349 | 1,408 | 1,426 | 1,437 |
| Industrial sector | 240 | 251 | 269 | 250 | 244 | 257 | 271 | 255 | 248 | 266 | 280 | 265 | 1,009 | 1,027 | 1,059 |
| Transportation sector | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 7 | 7 | 6 |
| Direct use (d) | 34 | 33 | 36 | 35 | 35 | 33 | 36 | 35 | 35 | 34 | 37 | 36 | 138 | 139 | 142 |
| Average residential electricity usage per customer (kWh) | 2,515 | 2,256 | 3,224 | 2,302 | 2,545 | 2,404 | 3,212 | 2,321 | 2,554 | 2,367 | 3,246 | 2,341 | 10,297 | 10,483 | 10,507 |
| End-of-period fuel inventories held by electric power sector | | | | | | | | | | | | | | | |
| Coal (million short tons) | 109.0 | 129.4 | 118.3 | 133.3 | 135.7 | 135.4 | 126.4 | 131.0 | 130.9 | 138.6 | 110.0 | 96.9 | 133.3 | 131.0 | 96.9 |
| Residual fuel (million barrels) | 6.1 | 6.0 | 6.1 | 6.1 | 6.0 | 5.8 | 5.0 | 5.5 | 3.7 | 3.6 | 1.8 | 2.6 | 6.1 | 5.5 | 2.6 |
| Distillate fuel (million barrels) | 17.5 | 17.5 | 16.8 | 17.6 | 17.0 | 16.9 | 16.3 | 16.6 | 16.5 | 16.4 | 16.4 | 16.6 | 17.6 | 16.6 | 16.6 |
| Prices | | | | | | | | | | | | | | | |
| Power generation fuel costs (dollars per million Btu) | | | | | | | | | | | | | | | |
| Coal | 2.56 | 2.48 | 2.50 | 2.50 | 2.50 | 2.54 | 2.45 | 2.40 | 2.42 | 2.41 | 2.41 | 2.38 | 2.51 | 2.47 | 2.40 |
| Natural gas | 4.96 | 2.61 | 2.94 | 3.20 | 3.37 | 2.37 | 2.40 | 2.73 | 3.34 | 2.68 | 3.06 | 3.58 | 3.36 | 2.69 | 3.16 |
| Residual fuel oil | 19.21 | 17.89 | 19.32 | 20.87 | 18.84 | 18.55 | 17.43 | 13.96 | 14.07 | 14.97 | 14.28 | 13.91 | 19.36 | 17.25 | 14.26 |
| Distillate fuel oil | 22.96 | 19.97 | 22.30 | 22.18 | 20.14 | 19.55 | 18.15 | 16.81 | 17.11 | 17.52 | 18.08 | 18.21 | 21.87 | 18.54 | 17.70 |
| Prices to ultimate customers (cents per kilowatthour) | | | | | | | | | | | | | | | |
| Residential sector | 15.81 | 16.11 | 16.00 | 16.10 | 16.02 | 16.55 | 16.66 | 16.19 | 16.13 | 16.91 | 17.01 | 16.62 | 16.00 | 16.38 | 16.69 |
| Commercial sector | 12.50 | 12.30 | 13.02 | 12.47 | 12.69 | 12.74 | 13.43 | 12.57 | 12.80 | 13.11 | 13.87 | 12.95 | 12.59 | 12.88 | 13.21 |
| Industrial sector | 7.99 | 7.76 | 8.57 | 7.81 | 7.86 | 8.02 | 8.65 | 7.82 | 7.98 | 8.12 | 8.69 | 7.86 | 8.04 | 8.10 | 8.17 |
| Wholesale electricity prices (dollars per megawatthour) | | | | | | | | | | | | | | | |
| ERCOT North hub | 28.05 | 57.27 | 188.81 | 33.85 | 32.53 | 39.94 | 33.54 | 26.27 | 25.97 | 23.06 | 32.58 | 28.59 | 77.00 | 33.07 | 27.55 |
| CAISO SP15 zone | 92.54 | 30.00 | 67.59 | 50.54 | 33.41 | 7.97 | 43.12 | 38.87 | 39.93 | 33.03 | 41.60 | 44.44 | 60.17 | 30.84 | 39.75 |
| ISO-NE Internal hub | 52.63 | 32.55 | 40.41 | 39.84 | 47.50 | 34.50 | 45.87 | 43.55 | 65.96 | 45.99 | 55.13 | 57.22 | 41.36 | 42.85 | 56.07 |
| NYISO Hudson Valley zone | 44.65 | 31.38 | 39.45 | 36.35 | 43.48 | 33.82 | 42.06 | 39.06 | 42.79 | 40.40 | 46.60 | 44.26 | 37.96 | 39.60 | 43.51 |
| PJM Western hub | 36.49 | 35.41 | 43.27 | 42.17 | 35.76 | 37.75 | 49.70 | 41.21 | 46.15 | 40.43 | 49.25 | 43.48 | 39.34 | 41.10 | 44.83 |
| Midcontinent ISO Illinois hub | 31.39 | 32.13 | 40.60 | 33.58 | 32.52 | 30.38 | 37.95 | 30.83 | 35.18 | 32.44 | 38.03 | 34.02 | 34.42 | 32.92 | 34.92 |
| SPP ISO South hub | 28.96 | 34.56 | 46.96 | 28.50 | 31.66 | 33.95 | 47.92 | 46.79 | 43.04 | 43.08 | 55.36 | 46.38 | 34.74 | 40.08 | 46.96 |
| SERC index, Into Southern | 30.53 | 31.66 | 36.45 | 30.40 | 27.96 | 29.20 | 31.53 | 30.24 | 32.66 | 30.14 | 35.43 | 32.81 | 32.26 | 29.73 | 32.76 |
| FRCC index, Florida Reliability | 30.31 | 33.06 | 36.79 | 32.05 | 30.01 | 31.81 | 33.26 | 31.08 | 32.33 | 33.35 | 36.65 | 34.64 | 33.05 | 31.54 | 34.24 |
| Northwest index, Mid-Columbia | 105.99 | 58.61 | 82.36 | 79.49 | 99.74 | 32.91 | 60.98 | 58.12 | 58.92 | 45.77 | 59.12 | 65.95 | 81.61 | 62.94 | 57.44 |
| Southwest index, Palo Verde | 84.19 | 31.60 | 71.95 | 50.10 | 29.62 | 11.22 | 50.17 | 39.76 | 40.48 | 37.92 | 46.52 | 46.11 | 59.46 | 32.69 | 42.76 |

(a) Generation supplied by utility-scale power plants with capacity of at least one megawatt.

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

(c) Solar photovoltaic systems smaller than one megawatt such as those installed on rooftops.

(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.

Notes:

EIA completed modeling and analysis for this report on November 7, 2024.

The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray.

kWh = kilowatthours. Btu = British thermal units.

Prices are not adjusted for inflation.

Sources:

Historical data: Latest data available from EIA databases supporting the following reports: Electric Power Monthly and Electric Power Annual (electricity supply and consumption, fuel inventories and costs, and retail electricity prices); S&P Global Market Intelligence (wholesale electricity prices).

Table 7b. U.S. Regional Electricity Sales to Ultimate Customers (billion kilowatthours)

U.S. Energy Information Administration | Short-Term Energy Outlook - November 2024

| | 2023 | | | | 2024 | | | | 2025 | | | | Year | | |
|---------------------------------|--------------|--------------|----------------|--------------|--------------|--------------|----------------|--------------|--------------|--------------|----------------|--------------|----------------|----------------|----------------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2023 | 2024 | 2025 |
| All sectors (a) | 924.8 | 908.3 | 1,126.2 | 915.0 | 939.6 | 948.6 | 1,130.3 | 933.0 | 953.0 | 956.1 | 1,154.5 | 952.1 | 3,874.3 | 3,951.5 | 4,015.8 |
| New England | 28.1 | 25.2 | 31.6 | 26.4 | 28.5 | 26.3 | 30.5 | 26.2 | 28.8 | 26.1 | 30.7 | 26.2 | 111.3 | 111.7 | 111.9 |
| Middle Atlantic | 86.7 | 79.3 | 100.1 | 83.1 | 87.1 | 83.6 | 101.9 | 82.3 | 87.7 | 83.1 | 102.8 | 83.4 | 349.2 | 355.0 | 357.0 |
| E. N. Central | 133.7 | 127.5 | 148.8 | 129.3 | 136.5 | 134.3 | 153.1 | 130.0 | 138.6 | 133.8 | 156.1 | 132.1 | 539.4 | 554.0 | 560.5 |
| W. N. Central | 78.4 | 74.5 | 86.3 | 74.8 | 79.4 | 75.8 | 86.7 | 77.1 | 82.8 | 77.1 | 90.6 | 79.5 | 313.9 | 319.0 | 330.1 |
| S. Atlantic | 196.8 | 201.6 | 251.7 | 199.5 | 204.1 | 214.2 | 251.9 | 202.7 | 206.9 | 216.5 | 258.5 | 207.7 | 849.6 | 872.9 | 889.6 |
| E. S. Central | 73.0 | 71.0 | 88.8 | 70.7 | 77.0 | 74.9 | 90.1 | 70.6 | 76.2 | 74.3 | 90.8 | 71.5 | 303.6 | 312.6 | 312.8 |
| W. S. Central | 157.3 | 166.4 | 218.7 | 163.4 | 158.7 | 171.4 | 208.2 | 173.1 | 165.0 | 176.6 | 219.1 | 180.3 | 705.8 | 711.4 | 741.0 |
| Mountain | 68.8 | 71.0 | 90.3 | 69.2 | 69.9 | 76.1 | 93.6 | 71.1 | 70.5 | 76.6 | 93.1 | 71.8 | 299.4 | 310.8 | 312.0 |
| Pacific contiguous | 98.2 | 88.2 | 106.0 | 94.6 | 94.6 | 88.5 | 110.4 | 95.9 | 92.8 | 88.4 | 109.1 | 95.8 | 387.0 | 389.3 | 386.0 |
| AK and HI | 3.7 | 3.6 | 3.8 | 3.9 | 3.7 | 3.6 | 3.8 | 3.9 | 3.7 | 3.6 | 3.8 | 3.9 | 15.0 | 14.9 | 14.9 |
| Residential sector | 354.2 | 317.7 | 454.0 | 324.1 | 362.3 | 342.2 | 457.2 | 330.5 | 367.9 | 341.0 | 467.6 | 337.2 | 1,450.0 | 1,492.2 | 1,513.7 |
| New England | 12.3 | 9.8 | 13.8 | 10.9 | 12.7 | 10.9 | 13.7 | 11.0 | 13.2 | 10.9 | 14.0 | 11.1 | 46.7 | 48.3 | 49.2 |
| Middle Atlantic | 33.1 | 27.4 | 40.1 | 30.2 | 33.7 | 30.6 | 42.0 | 29.8 | 34.6 | 30.4 | 42.7 | 30.6 | 130.9 | 136.2 | 138.4 |
| E. N. Central | 46.3 | 39.6 | 52.2 | 41.5 | 47.1 | 43.6 | 55.0 | 42.1 | 49.3 | 43.0 | 56.8 | 43.1 | 179.5 | 187.8 | 192.2 |
| W. N. Central | 29.0 | 23.9 | 30.5 | 24.0 | 28.8 | 24.1 | 30.5 | 25.0 | 30.7 | 24.4 | 32.6 | 25.9 | 107.4 | 108.4 | 113.6 |
| S. Atlantic | 86.6 | 83.2 | 117.1 | 83.7 | 91.6 | 92.0 | 117.8 | 84.4 | 92.2 | 92.7 | 121.3 | 87.0 | 370.6 | 385.7 | 393.1 |
| E. S. Central | 28.8 | 25.0 | 36.6 | 25.6 | 32.1 | 27.5 | 37.7 | 25.6 | 31.8 | 27.3 | 38.3 | 26.4 | 115.9 | 122.8 | 123.8 |
| W. S. Central | 52.1 | 53.0 | 87.6 | 49.8 | 52.8 | 55.9 | 79.8 | 52.1 | 53.3 | 55.1 | 83.2 | 52.4 | 242.5 | 240.6 | 244.0 |
| Mountain | 25.3 | 24.6 | 36.4 | 23.4 | 24.4 | 26.8 | 37.9 | 24.4 | 24.5 | 26.4 | 36.8 | 24.3 | 109.7 | 113.5 | 112.0 |
| Pacific contiguous | 39.4 | 30.2 | 38.7 | 33.9 | 37.8 | 29.7 | 41.7 | 35.0 | 37.0 | 29.6 | 40.9 | 35.2 | 142.2 | 144.2 | 142.7 |
| AK and HI | 1.2 | 1.1 | 1.1 | 1.3 | 1.2 | 1.1 | 1.1 | 1.3 | 1.2 | 1.1 | 1.1 | 1.3 | 4.7 | 4.7 | 4.7 |
| Commercial sector | 329.3 | 338.0 | 401.3 | 339.5 | 331.1 | 347.6 | 400.7 | 346.3 | 335.0 | 347.9 | 405.4 | 348.8 | 1,408.1 | 1,425.7 | 1,437.1 |
| New England | 12.0 | 11.6 | 13.8 | 11.8 | 12.3 | 11.7 | 12.9 | 11.6 | 12.1 | 11.6 | 12.9 | 11.5 | 49.3 | 48.5 | 48.1 |
| Middle Atlantic | 35.2 | 33.3 | 40.1 | 34.7 | 35.1 | 34.2 | 40.6 | 34.5 | 35.0 | 33.9 | 40.7 | 34.5 | 143.3 | 144.4 | 144.1 |
| E. N. Central | 42.4 | 42.0 | 48.1 | 42.2 | 43.4 | 43.8 | 49.7 | 42.4 | 43.5 | 43.3 | 50.2 | 42.5 | 174.7 | 179.2 | 179.4 |
| W. N. Central | 25.9 | 26.0 | 29.5 | 25.9 | 25.9 | 26.5 | 29.9 | 26.9 | 27.0 | 26.8 | 30.8 | 27.4 | 107.3 | 109.1 | 112.0 |
| S. Atlantic | 77.0 | 83.5 | 98.7 | 82.1 | 78.7 | 86.6 | 98.1 | 84.7 | 81.1 | 87.9 | 100.8 | 86.5 | 341.3 | 348.0 | 356.3 |
| E. S. Central | 20.6 | 21.7 | 27.0 | 21.4 | 21.5 | 23.1 | 27.3 | 21.5 | 21.3 | 22.7 | 27.2 | 21.4 | 90.8 | 93.4 | 92.6 |
| W. S. Central | 49.9 | 54.3 | 66.8 | 53.4 | 49.7 | 54.9 | 63.7 | 56.0 | 50.8 | 54.5 | 64.5 | 56.2 | 224.3 | 224.3 | 226.1 |
| Mountain | 24.2 | 25.4 | 30.5 | 25.2 | 24.7 | 26.9 | 31.7 | 25.8 | 25.0 | 27.3 | 31.9 | 26.2 | 105.3 | 109.0 | 110.4 |
| Pacific contiguous | 40.7 | 38.9 | 45.5 | 41.3 | 38.6 | 38.7 | 45.6 | 41.6 | 37.9 | 38.7 | 45.0 | 41.1 | 166.4 | 164.4 | 162.7 |
| AK and HI | 1.3 | 1.3 | 1.4 | 1.4 | 1.3 | 1.3 | 1.4 | 1.4 | 1.3 | 1.3 | 1.4 | 1.3 | 5.4 | 5.4 | 5.4 |
| Industrial sector | 239.7 | 250.9 | 269.0 | 249.7 | 244.4 | 257.1 | 270.6 | 254.6 | 248.4 | 265.7 | 279.9 | 264.6 | 1,009.3 | 1,026.7 | 1,058.6 |
| New England | 3.7 | 3.7 | 3.9 | 3.6 | 3.5 | 3.6 | 3.8 | 3.5 | 3.4 | 3.6 | 3.8 | 3.5 | 14.9 | 14.4 | 14.2 |
| Middle Atlantic | 17.4 | 17.7 | 19.0 | 17.4 | 17.3 | 17.9 | 18.4 | 17.2 | 17.2 | 18.0 | 18.6 | 17.5 | 71.5 | 70.8 | 71.2 |
| E. N. Central | 45.0 | 45.9 | 48.4 | 45.5 | 45.8 | 46.8 | 48.3 | 45.5 | 45.6 | 47.3 | 49.0 | 46.4 | 184.7 | 186.4 | 188.4 |
| W. N. Central | 23.4 | 24.6 | 26.3 | 24.9 | 24.7 | 25.2 | 26.3 | 25.2 | 25.1 | 26.0 | 27.2 | 26.2 | 99.2 | 101.4 | 104.5 |
| S. Atlantic | 32.9 | 34.6 | 35.7 | 33.4 | 33.6 | 35.4 | 35.7 | 33.3 | 33.3 | 35.7 | 36.2 | 34.0 | 136.6 | 138.0 | 139.2 |
| E. S. Central | 23.6 | 24.4 | 25.2 | 23.7 | 23.4 | 24.3 | 25.2 | 23.6 | 23.2 | 24.3 | 25.3 | 23.7 | 96.9 | 96.4 | 96.4 |
| W. S. Central | 55.2 | 59.0 | 64.3 | 60.2 | 56.2 | 60.6 | 64.7 | 65.0 | 60.9 | 66.9 | 71.3 | 71.6 | 238.7 | 246.4 | 270.7 |
| Mountain | 19.3 | 21.0 | 23.4 | 20.6 | 20.7 | 22.4 | 24.0 | 20.9 | 20.9 | 22.9 | 24.4 | 21.3 | 84.2 | 88.1 | 89.4 |
| Pacific contiguous | 17.9 | 18.8 | 21.6 | 19.2 | 18.0 | 19.8 | 22.9 | 19.2 | 17.7 | 19.9 | 22.9 | 19.2 | 77.6 | 79.9 | 79.8 |
| AK and HI | 1.1 | 1.2 | 1.3 | 1.2 | 1.2 | 1.2 | 1.3 | 1.2 | 1.1 | 1.2 | 1.3 | 1.2 | 4.8 | 4.8 | 4.8 |

(a) Total includes sales of electricity to ultimate customers in transportation sector (not shown), as well as residential, commercial, and industrial sectors.

Notes:

EIA completed modeling and analysis for this report on November 7, 2024.

The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray.

Electricity sales to ultimate customers are sold by electric utilities and power marketers for direct consumption by the customer and not available for resale. Includes electric sales to end users by third-party owners of behind-the-meter solar photovoltaic systems.

 Regions refer to U.S. Census divisions (https://www.eia.gov/tools/glossary/index.php?id=C#census_division).

Sources:

Historical data: Latest data available from EIA databases supporting the following reports: Electric Power Monthly and Electric Power Annual.

Table 7c. U.S. Regional Electricity Prices to Ultimate Customers (Cents per Kilowatthour)

U.S. Energy Information Administration | Short-Term Energy Outlook - November 2024

| | 2023 | | | | 2024 | | | | 2025 | | | | Year | | |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2023 | 2024 | 2025 |
| All sectors (a) | | | | | | | | | | | | | | | |
| United States average ... | 12.60 | 12.38 | 13.16 | 12.48 | 12.72 | 12.83 | 13.60 | 12.55 | 12.83 | 13.07 | 13.88 | 12.84 | 12.68 | 12.96 | 13.19 |
| New England | 24.48 | 22.59 | 21.98 | 22.26 | 23.16 | 22.00 | 22.88 | 22.23 | 23.24 | 22.66 | 24.07 | 23.75 | 22.81 | 22.59 | 23.45 |
| Middle Atlantic | 15.36 | 14.73 | 16.11 | 15.22 | 15.59 | 15.77 | 17.18 | 15.86 | 16.24 | 16.29 | 17.71 | 16.31 | 15.40 | 16.15 | 16.69 |
| E. N. Central | 12.16 | 11.93 | 12.02 | 11.80 | 12.06 | 12.30 | 12.50 | 12.04 | 12.35 | 12.56 | 12.81 | 12.34 | 11.98 | 12.23 | 12.52 |
| W. N. Central | 9.82 | 10.55 | 11.42 | 9.83 | 10.01 | 10.70 | 11.58 | 9.84 | 10.08 | 10.89 | 11.82 | 10.05 | 10.44 | 10.56 | 10.74 |
| S. Atlantic | 11.88 | 11.76 | 12.04 | 11.81 | 12.09 | 11.97 | 12.21 | 11.58 | 11.89 | 11.97 | 12.39 | 11.83 | 11.88 | 11.97 | 12.04 |
| E. S. Central | 10.94 | 10.57 | 10.91 | 10.67 | 11.05 | 10.97 | 11.18 | 10.92 | 11.36 | 11.29 | 11.50 | 11.22 | 10.78 | 11.04 | 11.35 |
| W. S. Central | 9.73 | 9.33 | 10.49 | 9.39 | 9.39 | 9.50 | 10.18 | 9.31 | 9.47 | 9.71 | 10.47 | 9.38 | 9.79 | 9.63 | 9.80 |
| Mountain | 10.54 | 11.01 | 11.79 | 10.73 | 10.71 | 11.31 | 11.82 | 10.60 | 10.61 | 11.52 | 12.20 | 11.16 | 11.07 | 11.16 | 11.43 |
| Pacific | 17.56 | 18.48 | 21.31 | 18.99 | 19.18 | 20.66 | 23.25 | 19.69 | 19.71 | 21.39 | 23.81 | 20.13 | 19.15 | 20.80 | 21.36 |
| Residential sector | | | | | | | | | | | | | | | |
| United States average ... | 15.81 | 16.11 | 16.00 | 16.10 | 16.02 | 16.55 | 16.66 | 16.19 | 16.13 | 16.91 | 17.01 | 16.62 | 16.00 | 16.38 | 16.69 |
| New England | 30.79 | 29.65 | 27.09 | 27.66 | 27.62 | 26.55 | 27.21 | 26.81 | 27.13 | 27.11 | 28.68 | 28.93 | 28.73 | 27.08 | 27.97 |
| Middle Atlantic | 19.75 | 19.12 | 19.83 | 19.58 | 19.94 | 20.50 | 21.36 | 20.83 | 21.00 | 21.47 | 22.15 | 21.55 | 19.60 | 20.70 | 21.58 |
| E. N. Central | 16.16 | 16.58 | 15.94 | 16.19 | 16.05 | 16.89 | 16.48 | 16.50 | 16.26 | 17.36 | 16.91 | 16.95 | 16.19 | 16.47 | 16.85 |
| W. N. Central | 11.80 | 13.47 | 14.17 | 12.60 | 12.32 | 14.00 | 14.56 | 12.38 | 12.15 | 14.18 | 14.70 | 12.61 | 13.02 | 13.34 | 13.42 |
| S. Atlantic | 14.20 | 14.65 | 14.43 | 14.54 | 14.52 | 14.67 | 14.56 | 14.25 | 14.26 | 14.69 | 14.75 | 14.54 | 14.45 | 14.51 | 14.57 |
| E. S. Central | 13.16 | 13.19 | 12.93 | 13.26 | 13.23 | 13.58 | 13.27 | 13.61 | 13.65 | 14.10 | 13.61 | 13.94 | 13.11 | 13.40 | 13.80 |
| W. S. Central | 13.66 | 13.67 | 13.61 | 13.85 | 13.46 | 13.88 | 14.03 | 13.56 | 13.18 | 13.96 | 14.08 | 13.71 | 13.68 | 13.77 | 13.78 |
| Mountain | 12.94 | 13.84 | 14.07 | 13.70 | 13.59 | 14.42 | 14.32 | 13.70 | 13.58 | 14.69 | 15.02 | 14.80 | 13.68 | 14.05 | 14.58 |
| Pacific | 19.98 | 22.33 | 23.96 | 21.92 | 22.04 | 25.17 | 25.86 | 22.78 | 22.97 | 26.41 | 26.72 | 23.14 | 22.03 | 23.97 | 24.80 |
| Commercial sector | | | | | | | | | | | | | | | |
| United States average ... | 12.50 | 12.30 | 13.02 | 12.47 | 12.69 | 12.74 | 13.43 | 12.57 | 12.80 | 13.11 | 13.87 | 12.95 | 12.59 | 12.88 | 13.21 |
| New England | 20.62 | 19.11 | 18.72 | 19.33 | 20.51 | 19.77 | 20.31 | 19.82 | 20.89 | 20.50 | 21.28 | 20.96 | 19.42 | 20.11 | 20.92 |
| Middle Atlantic | 14.79 | 14.82 | 16.31 | 15.18 | 15.04 | 15.59 | 16.77 | 15.45 | 15.30 | 15.92 | 17.22 | 15.84 | 15.32 | 15.75 | 16.12 |
| E. N. Central | 11.99 | 12.04 | 11.89 | 11.85 | 12.06 | 12.35 | 12.21 | 12.02 | 12.26 | 12.62 | 12.49 | 12.32 | 11.94 | 12.17 | 12.42 |
| W. N. Central | 9.78 | 10.44 | 11.19 | 9.73 | 9.89 | 10.46 | 11.33 | 9.73 | 9.95 | 10.73 | 11.70 | 10.04 | 10.31 | 10.38 | 10.64 |
| S. Atlantic | 11.11 | 10.74 | 10.69 | 10.80 | 11.17 | 10.86 | 10.79 | 10.47 | 10.83 | 10.81 | 10.94 | 10.68 | 10.82 | 10.81 | 10.82 |
| E. S. Central | 12.49 | 12.03 | 12.01 | 12.04 | 12.47 | 12.32 | 12.31 | 12.34 | 12.73 | 12.71 | 12.72 | 12.73 | 12.13 | 12.35 | 12.72 |
| W. S. Central | 9.24 | 8.75 | 9.49 | 8.95 | 8.91 | 8.94 | 9.44 | 9.66 | 10.09 | 10.55 | 10.81 | 10.38 | 9.13 | 9.25 | 10.48 |
| Mountain | 10.34 | 11.02 | 11.58 | 10.68 | 10.57 | 11.22 | 11.48 | 10.34 | 10.18 | 11.14 | 11.84 | 10.81 | 10.94 | 10.94 | 11.04 |
| Pacific | 17.70 | 18.33 | 22.08 | 19.20 | 19.45 | 20.37 | 24.01 | 19.60 | 19.51 | 20.46 | 24.27 | 20.00 | 19.42 | 20.97 | 21.18 |
| Industrial sector | | | | | | | | | | | | | | | |
| United States average ... | 7.99 | 7.76 | 8.57 | 7.81 | 7.86 | 8.02 | 8.65 | 7.82 | 7.98 | 8.12 | 8.69 | 7.86 | 8.04 | 8.10 | 8.17 |
| New England | 16.36 | 15.22 | 15.75 | 15.90 | 16.55 | 15.87 | 16.28 | 16.14 | 16.90 | 16.39 | 16.96 | 16.86 | 15.81 | 16.21 | 16.78 |
| Middle Atlantic | 8.21 | 7.80 | 7.87 | 7.75 | 8.36 | 8.12 | 8.65 | 8.17 | 8.68 | 8.28 | 8.71 | 8.21 | 7.91 | 8.33 | 8.47 |
| E. N. Central | 8.22 | 7.83 | 7.94 | 7.79 | 7.95 | 7.99 | 8.28 | 7.95 | 8.22 | 8.16 | 8.39 | 8.09 | 7.94 | 8.04 | 8.22 |
| W. N. Central | 7.43 | 7.84 | 8.48 | 7.28 | 7.43 | 7.78 | 8.38 | 7.44 | 7.68 | 7.96 | 8.53 | 7.55 | 7.77 | 7.77 | 7.94 |
| S. Atlantic | 7.60 | 7.28 | 7.98 | 7.45 | 7.64 | 7.66 | 8.35 | 7.69 | 7.93 | 7.79 | 8.54 | 7.83 | 7.58 | 7.84 | 8.03 |
| E. S. Central | 6.88 | 6.57 | 6.81 | 6.64 | 6.77 | 6.72 | 6.83 | 6.71 | 6.97 | 6.81 | 6.98 | 6.83 | 6.72 | 6.76 | 6.90 |
| W. S. Central | 6.46 | 5.96 | 7.30 | 6.08 | 5.99 | 5.96 | 6.18 | 5.60 | 5.71 | 5.53 | 5.95 | 5.41 | 6.47 | 5.93 | 5.65 |
| Mountain | 7.66 | 7.67 | 8.52 | 7.40 | 7.49 | 7.70 | 8.31 | 7.30 | 7.64 | 8.33 | 8.40 | 7.45 | 7.84 | 7.72 | 7.98 |
| Pacific | 11.99 | 12.70 | 15.06 | 13.44 | 12.62 | 14.50 | 17.05 | 14.30 | 13.44 | 15.84 | 17.82 | 15.01 | 13.38 | 14.76 | 15.67 |

(a) Average price to all sectors is weighted by sales of electricity to ultimate customers in the residential, commercial, industrial and transportation (not shown) sectors.

Notes:

EIA completed modeling and analysis for this report on November 7, 2024.

The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray. consumers by the corresponding sales of electricity.

Prices are not adjusted for inflation.

Regions refer to U.S. Census divisions (https://www.eia.gov/tools/glossary/index.php?id=C#census_division).

Sources:

Historical data: Latest data available from EIA databases supporting the following reports: Electric Power Monthly and Electric Power Annual.

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 - November 2024

| | 2023 | | | | 2024 | | | | 2025 | | | | Year | | |
|----------------------------------|--------------|--------------|----------------|--------------|--------------|----------------|----------------|--------------|--------------|----------------|----------------|--------------|----------------|----------------|----------------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2023 | 2024 | 2025 |
| United States | | | | | | | | | | | | | | | |
| Total generation | 952.5 | 951.5 | 1,167.6 | 957.5 | 986.2 | 1,007.5 | 1,171.2 | 978.8 | 991.1 | 1,005.1 | 1,198.7 | 993.9 | 4,029.0 | 4,143.7 | 4,188.9 |
| Natural gas | 371.2 | 394.0 | 535.9 | 398.7 | 394.8 | 409.0 | 551.2 | 403.7 | 380.5 | 386.2 | 525.1 | 380.5 | 1,699.9 | 1,758.6 | 1,672.3 |
| Coal | 156.6 | 140.7 | 215.8 | 157.4 | 156.9 | 143.6 | 192.2 | 148.7 | 152.6 | 119.7 | 208.5 | 165.4 | 670.6 | 641.4 | 646.1 |
| Nuclear | 194.5 | 182.6 | 205.2 | 192.5 | 197.0 | 190.8 | 202.0 | 191.6 | 198.2 | 192.7 | 208.6 | 197.4 | 774.9 | 781.4 | 797.0 |
| Renewable energy sources: | 225.9 | 230.2 | 206.1 | 204.9 | 233.7 | 260.5 | 222.2 | 229.5 | 255.4 | 304.2 | 254.2 | 245.9 | 867.1 | 945.9 | 1,059.6 |
| Conventional hydropower | 63.7 | 68.7 | 59.9 | 51.5 | 65.0 | 62.9 | 59.4 | 56.0 | 68.3 | 78.7 | 64.8 | 58.6 | 243.9 | 243.2 | 270.4 |
| Wind | 123.3 | 102.5 | 84.7 | 110.4 | 121.7 | 123.8 | 84.1 | 116.3 | 125.7 | 128.9 | 88.5 | 121.0 | 420.9 | 445.9 | 464.0 |
| Solar (a) | 29.3 | 49.9 | 51.9 | 33.5 | 37.8 | 65.0 | 69.4 | 47.7 | 52.3 | 88.1 | 91.3 | 56.6 | 164.6 | 219.9 | 288.3 |
| Biomass | 5.5 | 5.1 | 5.6 | 5.1 | 5.1 | 5.0 | 5.4 | 5.2 | 5.3 | 5.1 | 5.6 | 5.2 | 21.4 | 20.7 | 21.1 |
| Geothermal | 4.2 | 4.0 | 3.9 | 4.3 | 4.0 | 3.9 | 3.9 | 4.4 | 3.9 | 3.5 | 4.0 | 4.4 | 16.4 | 16.2 | 15.8 |
| Pumped storage hydropower ... | -1.6 | -1.3 | -1.9 | -1.2 | -1.2 | -1.2 | -2.0 | -0.9 | -1.2 | -1.9 | -2.9 | -1.1 | -6.0 | -5.3 | -7.1 |
| Petroleum (b) | 4.0 | 3.5 | 4.5 | 3.4 | 3.6 | 3.5 | 4.3 | 4.8 | 4.5 | 3.3 | 4.1 | 4.7 | 15.4 | 16.1 | 16.5 |
| Other fossil gases | 0.8 | 0.8 | 0.9 | 0.8 | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.9 | 0.8 | 3.3 | 3.0 | 3.2 |
| Other nonrenewable fuels (c) ... | 0.9 | 0.9 | 0.8 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.4 | 0.2 | 0.2 | 0.3 | 3.4 | 2.5 | 1.1 |
| New England (ISO-NE) | | | | | | | | | | | | | | | |
| Total generation | 24.0 | 21.9 | 28.7 | 24.0 | 25.9 | 24.7 | 29.3 | 25.4 | 25.4 | 23.7 | 29.6 | 24.7 | 98.5 | 105.2 | 103.4 |
| Natural gas | 11.5 | 13.3 | 17.0 | 13.4 | 13.2 | 12.0 | 17.2 | 14.9 | 12.5 | 11.7 | 17.4 | 11.2 | 55.2 | 57.3 | 52.9 |
| Coal | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 |
| Nuclear | 7.1 | 3.4 | 6.9 | 5.8 | 7.0 | 7.3 | 6.9 | 5.2 | 7.0 | 6.0 | 7.1 | 7.1 | 23.2 | 26.4 | 27.3 |
| Conventional hydropower | 2.3 | 2.1 | 2.2 | 2.0 | 2.5 | 2.1 | 1.9 | 1.9 | 2.0 | 2.2 | 1.2 | 1.8 | 8.5 | 8.4 | 7.2 |
| Nonhydro renewables (d) | 2.6 | 2.9 | 2.5 | 2.4 | 2.8 | 3.1 | 3.0 | 2.8 | 3.0 | 3.6 | 3.5 | 4.0 | 10.4 | 11.7 | 14.0 |
| Other energy sources (e) | 0.4 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.5 | 0.8 | 0.2 | 0.2 | 0.5 | 1.0 | 1.2 | 1.8 |
| Net energy for load (f) | 29.0 | 25.6 | 32.2 | 27.9 | 29.6 | 27.0 | 31.9 | 27.4 | 29.3 | 26.9 | 33.3 | 28.9 | 114.7 | 116.0 | 118.5 |
| New York (NYISO) | | | | | | | | | | | | | | | |
| Total generation | 30.0 | 29.0 | 36.3 | 32.1 | 32.7 | 32.4 | 36.5 | 31.3 | 30.5 | 30.4 | 37.6 | 31.9 | 127.3 | 132.9 | 130.4 |
| Natural gas | 13.7 | 13.6 | 20.7 | 15.5 | 15.9 | 15.5 | 21.1 | 14.7 | 14.0 | 13.5 | 21.0 | 14.6 | 63.5 | 67.2 | 63.2 |
| 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 | 6.8 | 6.6 | 6.9 | 7.2 | 6.5 | 7.2 | 6.4 | 7.0 | 6.7 | 7.0 | 7.2 | 7.2 | 27.5 | 27.1 | 28.0 |
| Conventional hydropower | 7.4 | 6.9 | 7.0 | 7.1 | 7.7 | 7.1 | 6.9 | 7.0 | 6.9 | 6.9 | 6.9 | 7.1 | 28.4 | 28.7 | 27.8 |
| Nonhydro renewables (d) | 1.9 | 2.0 | 1.6 | 2.2 | 2.4 | 2.6 | 2.1 | 2.5 | 2.5 | 3.0 | 2.5 | 2.9 | 7.7 | 9.6 | 10.9 |
| Other energy sources (e) | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.4 | 0.0 | 0.0 | 0.1 | 0.3 | 0.3 | 0.6 |
| Net energy for load (f) | 36.1 | 33.3 | 42.1 | 35.5 | 37.0 | 35.7 | 42.4 | 34.9 | 36.7 | 35.6 | 44.6 | 36.7 | 147.0 | 150.0 | 153.6 |
| Mid-Atlantic (PJM) | | | | | | | | | | | | | | | |
| Total generation | 206.3 | 191.7 | 238.7 | 203.6 | 217.8 | 207.7 | 241.0 | 200.8 | 217.1 | 203.2 | 245.7 | 210.2 | 840.3 | 867.3 | 876.2 |
| Natural gas | 87.4 | 82.7 | 113.7 | 88.1 | 95.5 | 90.9 | 118.3 | 87.4 | 93.4 | 93.4 | 115.4 | 88.5 | 371.9 | 392.0 | 390.7 |
| Coal | 34.7 | 29.1 | 43.5 | 31.6 | 36.2 | 34.9 | 38.5 | 28.1 | 37.8 | 23.1 | 43.4 | 35.7 | 138.8 | 137.7 | 139.9 |
| Nuclear | 67.6 | 65.7 | 70.6 | 68.8 | 68.9 | 64.4 | 70.2 | 68.0 | 67.5 | 66.4 | 71.4 | 67.6 | 272.6 | 271.5 | 272.8 |
| Conventional hydropower | 2.8 | 2.0 | 1.7 | 2.3 | 3.0 | 2.1 | 1.9 | 2.3 | 2.7 | 2.6 | 1.7 | 2.1 | 8.9 | 9.3 | 9.2 |
| Nonhydro renewables (d) | 13.4 | 12.0 | 9.2 | 12.6 | 14.0 | 15.3 | 12.0 | 14.5 | 15.7 | 17.8 | 14.0 | 15.8 | 47.2 | 55.8 | 63.2 |
| Other energy sources (e) | 0.4 | 0.2 | 0.0 | 0.3 | 0.2 | 0.2 | 0.2 | 0.5 | 0.1 | 0.0 | -0.2 | 0.4 | 0.9 | 1.1 | 0.3 |
| Net energy for load (f) | 200.0 | 183.4 | 223.0 | 194.3 | 207.2 | 199.4 | 227.5 | 196.1 | 210.1 | 195.3 | 233.8 | 200.1 | 800.6 | 830.2 | 839.2 |
| Southeast (SERC) | | | | | | | | | | | | | | | |
| Total generation | 146.0 | 147.0 | 179.1 | 145.3 | 153.0 | 158.4 | 179.0 | 144.4 | 150.0 | 155.0 | 182.5 | 145.4 | 617.5 | 634.7 | 632.9 |
| Natural gas | 61.2 | 61.8 | 76.5 | 59.3 | 58.8 | 63.2 | 81.1 | 58.8 | 56.2 | 60.0 | 76.4 | 54.3 | 258.8 | 261.9 | 246.9 |
| Coal | 17.4 | 20.2 | 32.4 | 19.3 | 23.3 | 24.4 | 29.2 | 17.9 | 20.4 | 19.3 | 30.0 | 20.0 | 89.2 | 94.9 | 89.7 |
| Nuclear | 51.7 | 52.4 | 57.4 | 57.4 | 55.9 | 56.8 | 55.6 | 54.3 | 56.4 | 58.7 | 60.5 | 57.0 | 218.9 | 222.6 | 232.7 |
| Conventional hydropower | 10.9 | 5.8 | 6.2 | 4.7 | 9.6 | 6.2 | 6.1 | 8.1 | 10.7 | 8.3 | 7.6 | 8.3 | 27.7 | 30.0 | 34.8 |
| Nonhydro renewables (d) | 5.0 | 7.0 | 7.1 | 5.1 | 5.4 | 8.0 | 7.8 | 5.6 | 6.3 | 9.6 | 9.3 | 6.2 | 24.2 | 26.8 | 31.4 |
| Other energy sources (e) | -0.3 | -0.2 | -0.5 | -0.4 | 0.0 | -0.3 | -0.7 | -0.3 | -0.1 | -0.8 | -1.3 | -0.4 | -1.4 | -1.4 | -2.6 |
| Net energy for load (f) | 131.4 | 131.9 | 162.0 | 132.1 | 140.3 | 142.6 | 161.5 | 130.2 | 136.0 | 138.9 | 163.8 | 132.7 | 557.4 | 574.6 | 571.4 |
| Florida (FRCC) | | | | | | | | | | | | | | | |
| Total generation | 53.9 | 65.5 | 77.2 | 57.1 | 54.7 | 68.4 | 78.7 | 57.7 | 54.7 | 66.2 | 76.6 | 59.5 | 253.7 | 259.5 | 257.0 |
| Natural gas | 39.6 | 50.6 | 60.4 | 44.0 | 41.5 | 51.9 | 62.6 | 44.0 | 41.0 | 49.0 | 56.8 | 42.8 | 194.5 | 200.0 | 189.6 |
| Coal | 2.7 | 2.6 | 3.9 | 2.5 | 1.4 | 2.3 | 2.8 | 2.2 | 0.2 | 2.1 | 5.5 | 3.8 | 11.7 | 8.8 | 11.5 |
| Nuclear | 7.4 | 7.5 | 8.0 | 7.1 | 7.5 | 7.5 | 7.2 | 6.9 | 7.8 | 7.4 | 7.5 | 7.7 | 29.9 | 29.2 | 30.4 |
| Conventional hydropower | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 0.2 | 0.2 |
| Nonhydro renewables (d) | 3.6 | 4.3 | 4.2 | 3.1 | 4.0 | 6.1 | 5.4 | 4.1 | 5.1 | 7.2 | 6.2 | 4.8 | 15.2 | 19.6 | 23.3 |
| Other energy sources (e) | 0.6 | 0.5 | 0.6 | 0.4 | 0.3 | 0.5 | 0.6 | 0.4 | 0.5 | 0.4 | 0.6 | 0.4 | 2.1 | 1.8 | 1.9 |
| Net energy for load (f) | 55.4 | 67.3 | 79.7 | 57.9 | 53.8 | 70.1 | 80.2 | 60.7 | 55.6 | 68.8 | 79.9 | 60.8 | 260.3 | 264.9 | 265.0 |

(a) Generation from utility-scale (larger than 1 megawatt) solar photovoltaic and solar thermal power plants. Excludes generation from small-scale solar photovoltaic systems (see Table 7a).

(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 fossil gases, batteries, and other nonrenewable fuels. See notes (b) and (c).

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

Notes:

EIA completed modeling and analysis for this report on November 7, 2024.

The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray.

The electric power sector includes utility-scale generating power plants (total capacity is larger than 1 megawatt) operated by electric utilities and independent power producers whose primary business is to sell electricity over the transmission grid for consumption by the public.

Sources:

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 - November 2024

| | 2023 | | | | 2024 | | | | 2025 | | | | Year | | |
|---------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2023 | 2024 | 2025 |
| Midwest (MISO) | | | | | | | | | | | | | | | |
| Total generation | 144.0 | 141.1 | 166.9 | 141.7 | 146.2 | 149.1 | 170.4 | 147.7 | 151.9 | 145.1 | 171.5 | 149.2 | 593.7 | 613.3 | 617.7 |
| Natural gas | 44.8 | 52.5 | 63.7 | 46.4 | 48.1 | 54.1 | 69.2 | 49.6 | 48.7 | 51.8 | 65.1 | 45.6 | 207.4 | 221.0 | 211.2 |
| Coal | 43.0 | 38.0 | 57.3 | 44.9 | 42.8 | 38.1 | 51.2 | 39.7 | 41.6 | 33.4 | 53.5 | 43.5 | 183.2 | 171.8 | 172.0 |
| Nuclear | 23.4 | 21.1 | 24.3 | 18.4 | 20.9 | 21.8 | 25.0 | 23.2 | 22.4 | 20.9 | 24.2 | 24.0 | 87.2 | 90.9 | 91.5 |
| Conventional hydropower | 2.7 | 2.7 | 1.5 | 1.7 | 2.3 | 2.1 | 2.1 | 2.2 | 2.4 | 2.9 | 2.3 | 2.2 | 8.6 | 8.7 | 9.7 |
| Nonhydro renewables (d) | 29.2 | 26.1 | 18.8 | 29.4 | 31.4 | 32.4 | 22.1 | 31.6 | 35.9 | 35.4 | 25.4 | 32.6 | 103.4 | 117.5 | 129.2 |
| Other energy sources (e) | 0.9 | 0.7 | 1.4 | 0.8 | 0.7 | 0.5 | 0.8 | 1.5 | 0.9 | 0.8 | 1.0 | 1.3 | 3.9 | 3.4 | 4.0 |
| Net energy for load (f) | 158.6 | 157.9 | 184.3 | 155.2 | 159.9 | 160.1 | 182.5 | 159.5 | 162.5 | 159.3 | 187.5 | 162.1 | 656.0 | 661.9 | 671.5 |
| Central (Southwest Power Pool) | | | | | | | | | | | | | | | |
| Total generation | 73.7 | 71.1 | 86.3 | 71.7 | 75.8 | 75.9 | 88.4 | 75.9 | 76.0 | 74.6 | 88.0 | 72.4 | 302.8 | 316.0 | 311.0 |
| Natural gas | 16.2 | 21.9 | 30.0 | 18.5 | 20.1 | 22.7 | 32.0 | 19.6 | 19.6 | 20.0 | 28.1 | 17.4 | 86.5 | 94.4 | 85.1 |
| Coal | 18.3 | 16.0 | 25.1 | 16.2 | 17.7 | 15.5 | 25.7 | 17.4 | 17.3 | 13.2 | 26.8 | 15.3 | 75.6 | 76.3 | 72.6 |
| Nuclear | 4.3 | 4.3 | 4.3 | 4.4 | 4.3 | 3.2 | 4.0 | 3.4 | 4.2 | 4.2 | 4.2 | 3.1 | 17.2 | 14.9 | 15.6 |
| Conventional hydropower | 3.0 | 3.0 | 3.5 | 2.3 | 3.3 | 2.9 | 2.9 | 2.8 | 3.3 | 4.1 | 3.7 | 3.0 | 11.8 | 11.9 | 14.1 |
| Nonhydro renewables (d) | 31.7 | 25.7 | 23.0 | 30.0 | 30.2 | 31.2 | 23.4 | 32.4 | 31.5 | 32.8 | 25.1 | 33.4 | 110.5 | 117.2 | 122.7 |
| Other energy sources (e) | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 1.2 | 1.2 | 1.0 |
| Net energy for load (f) | 73.1 | 72.1 | 88.3 | 71.4 | 75.6 | 75.9 | 89.5 | 74.4 | 75.5 | 73.5 | 88.5 | 72.0 | 304.8 | 315.4 | 309.4 |
| Texas (ERCOT) | | | | | | | | | | | | | | | |
| Total generation | 94.3 | 108.5 | 137.7 | 100.1 | 102.3 | 115.7 | 132.7 | 113.0 | 106.3 | 121.3 | 143.6 | 115.0 | 440.6 | 463.7 | 486.2 |
| Natural gas | 36.4 | 50.8 | 73.7 | 43.3 | 42.9 | 51.5 | 67.9 | 49.5 | 41.2 | 46.2 | 68.1 | 44.2 | 204.2 | 211.8 | 199.7 |
| Coal | 10.9 | 14.6 | 19.0 | 14.5 | 12.0 | 12.4 | 17.9 | 15.3 | 13.4 | 12.0 | 18.7 | 17.7 | 59.0 | 57.7 | 61.9 |
| Nuclear | 10.5 | 9.0 | 10.9 | 10.3 | 10.0 | 9.1 | 10.6 | 8.8 | 10.7 | 10.0 | 10.7 | 10.2 | 40.7 | 38.5 | 41.5 |
| Conventional hydropower | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.3 | 0.5 | 0.6 |
| Nonhydro renewables (d) | 36.1 | 33.7 | 33.7 | 31.7 | 36.9 | 42.3 | 35.8 | 39.0 | 40.6 | 52.7 | 45.8 | 42.7 | 135.1 | 154.1 | 181.8 |
| Other energy sources (e) | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 1.2 | 1.2 | 0.8 |
| Net energy for load (f) | 94.1 | 109.8 | 140.6 | 100.0 | 101.0 | 117.8 | 134.2 | 113.0 | 106.3 | 121.3 | 143.6 | 115.0 | 444.5 | 466.0 | 486.2 |
| Northwest | | | | | | | | | | | | | | | |
| Total generation | 96.9 | 87.6 | 103.1 | 92.8 | 93.2 | 86.8 | 99.7 | 92.4 | 96.3 | 92.7 | 105.4 | 94.9 | 380.4 | 372.0 | 389.3 |
| Natural gas | 27.6 | 18.7 | 30.8 | 26.9 | 27.2 | 20.7 | 31.8 | 26.1 | 23.8 | 14.3 | 29.6 | 24.3 | 104.1 | 105.7 | 92.0 |
| Coal | 22.2 | 15.8 | 25.7 | 22.3 | 17.4 | 11.1 | 19.3 | 21.8 | 16.7 | 10.5 | 21.3 | 22.5 | 86.0 | 69.6 | 71.1 |
| Nuclear | 2.4 | 1.0 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.4 | 1.2 | 2.4 | 2.4 | 8.4 | 9.9 | 8.5 |
| Conventional hydropower | 26.1 | 32.7 | 25.5 | 24.3 | 26.8 | 27.8 | 26.3 | 25.3 | 32.6 | 39.6 | 30.4 | 28.0 | 108.6 | 106.2 | 130.6 |
| Nonhydro renewables (d) | 18.4 | 19.1 | 18.4 | 16.6 | 19.0 | 24.6 | 19.7 | 16.4 | 20.5 | 27.0 | 21.5 | 17.5 | 72.5 | 79.8 | 86.5 |
| Other energy sources (e) | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.8 | 0.7 | 0.7 |
| Net energy for load (f) | 92.1 | 82.1 | 93.3 | 88.0 | 93.4 | 86.2 | 97.1 | 89.9 | 91.7 | 86.9 | 99.5 | 92.2 | 355.4 | 366.6 | 370.1 |
| Southwest | | | | | | | | | | | | | | | |
| Total generation | 34.3 | 35.9 | 45.9 | 35.9 | 34.6 | 37.1 | 46.6 | 37.1 | 34.9 | 38.8 | 49.4 | 38.6 | 152.0 | 155.4 | 161.8 |
| Natural gas | 11.8 | 16.0 | 22.0 | 16.2 | 12.4 | 15.3 | 22.6 | 15.5 | 11.8 | 12.8 | 19.4 | 14.3 | 66.0 | 65.8 | 58.3 |
| Coal | 6.0 | 3.7 | 7.1 | 4.9 | 5.1 | 4.0 | 5.7 | 5.1 | 4.1 | 5.2 | 8.9 | 6.4 | 21.8 | 19.8 | 24.6 |
| Nuclear | 8.6 | 6.8 | 8.6 | 7.6 | 8.7 | 7.4 | 8.7 | 7.5 | 8.4 | 7.4 | 8.6 | 7.5 | 31.5 | 32.3 | 31.9 |
| Conventional hydropower | 1.4 | 2.5 | 2.1 | 1.4 | 1.7 | 2.2 | 1.6 | 1.4 | 1.7 | 2.1 | 1.9 | 1.4 | 7.4 | 6.9 | 7.2 |
| Nonhydro renewables (d) | 6.5 | 6.9 | 6.1 | 5.8 | 6.8 | 8.2 | 7.9 | 7.7 | 9.0 | 11.4 | 10.4 | 9.0 | 25.3 | 30.6 | 39.9 |
| Other energy sources (e) | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | -0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 |
| Net energy for load (f) | 23.0 | 27.4 | 38.0 | 24.3 | 23.5 | 29.7 | 38.7 | 25.7 | 24.3 | 30.3 | 38.5 | 25.7 | 112.6 | 117.7 | 118.8 |
| California | | | | | | | | | | | | | | | |
| Total generation | 45.4 | 48.6 | 63.8 | 49.5 | 46.5 | 47.9 | 65.0 | 49.2 | 44.3 | 50.5 | 65.1 | 48.4 | 207.4 | 208.7 | 208.3 |
| Natural gas | 20.2 | 11.4 | 26.8 | 26.2 | 18.6 | 10.7 | 26.5 | 22.7 | 17.6 | 12.8 | 27.1 | 22.6 | 84.5 | 78.5 | 80.0 |
| Coal | 1.1 | 0.6 | 1.7 | 1.1 | 0.7 | 0.6 | 1.6 | 0.8 | 0.5 | 0.5 | 0.0 | 0.0 | 4.4 | 3.7 | 1.0 |
| Nuclear | 4.7 | 4.9 | 4.9 | 3.2 | 4.9 | 3.6 | 4.9 | 4.8 | 4.6 | 3.7 | 4.7 | 3.6 | 17.7 | 18.2 | 16.7 |
| Conventional hydropower | 6.7 | 10.5 | 9.6 | 5.1 | 7.2 | 9.8 | 9.2 | 4.5 | 5.3 | 9.3 | 8.5 | 4.3 | 32.0 | 30.7 | 27.5 |
| Nonhydro renewables (d) | 13.5 | 21.4 | 21.0 | 14.1 | 15.4 | 23.2 | 23.0 | 16.4 | 16.5 | 24.5 | 25.1 | 18.0 | 69.9 | 78.1 | 84.1 |
| Other energy sources (e) | -0.7 | -0.2 | -0.1 | -0.2 | -0.3 | -0.1 | -0.2 | 0.0 | -0.3 | -0.3 | -0.3 | 0.0 | -1.1 | -0.6 | -1.0 |
| Net energy for load (f) | 59.1 | 58.6 | 75.5 | 62.1 | 57.7 | 60.7 | 79.1 | 63.1 | 59.6 | 64.9 | 82.0 | 64.1 | 255.4 | 260.5 | 270.5 |

(a) Generation from utility-scale (larger than 1 megawatt) solar photovoltaic and solar thermal power plants. Excludes generation from small-scale solar photovoltaic systems (see Table 7a).

(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 fossil gases, batteries, and other nonrenewable fuels. See notes (b) and (c).

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

Notes:

EIA completed modeling and analysis for this report on November 7, 2024.

The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray.

The electric power sector includes utility-scale generating power plants (total capacity is larger than 1 megawatt) operated by electric utilities and independent power producers whose primary business is to sell electricity over the transmission grid for consumption by the public.

Sources:

Table 7e. U.S. Electricity Generating Capacity (gigawatts at end of period)
U.S. Energy Information Administration | Short-Term Energy Outlook - November 2024

| | 2023 | | | | 2024 | | | | 2025 | | | | Year | | |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2023 | 2024 | 2025 |
| Electric power sector (power plants larger than one megawatt) | | | | | | | | | | | | | | | |
| Fossil fuel energy sources | | | | | | | | | | | | | | | |
| Natural gas | 486.1 | 487.7 | 488.1 | 488.9 | 488.1 | 486.9 | 487.9 | 488.5 | 487.7 | 489.9 | 491.2 | 490.7 | 488.9 | 488.5 | 490.7 |
| Coal | 184.6 | 180.9 | 178.8 | 177.0 | 176.8 | 175.5 | 175.5 | 174.9 | 174.9 | 171.6 | 169.8 | 163.7 | 177.0 | 174.9 | 163.7 |
| Petroleum | 28.2 | 28.0 | 28.0 | 28.0 | 28.0 | 27.9 | 27.9 | 27.5 | 27.5 | 26.5 | 26.5 | 26.3 | 28.0 | 27.5 | 26.3 |
| Other fossil gases | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 |
| Renewable energy sources | | | | | | | | | | | | | | | |
| Wind | 142.5 | 143.6 | 144.3 | 147.3 | 148.5 | 149.8 | 151.0 | 153.8 | 154.9 | 156.5 | 158.1 | 162.0 | 147.3 | 153.8 | 162.0 |
| Solar photovoltaic | 73.3 | 77.0 | 80.0 | 89.8 | 95.9 | 102.3 | 109.8 | 128.2 | 131.9 | 137.6 | 139.5 | 151.2 | 89.8 | 128.2 | 151.2 |
| Solar thermal | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.5 | 1.4 | 1.4 |
| Geothermal | 2.6 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 |
| Waste biomass | 2.8 | 2.8 | 2.8 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 |
| Wood biomass | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 |
| Conventional hydroelectric | 79.7 | 79.7 | 79.7 | 79.7 | 79.5 | 79.5 | 79.5 | 79.6 | 79.6 | 79.6 | 79.6 | 79.6 | 79.7 | 79.6 | 79.6 |
| Pumped storage hydroelectric | 23.1 | 23.1 | 23.1 | 23.1 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.1 | 23.2 | 23.2 |
| Nuclear | 94.6 | 94.6 | 95.7 | 95.7 | 96.5 | 97.6 | 97.6 | 97.6 | 97.6 | 97.6 | 97.6 | 97.6 | 95.7 | 97.6 | 97.6 |
| Battery storage | 9.6 | 10.8 | 13.5 | 16.0 | 16.9 | 19.9 | 23.4 | 30.9 | 32.6 | 37.6 | 38.4 | 43.4 | 16.0 | 30.9 | 43.4 |
| Other nonrenewable sources (a) | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Industrial and commercial sectors (combined heat and power plants larger than one megawatt) | | | | | | | | | | | | | | | |
| Fossil fuel energy sources | | | | | | | | | | | | | | | |
| Natural gas | 18.7 | 18.7 | 18.7 | 18.6 | 18.6 | 18.6 | 18.6 | 18.4 | 18.4 | 18.4 | 18.4 | 18.4 | 18.6 | 18.4 | 18.4 |
| Coal | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| Petroleum | 1.5 | 1.5 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.4 | 1.5 | 1.5 |
| Other fossil gases | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Renewable energy sources | | | | | | | | | | | | | | | |
| Wood biomass | 5.5 | 5.5 | 5.4 | 5.4 | 5.4 | 5.4 | 5.4 | 5.4 | 5.4 | 5.4 | 5.4 | 5.4 | 5.4 | 5.4 | 5.4 |
| Waste biomass | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.4 | 1.3 | 1.3 |
| Solar | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| Wind | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Geothermal | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 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 | 0.3 | 0.3 | 0.3 |
| Battery storage | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Other nonrenewable sources (a) | 1.2 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 |
| Small-scale solar photovoltaic capacity (systems smaller than one megawatt) | | | | | | | | | | | | | | | |
| All sectors total | 41.7 | 43.8 | 45.9 | 47.7 | 49.2 | 50.5 | 51.8 | 53.5 | 55.1 | 56.9 | 58.6 | 60.4 | 47.7 | 53.5 | 60.4 |
| Residential sector | 27.8 | 29.6 | 31.4 | 32.9 | 33.6 | 34.4 | 35.3 | 36.4 | 37.6 | 38.8 | 40.1 | 41.3 | 32.9 | 36.4 | 41.3 |
| Commercial sector | 11.5 | 11.8 | 12.0 | 12.3 | 13.0 | 13.5 | 13.9 | 14.3 | 14.8 | 15.2 | 15.7 | 16.1 | 12.3 | 14.3 | 16.1 |
| Industrial sector | 2.4 | 2.5 | 2.5 | 2.6 | 2.6 | 2.6 | 2.6 | 2.7 | 2.8 | 2.8 | 2.9 | 2.9 | 2.6 | 2.7 | 2.9 |

(a) Other sources include hydrogen, pitch, chemicals, sulfur, purchased steam, nonrenewable waste, and miscellaneous technologies.

Notes:

EIA completed modeling and analysis for this report on November 7, 2024.

The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray.

Capacity values represent the amount of generating capacity that is operating (or expected to be operating) at the end of each period.

factors.

Sources:

Historical data: Utility-scale capacity (power plants larger than one megawatt): EIA-860 Annual Survey and EIA-860M Preliminary Monthly Electric Generator Inventory, August 2024.

Small-scale solar capacity (systems smaller than one megawatt): Form EIA-861M Monthly Electric Power Industry Report.

Historical capacity data may differ from other EIA publications due to frequent updates to the Preliminary Monthly Electric Generator Inventory.

Table 8. U.S. Renewable Energy Consumption (quadrillion Btu)
U.S. Energy Information Administration | Short-Term Energy Outlook - November 2024

| | 2023 | | | | 2024 | | | | 2025 | | | | Year | | |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2023 | 2024 | 2025 |
| All Sectors | 2.034 | 2.104 | 2.045 | 2.048 | 2.089 | 2.231 | 2.139 | 2.166 | 2.205 | 2.437 | 2.303 | 2.251 | 8.231 | 8.625 | 9.195 |
| Biodiesel, renewable diesel, and other (g) | 0.139 | 0.173 | 0.175 | 0.174 | 0.177 | 0.193 | 0.199 | 0.188 | 0.178 | 0.194 | 0.197 | 0.201 | 0.660 | 0.757 | 0.771 |
| Biofuel losses and co-products (d) | 0.198 | 0.201 | 0.206 | 0.214 | 0.209 | 0.204 | 0.213 | 0.216 | 0.209 | 0.210 | 0.214 | 0.217 | 0.819 | 0.842 | 0.850 |
| Ethanol (f) | 0.280 | 0.297 | 0.299 | 0.300 | 0.279 | 0.294 | 0.307 | 0.299 | 0.277 | 0.297 | 0.302 | 0.299 | 1.177 | 1.179 | 1.175 |
| Geothermal | 0.030 | 0.029 | 0.030 | 0.030 | 0.029 | 0.029 | 0.029 | 0.031 | 0.029 | 0.028 | 0.030 | 0.031 | 0.120 | 0.118 | 0.118 |
| Hydroelectric power (a) | 0.209 | 0.220 | 0.201 | 0.189 | 0.218 | 0.213 | 0.194 | 0.192 | 0.234 | 0.270 | 0.222 | 0.201 | 0.818 | 0.816 | 0.927 |
| Solar (b)(f) | 0.162 | 0.265 | 0.272 | 0.182 | 0.202 | 0.329 | 0.342 | 0.235 | 0.257 | 0.417 | 0.428 | 0.273 | 0.881 | 1.109 | 1.375 |
| Waste biomass (c) | 0.102 | 0.098 | 0.097 | 0.102 | 0.099 | 0.095 | 0.095 | 0.100 | 0.096 | 0.095 | 0.095 | 0.100 | 0.399 | 0.390 | 0.386 |
| Wood biomass | 0.494 | 0.471 | 0.477 | 0.479 | 0.460 | 0.452 | 0.473 | 0.508 | 0.495 | 0.486 | 0.512 | 0.517 | 1.921 | 1.892 | 2.011 |
| Wind | 0.421 | 0.350 | 0.289 | 0.377 | 0.415 | 0.422 | 0.287 | 0.397 | 0.429 | 0.440 | 0.302 | 0.413 | 1.436 | 1.521 | 1.583 |
| Electric power sector | 0.832 | 0.834 | 0.766 | 0.777 | 0.855 | 0.945 | 0.813 | 0.847 | 0.935 | 1.098 | 0.935 | 0.901 | 3.210 | 3.459 | 3.869 |
| Geothermal | 0.014 | 0.014 | 0.013 | 0.015 | 0.014 | 0.013 | 0.013 | 0.015 | 0.013 | 0.012 | 0.014 | 0.015 | 0.056 | 0.055 | 0.054 |
| Hydroelectric power (a) | 0.208 | 0.219 | 0.200 | 0.188 | 0.217 | 0.212 | 0.193 | 0.191 | 0.233 | 0.268 | 0.221 | 0.200 | 0.814 | 0.813 | 0.923 |
| Solar (b) | 0.100 | 0.170 | 0.177 | 0.114 | 0.129 | 0.222 | 0.237 | 0.163 | 0.178 | 0.300 | 0.312 | 0.193 | 0.562 | 0.750 | 0.984 |
| Waste biomass (c) | 0.043 | 0.041 | 0.042 | 0.043 | 0.040 | 0.038 | 0.040 | 0.040 | 0.039 | 0.038 | 0.040 | 0.039 | 0.168 | 0.158 | 0.156 |
| Wood biomass | 0.047 | 0.041 | 0.045 | 0.040 | 0.040 | 0.038 | 0.042 | 0.042 | 0.043 | 0.039 | 0.046 | 0.041 | 0.174 | 0.162 | 0.169 |
| Wind | 0.421 | 0.350 | 0.289 | 0.377 | 0.415 | 0.422 | 0.287 | 0.397 | 0.429 | 0.440 | 0.302 | 0.413 | 1.436 | 1.521 | 1.583 |
| Industrial sector (e) | 0.567 | 0.552 | 0.554 | 0.573 | 0.563 | 0.552 | 0.565 | 0.604 | 0.595 | 0.591 | 0.602 | 0.614 | 2.247 | 2.283 | 2.402 |
| Biofuel losses and co-products (d) | 0.198 | 0.201 | 0.206 | 0.214 | 0.209 | 0.204 | 0.213 | 0.216 | 0.209 | 0.210 | 0.214 | 0.217 | 0.819 | 0.842 | 0.850 |
| 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) | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.003 | 0.003 | 0.003 |
| Solar (b) | 0.003 | 0.005 | 0.005 | 0.003 | 0.004 | 0.005 | 0.005 | 0.004 | 0.004 | 0.005 | 0.005 | 0.004 | 0.016 | 0.018 | 0.019 |
| Waste biomass (c) | 0.041 | 0.040 | 0.037 | 0.042 | 0.042 | 0.040 | 0.037 | 0.042 | 0.040 | 0.039 | 0.038 | 0.042 | 0.160 | 0.161 | 0.159 |
| Wood biomass | 0.318 | 0.300 | 0.299 | 0.307 | 0.302 | 0.296 | 0.303 | 0.335 | 0.334 | 0.329 | 0.338 | 0.345 | 1.224 | 1.236 | 1.347 |
| Commercial sector (e) | 0.062 | 0.069 | 0.070 | 0.063 | 0.064 | 0.071 | 0.073 | 0.066 | 0.066 | 0.075 | 0.076 | 0.068 | 0.264 | 0.275 | 0.285 |
| Geothermal | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.020 | 0.020 | 0.020 |
| Solar (b) | 0.014 | 0.021 | 0.020 | 0.013 | 0.016 | 0.023 | 0.024 | 0.016 | 0.019 | 0.027 | 0.027 | 0.019 | 0.069 | 0.079 | 0.091 |
| Waste biomass (c) | 0.017 | 0.017 | 0.018 | 0.018 | 0.018 | 0.017 | 0.018 | 0.019 | 0.017 | 0.017 | 0.018 | 0.019 | 0.071 | 0.071 | 0.070 |
| Wood biomass | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 | 0.017 | 0.018 | 0.018 | 0.072 | 0.072 | 0.072 |
| Residential sector | 0.166 | 0.191 | 0.193 | 0.174 | 0.163 | 0.188 | 0.196 | 0.176 | 0.166 | 0.194 | 0.203 | 0.181 | 0.725 | 0.723 | 0.745 |
| 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) | 0.045 | 0.069 | 0.070 | 0.051 | 0.054 | 0.078 | 0.077 | 0.053 | 0.056 | 0.084 | 0.084 | 0.057 | 0.235 | 0.261 | 0.282 |
| Wood biomass | 0.111 | 0.112 | 0.114 | 0.114 | 0.100 | 0.100 | 0.109 | 0.114 | 0.100 | 0.100 | 0.109 | 0.114 | 0.450 | 0.423 | 0.423 |
| Transportation sector | 0.407 | 0.457 | 0.461 | 0.460 | 0.444 | 0.474 | 0.493 | 0.474 | 0.443 | 0.478 | 0.486 | 0.486 | 1.785 | 1.884 | 1.893 |
| Biodiesel, renewable diesel, and other (g) | 0.139 | 0.173 | 0.175 | 0.174 | 0.177 | 0.193 | 0.199 | 0.188 | 0.178 | 0.194 | 0.197 | 0.201 | 0.660 | 0.757 | 0.771 |
| Ethanol (g) | 0.268 | 0.284 | 0.286 | 0.287 | 0.266 | 0.281 | 0.294 | 0.286 | 0.265 | 0.284 | 0.289 | 0.285 | 1.125 | 1.127 | 1.123 |

(a) Energy consumption for conventional hydroelectric power only. Hydroelectricity generated by pumped storage is not included in renewable energy.

(b) Solar energy consumption by utility-scale power plants (capacity greater than or equal to 1 megawatt) in the electric power, commercial, and industrial sectors and energy consumption by small-scale solar photovoltaic systems (less than 1 megawatts in size).

(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 solar photovoltaic systems (<1 megawatt), and it 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.

Notes:

EIA completed modeling and analysis for this report on November 7, 2024.

The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray.

Sources:

Monthly Energy Review, and Petroleum Supply Monthly.

Minor discrepancies with published historical data are due to independent rounding and possible revisions not yet reflected in the STEO.

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 - November 2024

| | 2023 | | | | 2024 | | | | 2025 | | | | Year | | |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2023 | 2024 | 2025 |
| Macroeconomic | | | | | | | | | | | | | | | |
| Real Gross Domestic Product | | | | | | | | | | | | | | | |
| (billion chained 2017 dollars - SAAR) | 22,403 | 22,539 | 22,781 | 22,961 | 23,054 | 23,224 | 23,381 | 23,493 | 23,601 | 23,715 | 23,830 | 23,960 | 22,671 | 23,288 | 23,776 |
| Real Personal Consumption Expend. | | | | | | | | | | | | | | | |
| (billion chained 2017 dollars - SAAR) | 15,510 | 15,549 | 15,647 | 15,781 | 15,857 | 15,967 | 16,095 | 16,191 | 16,280 | 16,370 | 16,458 | 16,555 | 15,622 | 16,027 | 16,415 |
| Real Private Fixed Investment | | | | | | | | | | | | | | | |
| (billion chained 2017 dollars - SAAR) | 4,019 | 4,103 | 4,129 | 4,165 | 4,231 | 4,256 | 4,285 | 4,294 | 4,319 | 4,345 | 4,372 | 4,398 | 4,104 | 4,267 | 4,358 |
| Business Inventory Change | | | | | | | | | | | | | | | |
| (billion chained 2017 dollars - SAAR) | 21 | 0 | 89 | 57 | 21 | 97 | 84 | 87 | 100 | 110 | 134 | 146 | 42 | 72 | 123 |
| Real Government Expenditures | | | | | | | | | | | | | | | |
| (billion chained 2017 dollars - SAAR) | 3,756 | 3,784 | 3,836 | 3,871 | 3,888 | 3,917 | 3,930 | 3,940 | 3,944 | 3,948 | 3,951 | 3,953 | 3,812 | 3,919 | 3,949 |
| Real Exports of Goods & Services | | | | | | | | | | | | | | | |
| (billion chained 2017 dollars - SAAR) | 2,522 | 2,492 | 2,521 | 2,560 | 2,572 | 2,578 | 2,635 | 2,662 | 2,687 | 2,713 | 2,739 | 2,768 | 2,524 | 2,612 | 2,727 |
| Real Imports of Goods & Services | | | | | | | | | | | | | | | |
| (billion chained 2017 dollars - SAAR) | 3,448 | 3,421 | 3,460 | 3,496 | 3,549 | 3,614 | 3,679 | 3,720 | 3,771 | 3,815 | 3,865 | 3,900 | 3,457 | 3,640 | 3,838 |
| Real Disposable Personal Income | | | | | | | | | | | | | | | |
| (billion chained 2017 dollars - SAAR) | 16,885 | 17,025 | 17,083 | 17,217 | 17,452 | 17,554 | 17,628 | 17,734 | 17,868 | 17,997 | 18,122 | 18,259 | 17,052 | 17,592 | 18,061 |
| Non-Farm Employment | | | | | | | | | | | | | | | |
| (millions) | 155.0 | 155.8 | 156.4 | 157.1 | 157.8 | 158.4 | 158.9 | 159.4 | 159.7 | 159.9 | 160.1 | 160.3 | 156.1 | 158.6 | 160.0 |
| Civilian Unemployment Rate | | | | | | | | | | | | | | | |
| (percent) | 3.5 | 3.6 | 3.7 | 3.7 | 3.8 | 4.0 | 4.2 | 4.2 | 4.2 | 4.3 | 4.3 | 4.3 | 3.6 | 4.1 | 4.3 |
| Housing Starts | | | | | | | | | | | | | | | |
| (millions - SAAR) | 1.37 | 1.46 | 1.38 | 1.48 | 1.41 | 1.34 | 1.30 | 1.35 | 1.36 | 1.37 | 1.37 | 1.39 | 1.42 | 1.35 | 1.37 |
| Industrial Production Indices (Index, 2017=100) | | | | | | | | | | | | | | | |
| Total Industrial Production | 102.8 | 102.9 | 103.2 | 102.7 | 102.2 | 103.0 | 102.8 | 103.1 | 103.3 | 103.7 | 104.0 | 104.5 | 102.9 | 102.8 | 103.9 |
| Manufacturing | 100.0 | 100.1 | 100.0 | 99.7 | 99.5 | 99.9 | 99.8 | 100.1 | 100.4 | 101.0 | 101.5 | 102.3 | 100.0 | 99.8 | 101.3 |
| Food | 104.7 | 103.4 | 101.9 | 102.5 | 101.8 | 102.2 | 101.8 | 102.4 | 102.8 | 103.2 | 103.8 | 104.3 | 103.1 | 102.0 | 103.5 |
| Paper | 86.8 | 85.2 | 84.8 | 86.2 | 86.6 | 86.7 | 87.9 | 88.5 | 88.6 | 89.1 | 89.1 | 89.7 | 85.7 | 87.4 | 89.1 |
| Petroleum and coal products | 89.0 | 89.7 | 91.1 | 93.0 | 93.0 | 92.5 | 94.3 | 94.5 | 94.6 | 94.6 | 94.5 | 94.5 | 90.7 | 93.6 | 94.5 |
| Chemicals | 103.3 | 104.0 | 104.0 | 103.4 | 103.0 | 105.0 | 106.0 | 107.0 | 107.5 | 108.5 | 109.0 | 110.1 | 103.7 | 105.3 | 108.8 |
| Nonmetallic mineral products | 108.6 | 105.5 | 104.5 | 104.2 | 100.7 | 100.1 | 101.0 | 101.1 | 101.3 | 101.8 | 102.1 | 102.9 | 105.7 | 100.7 | 102.0 |
| Primary metals | 94.7 | 95.5 | 94.9 | 94.3 | 93.7 | 93.4 | 94.6 | 96.0 | 95.8 | 97.2 | 97.7 | 99.8 | 94.8 | 94.4 | 97.6 |
| Coal-weighted manufacturing (a) | 96.2 | 95.9 | 95.8 | 95.8 | 94.4 | 94.3 | 95.3 | 96.0 | 95.9 | 96.8 | 96.9 | 98.0 | 95.9 | 95.0 | 96.9 |
| Distillate-weighted manufacturing (a) | 98.8 | 98.1 | 97.9 | 97.9 | 96.7 | 96.7 | 96.9 | 97.4 | 97.6 | 98.2 | 98.7 | 99.6 | 98.2 | 96.9 | 98.5 |
| Electricity-weighted manufacturing (a) | 97.2 | 97.4 | 97.4 | 97.1 | 96.3 | 96.6 | 96.7 | 97.4 | 97.6 | 98.5 | 98.9 | 100.0 | 97.3 | 96.8 | 98.8 |
| Natural Gas-weighted manufacturing (a) | 95.0 | 95.1 | 95.5 | 95.3 | 93.9 | 94.6 | 94.9 | 95.7 | 95.7 | 96.5 | 96.6 | 97.6 | 95.2 | 94.8 | 96.6 |
| Price Indexes | | | | | | | | | | | | | | | |
| Consumer Price Index (all urban consumers) | | | | | | | | | | | | | | | |
| (index, 1982=1984=1.00) | 3.01 | 3.03 | 3.06 | 3.08 | 3.11 | 3.13 | 3.14 | 3.15 | 3.17 | 3.18 | 3.20 | 3.21 | 3.05 | 3.13 | 3.19 |
| Producer Price Index: All Commodities | | | | | | | | | | | | | | | |
| (index, 1982=1.00) | 2.60 | 2.53 | 2.55 | 2.55 | 2.55 | 2.54 | 2.51 | 2.50 | 2.50 | 2.49 | 2.51 | 2.52 | 2.56 | 2.52 | 2.50 |
| Producer Price Index: Petroleum | | | | | | | | | | | | | | | |
| (index, 1982=1.00) | 3.09 | 2.91 | 3.17 | 2.82 | 2.79 | 2.84 | 2.67 | 2.24 | 2.28 | 2.39 | 2.40 | 2.28 | 3.00 | 2.64 | 2.34 |
| GDP Implicit Price Deflator | | | | | | | | | | | | | | | |
| (index, 2017=100) | 121.2 | 121.8 | 122.8 | 123.2 | 124.2 | 124.9 | 125.4 | 125.9 | 126.7 | 127.4 | 128.1 | 128.9 | 122.3 | 125.1 | 127.8 |
| Miscellaneous | | | | | | | | | | | | | | | |
| Vehicle Miles Traveled (a) | | | | | | | | | | | | | | | |
| (million miles/day) | 8,426 | 9,159 | 9,334 | 8,835 | 8,381 | 9,251 | 9,431 | 8,930 | 8,520 | 9,347 | 9,538 | 8,950 | 8,941 | 8,999 | 9,091 |
| Raw Steel Production | | | | | | | | | | | | | | | |
| (million short tons per day) | 21.227 | 22.165 | 22.510 | 22.298 | 22.216 | 22.362 | 22.716 | 21.814 | 22.148 | 23.184 | 23.589 | 24.162 | 88.200 | 89.108 | 93.083 |
| Carbon Dioxide (CO₂) Emissions (million metric tons) | | | | | | | | | | | | | | | |
| Total Energy (c) | 1,241 | 1,115 | 1,224 | 1,214 | 1,239 | 1,115 | 1,217 | 1,204 | 1,242 | 1,092 | 1,225 | 1,223 | 4,794 | 4,775 | 4,782 |
| Petroleum | 550 | 563 | 566 | 572 | 543 | 561 | 574 | 571 | 548 | 568 | 577 | 571 | 2,251 | 2,250 | 2,265 |
| Natural gas | 503 | 383 | 417 | 457 | 512 | 386 | 422 | 455 | 514 | 380 | 414 | 457 | 1,759 | 1,774 | 1,765 |
| Coal | 186 | 167 | 240 | 184 | 183 | 166 | 219 | 176 | 178 | 142 | 232 | 192 | 777 | 744 | 744 |

 (a) Fuel share weights of individual sector indices based on EIA *Manufacturing Energy Consumption Survey*.

(b) Total highway travel includes gasoline and diesel fuel vehicles.

(c) Includes electric power sector use of geothermal energy and non-biomass waste.

Notes:

EIA completed modeling and analysis for this report on November 7, 2024.

- = no data available

SAAR = Seasonally-adjusted annual rate

The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray.

Sources:

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

Table 9b. U.S. Regional Macroeconomic Data

U.S. Energy Information Administration | Short-Term Energy Outlook - November 2024

| | 2023 | | | | 2024 | | | | 2025 | | | | Year | | |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2023 | 2024 | 2025 |
| Real Gross State Product (billion \$2017) | | | | | | | | | | | | | | | |
| New England | 1,150 | 1,156 | 1,167 | 1,176 | 1,180 | 1,186 | 1,192 | 1,197 | 1,202 | 1,206 | 1,211 | 1,217 | 1,162 | 1,189 | 1,209 |
| Middle Atlantic | 3,197 | 3,209 | 3,238 | 3,257 | 3,274 | 3,299 | 3,324 | 3,340 | 3,355 | 3,369 | 3,382 | 3,398 | 3,225 | 3,310 | 3,376 |
| E. N. Central | 2,835 | 2,848 | 2,873 | 2,893 | 2,894 | 2,915 | 2,933 | 2,945 | 2,953 | 2,964 | 2,976 | 2,989 | 2,862 | 2,922 | 2,971 |
| W. N. Central | 1,355 | 1,363 | 1,378 | 1,385 | 1,380 | 1,392 | 1,401 | 1,406 | 1,411 | 1,417 | 1,423 | 1,429 | 1,370 | 1,395 | 1,420 |
| S. Atlantic | 4,097 | 4,116 | 4,158 | 4,195 | 4,220 | 4,252 | 4,283 | 4,305 | 4,325 | 4,348 | 4,371 | 4,396 | 4,142 | 4,265 | 4,360 |
| E. S. Central | 1,000 | 1,002 | 1,012 | 1,020 | 1,024 | 1,032 | 1,038 | 1,043 | 1,047 | 1,052 | 1,056 | 1,061 | 1,008 | 1,035 | 1,054 |
| W. S. Central | 2,566 | 2,596 | 2,637 | 2,665 | 2,683 | 2,705 | 2,725 | 2,741 | 2,758 | 2,774 | 2,792 | 2,811 | 2,616 | 2,713 | 2,784 |
| Mountain | 1,529 | 1,539 | 1,558 | 1,575 | 1,587 | 1,599 | 1,611 | 1,620 | 1,629 | 1,639 | 1,649 | 1,660 | 1,550 | 1,604 | 1,644 |
| Pacific | 4,255 | 4,287 | 4,332 | 4,365 | 4,380 | 4,407 | 4,434 | 4,454 | 4,478 | 4,501 | 4,524 | 4,549 | 4,310 | 4,419 | 4,513 |
| Industrial Output, Manufacturing (index, year 2017=100) | | | | | | | | | | | | | | | |
| New England | 96.5 | 96.1 | 95.8 | 95.1 | 95.0 | 94.8 | 94.3 | 94.6 | 94.8 | 95.3 | 95.7 | 96.4 | 95.9 | 94.7 | 95.6 |
| Middle Atlantic | 95.3 | 95.3 | 95.3 | 94.7 | 94.3 | 94.6 | 94.6 | 94.9 | 95.2 | 95.6 | 96.0 | 96.6 | 95.2 | 94.6 | 95.8 |
| E. N. Central | 96.7 | 96.7 | 96.5 | 96.0 | 95.7 | 96.0 | 95.9 | 96.2 | 96.5 | 97.0 | 97.5 | 98.2 | 96.5 | 95.9 | 97.3 |
| W. N. Central | 101.4 | 101.5 | 101.4 | 100.9 | 100.8 | 101.5 | 101.2 | 101.5 | 101.7 | 102.2 | 102.7 | 103.4 | 101.3 | 101.3 | 102.5 |
| S. Atlantic | 102.6 | 102.9 | 103.0 | 102.8 | 102.7 | 103.5 | 103.6 | 104.0 | 104.4 | 105.1 | 105.7 | 106.7 | 102.8 | 103.4 | 105.5 |
| E. S. Central | 100.2 | 100.3 | 100.1 | 99.7 | 99.7 | 100.2 | 100.2 | 100.6 | 101.0 | 101.6 | 102.2 | 103.0 | 100.1 | 100.2 | 101.9 |
| W. S. Central | 104.5 | 105.2 | 105.5 | 105.0 | 105.2 | 106.3 | 106.4 | 106.8 | 107.3 | 107.9 | 108.5 | 109.4 | 105.1 | 106.2 | 108.3 |
| Mountain | 111.1 | 111.2 | 111.2 | 111.0 | 111.3 | 112.3 | 112.3 | 112.6 | 113.0 | 113.8 | 114.5 | 115.4 | 111.1 | 112.1 | 114.2 |
| Pacific | 97.1 | 96.7 | 96.2 | 96.3 | 95.6 | 95.2 | 94.9 | 95.0 | 95.1 | 95.6 | 96.0 | 96.7 | 96.6 | 95.1 | 95.8 |
| Real Personal Income (billion \$2017) | | | | | | | | | | | | | | | |
| New England | 951 | 957 | 959 | 967 | 980 | 986 | 991 | 997 | 1,004 | 1,011 | 1,018 | 1,025 | 959 | 989 | 1,015 |
| Middle Atlantic | 2,515 | 2,534 | 2,548 | 2,549 | 2,582 | 2,599 | 2,613 | 2,630 | 2,649 | 2,668 | 2,685 | 2,704 | 2,536 | 2,606 | 2,677 |
| E. N. Central | 2,612 | 2,627 | 2,632 | 2,651 | 2,681 | 2,698 | 2,711 | 2,725 | 2,742 | 2,758 | 2,774 | 2,792 | 2,630 | 2,704 | 2,766 |
| W. N. Central | 1,295 | 1,299 | 1,302 | 1,309 | 1,320 | 1,325 | 1,328 | 1,334 | 1,342 | 1,351 | 1,360 | 1,371 | 1,301 | 1,327 | 1,356 |
| S. Atlantic | 3,707 | 3,732 | 3,747 | 3,793 | 3,856 | 3,887 | 3,911 | 3,936 | 3,967 | 3,997 | 4,027 | 4,059 | 3,745 | 3,898 | 4,013 |
| E. S. Central | 1,008 | 1,013 | 1,018 | 1,024 | 1,040 | 1,051 | 1,057 | 1,063 | 1,070 | 1,076 | 1,082 | 1,090 | 1,016 | 1,053 | 1,079 |
| W. S. Central | 2,315 | 2,314 | 2,331 | 2,355 | 2,385 | 2,401 | 2,416 | 2,432 | 2,451 | 2,471 | 2,490 | 2,512 | 2,329 | 2,408 | 2,481 |
| Mountain | 1,426 | 1,442 | 1,443 | 1,460 | 1,483 | 1,493 | 1,501 | 1,510 | 1,521 | 1,532 | 1,544 | 1,556 | 1,443 | 1,497 | 1,538 |
| Pacific | 3,082 | 3,112 | 3,119 | 3,136 | 3,185 | 3,202 | 3,218 | 3,236 | 3,258 | 3,280 | 3,302 | 3,327 | 3,112 | 3,211 | 3,292 |
| Households (thousands) | | | | | | | | | | | | | | | |
| New England | 6,088 | 6,103 | 6,117 | 6,125 | 6,139 | 6,152 | 6,168 | 6,182 | 6,196 | 6,210 | 6,222 | 6,235 | 6,125 | 6,182 | 6,235 |
| Middle Atlantic | 16,074 | 16,101 | 16,126 | 16,141 | 16,173 | 16,201 | 16,237 | 16,277 | 16,316 | 16,353 | 16,383 | 16,415 | 16,141 | 16,277 | 16,415 |
| E. N. Central | 19,005 | 19,040 | 19,078 | 19,104 | 19,144 | 19,175 | 19,212 | 19,250 | 19,288 | 19,323 | 19,352 | 19,382 | 19,104 | 19,250 | 19,382 |
| W. N. Central | 8,702 | 8,729 | 8,754 | 8,773 | 8,799 | 8,819 | 8,842 | 8,866 | 8,890 | 8,912 | 8,931 | 8,951 | 8,773 | 8,866 | 8,951 |
| S. Atlantic | 27,263 | 27,363 | 27,467 | 27,556 | 27,676 | 27,784 | 27,902 | 28,019 | 28,130 | 28,233 | 28,322 | 28,416 | 27,556 | 28,019 | 28,416 |
| E. S. Central | 7,902 | 7,933 | 7,963 | 7,989 | 8,020 | 8,046 | 8,073 | 8,101 | 8,127 | 8,150 | 8,171 | 8,193 | 7,989 | 8,101 | 8,193 |
| W. S. Central | 15,960 | 16,022 | 16,092 | 16,152 | 16,223 | 16,288 | 16,366 | 16,444 | 16,520 | 16,593 | 16,657 | 16,722 | 16,152 | 16,444 | 16,722 |
| Mountain | 9,791 | 9,820 | 9,852 | 9,878 | 9,914 | 9,947 | 9,985 | 10,026 | 10,068 | 10,109 | 10,147 | 10,185 | 9,878 | 10,026 | 10,185 |
| Pacific | 18,984 | 19,002 | 19,028 | 19,041 | 19,072 | 19,099 | 19,138 | 19,178 | 19,218 | 19,256 | 19,290 | 19,327 | 19,041 | 19,178 | 19,327 |
| Total Non-farm Employment (millions) | | | | | | | | | | | | | | | |
| New England | 7.6 | 7.6 | 7.6 | 7.6 | 7.7 | 7.7 | 7.7 | 7.7 | 7.7 | 7.7 | 7.7 | 7.7 | 7.6 | 7.7 | 7.7 |
| Middle Atlantic | 20.0 | 20.1 | 20.2 | 20.3 | 20.4 | 20.5 | 20.5 | 20.6 | 20.6 | 20.6 | 20.6 | 20.6 | 20.2 | 20.5 | 20.6 |
| E. N. Central | 22.4 | 22.5 | 22.5 | 22.5 | 22.6 | 22.7 | 22.7 | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 22.5 | 22.7 | 22.8 |
| W. N. Central | 10.9 | 10.9 | 11.0 | 11.0 | 11.1 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.0 | 11.2 | 11.2 |
| S. Atlantic | 30.6 | 30.8 | 30.9 | 31.1 | 31.2 | 31.4 | 31.5 | 31.6 | 31.7 | 31.8 | 31.9 | 31.9 | 30.8 | 31.4 | 31.8 |
| E. S. Central | 8.6 | 8.7 | 8.7 | 8.7 | 8.8 | 8.8 | 8.8 | 8.9 | 8.9 | 8.9 | 8.9 | 8.9 | 8.7 | 8.8 | 8.9 |
| W. S. Central | 18.9 | 19.0 | 19.1 | 19.2 | 19.3 | 19.3 | 19.4 | 19.5 | 19.5 | 19.6 | 19.6 | 19.7 | 19.0 | 19.4 | 19.6 |
| Mountain | 11.8 | 11.9 | 12.0 | 12.1 | 12.1 | 12.2 | 12.2 | 12.3 | 12.3 | 12.4 | 12.4 | 12.4 | 12.0 | 12.2 | 12.4 |
| Pacific | 24.3 | 24.4 | 24.4 | 24.6 | 24.7 | 24.7 | 24.8 | 24.9 | 24.9 | 24.9 | 24.9 | 25.0 | 24.4 | 24.7 | 24.9 |

Notes:

EIA completed modeling and analysis for this report on November 7, 2024.

- = no data available

The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray.

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.**Sources:**

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

Table 9c. U.S. Regional Weather Data

U.S. Energy Information Administration | Short-Term Energy Outlook - November 2024

| | 2023 | | | | 2024 | | | | 2025 | | | | Year | | |
|---|-------|-----|-------|-------|-------|-------|-------|-------|-------|-----|-------|-------|-------|-------|-------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2023 | 2024 | 2025 |
| Heating Degree Days | | | | | | | | | | | | | | | |
| United States average | 1,923 | 485 | 61 | 1,335 | 1,906 | 414 | 50 | 1,345 | 1,989 | 469 | 74 | 1,443 | 3,804 | 3,714 | 3,975 |
| New England | 2,711 | 820 | 91 | 1,926 | 2,757 | 749 | 112 | 1,983 | 2,944 | 818 | 130 | 2,029 | 5,548 | 5,602 | 5,921 |
| Middle Atlantic | 2,453 | 652 | 71 | 1,775 | 2,520 | 563 | 68 | 1,772 | 2,722 | 654 | 86 | 1,857 | 4,951 | 4,923 | 5,318 |
| E. N. Central | 2,725 | 699 | 94 | 1,897 | 2,654 | 546 | 68 | 1,949 | 3,001 | 701 | 120 | 2,129 | 5,416 | 5,217 | 5,952 |
| W. N. Central | 3,172 | 656 | 92 | 2,010 | 2,839 | 600 | 88 | 2,131 | 3,172 | 706 | 154 | 2,352 | 5,931 | 5,658 | 6,384 |
| South Atlantic | 1,060 | 190 | 10 | 890 | 1,252 | 137 | 10 | 816 | 1,272 | 178 | 12 | 876 | 2,149 | 2,214 | 2,338 |
| E. S. Central | 1,391 | 258 | 14 | 1,160 | 1,658 | 167 | 10 | 1,094 | 1,685 | 232 | 19 | 1,223 | 2,822 | 2,929 | 3,160 |
| W. S. Central | 931 | 91 | 1 | 694 | 1,077 | 49 | 2 | 657 | 1,094 | 85 | 5 | 764 | 1,718 | 1,785 | 1,947 |
| Mountain | 2,572 | 734 | 128 | 1,673 | 2,238 | 693 | 102 | 1,765 | 2,169 | 711 | 154 | 1,842 | 5,107 | 4,797 | 4,876 |
| Pacific | 1,833 | 653 | 98 | 1,034 | 1,573 | 616 | 67 | 1,105 | 1,442 | 583 | 94 | 1,157 | 3,618 | 3,360 | 3,276 |
| Heating Degree Days, Prior 10-year average | | | | | | | | | | | | | | | |
| United States average | 2,133 | 485 | 60 | 1,477 | 2,103 | 483 | 58 | 1,444 | 2,048 | 476 | 55 | 1,425 | 4,155 | 4,088 | 4,004 |
| New England | 3,151 | 859 | 106 | 2,093 | 3,110 | 856 | 98 | 2,057 | 3,030 | 843 | 95 | 2,046 | 6,209 | 6,121 | 6,014 |
| Middle Atlantic | 2,939 | 689 | 69 | 1,907 | 2,889 | 685 | 63 | 1,878 | 2,799 | 671 | 60 | 1,859 | 5,604 | 5,516 | 5,389 |
| E. N. Central | 3,215 | 741 | 93 | 2,169 | 3,158 | 735 | 91 | 2,113 | 3,030 | 717 | 81 | 2,071 | 6,218 | 6,097 | 5,899 |
| W. N. Central | 3,319 | 754 | 121 | 2,374 | 3,295 | 729 | 120 | 2,303 | 3,193 | 714 | 111 | 2,265 | 6,568 | 6,448 | 6,282 |
| South Atlantic | 1,403 | 190 | 10 | 905 | 1,357 | 188 | 9 | 895 | 1,311 | 182 | 9 | 873 | 2,508 | 2,449 | 2,375 |
| E. S. Central | 1,811 | 251 | 14 | 1,231 | 1,756 | 248 | 14 | 1,205 | 1,695 | 242 | 13 | 1,173 | 3,307 | 3,224 | 3,124 |
| W. S. Central | 1,188 | 95 | 3 | 762 | 1,164 | 90 | 3 | 731 | 1,124 | 86 | 2 | 712 | 2,048 | 1,987 | 1,924 |
| Mountain | 2,193 | 696 | 128 | 1,833 | 2,209 | 697 | 128 | 1,801 | 2,221 | 695 | 123 | 1,801 | 4,850 | 4,835 | 4,841 |
| Pacific | 1,444 | 523 | 75 | 1,148 | 1,471 | 539 | 77 | 1,129 | 1,502 | 553 | 78 | 1,141 | 3,191 | 3,216 | 3,275 |
| Cooling Degree Days | | | | | | | | | | | | | | | |
| United States average | 68 | 362 | 941 | 104 | 53 | 496 | 943 | 130 | 51 | 446 | 967 | 106 | 1,476 | 1,622 | 1,569 |
| New England | 0 | 51 | 465 | 5 | 0 | 147 | 476 | 0 | 0 | 99 | 509 | 1 | 522 | 623 | 609 |
| Middle Atlantic | 0 | 91 | 583 | 10 | 0 | 244 | 621 | 0 | 0 | 183 | 657 | 5 | 684 | 865 | 845 |
| E. N. Central | 0 | 179 | 524 | 10 | 3 | 311 | 570 | 9 | 1 | 245 | 598 | 7 | 714 | 893 | 851 |
| W. N. Central | 1 | 319 | 709 | 14 | 11 | 331 | 672 | 21 | 5 | 297 | 733 | 11 | 1,043 | 1,035 | 1,046 |
| South Atlantic | 201 | 584 | 1,238 | 242 | 148 | 758 | 1,246 | 264 | 139 | 715 | 1,288 | 260 | 2,264 | 2,416 | 2,402 |
| E. S. Central | 63 | 441 | 1,094 | 72 | 41 | 620 | 1,106 | 102 | 34 | 545 | 1,127 | 68 | 1,670 | 1,870 | 1,773 |
| W. S. Central | 149 | 899 | 1,863 | 214 | 126 | 1,049 | 1,587 | 342 | 105 | 936 | 1,648 | 213 | 3,126 | 3,104 | 2,903 |
| Mountain | 3 | 349 | 1,024 | 98 | 8 | 489 | 1,081 | 112 | 20 | 450 | 1,014 | 83 | 1,474 | 1,691 | 1,568 |
| Pacific | 26 | 109 | 613 | 78 | 20 | 195 | 732 | 92 | 28 | 200 | 703 | 77 | 826 | 1,040 | 1,009 |
| Cooling Degree Days, Prior 10-year average | | | | | | | | | | | | | | | |
| United States average | 50 | 415 | 895 | 109 | 53 | 414 | 909 | 111 | 55 | 424 | 926 | 115 | 1,470 | 1,487 | 1,520 |
| New England | 0 | 87 | 480 | 2 | 0 | 83 | 482 | 2 | 0 | 90 | 495 | 2 | 569 | 567 | 588 |
| Middle Atlantic | 0 | 160 | 617 | 8 | 0 | 154 | 623 | 9 | 0 | 162 | 641 | 8 | 785 | 785 | 812 |
| E. N. Central | 1 | 234 | 561 | 10 | 1 | 231 | 566 | 10 | 1 | 239 | 586 | 11 | 805 | 808 | 836 |
| W. N. Central | 4 | 292 | 674 | 12 | 4 | 301 | 680 | 12 | 5 | 308 | 693 | 13 | 982 | 997 | 1,019 |
| South Atlantic | 144 | 675 | 1,192 | 272 | 153 | 674 | 1,212 | 271 | 157 | 685 | 1,231 | 278 | 2,283 | 2,309 | 2,351 |
| E. S. Central | 36 | 520 | 1,058 | 83 | 41 | 519 | 1,076 | 85 | 44 | 531 | 1,095 | 89 | 1,697 | 1,721 | 1,759 |
| W. S. Central | 101 | 861 | 1,549 | 223 | 108 | 872 | 1,584 | 228 | 118 | 899 | 1,599 | 240 | 2,734 | 2,793 | 2,856 |
| Mountain | 24 | 460 | 960 | 83 | 22 | 447 | 971 | 88 | 19 | 452 | 992 | 90 | 1,527 | 1,527 | 1,552 |
| Pacific | 32 | 213 | 676 | 86 | 32 | 202 | 677 | 89 | 30 | 199 | 681 | 87 | 1,006 | 999 | 996 |

Notes:

EIA completed modeling and analysis for this report on November 7, 2024.

- = no data available

The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray.

Regional degree days for each period are calculated by EIA as contemporaneous period population-weighted averages of state degree day data published by the National Oceanic and Atmospheric Administration (NOAA).

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

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

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

Table 10a. Drilling Productivity Metrics
U.S. Energy Information Administration | Short-Term Energy Outlook - November 2024

| | 2023 | | | | 2024 | | | | 2025 | | | | Year | | |
|---|----------|----------|----------|----------|----------|----------|----------|----|------|----|----|----|----------|------|------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2023 | 2024 | 2025 |
| Active rigs | | | | | | | | | | | | | | | |
| Appalachia region | 51 | 50 | 43 | 40 | 42 | 39 | 35 | - | - | - | - | - | 46 | - | - |
| Bakken region | 41 | 37 | 34 | 33 | 34 | 34 | 35 | - | - | - | - | - | 36 | - | - |
| Eagle Ford region | 78 | 67 | 55 | 55 | 57 | 56 | 52 | - | - | - | - | - | 64 | - | - |
| Haynesville region | 72 | 63 | 49 | 46 | 43 | 36 | 35 | - | - | - | - | - | 58 | - | - |
| Permian region | 352 | 349 | 326 | 311 | 312 | 313 | 305 | - | - | - | - | - | 334 | - | - |
| Rest of Lower 48 States, excluding GOM | 141 | 127 | 112 | 108 | 104 | 96 | 96 | - | - | - | - | - | 122 | - | - |
| New wells drilled | | | | | | | | | | | | | | | |
| Appalachia region | 294 | 284 | 247 | 226 | 239 | 222 | 198 | - | - | - | - | - | 1,051 | - | - |
| Bakken region | 240 | 223 | 202 | 200 | 206 | 208 | 212 | - | - | - | - | - | 865 | - | - |
| Eagle Ford region | 356 | 308 | 271 | 276 | 287 | 291 | 282 | - | - | - | - | - | 1,211 | - | - |
| Haynesville region | 221 | 194 | 148 | 133 | 124 | 103 | 99 | - | - | - | - | - | 696 | - | - |
| Permian region | 1,436 | 1,430 | 1,373 | 1,332 | 1,355 | 1,368 | 1,345 | - | - | - | - | - | 5,571 | - | - |
| Rest of Lower 48 States, excluding GOM | 828 | 775 | 725 | 674 | 613 | 562 | 566 | - | - | - | - | - | 3,002 | - | - |
| New wells drilled per rig | | | | | | | | | | | | | | | |
| Appalachia region | 5.7 | 5.7 | 5.7 | 5.7 | 5.6 | 5.7 | 5.7 | - | - | - | - | - | 22.8 | - | - |
| Bakken region | 5.9 | 6.0 | 6.0 | 6.1 | 6.1 | 6.1 | 6.1 | - | - | - | - | - | 23.9 | - | - |
| Eagle Ford region | 4.6 | 4.6 | 4.9 | 5.0 | 5.0 | 5.2 | 5.4 | - | - | - | - | - | 19.1 | - | - |
| Haynesville region | 3.1 | 3.1 | 3.0 | 2.9 | 2.9 | 2.9 | 2.9 | - | - | - | - | - | 12.0 | - | - |
| Permian region | 4.1 | 4.1 | 4.2 | 4.3 | 4.3 | 4.4 | 4.4 | - | - | - | - | - | 16.7 | - | - |
| Rest of Lower 48 States, excluding GOM | 5.9 | 6.1 | 6.5 | 6.3 | 5.9 | 5.9 | 5.9 | - | - | - | - | - | 24.7 | - | - |
| New wells completed | | | | | | | | | | | | | | | |
| Appalachia region | 258 | 241 | 219 | 245 | 263 | 240 | 219 | - | - | - | - | - | 963 | - | - |
| Bakken region | 258 | 310 | 303 | 221 | 187 | 258 | 239 | - | - | - | - | - | 1,092 | - | - |
| Eagle Ford region | 455 | 404 | 363 | 308 | 385 | 348 | 285 | - | - | - | - | - | 1,530 | - | - |
| Haynesville region | 168 | 123 | 125 | 139 | 113 | 110 | 89 | - | - | - | - | - | 555 | - | - |
| Permian region | 1,525 | 1,450 | 1,435 | 1,369 | 1,361 | 1,372 | 1,324 | - | - | - | - | - | 5,779 | - | - |
| Rest of Lower 48 States, excluding GOM | 701 | 790 | 708 | 704 | 628 | 596 | 606 | - | - | - | - | - | 2,903 | - | - |
| Cumulative drilled but uncompleted wells | | | | | | | | | | | | | | | |
| Appalachia region | 761 | 804 | 832 | 813 | 789 | 771 | 750 | - | - | - | - | - | 813 | - | - |
| Bakken region | 584 | 497 | 396 | 375 | 394 | 344 | 317 | - | - | - | - | - | 375 | - | - |
| Eagle Ford region | 692 | 586 | 504 | 472 | 374 | 317 | 314 | - | - | - | - | - | 472 | - | - |
| Haynesville region | 699 | 770 | 793 | 787 | 798 | 791 | 801 | - | - | - | - | - | 787 | - | - |
| Permian region | 985 | 965 | 903 | 866 | 860 | 856 | 877 | - | - | - | - | - | 866 | - | - |
| Rest of Lower 48 States, excluding GOM | 2,411 | 2,396 | 2,413 | 2,383 | 2,368 | 2,334 | 2,294 | - | - | - | - | - | 2,383 | - | - |
| Crude oil production from newly completed wells, one-year trend (thousand barrels per day) (a) (c) | | | | | | | | | | | | | | | |
| Appalachia region | 13 | 13 | 13 | 12 | 12 | 13 | 13 | - | - | - | - | - | 13 | - | - |
| Bakken region | 51 | 60 | 67 | 64 | 55 | 55 | 58 | - | - | - | - | - | 60 | - | - |
| Eagle Ford region | 82 | 88 | 80 | 64 | 66 | 72 | 70 | - | - | - | - | - | 79 | - | - |
| Haynesville region | 1 | 0 | 0 | 0 | 0 | 0 | 0 | - | - | - | - | - | 0 | - | - |
| Permian region | 438 | 437 | 445 | 440 | 440 | 452 | 459 | - | - | - | - | - | 440 | - | - |
| Rest of Lower 48 States, excluding GOM | 78 | 82 | 85 | 80 | 78 | 77 | 78 | - | - | - | - | - | 81 | - | - |
| Crude oil production from newly completed wells per rig, one-year trend (thousand barrels per day) (a) | | | | | | | | | | | | | | | |
| Appalachia region | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | - | - | - | - | - | 0.3 | - | - |
| Bakken region | 1.2 | 1.5 | 1.9 | 1.9 | 1.7 | 1.6 | 1.7 | - | - | - | - | - | 1.6 | - | - |
| Eagle Ford region | 1.1 | 1.2 | 1.3 | 1.2 | 1.2 | 1.3 | 1.3 | - | - | - | - | - | 1.2 | - | - |
| Haynesville region | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | - | - | - | - | - | 0.0 | - | - |
| Permian region | 1.2 | 1.2 | 1.3 | 1.4 | 1.4 | 1.4 | 1.5 | - | - | - | - | - | 1.3 | - | - |
| Rest of Lower 48 States, excluding GOM | 0.5 | 0.6 | 0.7 | 0.7 | 0.7 | 0.8 | 0.8 | - | - | - | - | - | 0.6 | - | - |
| Existing crude oil production change, one-year trend (thousand barrels per day) (a) (c) | | | | | | | | | | | | | | | |
| Appalachia region | -10.1 | -11.9 | -13.2 | -12.8 | -11.9 | -11.8 | -12.6 | - | - | - | - | - | -12.0 | - | - |
| Bakken region | -41.4 | -37.7 | -50.0 | -60.0 | -56.6 | -49.9 | -51.2 | - | - | - | - | - | -47.3 | - | - |
| Eagle Ford region | -73.8 | -80.5 | -87.6 | -80.5 | -67.6 | -64.5 | -71.8 | - | - | - | - | - | -80.6 | - | - |
| Haynesville region | -0.8 | -0.9 | -0.7 | -0.4 | -0.5 | -0.4 | -0.4 | - | - | - | - | - | -0.7 | - | - |
| Permian region | -410.3 | -415.4 | -411.1 | -394.0 | -398.5 | -404.6 | -412.0 | - | - | - | - | - | -407.7 | - | - |
| Rest of Lower 48 States, excluding GOM | -71.0 | -68.9 | -80.0 | -87.9 | -85.2 | -77.7 | -78.1 | - | - | - | - | - | -77.0 | - | - |
| Natural gas production from newly completed wells, one-year trend (million cubic feet per day) (a) (d) | | | | | | | | | | | | | | | |
| Appalachia region | 1,276.9 | 1,236.5 | 1,206.1 | 1,144.9 | 1,045.1 | 964.8 | 1,032.3 | - | - | - | - | - | 1,215.7 | - | - |
| Bakken region | 59.7 | 68.8 | 75.6 | 70.8 | 61.2 | 60.2 | 63.9 | - | - | - | - | - | 68.8 | - | - |
| Eagle Ford region | 384.6 | 326.1 | 312.3 | 323.5 | 333.4 | 311.6 | 292.4 | - | - | - | - | - | 336.4 | - | - |
| Haynesville region | 994.5 | 922.0 | 774.2 | 656.1 | 535.1 | 448.4 | 461.7 | - | - | - | - | - | 835.6 | - | - |
| Permian region | 836.0 | 834.1 | 838.1 | 827.1 | 839.2 | 861.6 | 861.0 | - | - | - | - | - | 833.8 | - | - |
| Rest of Lower 48 States, excluding GOM | 383.2 | 357.5 | 389.7 | 380.5 | 336.3 | 320.9 | 343.5 | - | - | - | - | - | 377.8 | - | - |
| Natural gas production from newly completed wells per rig, one-year trend (million cubic feet per day) (a) (d) | | | | | | | | | | | | | | | |
| Appalachia region | 24.6 | 24.1 | 24.8 | 28.2 | 25.7 | 22.8 | 27.7 | - | - | - | - | - | 25.4 | - | - |
| Bakken region | 1.5 | 1.7 | 2.1 | 2.1 | 1.9 | 1.8 | 1.8 | - | - | - | - | - | 1.9 | - | - |
| Eagle Ford region | 5.0 | 4.3 | 5.1 | 6.0 | 6.0 | 5.4 | 5.4 | - | - | - | - | - | 5.1 | - | - |
| Haynesville region | 13.7 | 12.9 | 13.6 | 13.9 | 11.7 | 11.3 | 12.6 | - | - | - | - | - | 13.5 | - | - |
| Permian region | 2.4 | 2.4 | 2.5 | 2.6 | 2.7 | 2.7 | 2.8 | - | - | - | - | - | 2.5 | - | - |
| Rest of Lower 48 States, excluding GOM | 2.4 | 2.6 | 3.2 | 3.5 | 3.1 | 3.1 | 3.7 | - | - | - | - | - | 3.0 | - | - |
| Existing natural gas production change, one-year trend (million cubic feet per day) (a) (c) (d) | | | | | | | | | | | | | | | |
| Appalachia region | -1,144.5 | -1,053.7 | -1,047.3 | -1,260.9 | -1,422.1 | -1,377.4 | -1,262.4 | - | - | - | - | - | -1,126.7 | - | - |
| Bakken region | -42.1 | -7.8 | -35.5 | -71.0 | -51.8 | -20.8 | -33.9 | - | - | - | - | - | -39.2 | - | - |
| Eagle Ford region | -310.3 | -278.5 | -297.0 | -305.1 | -327.5 | -315.6 | -308.2 | - | - | - | - | - | -297.7 | - | - |
| Haynesville region | -812.4 | -913.0 | -860.5 | -777.6 | -780.1 | -786.0 | -806.2 | - | - | - | - | - | -865.5 | - | - |
| Permian region | -643.9 | -622.1 | -650.3 | -600.2 | -616.9 | -619.6 | -635.9 | - | - | - | - | - | -629.1 | - | - |
| Rest of Lower 48 States, excluding GOM | -532.6 | -389.8 | -298.6 | -329.4 | -461.5 | -459.9 | -401.5 | - | - | - | - | - | -386.8 | - | - |

(a) The Production From Newly Completed Wells and the Existing Production Change data series are reported as smoothed monthly data over a twelve-month period. The smoothing is done using the Locally Weighted Scatterplot Smoothing (LOWESS) function. LOWESS calculates a locally weighted average for each point, giving more weight to nearby monthly data and less weights to distant data. The smoothed data may change each month according to updated data.

(b) The most recent six months of well-level data is incomplete due to known lags in reporting. For these months, the values are imputed based on historical reporting patterns and other relevant factors.

(c) The sum of "Production from Newly Completed Wells" and "Existing Production Change" may not equal the month-over-month crude oil or natural gas production changes reported in tables 4a and 5a, respectively. This discrepancy arises from the statistical smoothing techniques applied to aggregated basin level data, variations in data imputation methodologies, and utilizing different data sources.

(d) Natural gas production in this table is marketed natural gas production.

Notes:
EIA completed modeling and analysis for this report on November 7, 2024.
- = no data available
The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray.
Minor discrepancies with published historical data are due to independent rounding.
Sources:
Historical data: Latest data available from Baker Hughes, Enervus, FracFocus.org.

Table 10b. Crude Oil and Natural Gas Production from Shale and Tight Formations
U.S. Energy Information Administration | Short-Term Energy Outlook

| | 2023 | | | | 2024 | | | | 2025 | | | | Year | | |
|--|------|------|------|------|------|------|------|----|------|----|----|----|------|------|------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2023 | 2024 | 2025 |
| Total U.S. tight oil production (million barrels per day) (a) | 8.26 | 8.37 | 8.56 | 8.70 | 8.61 | 8.68 | 8.62 | - | - | - | - | - | 8.47 | - | - |
| Austin Chalk formation | 0.13 | 0.12 | 0.13 | 0.12 | 0.11 | 0.12 | 0.12 | - | - | - | - | - | 0.13 | - | - |
| Bakken formation | 1.08 | 1.11 | 1.19 | 1.24 | 1.17 | 1.18 | 1.15 | - | - | - | - | - | 1.16 | - | - |
| Eagle Ford formation | 1.00 | 1.03 | 1.03 | 0.97 | 0.94 | 1.02 | 1.02 | - | - | - | - | - | 1.00 | - | - |
| Mississippian formation | 0.15 | 0.14 | 0.14 | 0.14 | 0.13 | 0.12 | 0.12 | - | - | - | - | - | 0.14 | - | - |
| Niobrara Codell formation | 0.42 | 0.45 | 0.46 | 0.48 | 0.46 | 0.45 | 0.44 | - | - | - | - | - | 0.45 | - | - |
| Permian formations | 5.07 | 5.10 | 5.21 | 5.35 | 5.42 | 5.39 | 5.40 | - | - | - | - | - | 5.18 | - | - |
| Woodford formation | 0.10 | 0.10 | 0.10 | 0.09 | 0.08 | 0.09 | 0.08 | - | - | - | - | - | 0.10 | - | - |
| Other U.S. formations | 0.31 | 0.32 | 0.31 | 0.31 | 0.29 | 0.30 | 0.31 | - | - | - | - | - | 0.31 | - | - |
| Total U.S. shale dry natural gas production (billion cubic feet per day) (a) | 82.5 | 82.6 | 82.9 | 83.4 | 82.0 | 79.5 | 83.0 | - | - | - | - | - | 82.8 | - | - |
| Bakken formation | 2.2 | 2.3 | 2.5 | 2.6 | 2.4 | 2.6 | 2.6 | - | - | - | - | - | 2.4 | - | - |
| Barnett formation | 1.9 | 1.9 | 1.8 | 1.8 | 1.7 | 1.7 | 1.7 | - | - | - | - | - | 1.8 | - | - |
| Eagle Ford formation | 4.4 | 4.5 | 4.5 | 4.5 | 4.4 | 4.4 | 4.5 | - | - | - | - | - | 4.5 | - | - |
| Fayetteville formation | 0.9 | 0.9 | 0.9 | 0.9 | 0.8 | 0.8 | 0.8 | - | - | - | - | - | 0.9 | - | - |
| Haynesville formation | 14.6 | 14.8 | 14.6 | 14.2 | 13.6 | 12.2 | 12.8 | - | - | - | - | - | 14.5 | - | - |
| Marcellus formation | 25.6 | 25.5 | 25.4 | 26.0 | 25.1 | 23.7 | 25.9 | - | - | - | - | - | 25.6 | - | - |
| Mississippian formation | 2.4 | 2.4 | 2.4 | 2.3 | 2.4 | 2.3 | 2.3 | - | - | - | - | - | 2.4 | - | - |
| Niobrara Codell formation | 2.6 | 2.6 | 2.7 | 2.8 | 2.8 | 2.8 | 2.8 | - | - | - | - | - | 2.7 | - | - |
| Permian formations | 15.8 | 16.1 | 16.7 | 17.1 | 17.7 | 18.0 | 18.4 | - | - | - | - | - | 16.4 | - | - |
| Utica formation | 6.8 | 6.4 | 6.3 | 6.1 | 6.1 | 6.0 | 6.3 | - | - | - | - | - | 6.4 | - | - |
| Woodford formation | 3.1 | 2.9 | 2.9 | 2.9 | 2.7 | 2.8 | 2.8 | - | - | - | - | - | 2.9 | - | - |
| Other U.S. formations | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | - | - | - | - | - | 2.3 | - | - |

(a) These production estimates are based on geologic formations, not geographic regions

Notes:

EIA completed modeling and analysis for this report on November 7, 2024.

- = no data available

The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray.

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

Sources:

Historical data: Latest data available from Enverus state administrative data.