Independent Statistics and Analysis
U.S. Energy Information Administration

Short-Term Energy Outlook

STEO

June 2024

June 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**	**$84**	**$85**
Retail gasoline price (dollars per gallon)	**$3.50**	**$3.40**	**$3.50**
U.S. crude oil production (million barrels per day)	**12.9**	**13.2**	**13.7**
Natural gas price at Henry Hub (dollars per million British thermal units)	**$2.50**	**$2.50**	**$3.20**
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%	41%
Coal	17%	16%	15%
Renewables	21%	23%	25%
Nuclear	19%	19%	19%
U.S. GDP (percentage change)	**2.5%**	**2.5%**	**1.6%**
U.S. CO_2 emissions (billion metric tons)	**4.8**	**4.8**	**4.8**

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

- **New U.S. crude oil and natural gas production data**. This month we are publishing regional crude oil and natural gas production data. These data provide a regional breakout of domestic crude oil and natural gas production in existing production tables and introduce some data series previously published in the *Drilling Productivity Report* and *Shale Gas and Tight Oil* into the STEO.

- **U.S. crude oil production.** U.S. crude oil production grows in our forecast by 2% from 2023 to an annual average of 13.2 million barrels per day (b/d) in 2024 and by another 4% in 2025 to 13.7 million b/d. Increasing production is led by the Permian region, which is the source of almost 50% of domestic crude oil production, followed by the Eagle Ford region and the Federal Gulf of Mexico.

- **OPEC+ crude oil production.** In our May outlook, we had assumed OPEC+ would begin to relax some voluntary production cuts beginning in the third quarter of 2024 (3Q24). In line with the group's recent announcement, we now expect OPEC+ will begin relaxing voluntary cuts in 4Q24. As a result, we expect that the extension of voluntary OPEC+ production cuts will cause global oil inventories to continue falling through 1Q25. Although we expect crude oil prices to rise from early June levels, lower-than-expected Brent prices in May mean our forecast for 2024 is $84/b, 4% lower than our May forecast.

- **Natural gas production.** We expect U.S. marketed natural gas production to fall by 1% in 2024 because of low natural gas prices. Marketed natural gas production in the Haynesville region in our forecast falls by 9% this year and production in the Appalachia region falls by 4%. The forecast

declines are partly offset by growth of 4% in the Permian region, largely because most of the natural gas produced in the Permian is associated with oil production. We forecast U.S. marketed natural gas production will increase by 2% next year, with growth in all three of these regions, as natural gas prices rise in our forecast.

- **Natural gas prices.** We expect that a drop in U.S. natural gas production in 2024 will continue to put upward pressure on the Henry Hub natural gas spot price. We expect that the Henry Hub spot price will average $2.50 per million British thermal units (MMBtu) this year, 13% higher than we expected last month, with prices rising from $2.12/MMBtu in May to $3.30/MMBtu in December 2024.

- **Electricity expenditures.** This summer—June through August—we expect that U.S. residential electricity customers' monthly bills will average around $170, about the same as last summer. We expect that lower residential electricity prices in most areas of the country will partially offset slightly increased electricity consumption, a result of our assumption that summer temperatures will be warmer this year.

- **Electricity consumption.** We revised our forecast for retail sales of electricity to the commercial and industrial sectors slightly upwards from our May STEO to reflect changes in our expectations of power demand from data centers. We expect commercial demand, which includes demand from data centers, in the South Atlantic to increase by 5% in 2024 and 2% in 2025. We expect West South Central commercial sector demand will increase by 3% this year and 1% next year.

Notable forecast changes

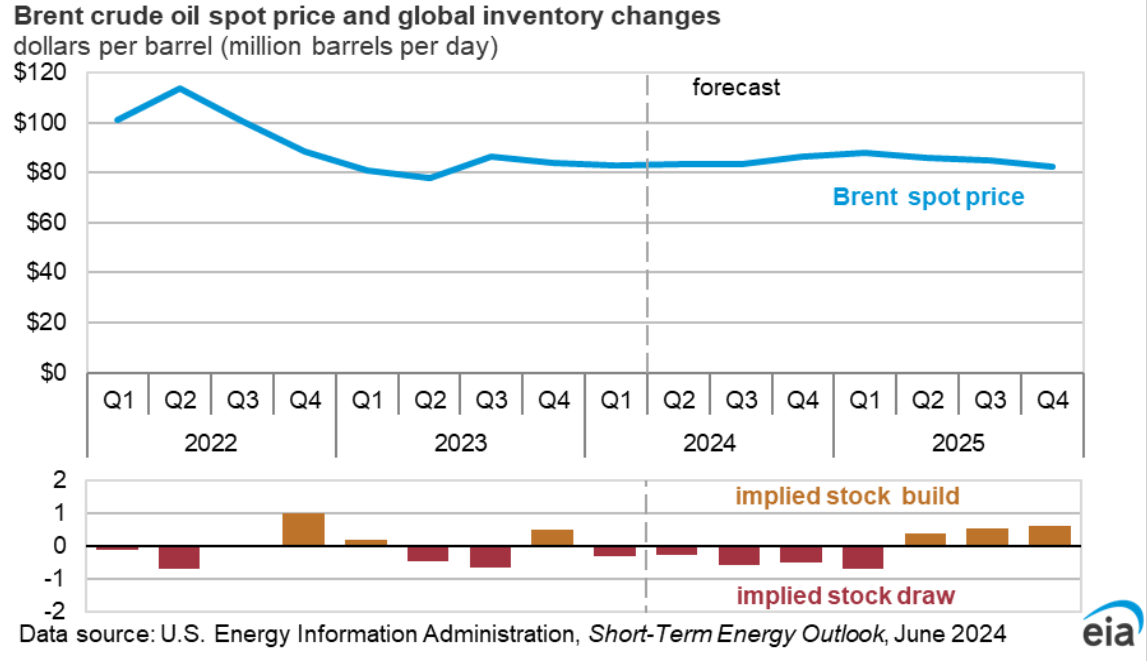
Current forecast: June 11, 2024; previous forecast: May 7, 2024	**2024**	**2025**
Brent spot price (dollars per barrel)	**$84**	**$85**
Previous forecast	$88	$85
Percentage change	-4.1%	0.0%
Retail diesel price (dollars per gallon)	**$3.90**	**$4.00**
Previous forecast	$4.00	$4.20
Percentage change	-2.9%	-3.9%
Retail gasoline price (dollars per gallon)	**$3.40**	**$3.50**
Previous forecast	$3.50	$3.50
Percentage change	-3.3%	-1.9%
Henry Hub spot price (dollars per million British thermal units)	**$2.50**	**$3.20**
Previous forecast	$2.20	$3.10
Percentage change	12.8%	5.1%
Natural gas inventories (billion cubic feet)	**3,340**	**3,260**
Previous forecast	3,520	**3,410**
Percentage change	-5.2%	-4.5%

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

Global Oil Markets

Global oil prices and inventories

The Brent crude oil spot price averaged $82 per barrel (b) in May, down $8/b from April. Daily spot prices also initially fell following the OPEC+ announcement on June 2, closing at $78/b on June 6. The extension of OPEC+ cuts through 3Q24 led us to reduce our forecast for OPEC+ oil production for the rest of 2024. We expect less OPEC+ production for the rest of this year will cause Brent prices to rise to an average of $85/b during the second half of 2024 (2H24). Because of less OPEC+ production, we expect more oil will be withdrawn from global inventories in 2H24 than we did last month. Despite more inventory draws in this month's forecast, we lowered our expectation for the annual average Brent price in 2024 compared with the May STEO to reflect the lower starting point for the forecast resulting from the recent price decline.



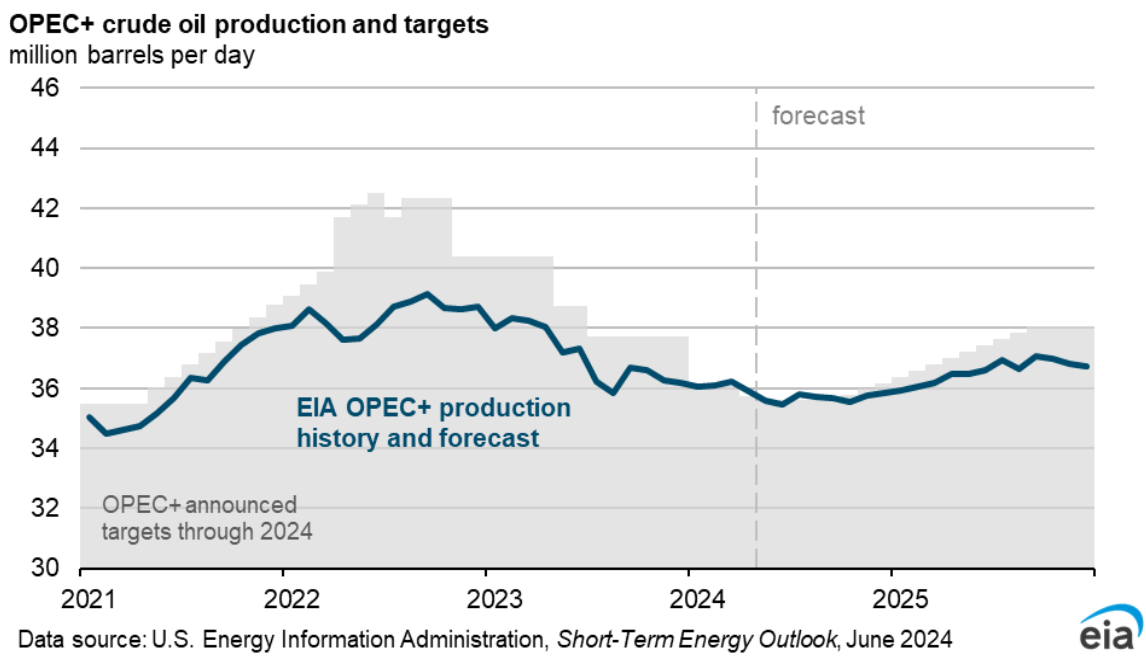
In our May outlook, we had assumed OPEC+ would begin to relax some voluntary production cuts beginning in 3Q24. We now expect OPEC+ will not begin relaxing voluntary cuts until 4Q24, in line with the group's recent announcement. Although crude oil prices initially fell following the OPEC+ announcement, we expect the extension of all voluntary cuts through 3Q24 will cause global oil inventories to continue falling through 1Q25 and put upward pressure on oil prices over that period.

Global oil inventories fell by an estimated 0.3 million barrels per day (b/d) in the first half of 2024 (1H24), and we expect they will decrease by an average of 0.6 million b/d from 3Q24 through 1Q25. Following the start of the phaseout of voluntary OPEC+ supply cuts in 4Q24 and supported by the ongoing supply growth from countries outside of OPEC+, we expect growth in global oil supply will outweigh growth in global oil demand growth, returning the market to moderate inventory builds for most of 2025. We forecast that global oil inventories will begin increasing at an average of 0.4 million b/d in 2Q25 and will increase by 0.6 million b/d in the second half of 2025.

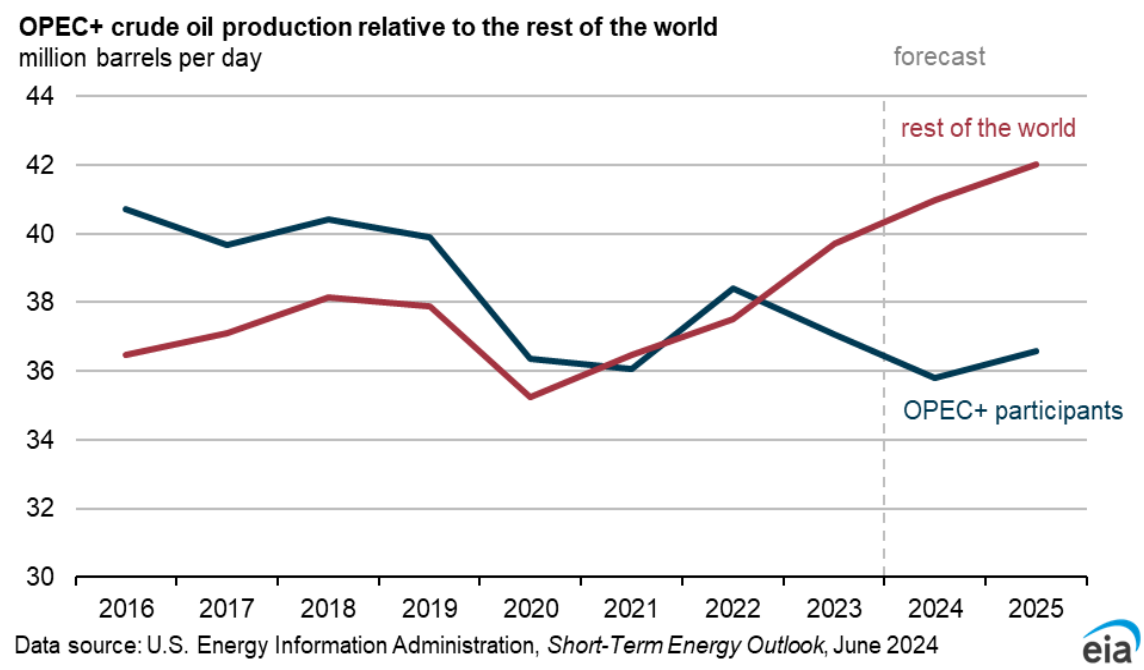
As a result, we expect oil prices will increase to an average of $87/b in 4Q24 and $88/b in 1Q25. As global oil inventories rise during most of 2025, we forecast the Brent crude oil price will gradually fall to an average of $83/b by 4Q25.

Global oil production

We expect OPEC+ will largely adhere to production targets announced on June 2. The announcement extends the additional voluntary production cuts by countries such as Saudi Arabia and Russia, which were set to expire at the end of June 2024, through September 2024. Beginning in October, these member countries plan to gradually phase out their production cuts on a monthly basis through the end of September 2025. In addition, the round of production cuts that OPEC+ participants announced in April 2023 and were set to expire at the end of 2024 were also extended through the end of 2025. Given the extension of these production cuts, our expectation is that OPEC+ crude oil production will follow these new targets until early 2025. At that time, we expect that some OPEC+ producers will keep production below the targets in an effort to limit global oil inventory builds.



Although OPEC+ cuts are limiting growth in world oil production, we estimate that production growth outside of OPEC+ will remain strong. Forecast production outside of OPEC+ increases by almost 2.0 million b/d in 2024, led by increasing production from the United States, Canada, Brazil, and increasingly Guyana. We expect that global production of petroleum and other liquid fuels will increase by 0.8 million b/d in 2024, which is 0.2 million b/d less than in last month's STEO because of the extension of voluntary OPEC+ production cuts through 3Q24. We now expect OPEC+ liquid fuels production to decrease by 1.2 million b/d in 2024.



In 2025, we expect that global production of liquid fuels will increase by 2.2 million b/d. As the gradual phaseout of the first round of OPEC+ voluntary production cuts unfolds throughout the year, OPEC+ production increases by 0.7 million b/d combined with 1.4 million b/d of production growth from countries outside of OPEC+.

Global oil consumption

We forecast that global consumption of liquid fuels will increase by 1.1 million b/d in 2024 and 1.5 million b/d in 2025. Most of the expected growth is from non-OECD countries, which increase their liquid fuels consumption by 1.1 million b/d in 2024 and 1.3 million b/d in 2025. The growth in non-OECD consumption is led by China and India, which we expect will increase consumption by a combined 0.6 million b/d in 2024 and 0.7 million b/d in 2025. In addition, we expect an increase in liquid fuels consumption from non-OECD Asia because of increased bunker fuel demand driven by Red Sea disruptions and longer shipping routes for tankers. We expect increases related to bunker fuels will contribute around 10% of total oil consumption growth in 2024. In OECD countries, liquid fuels consumption stays relatively flat in 2024 and increases by 0.3 million b/d in 2025.

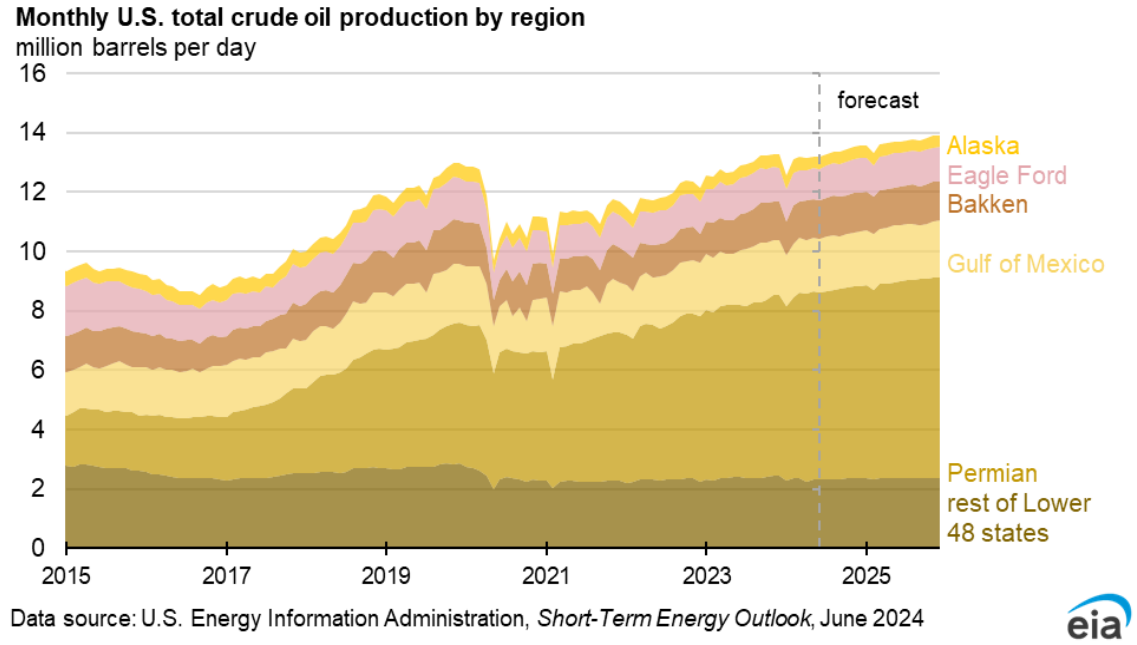
U.S. Petroleum Products

U.S. crude oil production

We forecast U.S. crude oil production will grow by 2% in 2024 and average 13.2 million barrels per day (b/d) for the year and a further 4% in 2025. If our forecast is realized, U.S. crude oil production would set new annual records in both 2024 and 2025.

In Table 4a of the June STEO, we introduce more detail for the regional breakout of our U.S. crude oil production forecast. Comparing the regions, we forecast the Permian region, mostly in Texas, will contribute almost two-thirds of all U.S. crude oil production growth through December 2025. This share

continues a decade-long trend of the Permian region leading crude oil production growth in the United States. The Permian region's proximity to crude oil refining and export terminals on the Gulf Coast, established takeaway capacity, and improved new well productivity support crude oil production growth in the region. The Egale Ford and the Federal Offshore Gulf of Mexico regions will contribute the second- and third-largest shares (15% each).



In Table 10a of the June STEO, we introduce data on drilling productivity metrics formerly published in our *Drilling Productivity Report*. Recent data on crude oil production from newly completed wells suggest operators in the Permian, Eagle Ford, and Bakken regions have noticeably increased their productivity on a per-rig basis over the past 18 months.

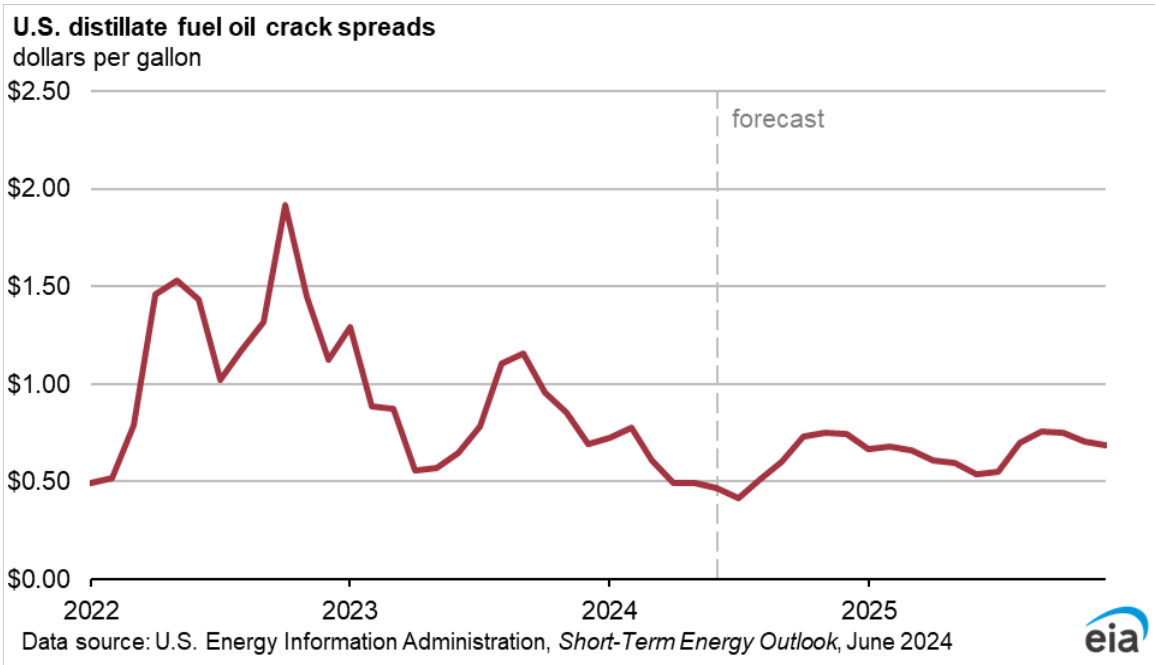
Distillate crack spreads

Distillate crack spreads (the difference between the wholesale price of diesel and crude oil) in April and May averaged almost 50 cents per gallon (gal), close to recent lows seen in January 2022. Less-than-usual distillate consumption over the last few months is the primary cause of recent narrowing in distillate crack spreads. We forecast distillate crack spreads will remain lower than last year through the summer and will then increase toward the end of the year when more distillate is used for heating and the corn harvest. We expect distillate crack spreads to increase to about 75 cents/gal in 4Q24, which is still about 10 cents/gal less than in 4Q23. In 2025, we forecast distillate crack spreads will increase overall as some refinery capacity comes offline and lower-than-average distillate inventories keep upward pressure on prices.

We estimate U.S. consumption of distillate fuel decreased about 5% during the first five months of 2024 compared with the same period last year. However, we expect the United States will consume 1% more distillate fuel in 2H24 than it did in 2H23, as some of the factors that have been limiting consumption early this year recede. On-highway trucking—the single-largest end use of distillate fuel oil—has been

subdued since the start of the year as measured by the American Trucking Association's truck tonnage index. We expect manufacturing activity will increase over the next 18 months, supporting trucking demand and increasing distillate consumption.

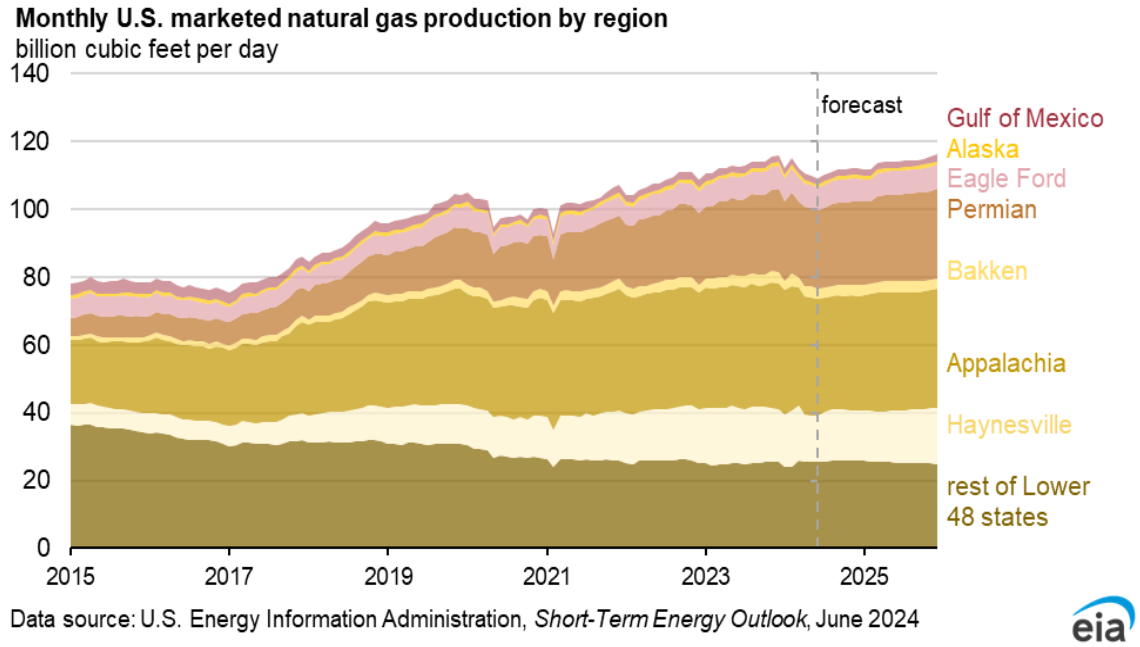
At the same time, we expect increasing substitution of biofuels in place of petroleum distillate will continue as renewable diesel production increases, which could limit consumption of petroleum-based distillate. Renewable diesel and biodiesel grew as a share of total distillate consumption from 5% in 2021 to 7% in 2023. We forecast the share of distillate consumption made up of biofuels will increase to 9% in 2024.



Natural Gas

Natural gas production

With the introduction of new natural gas production data tables in this month's STEO, we now provide data and analysis for U.S. marketed natural gas production by region in the Lower 48 states. Table 5a includes historical and forecast production data for the Appalachia, Bakken, Eagle Ford, Haynesville, and Permian regions specifically. The *rest of Lower 48 states* category includes U.S. producing areas outside these regions.



We expect U.S. marketed natural gas production to be down 1% this year, led by a 9% decline in the Haynesville region and 4% decline in the Appalachia region as some producers have limited development and production because of low natural gas prices.

We estimate U.S. marketed natural gas production averaged 110 billion cubic feet per day (Bcf/d) in May, a 3% decrease from 1Q24. Production in the Haynesville region was 15% lower in May than in 1Q24, and production in the Appalachia region decreased 3%. 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.

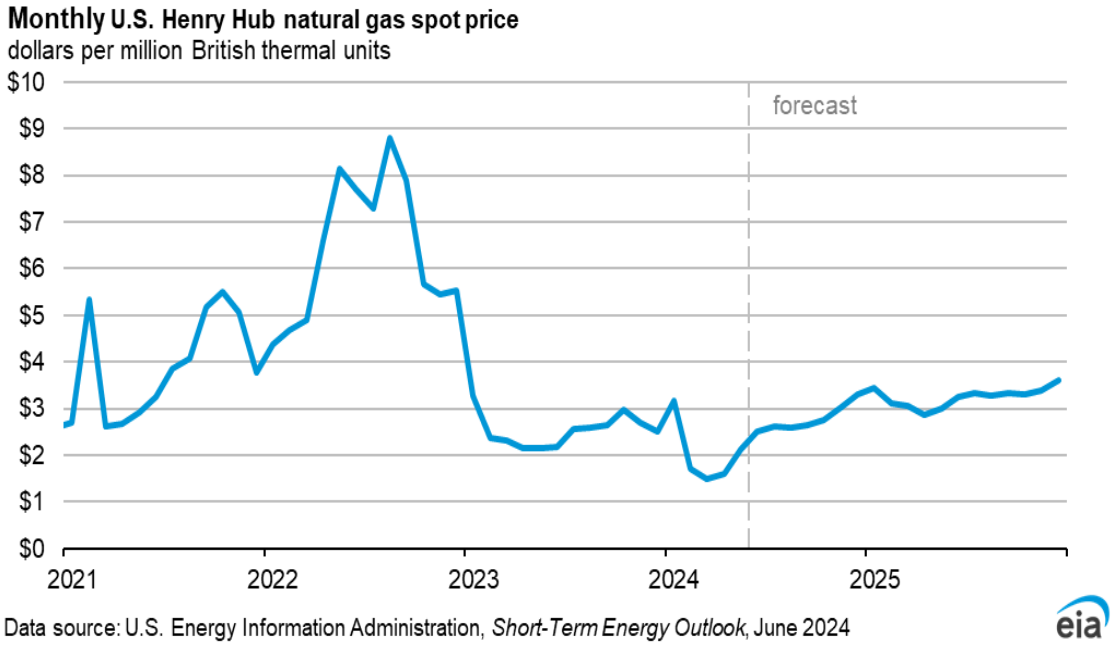
Natural gas production in the Permian region, which is mostly associated natural gas from oil wells, is driven by crude oil production. Unlike regions that focus more on natural gas production not associated with oil wells, natural gas production in the Permian region remained almost flat in May compared with 1Q24 as crude oil production in the Permian continued to grow.

We expect marketed natural gas production to increase by 2% in 2025, with production rising in most regions in the Lower 48 states. The increase in U.S. natural gas production in 2025 is the result of a combination of higher natural gas prices, which will incentivize more drilling in the natural gas-producing Appalachia and Haynesville regions, and more associated natural gas production in the Permian region. Pipeline takeaway capacity additions in the Northeast and Permian regions will support increased production.

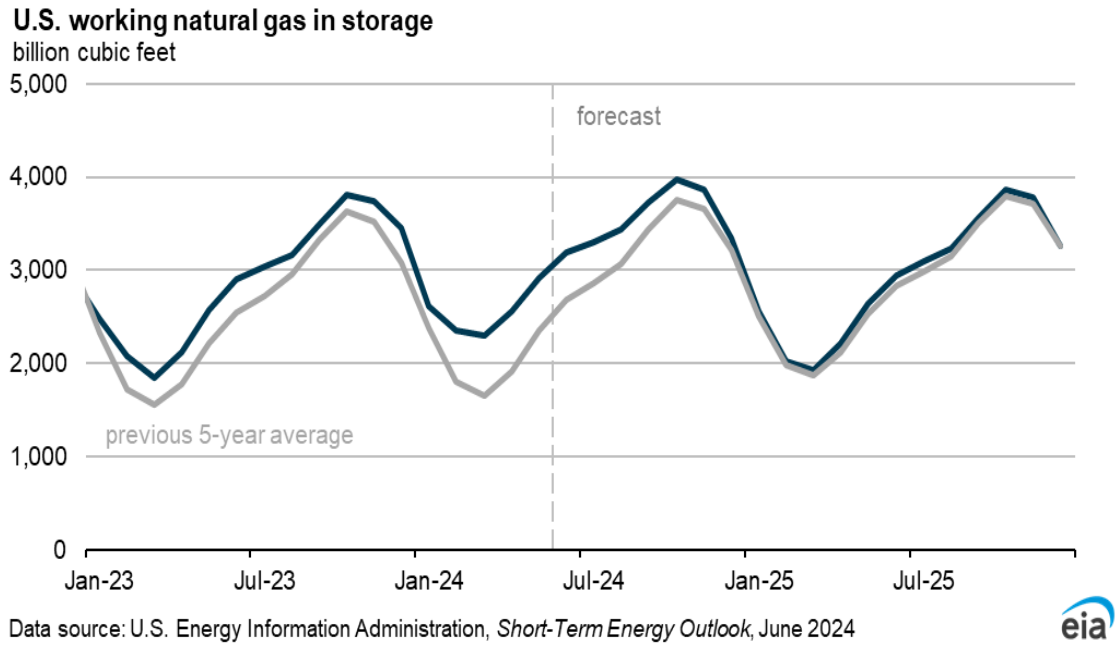
Natural gas prices and storage

We expect the U.S. benchmark Henry Hub natural gas spot price to rise in the summer, averaging just over $2.60 per million British thermal units (MMBtu) in 3Q24, up from an average of $2.12/MMBtu in May. Because of relatively flat production through the second half of 2024 and a seasonal increase in

demand from the electric power sector, we expect storage injections will continue to be below the five-year average (2019–2023), helping support higher prices. Storage injections two months into this injection season (April–October) have averaged 12% below the five-year average injections for this period.



Nevertheless, U.S. storage inventories are starting the summer with more natural gas than usual. Although we forecast an increase in natural gas prices for the summer months as storage inventories rise by less than the five-year average, we expect inventories will remain above the five-year average and keep prices below $3.00/MMBtu on average in 3Q24, similar to the $2.59/MMBtu average in 3Q23. Natural gas storage inventories were 24% above the five-year average at the end of May, and we forecast storage inventories to end the summer injection season on October 31 at 6% above the five-year average. If U.S. natural gas production is lower than our forecast and consumption in the electric power sector to meet air-conditioning demand increases more than we expect, natural gas prices could be higher than forecast.



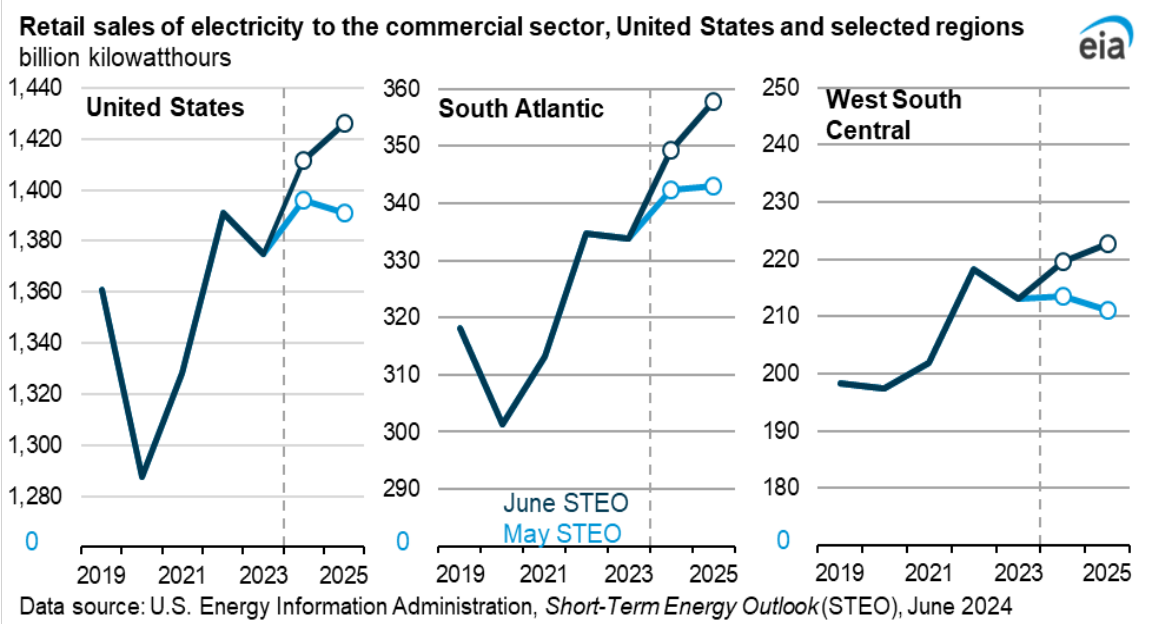
Electricity, Coal, and Renewables

Electricity consumption

We forecast that consumption of electricity in the United States will increase by 3% in 2024 and by 2% in 2025. This growth reflects more demand for air conditioning based on our assumption of warmer temperatures in the forecast, along with more electricity use related to the expansion of data centers.

We expect that U.S. retail sales of electricity to residential end-use customers in 2024 will be 3% higher than 2023 as a result of more electricity use for air conditioning this summer and more heating demand in the winter months. Residential electricity sales grow by a further 2% in 2025.

We forecast that retail sales of electricity to customers in the U.S. commercial and industrial sectors will each grow by about 3% in 2024, followed by a 1% increase in commercial electricity sales and a 4% increase in industrial sales in 2025. We have revised our electricity consumption forecasts slightly upwards to reflect adjustments to our expectations of power demand from data center customers. In the May STEO, we had forecast U.S. commercial sector electricity sales to increase less than 2% in 2024 and decline slightly in 2025.



The largest revisions to the forecast are in the South Atlantic and West South Central regions, which together account for 40% of U.S. commercial electricity demand. We now expect that commercial consumption in the South Atlantic will rise by 5% in 2024 and 2% in 2025, while West South Central demand will increase 3% this year and 1% next year. Data center developments are evolving rapidly, and we plan to re-evaluate our upcoming forecasts as we receive more information.

Electricity generation

We expect that U.S. electricity generation will grow by 3%, or 130 billion kilowatthours (BkWh), in 2024 and by 1%, or 40 BkWh, in 2025. The largest source of increase in power generation is coming from renewable energy sources, with solar alone accounting for more than 70% of the increase in U.S. generation. We expect that the U.S. electric power sector will use solar energy to produce 5% of all U.S. generation in 2024 and 7% in 2025, up from a generation share of 4% in 2023. Wind power's contribution to generation growth is beginning to flatten. Although we expect wind generation to increase by 5% in 2024 and 3% in 2025, because of growth in other generation sources, its share remains at 11% of total generation in both 2024 and 2025, similar to 2023.

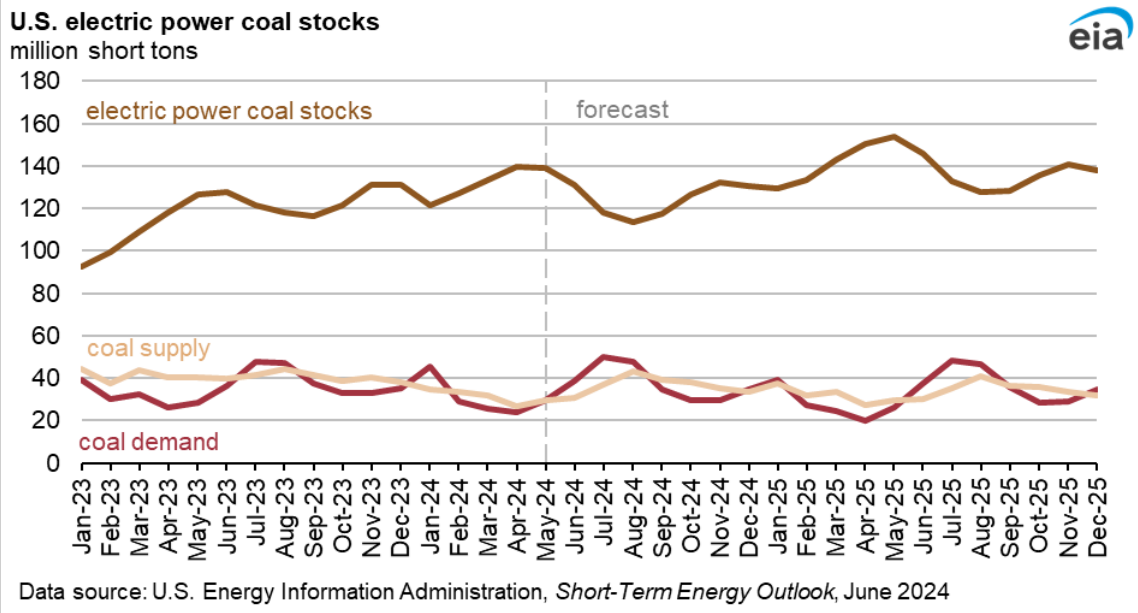
Natural gas provides a forecast 42% of U.S. generation in 2024, the largest share and about the same as last year. We forecast the natural gas share to fall to 41% in 2025 in response to growing generation from renewables and relatively little new natural gas-fired capacity coming online. The forecast share of generation from coal falls from 17% in 2023 to 16% this year and 15% in 2025, with 15 gigawatts of coal-fired capacity set to be retired through the end of next year.

Coal markets

With an upward revision in our forecast of U.S. electricity demand as well as expected increases in the price of natural gas, we forecast that coal consumption by the electric power sector will total more than 380 million short tons (MMst) in 2024 and about 360 MMst in 2025. This amount is still less than electric

power consumption of 387 MMst in 2023, but it represents a slight increase from our forecast in the May STEO.

We expect that the increase in U.S. consumption of coal this summer will reduce electric power coal stocks to between 110 MMst and 115 MMst in August before stocks begin to accumulate again, reaching more than 130 MMst in December 2024 and almost 140 MMst in December 2025. Meanwhile, we forecast U.S. coal production will total almost 510 MMst in 2024 and fall to 500 MMst in 2025.



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

Export traffic has returned to the Port of Baltimore. As of June 10, the full 700-foot-wide and 50-foot-depth channel is available for commercial vessels. With the U.S. Census Bureau reporting another strong month of metallurgical exports in April, we have increased our forecast of metallurgical exports slightly to 50 MMst in 2024. We expect all coal exports to total more than 100 MMst in 2024, up 3% from 2023 and slightly more than our May STEO forecast, with exports again increasing about 3% in 2025.

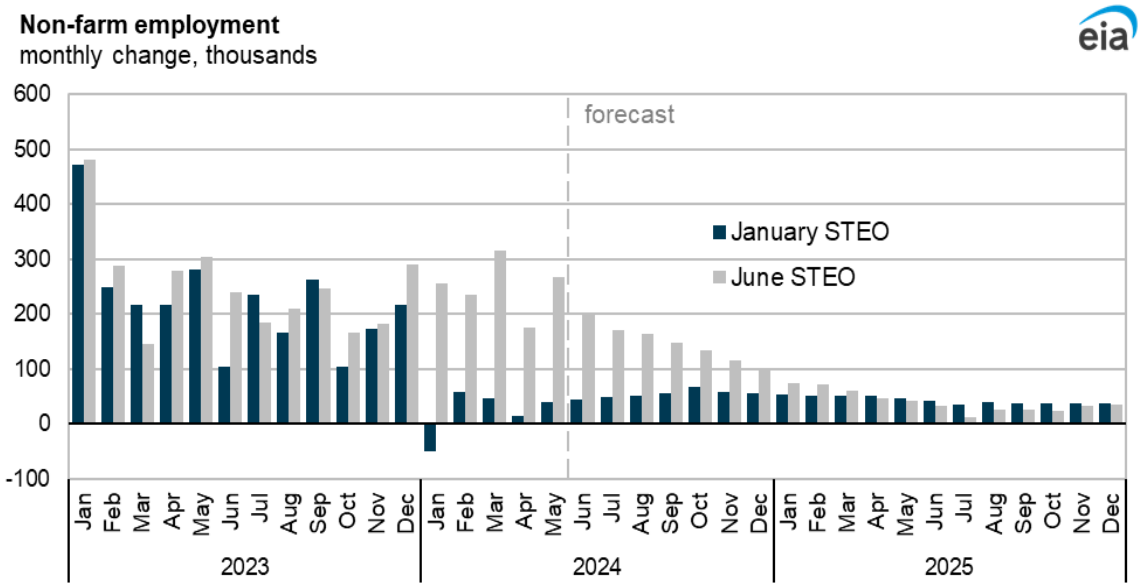
Economy, Weather, and CO_2

U.S. macroeconomics

Our forecast assumes real GDP will grow by 2.5% in the United States in 2024, unchanged from the forecast in May. We revised the forecast for 2025 lower by 0.3 percentage points to 1.6%. According to the U.S. Bureau of Economic Analysis, GDP grew at an annual rate of 1.3% in 1Q24, slower than the annual growth rates of 4.9% in 3Q23 and 3.4% in 4Q23.

Despite U.S. GDP growth slowing over the forecast, the labor market continues to show strength. In the January 2024 STEO, we had assumed that about 200,000 jobs would be added to U.S. non-farm employment in the first five months of 2024. However, more than 1.2 million jobs have been added over that period, according to the U.S. Bureau of Labor Statistics, and our forecast assumes 1.0 million more jobs will be added by the end of this year. In contrast, we expect that employment growth will slow in 2025, increasing by less than 500,000 jobs from December 2024 to December 2025. Accompanying

slowing employment growth, our forecast assumes the U.S. unemployment rate will remain near 3.8% through 2024 and rise above 4.0% by the end of 2025.



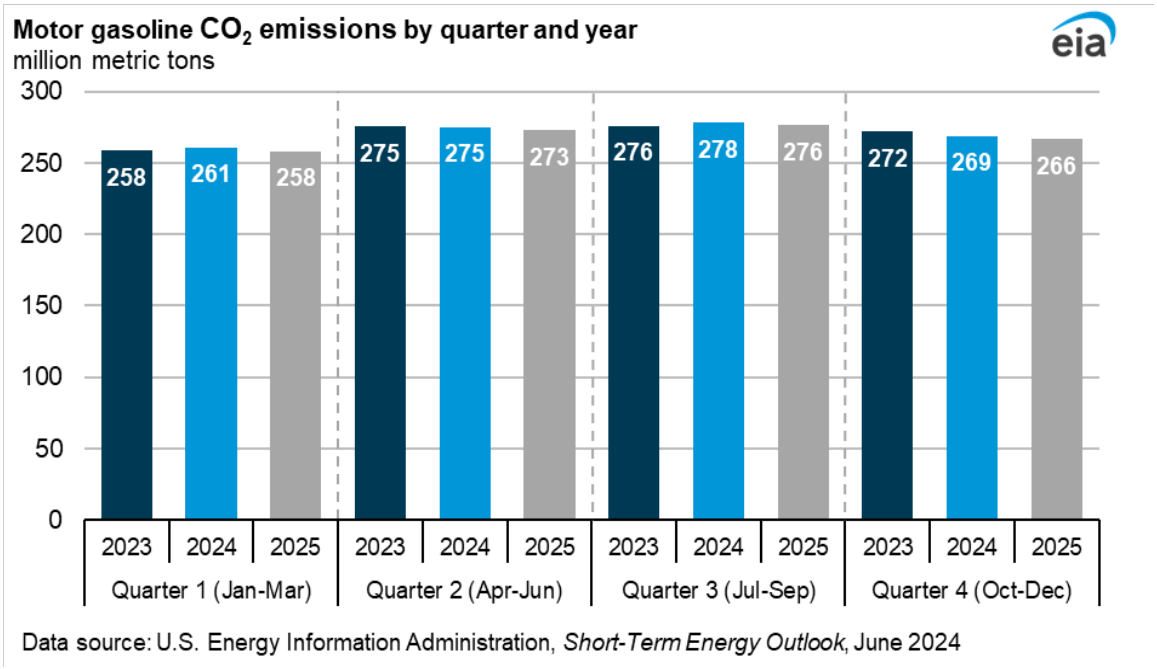
Data sources: U.S. Energy Information Administration, *Short-Term Energy Outlook* (STEO), June 2024, and Bureau of Labor Statistics, *Employment Situation Summary*

The macroeconomic forecasts are based on S&P Global's macroeconomic model. We incorporate STEO energy price forecasts into the model to obtain the final macroeconomic assumptions.

Emissions

We expect U.S. energy-related carbon dioxide (CO_2) emissions to be relatively unchanged in 2024 from 2023 and to decrease by almost 1% in 2025. We forecast CO_2 emissions from natural gas rise by 1% in 2024, offsetting a similar decline in coal emissions. Petroleum emissions are unchanged as increasing jet fuel consumption offsets falling emissions from diesel fuel and gasoline. We expect slightly less total CO_2 emissions in 2025 compared with this year.

CO_2 emissions vary for some fuels seasonally as well as annually. One notable example is motor gasoline, which makes up about half of U.S. energy-related petroleum emissions. Although we do not expect annual emissions from motor gasoline to change significantly over the forecast, they do vary noticeably within the year. Namely, motor gasoline emissions are typically highest during the summer season (the second and third quarters of the year) because this is a popular time for vacation and travel. We forecast 6% more motor gasoline CO_2 emissions for this period than in the first quarter and 3% more than in the fourth quarter for both 2024 and 2025.



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

Weather

Our forecast assumes a warmer summer (June–September) in 2024 than in 2023, translating to more U.S. cooling degree days (CDDs). We expect 246 cooling degree days in June, 17% more CDDs than in June 2023, with 5% more CDDs in the entire summer of 2024 than in 2023. We also expect a warmer summer in 2025 with about 3% more CDDs during the summer in 2025 than during the same period in 2024. We expect a slightly cooler heating season this winter (November–March), with 6% more heating degree days (HDDs) overall. We expect 9% more HDDs in 4Q24 than in 4Q23 and 5% more HDDs in 1Q25 than in 1Q24.

Short-Term Energy Outlook
Chart Gallery

June 11, 2024

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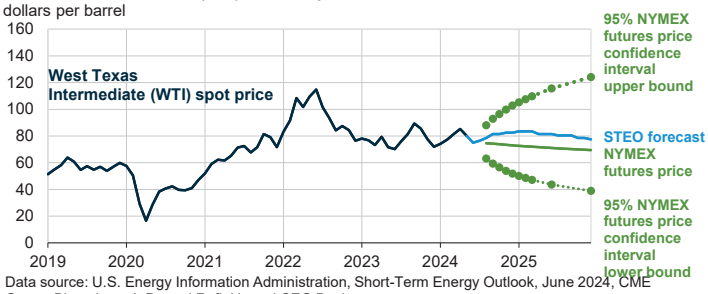
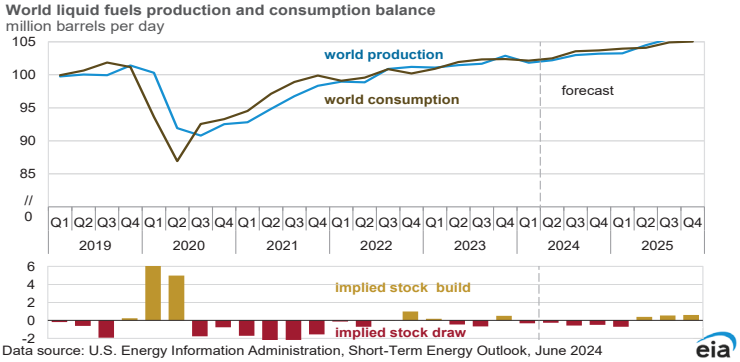
West Texas Intermediate (WTI) crude oil price and NYMEX confidence intervals



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

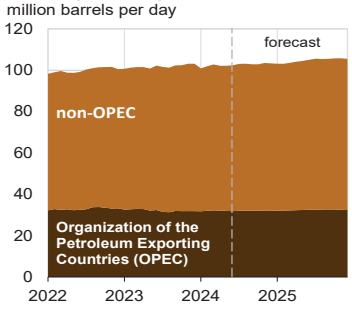
Note: Confidence interval derived from options market information for the five trading days ending June 6, 2024. Intervals not calculated for months with sparse trading in near-the-money options contracts.

World liquid fuels production and consumption balance

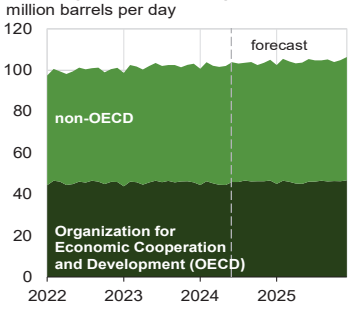


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024

World liquid fuels production
million barrels per day

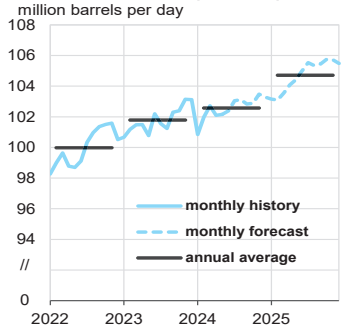


World liquid fuels consumption
million barrels per day

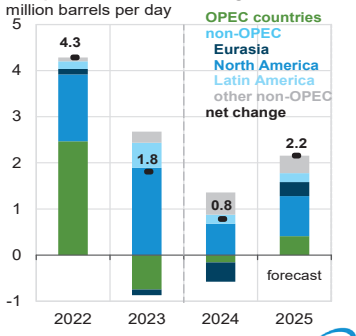


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024

World crude oil and liquid fuels production
million barrels per day

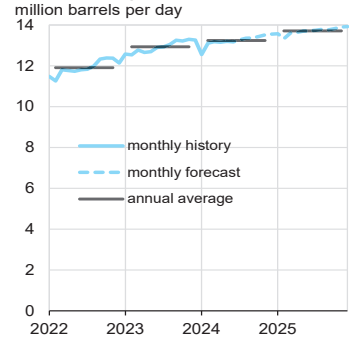


Components of annual change
million barrels per day

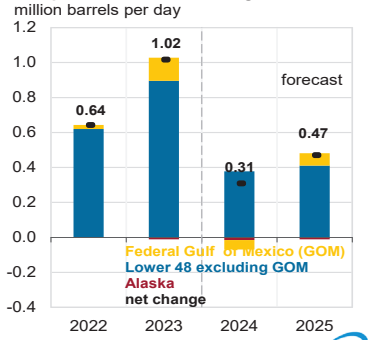


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024

U.S. crude oil production
million barrels per day

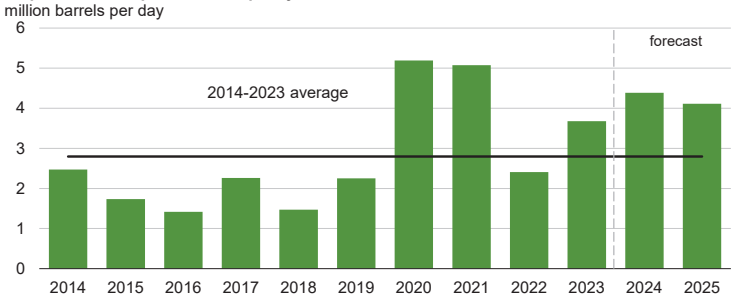


Components of annual change
million barrels per day



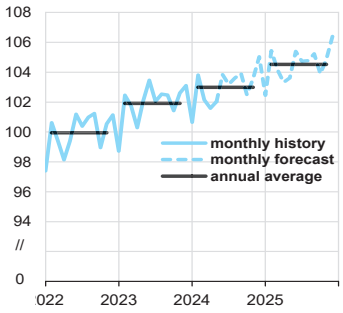
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024

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

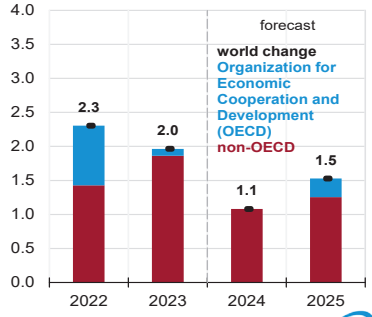


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024
Note: Black line represents 2014-2023 average (2.8 million barrels per day).

World liquid fuels consumption
million barrels per day

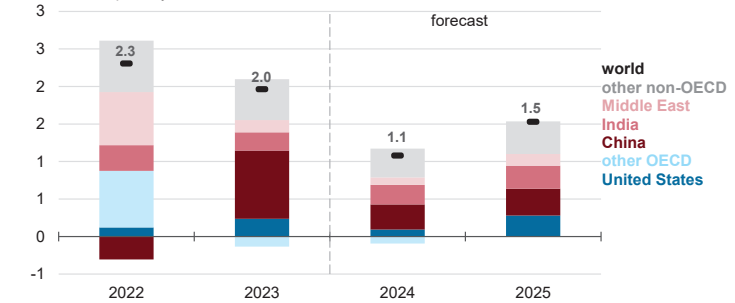


Components of annual change
million barrels per day



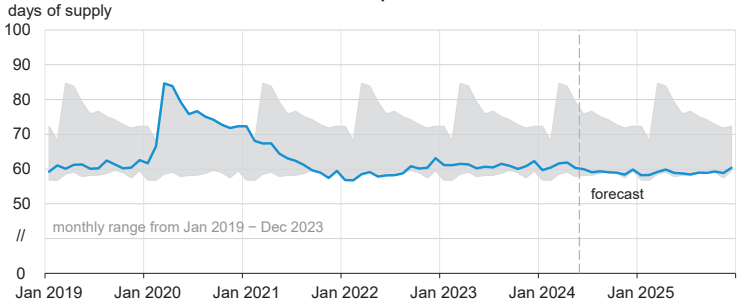
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024

Annual change in world liquid fuels consumption
million barrels per day



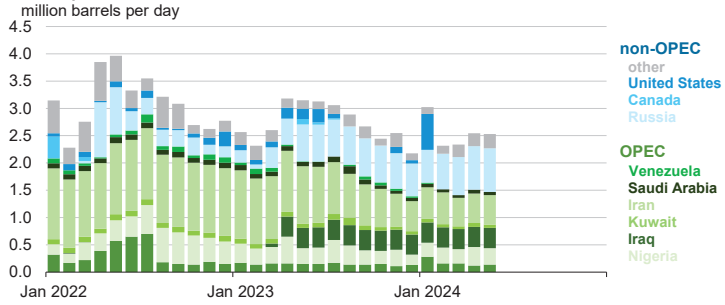
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024

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



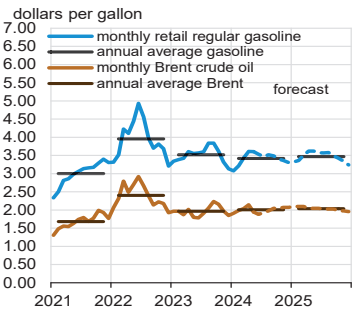
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024

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

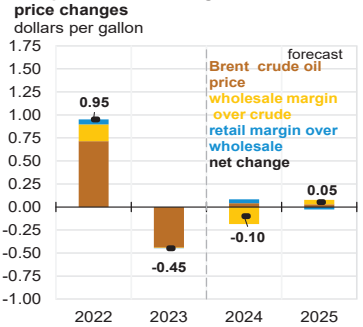


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024

U.S. gasoline and crude oil prices

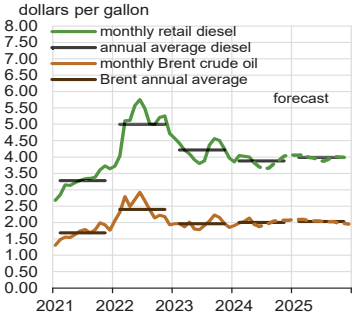


Components of annual gasoline price changes

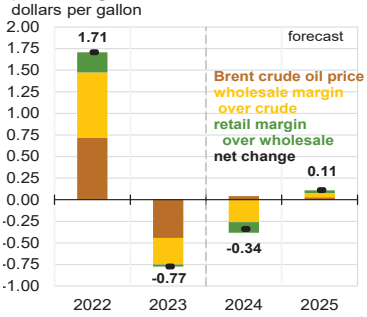


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024, and Refinitiv an LSEG Business

U.S. diesel and crude oil prices

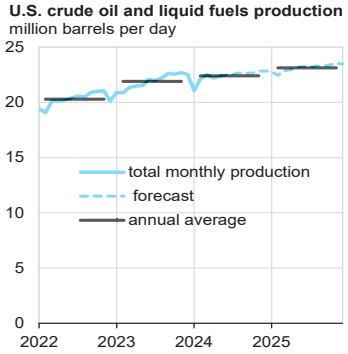


Components of annual diesel price changes

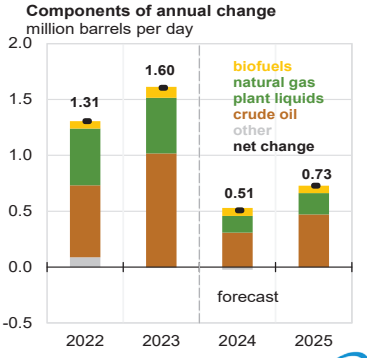


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024, and Refinitiv an LSEG Business

U.S. crude oil and liquid fuels production

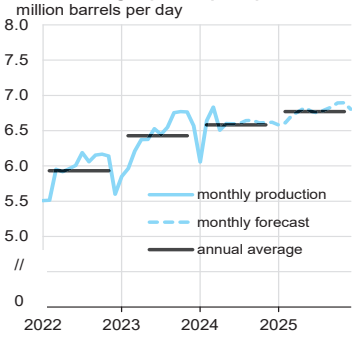


Components of annual change

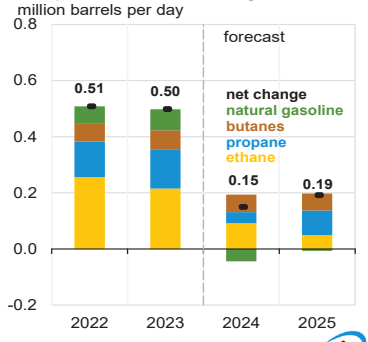


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024

U.S. natural gas plant liquids production

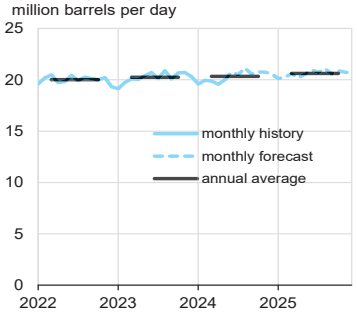


Components of annual change

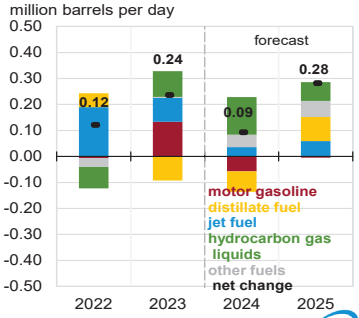


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024

U.S. liquid fuels product supplied (consumption)

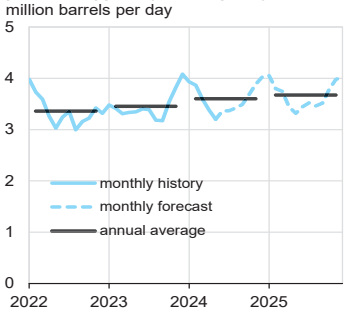


Components of annual change

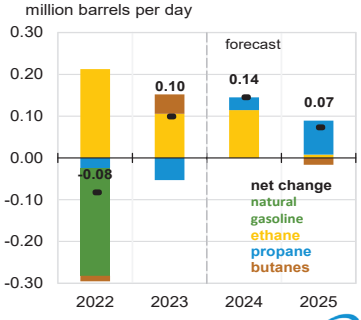


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024

U.S. hydrocarbon gas liquids product supplied (consumption)

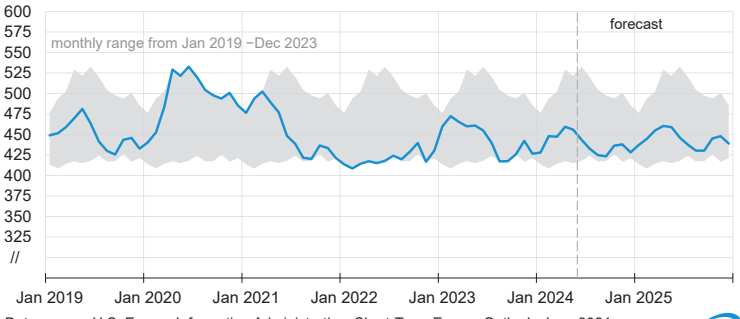


Components of annual change



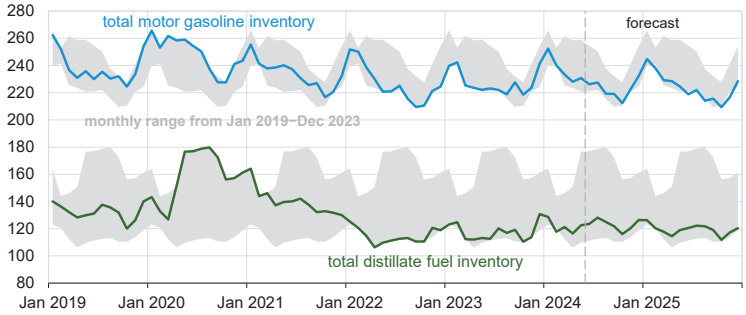
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024

U.S. commercial crude oil inventories



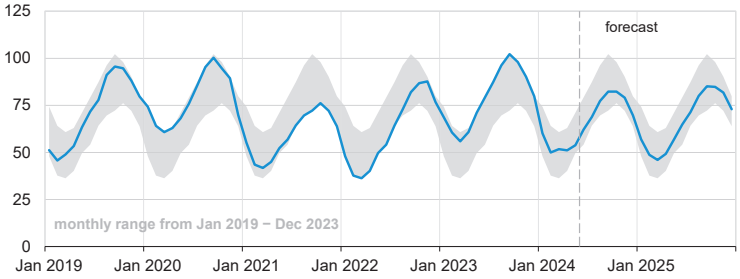
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024

U.S. gasoline and distillate inventories
million barrels



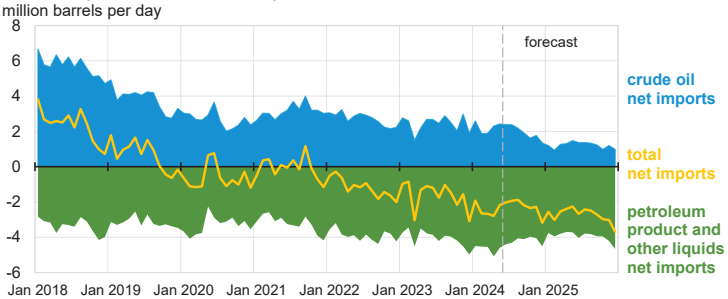
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024

U.S. commercial propane inventories
million barrels



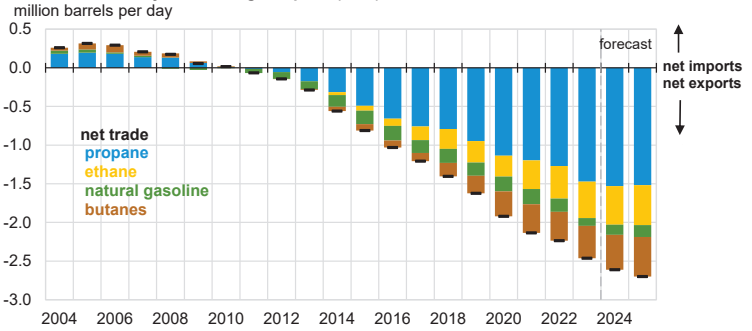
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024
Note: Excludes propylene.

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



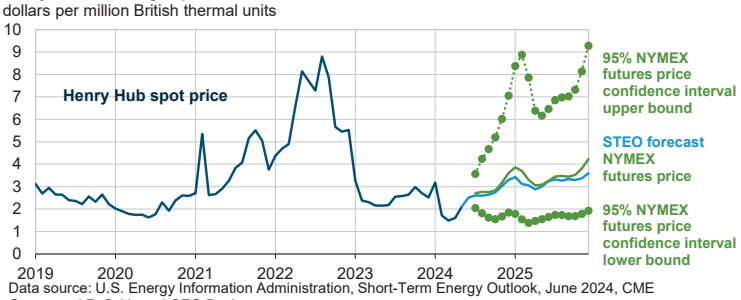
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024
Note: Petroleum product and other liquids include: gasoline, distillate fuels, hydrocarbon gas liquids, jet fuel, residual fuel oil, unfinished oils, other hydrocarbons/oxygenates, and other oils.

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



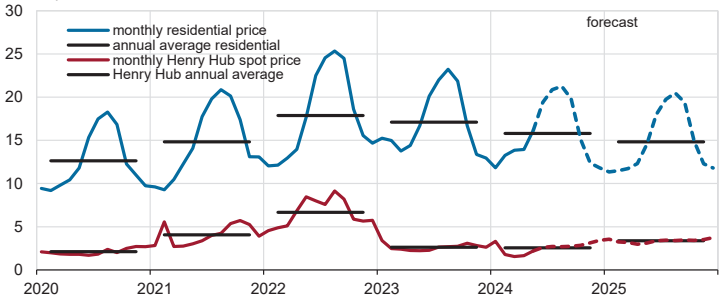
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024

Henry Hub natural gas price and NYMEX confidence intervals
dollars per million British thermal units



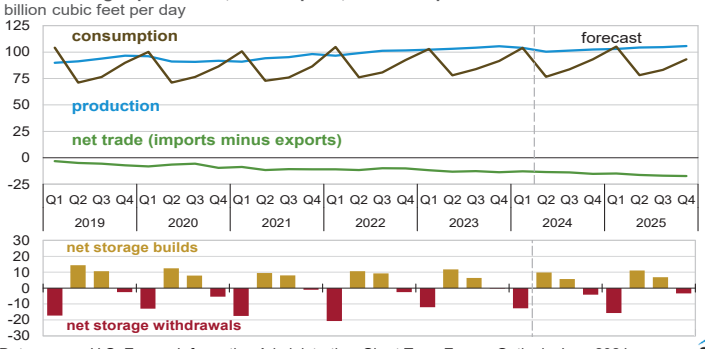
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024, CME Group, and Refinitiv an LSEG Business
Note: Confidence interval derived from options market information for the five trading days ending June 6, 2024. Intervals not calculated for months with sparse trading in near-the-money options contracts.

U.S. natural gas prices
dollars per thousand cubic feet



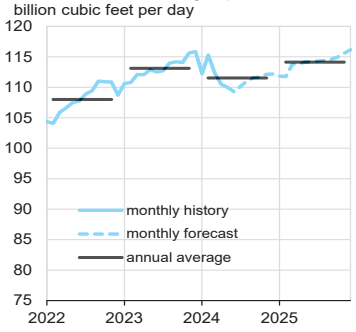
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024, and Refinitiv an LSEG Business

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

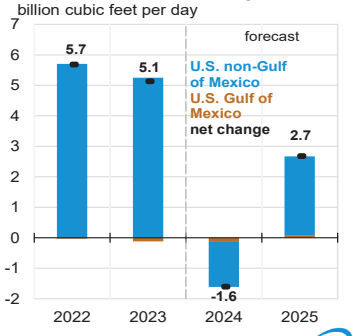


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024

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

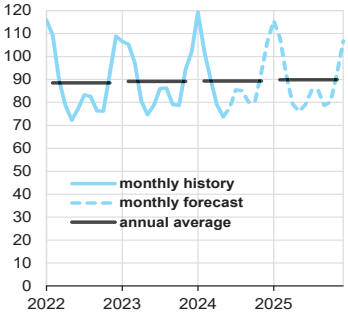


Components of annual change
billion cubic feet per day

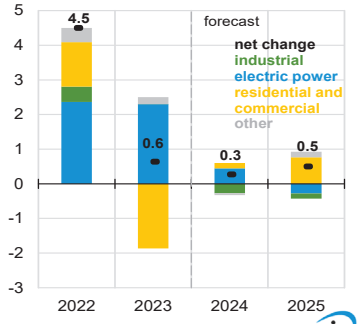


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024

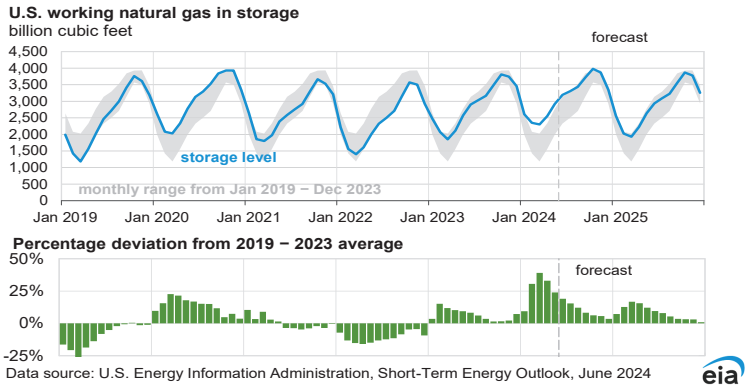
U.S. natural gas consumption
billion cubic feet per day

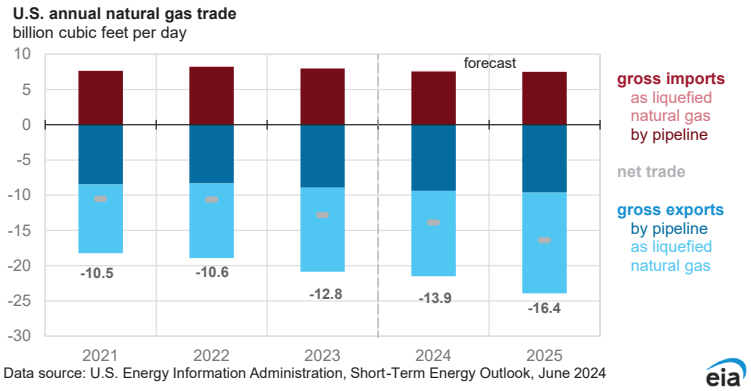


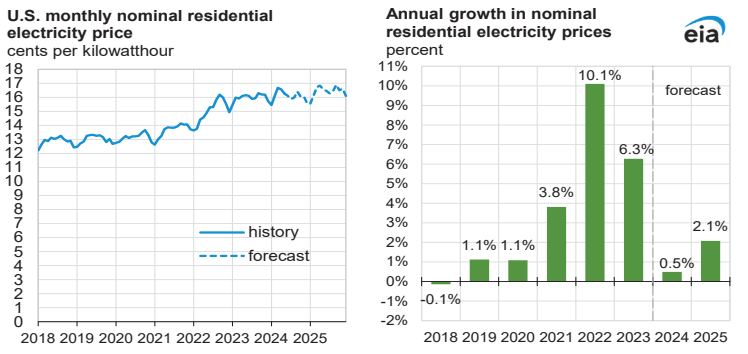
Components of annual change
billion cubic feet per day

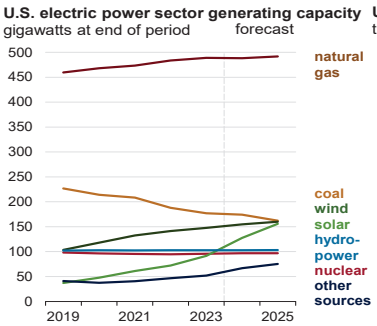


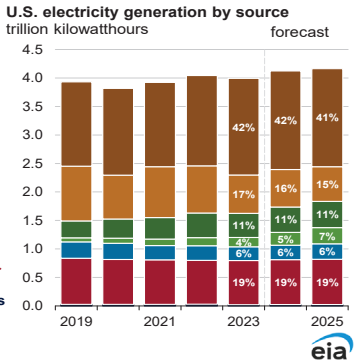
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024

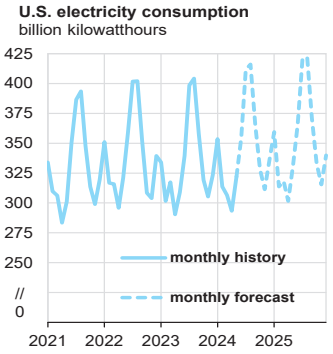

U.S. working natural gas in storage
billion cubic feet
forecast
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
storage level
monthly range from Jan 2019 – Dec 2023
Jan 2019
Jan 2020
Jan 2021
Jan 2022
Jan 2023
Jan 2024
Jan 2025
Percentage deviation from 2019 – 2023 average
50%
25%
0%
-25%
forecast
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024
eia

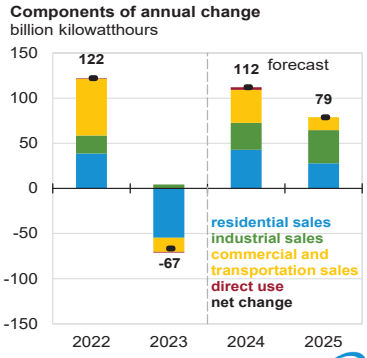

U.S. annual natural gas trade
billion cubic feet per day
10
5
0
-5
-10
-15
-20
-25
-30
forecast
-10.5
-10.6
-12.8
-13.9
-16.4
2021
2022
2023
2024
2025
gross imports
as liquefied natural gas
by pipeline
net trade
gross exports
by pipeline
as liquefied natural gas
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024
eia


U.S. monthly nominal residential electricity price
cents per kilowatthour
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
history
forecast
2018 2019 2020 2021 2022 2023 2024 2025
Annual growth in nominal residential electricity prices
percent
eia
11%
10%
9%
8%
7%
6%
5%
4%
3%
2%
1%
0%
-1%
-2%
-0.1%
1.1%
1.1%
3.8%
10.1%
6.3%
0.5%
2.1%
forecast
2018 2019 2020 2021 2022 2023 2024 2025
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024

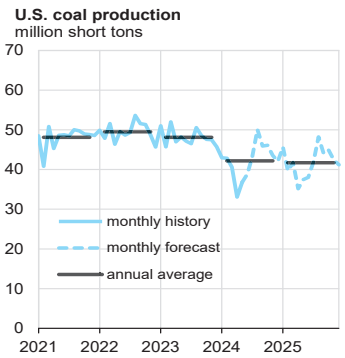


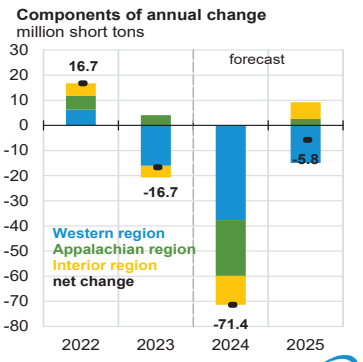




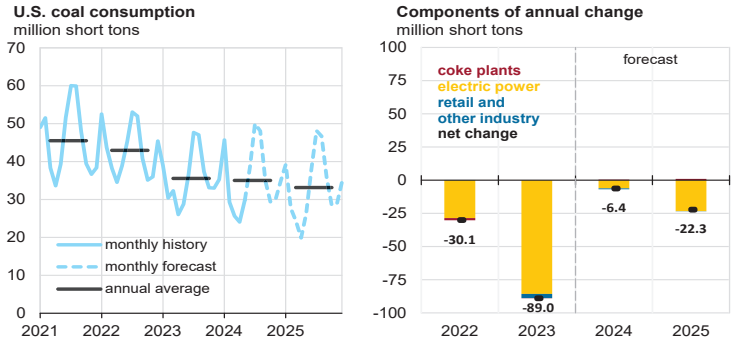


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024

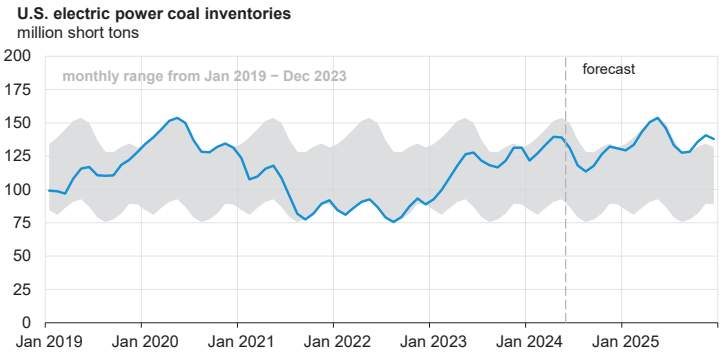




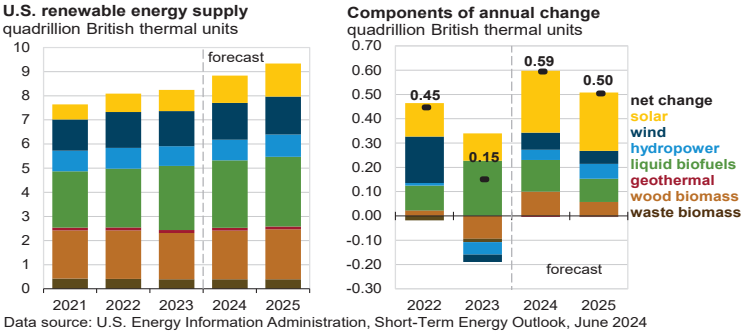
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024



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



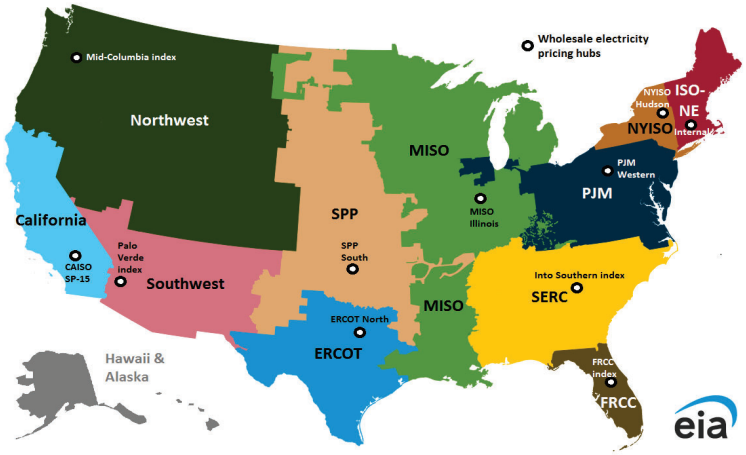
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024



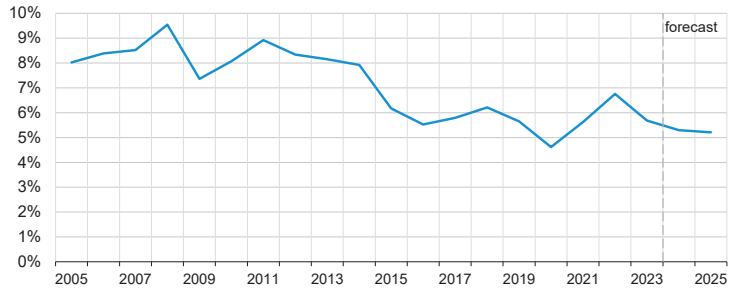
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024

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

Short-Term Energy Outlook electricity supply regions



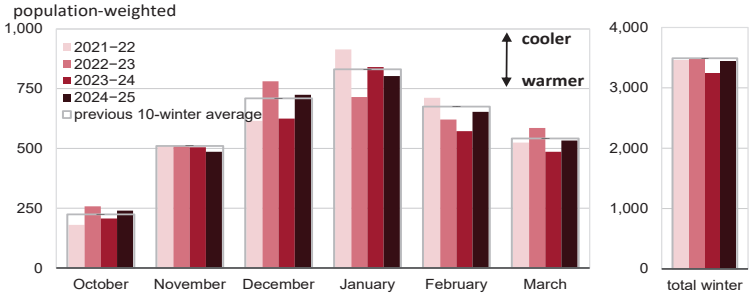
U.S. annual energy expenditures
share of gross domestic product



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

eia

U.S. winter heating degree days
population-weighted

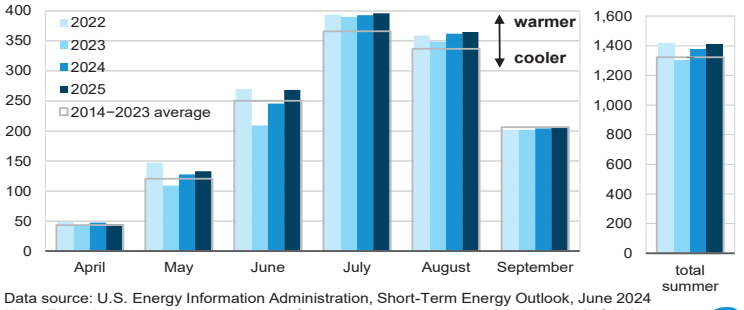


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024

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

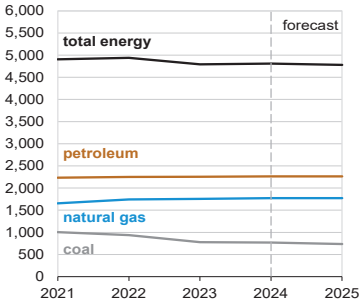
eia

U.S. summer cooling degree days
population-weighted

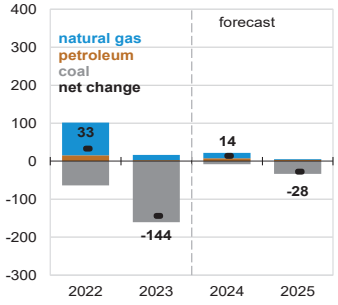


Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024
Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data. Projections reflect NOAA's 14-16 month outlook.

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

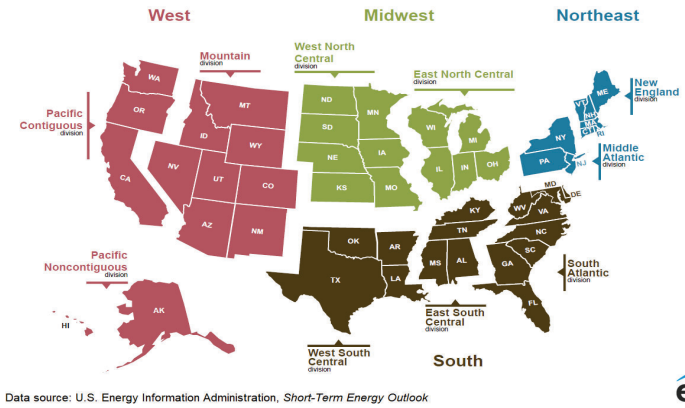


Components of annual change
million metric tons



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

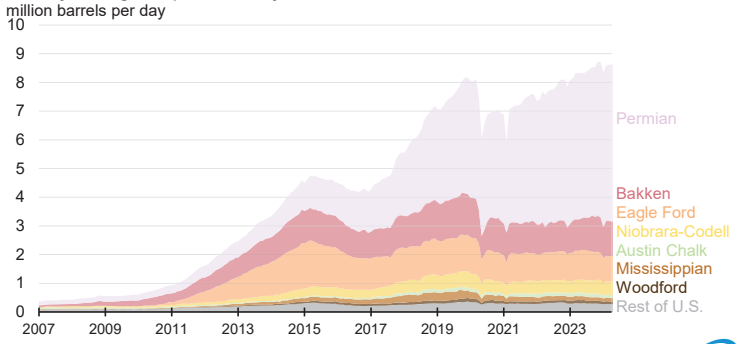
U.S. Census regions and divisions



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

Monthly U.S. tight oil production by formation

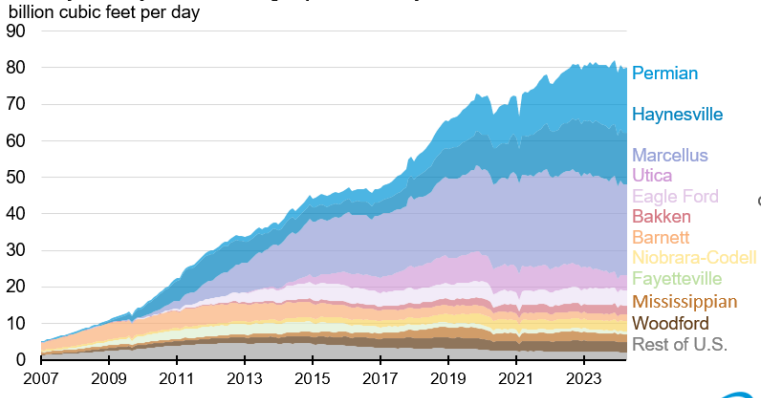
million barrels per day



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

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

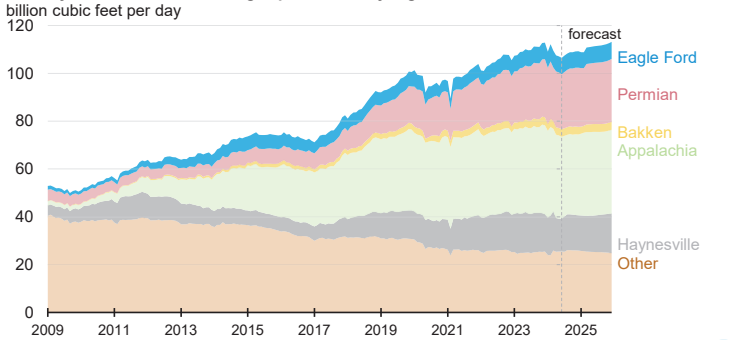
billion cubic feet per day



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

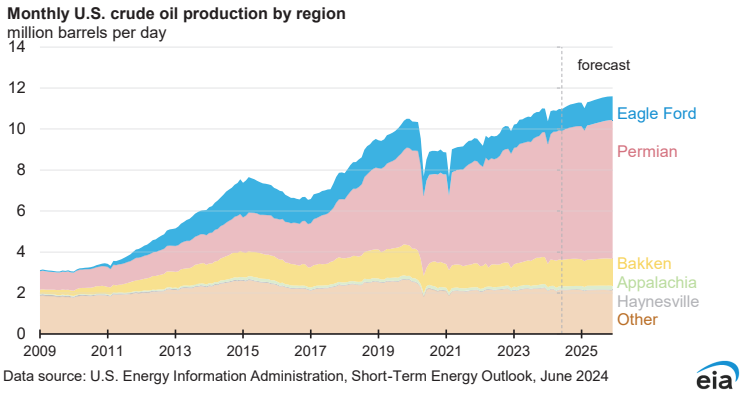

Monthly U.S. crude oil production by region
million barrels per day
14
12
10
8
6
4
2
0
2009
2011
2013
2015
2017
2019
2021
2023
2025
forecast
Eagle Ford
Permian
Bakken
Appalachia
Haynesville
Other
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, June 2024
eia

Table 1. U.S. Energy Markets Summary

U.S. Energy Information Administration | Short-Term Energy Outlook - June 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)	12.63	12.75	13.07	13.26	12.94	13.17	13.33	13.50	13.51	13.68	13.76	13.88	12.93	13.24	13.71
Dry Natural Gas Production															
(billion cubic feet per day)	102.3	103.2	104.1	105.6	103.9	100.4	101.4	102.5	102.9	104.3	104.7	105.7	103.8	102.1	104.4
Coal Production															
(million short tons)	149	142	146	141	126	109	139	132	127	111	134	129	577	506	500
Energy Consumption															
Liquid Fuels															
(million barrels per day)	19.66	20.38	20.37	20.56	19.80	20.11	20.73	20.70	20.33	20.57	20.80	20.76	20.25	20.34	20.62
Natural Gas															
(billion cubic feet per day)	103.0	78.0	83.9	91.7	104.0	76.7	83.6	93.2	105.1	78.1	83.2	93.2	89.1	89.4	89.9
Coal (b)															
(million short tons)	102	91	132	101	101	92	133	94	91	84	131	92	427	420	398
Electricity															
(billion kilowatt hours per day)	10.59	10.32	12.62	10.30	10.70	10.66	12.97	10.60	11.01	10.97	13.19	10.74	10.96	11.24	11.48
Renewables (c)															
(quadrillion Btu)	2.04	2.10	2.05	2.04	2.10	2.28	2.24	2.22	2.26	2.43	2.35	2.29	8.24	8.83	9.34
Total Energy Consumption (d)															
(quadrillion Btu)	24.12	22.01	23.73	23.73	24.50	22.22	24.09	23.95	24.57	22.36	24.12	24.02	93.59	94.76	95.06
Energy Prices															
Crude Oil West Texas Intermediate Spo															
(dollars per barrel)	75.96	73.49	82.25	78.63	77.50	80.32	78.75	82.14	83.50	81.50	80.50	78.16	77.58	79.70	80.88
Natural Gas Henry Hub Spot															
(dollars per million Btu)	2.65	2.16	2.59	2.74	2.13	2.08	2.61	3.02	3.20	3.04	3.31	3.42	2.54	2.46	3.24
Coal															
(dollars per million Btu)	2.57	2.49	2.51	2.51	2.50	2.51	2.51	2.46	2.46	2.44	2.44	2.40	2.52	2.49	2.43
Macroeconomic															
Real Gross Domestic Product															
(billion chained 2017 dollars - SAAR)	22,112	22,225	22,491	22,679	22,769	22,894	23,016	23,108	23,187	23,262	23,345	23,444	22,377	22,947	23,309
Percent change from prior year	1.7	2.4	2.9	3.1	3.0	3.0	2.3	1.9	1.8	1.6	1.4	1.5	2.5	2.5	1.6
GDP Implicit Price Deflator															
(Index, 2017=100)	121.3	121.8	122.8	123.3	124.2	125.0	125.7	126.6	127.6	128.3	129.0	129.8	122.3	125.4	128.7
Percent change from prior year	5.3	3.5	3.2	2.6	2.5	2.6	2.4	2.7	2.7	2.7	2.7	2.5	3.6	2.5	2.6
Real Disposable Personal Income															
(billion chained 2017 dollars - SAAR)	16,663	16,797	16,820	16,902	16,947	17,023	17,126	17,215	17,356	17,493	17,629	17,745	16,795	17,078	17,556
Percent change from prior year	3.7	4.9	4.1	4.1	1.7	1.3	1.8	1.8	2.4	2.8	2.9	3.1	4.2	1.7	2.8
Manufacturing Production Index															
(Index, 2017=100)	99.9	100.2	100.0	99.7	99.7	100.2	100.6	100.9	101.0	101.2	101.4	101.9	100.0	100.3	101.3
Percent change from prior year	-0.2	-0.7	-0.9	-0.3	-0.2	0.0	0.6	1.1	1.3	1.0	0.8	1.0	-0.5	0.4	1.0
Weather															
U.S. Heating Degree-Days	1,922	486	61	1,336	1,899	416	74	1,450	1,989	469	74	1,443	3,806	3,839	3,975
U.S. Cooling Degree-Days	68	362	940	104	53	421	959	105	51	446	967	106	1,474	1,538	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.

- = no data available

Notes: EIA completed modeling and analysis for this report on June 6, 2024.

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

Prices are not adjusted for inflation.

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: *Petroleum Supply Monthly* , DOE/EIA-0109; *Petroleum Supply Annual* , DOE/EIA-0340/2; *Weekly Petroleum Status Report* , DOE/EIA-0208; *Petroleum Marketing Monthly* , DOE/EIA-0380; *Natural Gas Monthly* , DOE/EIA-0130; *Electric Power Monthly* , DOE/EIA-0226; *Quarterly Coal Report* , DOE/EIA-0121; and *International Petroleum Monthly* , DOE/EIA-0520.

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

Forecasts: EIA Short-Term Integrated Forecasting System. U.S. macroeconomic forecasts are based on the S&P Global model of the U.S. Economy.

Weather forecasts from National Oceanic and Atmospheric Administration and Energy Information Administration.

Table 2. Energy Prices

U.S. Energy Information Administration | Short-Term Energy Outlook - June 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	80.32	78.75	82.14	83.50	81.50	80.50	78.16	77.58	79.70	80.88
Brent Spot Average	81.04	78.02	86.64	83.93	82.96	83.71	83.25	86.64	88.00	86.00	85.00	82.66	82.41	84.15	85.38
U.S. Imported Average	69.58	71.08	80.97	76.14	72.65	77.34	75.88	79.40	80.75	78.75	77.75	75.44	74.62	76.14	78.22
U.S. Refiner Average Acquisition Cost	74.44	73.99	82.38	79.38	76.56	79.58	78.27	81.67	83.00	81.00	80.00	77.66	77.64	79.03	80.38
U.S. Liquid Fuels (cents per gallon)															
Wholesale Petroleum Product Prices															
Gasoline	262	265	296	233	245	258	251	244	254	270	264	241	264	250	257
Diesel Fuel	295	245	309	284	268	247	249	280	276	263	270	268	283	261	269
Fuel Oil	277	230	288	280	262	239	231	268	270	253	257	260	269	250	260
Jet Fuel	305	233	291	272	266	248	238	263	270	260	264	263	275	253	264
No. 6 Residual Fuel Oil (a)	196	189	202	205	198	204	200	209	214	207	206	201	199	203	207
Propane															
Mont Belvieu Spot	82	68	68	67	84	72	70	72	72	70	69	66	71	75	69
Retail Prices Including Taxes															
Gasoline Regular Grade (b)	338	358	376	336	324	358	349	335	340	360	355	333	352	342	347
Gasoline All Grades (b)	349	369	387	348	336	370	362	348	353	373	368	347	364	354	360
On-highway Diesel Fuel	440	394	428	425	397	384	370	400	406	395	394	399	422	388	399
Heating Oil	405	351	382	398	379	354	338	388	385	358	351	373	384	365	367
Natural Gas															
Henry Hub Spot (dollars per thousand cubic feet)	2.76	2.25	2.69	2.84	2.21	2.16	2.72	3.14	3.33	3.16	3.44	3.56	2.63	2.56	3.37
Henry Hub Spot (dollars per million Btu)	2.65	2.16	2.59	2.74	2.13	2.08	2.61	3.02	3.20	3.04	3.31	3.42	2.54	2.46	3.24
U.S. Retail Prices (dollars per thousand cubic feet)															
Industrial Sector	6.12	3.76	3.87	4.38	4.47	3.51	3.70	4.46	5.07	4.27	4.35	4.89	4.59	4.07	4.67
Commercial Sector	11.81	10.48	10.89	9.82	9.79	9.82	9.89	8.40	8.45	9.09	9.87	8.71	10.89	9.37	8.80
Residential Sector	14.72	16.19	22.33	13.72	12.76	15.68	20.59	12.53	11.50	14.10	19.84	12.47	15.19	13.68	12.80
U.S. Electricity															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	2.57	2.49	2.51	2.51	2.50	2.51	2.51	2.46	2.46	2.44	2.44	2.40	2.52	2.49	2.43
Natural Gas	4.98	2.60	2.92	3.19	3.37	2.38	2.68	3.29	3.70	3.17	3.36	3.69	3.36	2.91	3.47
Residual Fuel Oil (c)	19.24	17.88	19.16	20.84	18.84	17.14	15.04	15.86	16.41	16.78	15.93	15.64	19.32	16.75	16.16
Distillate Fuel Oil	22.84	19.91	22.08	21.03	20.16	19.17	18.86	21.42	21.28	20.25	20.43	20.54	21.47	20.09	20.69
Prices to Ultimate Customers (cents per kilowatthour)															
Industrial Sector	8.06	7.74	8.55	7.83	7.88	7.58	8.33	7.78	8.01	7.68	8.37	7.82	8.05	7.90	7.98
Commercial Sector	12.64	12.45	13.18	12.63	12.75	12.40	13.16	12.60	12.76	12.67	13.59	13.01	12.74	12.75	13.03
Residential Sector	15.77	16.12	16.02	16.02	16.01	16.30	16.06	15.88	16.07	16.60	16.51	16.38	15.98	16.06	16.39

(a) Average for all sulfur contents.

(b) Average self-service cash price.

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

- = no data available

Notes: EIA completed modeling and analysis for this report on June 6, 2024.

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

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

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: *Petroleum Marketing Monthly* , DOE/EIA-0380; *Weekly Petroleum Status Report* , DOE/EIA-0208; *Natural Gas Monthly* , DOE/EIA-0130; *Electric Power Monthly* , DOE/EIA-0226; and *Monthly Energy Review* , DOE/EIA-0035.

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).

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 - June 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	**101.11**	**101.48**	**101.69**	**102.88**	**101.84**	**102.21**	**103.01**	**103.21**	**103.27**	**104.50**	**105.44**	**105.65**	**101.79**	**102.57**	**104.73**
Crude oil	77.10	76.60	76.19	77.15	76.58	76.44	76.83	77.35	77.76	78.29	79.03	79.34	76.76	76.80	78.61
Other liquids	24.00	24.88	25.50	25.72	25.26	25.78	26.18	25.86	25.51	26.21	26.41	26.31	25.03	25.77	26.12
World total	**101.11**	**101.48**	**101.69**	**102.88**	**101.84**	**102.21**	**103.01**	**103.21**	**103.27**	**104.50**	**105.44**	**105.65**	**101.79**	**102.57**	**104.73**
OPEC total (b)	32.77	32.46	31.63	31.88	32.02	31.97	32.05	32.06	32.13	32.40	32.70	32.51	32.18	32.03	32.44
Crude oil	27.38	27.23	26.37	26.58	26.63	26.71	26.75	26.72	26.85	27.11	27.42	27.23	26.89	26.70	27.15
Other liquids	5.40	5.22	5.26	5.30	5.40	5.27	5.30	5.33	5.28	5.28	5.28	5.28	5.29	5.32	5.28
Non-OPEC total	**68.33**	**69.02**	**70.06**	**71.00**	**69.82**	**70.24**	**70.96**	**71.15**	**71.14**	**72.10**	**72.75**	**73.14**	**69.61**	**70.55**	**72.29**
Crude oil	49.73	49.36	49.82	50.57	49.96	49.73	50.08	50.62	50.91	51.17	51.62	52.11	49.87	50.10	51.46
Other liquids	18.60	19.66	20.24	20.43	19.86	20.51	20.88	20.53	20.23	20.93	21.13	21.03	19.74	20.45	20.83
Consumption (million barrels per day) (c)															
World total	**100.93**	**101.94**	**102.35**	**102.38**	**102.17**	**102.48**	**103.57**	**103.70**	**103.97**	**104.10**	**104.91**	**105.05**	**101.90**	**102.98**	**104.51**
OECD total (d)	**45.22**	**45.67**	**46.02**	**46.08**	**45.34**	**44.99**	**46.25**	**46.41**	**45.85**	**45.45**	**46.32**	**46.47**	**45.75**	**45.75**	**46.02**
Canada	2.33	2.47	2.63	2.37	2.44	2.39	2.49	2.47	2.49	2.44	2.54	2.52	2.45	2.45	2.50
Europe	13.09	13.54	13.62	13.33	13.11	13.26	13.67	13.43	13.11	13.27	13.68	13.44	13.40	13.37	13.38
Japan	3.73	3.10	3.10	3.44	3.63	3.01	3.12	3.45	3.56	2.96	3.06	3.38	3.34	3.30	3.24
United States	19.66	20.38	20.37	20.56	19.80	20.11	20.73	20.70	20.33	20.57	20.80	20.76	20.25	20.34	20.62
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	6.29	6.06	6.19	6.26	6.23	6.09	6.11	6.25	6.23	6.10	6.12	6.25	6.20	6.17	6.17
Non-OECD total	**55.71**	**56.27**	**56.33**	**56.30**	**56.83**	**57.50**	**57.33**	**57.29**	**58.13**	**58.65**	**58.59**	**58.58**	**56.16**	**57.24**	**58.49**
China	16.02	16.22	15.89	16.11	16.36	16.55	16.22	16.44	16.71	16.91	16.58	16.80	16.06	16.39	16.75
Eurasia	4.66	4.82	5.16	5.06	4.68	4.85	5.19	5.09	4.74	4.90	5.25	5.15	4.93	4.95	5.01
Europe	0.74	0.76	0.77	0.77	0.75	0.77	0.77	0.78	0.76	0.78	0.78	0.79	0.76	0.77	0.78
Other Asia	14.58	14.45	13.92	14.23	14.99	15.02	14.40	14.69	15.51	15.48	14.85	15.18	14.29	14.78	15.25
Other non-OECD	19.71	20.02	20.59	20.13	20.05	20.31	20.74	20.28	20.42	20.58	21.13	20.66	20.12	20.35	20.70
Total crude oil and other liquids inventory net withdrawals (million barrels per day)															
World total	**-0.18**	**0.46**	**0.66**	**-0.50**	**0.32**	**0.27**	**0.56**	**0.49**	**0.70**	**-0.40**	**-0.54**	**-0.60**	**0.11**	**0.41**	**-0.21**
United States	-0.08	-0.11	-0.25	0.30	0.14	-0.35	-0.10	0.26	0.02	-0.36	-0.11	0.29	-0.03	-0.01	-0.04
Other OECD	0.32	-0.02	-0.15	0.11	0.06	0.19	0.20	0.07	0.21	-0.01	-0.13	-0.27	0.06	0.13	-0.05
Other inventory draws and balance	-0.42	0.59	1.06	-0.91	0.12	0.43	0.46	0.16	0.47	-0.03	-0.30	-0.62	0.08	0.29	-0.12
End-of-period commercial crude oil and other liquids inventories (million barrels)															
OECD total	**2,746**	**2,782**	**2,815**	**2,774**	**2,746**	**2,752**	**2,733**	**2,697**	**2,676**	**2,710**	**2,732**	**2,730**	**2,774**	**2,697**	**2,730**
United States	1,231	1,264	1,283	1,252	1,230	1,253	1,253	1,223	1,221	1,254	1,264	1,237	1,252	1,223	1,237
Other OECD	1,515	1,517	1,531	1,522	1,516	1,499	1,480	1,474	1,455	1,456	1,468	1,493	1,522	1,474	1,493

(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, Turkiye, United Kingdom, and United States.

Notes:

EIA completed modeling and analysis for this report on June 6, 2024.

- = no data available

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

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 - June 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)	**68.33**	**69.02**	**70.06**	**71.00**	**69.82**	**70.24**	**70.96**	**71.15**	**71.14**	**72.10**	**72.75**	**73.14**	**69.61**	**70.55**	**72.29**
North America total	**28.91**	**29.29**	**30.16**	**30.79**	**29.91**	**30.22**	**30.70**	**31.05**	**31.07**	**31.14**	**31.39**	**31.76**	**29.79**	**30.47**	**31.34**
Canada	5.79	5.44	5.79	6.10	5.95	5.84	6.09	6.31	6.38	6.07	6.22	6.40	5.78	6.05	6.27
Mexico	2.07	2.16	2.11	2.09	2.05	2.03	2.00	1.97	1.97	1.94	1.92	1.90	2.11	2.01	1.93
United States	21.05	21.69	22.27	22.59	21.91	22.35	22.61	22.77	22.71	23.13	23.25	23.46	21.91	22.41	23.14
Central and South America total	**6.31**	**6.99**	**7.62**	**7.40**	**7.02**	**7.56**	**8.00**	**7.56**	**7.16**	**7.88**	**8.29**	**7.97**	**7.09**	**7.53**	**7.83**
Argentina	0.81	0.81	0.82	0.84	0.86	0.86	0.89	0.91	0.91	0.91	0.93	0.95	0.82	0.88	0.92
Brazil	3.55	4.19	4.82	4.49	3.90	4.46	4.87	4.44	4.09	4.69	4.96	4.63	4.27	4.42	4.59
Colombia	0.79	0.81	0.81	0.81	0.80	0.80	0.80	0.80	0.80	0.80	0.79	0.79	0.81	0.80	0.79
Guyana	0.35	0.37	0.36	0.44	0.64	0.62	0.63	0.63	0.62	0.74	0.87	0.87	0.38	0.63	0.77
Europe total	**4.01**	**3.95**	**3.84**	**3.94**	**3.94**	**4.06**	**3.99**	**4.09**	**4.23**	**4.14**	**4.03**	**4.14**	**3.94**	**4.02**	**4.13**
Norway	2.03	2.03	1.98	2.06	2.06	2.04	2.05	2.18	2.21	2.14	2.13	2.22	2.02	2.08	2.17
United Kingdom	0.87	0.80	0.75	0.76	0.77	0.89	0.81	0.76	0.88	0.87	0.77	0.78	0.79	0.81	0.83
Eurasia total	**14.11**	**13.65**	**13.42**	**13.70**	**13.68**	**13.34**	**13.07**	**13.16**	**13.39**	**13.60**	**13.62**	**13.80**	**13.72**	**13.31**	**13.60**
Azerbaijan	0.65	0.62	0.62	0.61	0.60	0.61	0.61	0.62	0.63	0.65	0.67	0.67	0.62	0.61	0.65
Kazakhstan	2.02	1.97	1.85	1.99	2.00	1.95	1.93	1.95	2.00	2.11	2.01	2.19	1.96	1.95	2.08
Russia	11.06	10.68	10.58	10.70	10.68	10.39	10.13	10.20	10.36	10.45	10.55	10.55	10.75	10.35	10.48
Middle East total	**3.22**	**3.26**	**3.23**	**3.21**	**3.14**	**3.14**	**3.16**	**3.17**	**3.18**	**3.21**	**3.29**	**3.34**	**3.23**	**3.15**	**3.25**
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	1.01	1.04
Qatar	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.88	1.93	1.97	1.86	1.86	1.91
Africa total	**2.55**	**2.64**	**2.67**	**2.71**	**2.66**	**2.53**	**2.66**	**2.70**	**2.67**	**2.68**	**2.66**	**2.64**	**2.64**	**2.64**	**2.66**
Angola	1.17	1.23	1.23	1.24	1.20	1.14	1.12	1.10	1.08	1.07	1.06	1.04	1.22	1.14	1.07
Egypt	0.66	0.67	0.67	0.66	0.66	0.64	0.64	0.64	0.62	0.62	0.62	0.62	0.67	0.65	0.62
Asia and Oceania total	**9.21**	**9.24**	**9.12**	**9.25**	**9.47**	**9.40**	**9.38**	**9.42**	**9.44**	**9.46**	**9.45**	**9.50**	**9.20**	**9.42**	**9.46**
China	5.32	5.32	5.19	5.23	5.39	5.34	5.31	5.35	5.32	5.35	5.34	5.38	5.26	5.35	5.35
India	0.85	0.88	0.92	0.94	0.97	0.97	0.97	0.96	0.99	0.99	0.98	0.98	0.90	0.97	0.99
Indonesia	0.82	0.88	0.87	0.87	0.86	0.88	0.88	0.87	0.88	0.88	0.88	0.87	0.86	0.87	0.88
Malaysia	0.61	0.58	0.58	0.61	0.60	0.59	0.58	0.58	0.59	0.59	0.59	0.59	0.60	0.59	0.59
Unplanned production outages															
Non-OPEC total	**0.56**	**1.02**	**0.92**	**0.87**	**1.04**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**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 June 6, 2024.

- = no data available

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

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 - June 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	**101.11**	**101.48**	**101.69**	**102.88**	**101.84**	**102.21**	**103.01**	**103.21**	**103.27**	**104.50**	**105.44**	**105.65**	**101.79**	**102.57**	**104.73**
OPEC+ total (b)	44.99	44.21	42.82	43.09	42.95	42.46	42.47	42.48	42.82	43.28	43.58	43.54	43.77	42.59	43.31
United States	21.05	21.69	22.27	22.59	21.91	22.35	22.61	22.77	22.71	23.13	23.25	23.46	21.91	22.41	23.14
Non-OPEC+ excluding United States	35.07	35.58	36.60	37.20	36.98	37.41	37.93	37.96	37.74	38.10	38.62	38.65	36.12	37.57	38.28
OPEC total (c)	**32.77**	**32.46**	**31.63**	**31.88**	**32.02**	**31.97**	**32.05**	**32.06**	**32.13**	**32.40**	**32.70**	**32.51**	**32.18**	**32.03**	**32.44**
Algeria	1.48	1.45	1.42	1.43	1.38	-	-	-	-	-	-	-	1.44	-	-
Congo (Brazzaville)	0.27	0.26	0.26	0.27	0.26	-	-	-	-	-	-	-	0.27	-	-
Equatorial Guinea	0.10	0.10	0.10	0.09	0.10	-	-	-	-	-	-	-	0.10	-	-
Gabon	0.20	0.21	0.20	0.21	0.21	-	-	-	-	-	-	-	0.20	-	-
Iran	3.79	3.80	4.06	4.31	4.43	-	-	-	-	-	-	-	3.99	-	-
Iraq	4.52	4.30	4.44	4.44	4.40	-	-	-	-	-	-	-	4.42	-	-
Kuwait	3.00	2.90	2.88	2.85	2.77	-	-	-	-	-	-	-	2.91	-	-
Libya	1.24	1.22	1.25	1.27	1.20	-	-	-	-	-	-	-	1.24	-	-
Nigeria	1.57	1.49	1.49	1.60	1.57	-	-	-	-	-	-	-	1.54	-	-
Saudi Arabia	11.62	11.78	10.62	10.53	10.74	-	-	-	-	-	-	-	11.13	-	-
United Arab Emirates	4.27	4.15	4.12	4.11	4.15	-	-	-	-	-	-	-	4.16	-	-
Venezuela	0.73	0.78	0.79	0.78	0.81	-	-	-	-	-	-	-	0.77	-	-
OPEC+ total (b)	**44.99**	**44.21**	**42.82**	**43.09**	**42.95**	**42.46**	**42.47**	**42.48**	**42.82**	**43.28**	**43.58**	**43.54**	**43.77**	**42.59**	**43.31**
OPEC members subject to OPEC+ agreements (d)	**27.01**	**26.65**	**25.54**	**25.53**	**25.58**	**25.57**	**25.77**	**25.71**	**25.82**	**26.08**	**26.38**	**26.18**	**26.18**	**25.66**	**26.12**
OPEC+ other participants total	**17.97**	**17.56**	**17.29**	**17.56**	**17.37**	**16.89**	**16.70**	**16.76**	**16.99**	**17.19**	**17.20**	**17.36**	**17.59**	**16.93**	**17.19**
Azerbaijan	0.65	0.62	0.62	0.61	0.60	0.61	0.61	0.62	0.63	0.65	0.67	0.67	0.62	0.61	0.65
Bahrain	0.18	0.21	0.18	0.17	0.14	0.14	0.14	0.14	0.13	0.13	0.13	0.13	0.18	0.14	0.13
Brunei	0.11	0.08	0.09	0.10	0.10	0.09	0.09	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	1.95	1.93	1.95	2.00	2.11	2.01	2.19	1.96	1.95	2.08
Malaysia	0.61	0.58	0.58	0.61	0.60	0.59	0.58	0.58	0.59	0.59	0.59	0.59	0.60	0.59	0.59
Mexico	2.07	2.16	2.11	2.09	2.05	2.03	2.00	1.97	1.97	1.94	1.92	1.90	2.11	2.01	1.93
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	1.01	1.04
Russia	11.06	10.68	10.58	10.70	10.68	10.39	10.13	10.20	10.36	10.45	10.55	10.55	10.75	10.35	10.48
South Sudan	0.13	0.13	0.16	0.17	0.13	0.06	0.15	0.15	0.15	0.15	0.14	0.14	0.15	0.12	0.14
Sudan	0.07	0.07	0.07	0.07	0.06	0.04	0.06	0.06	0.05	0.05	0.05	0.04	0.07	0.05	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 sbuject to the OPEC+ agreements.

Notes:

EIA completed modeling and analysis for this report on June 6, 2024.

- = no data available

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

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 - June 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	**77.10**	**76.60**	**76.19**	**77.15**	**76.58**	**76.44**	**76.83**	**77.35**	**77.76**	**78.29**	**79.03**	**79.34**	**76.76**	**76.80**	**78.61**
OPEC+ total (b)	38.20	37.50	36.25	36.34	36.12	35.68	35.71	35.72	36.06	36.54	36.88	36.84	37.07	35.81	36.58
United States	12.63	12.75	13.07	13.26	12.94	13.17	13.33	13.50	13.51	13.68	13.76	13.88	12.93	13.24	13.71
Non-OPEC+ excluding United States	26.27	26.35	26.87	27.55	27.52	27.59	27.79	28.13	28.19	28.07	28.40	28.62	26.77	27.76	28.32
OPEC total (c)	**27.38**	**27.23**	**26.37**	**26.58**	**26.63**	**26.71**	**26.75**	**26.72**	**26.85**	**27.11**	**27.42**	**27.23**	**26.89**	**26.70**	**27.15**
Algeria	1.01	0.98	0.95	0.96	0.91	-	-	-	-	-	-	-	0.97	-	-
Congo (Brazzaville)	0.27	0.25	0.26	0.26	0.25	-	-	-	-	-	-	-	0.26	-	-
Equatorial Guinea	0.06	0.06	0.06	0.05	0.06	-	-	-	-	-	-	-	0.06	-	-
Gabon	0.20	0.21	0.20	0.21	0.21	-	-	-	-	-	-	-	0.20	-	-
Iran	2.60	2.74	2.97	3.18	3.24	-	-	-	-	-	-	-	2.87	-	-
Iraq	4.41	4.19	4.33	4.33	4.29	-	-	-	-	-	-	-	4.32	-	-
Kuwait	2.68	2.59	2.56	2.53	2.46	-	-	-	-	-	-	-	2.59	-	-
Libya	1.14	1.15	1.15	1.17	1.10	-	-	-	-	-	-	-	1.15	-	-
Nigeria	1.24	1.19	1.21	1.31	1.28	-	-	-	-	-	-	-	1.24	-	-
Saudi Arabia	10.02	10.18	9.02	8.93	9.12	-	-	-	-	-	-	-	9.53	-	-
United Arab Emirates	3.06	2.94	2.91	2.90	2.91	-	-	-	-	-	-	-	2.95	-	-
Venezuela	0.70	0.75	0.76	0.75	0.79	-	-	-	-	-	-	-	0.74	-	-
OPEC+ total (b)	**38.20**	**37.50**	**36.25**	**36.34**	**36.12**	**35.68**	**35.71**	**35.72**	**36.06**	**36.54**	**36.88**	**36.84**	**37.07**	**35.81**	**36.58**
OPEC members subject to OPEC+ agreements (d)	**22.94**	**22.60**	**21.49**	**21.48**	**21.49**	**21.48**	**21.68**	**21.63**	**21.75**	**22.01**	**22.32**	**22.13**	**22.12**	**21.57**	**22.05**
OPEC+ other participants total	**15.27**	**14.90**	**14.76**	**14.86**	**14.62**	**14.20**	**14.03**	**14.09**	**14.31**	**14.52**	**14.56**	**14.71**	**14.94**	**14.24**	**14.53**
Azerbaijan	0.52	0.50	0.49	0.49	0.47	-	-	-	-	-	-	-	0.50	-	-
Bahrain	0.17	0.20	0.17	0.15	0.13	-	-	-	-	-	-	-	0.17	-	-
Brunei	0.08	0.06	0.07	0.08	0.08	-	-	-	-	-	-	-	0.07	-	-
Kazakhstan	1.61	1.58	1.49	1.57	1.58	-	-	-	-	-	-	-	1.56	-	-
Malaysia	0.39	0.36	0.36	0.38	0.37	-	-	-	-	-	-	-	0.37	-	-
Mexico	1.67	1.67	1.65	1.63	1.60	-	-	-	-	-	-	-	1.66	-	-
Oman	0.84	0.82	0.80	0.80	0.76	-	-	-	-	-	-	-	0.81	-	-
Russia	9.78	9.52	9.49	9.53	9.44	-	-	-	-	-	-	-	9.58	-	-
South Sudan	0.13	0.13	0.16	0.17	0.13	-	-	-	-	-	-	-	0.15	-	-
Sudan	0.07	0.07	0.07	0.07	0.06	-	-	-	-	-	-	-	0.07	-	-
Crude oil production capacity															
OPEC total	**30.50**	**30.31**	**30.56**	**30.89**	**30.98**	**31.03**	**31.02**	**31.33**	**31.28**	**31.27**	**31.26**	**31.26**	**30.57**	**31.09**	**31.27**
Middle East	25.88	25.67	25.90	26.11	26.27	26.27	26.30	26.60	26.60	26.60	26.60	26.60	25.89	26.36	26.60
Other	4.63	4.64	4.67	4.78	4.71	4.76	4.71	4.73	4.68	4.67	4.66	4.66	4.68	4.73	4.67
Surplus crude oil production capacity															
OPEC total	**3.13**	**3.07**	**4.19**	**4.31**	**4.35**	**4.33**	**4.26**	**4.61**	**4.43**	**4.16**	**3.85**	**4.03**	**3.68**	**4.39**	**4.11**
Middle East	3.10	3.02	4.11	4.23	4.25	4.21	4.15	4.50	4.34	4.07	3.78	3.96	3.62	4.28	4.04
Other	0.02	0.05	0.08	0.07	0.11	0.11	0.11	0.10	0.09	0.08	0.07	0.07	0.06	0.11	0.08
Unplanned production outages															
OPEC total	**1.94**	**2.13**	**1.95**	**1.52**	**1.52**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**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 sbuject to the OPEC+ agreements.

Notes:

EIA completed modeling and analysis for this report on June 6, 2024.

- = no data available

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

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 - June 2024

	2023				2024				2025						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2023	2024	2025
Petroleum and other liquid fuels consumption (a)															
World total	**100.93**	**101.94**	**102.35**	**102.38**	**102.17**	**102.48**	**103.57**	**103.70**	**103.97**	**104.10**	**104.91**	**105.05**	**101.90**	**102.98**	**104.51**
OECD total (b)	45.22	45.67	46.02	46.08	45.34	44.99	46.25	46.41	45.85	45.45	46.32	46.47	45.75	45.75	46.02
Non-OECD total	55.71	56.27	56.33	56.30	56.83	57.50	57.33	57.29	58.13	58.65	58.59	58.58	56.16	57.24	58.49
World total	**100.93**	**101.94**	**102.35**	**102.38**	**102.17**	**102.48**	**103.57**	**103.70**	**103.97**	**104.10**	**104.91**	**105.05**	**101.90**	**102.98**	**104.51**
North America total	**23.83**	**24.70**	**24.87**	**24.80**	**24.07**	**24.35**	**25.08**	**25.04**	**24.64**	**24.86**	**25.19**	**25.14**	**24.55**	**24.64**	**24.96**
Canada	2.33	2.47	2.63	2.37	2.44	2.39	2.49	2.47	2.49	2.44	2.54	2.52	2.45	2.45	2.50
Mexico	1.83	1.84	1.86	1.85	1.82	1.84	1.84	1.86	1.81	1.84	1.84	1.86	1.85	1.84	1.84
United States	19.66	20.38	20.37	20.56	19.80	20.11	20.73	20.70	20.33	20.57	20.80	20.76	20.25	20.34	20.62
Central and South America total	**6.60**	**6.73**	**6.85**	**6.77**	**6.63**	**6.78**	**6.89**	**6.82**	**6.71**	**6.86**	**6.97**	**6.90**	**6.74**	**6.78**	**6.86**
Brazil	3.05	3.11	3.19	3.17	3.08	3.14	3.22	3.20	3.12	3.18	3.26	3.24	3.13	3.16	3.20
Europe total	**13.84**	**14.31**	**14.38**	**14.10**	**13.86**	**14.03**	**14.44**	**14.21**	**13.87**	**14.05**	**14.46**	**14.23**	**14.16**	**14.14**	**14.15**
Eurasia total	**4.66**	**4.82**	**5.16**	**5.06**	**4.68**	**4.85**	**5.19**	**5.09**	**4.74**	**4.90**	**5.25**	**5.15**	**4.93**	**4.95**	**5.01**
Russia	3.54	3.64	3.95	3.80	3.55	3.65	3.96	3.81	3.59	3.69	4.01	3.85	3.73	3.74	3.78
Middle East total	**9.24**	**9.38**	**9.94**	**9.35**	**9.44**	**9.54**	**9.95**	**9.38**	**9.62**	**9.61**	**10.15**	**9.56**	**9.48**	**9.58**	**9.73**
Africa total	**4.57**	**4.58**	**4.50**	**4.66**	**4.66**	**4.68**	**4.59**	**4.76**	**4.79**	**4.80**	**4.71**	**4.88**	**4.58**	**4.67**	**4.80**
Asia and Oceania total	**38.19**	**37.42**	**36.66**	**37.64**	**38.82**	**38.26**	**37.43**	**38.41**	**39.61**	**39.02**	**38.17**	**39.19**	**37.47**	**38.23**	**38.99**
China	16.02	16.22	15.89	16.11	16.36	16.55	16.22	16.44	16.71	16.91	16.58	16.80	16.06	16.39	16.75
India	5.38	5.35	5.05	5.38	5.58	5.70	5.32	5.63	5.91	5.99	5.59	5.95	5.29	5.55	5.86
Japan	3.73	3.10	3.10	3.44	3.63	3.01	3.12	3.45	3.56	2.96	3.06	3.38	3.34	3.30	3.24
Real gross domestic product (c)															
World index, 2015 Q1 = 100	125.9	127.0	127.9	128.9	129.7	130.6	131.6	132.8	133.8	135.0	136.0	137.2	127.4	131.2	135.5
Percent change from prior year	2.8	3.6	3.2	3.2	3.0	2.8	2.9	3.1	3.1	3.3	3.4	3.3	3.2	3.0	3.3
OECD index, 2015 = 100	-	-	-	-	-	-	-	-	-	-	-	-	115.9	117.8	120.0
Percent change from prior year	-	-	-	-	-	-	-	-	-	-	-	-	1.7	1.6	1.9
Non-OECD index, 2015 = 100	-	-	-	-	-	-	-	-	-	-	-	-	135.0	140.5	146.7
Percent change from prior year	-	-	-	-	-	-	-	-	-	-	-	-	4.4	4.1	4.4
Nominal U.S. Dollar index (d)															
Index, 2015 Q1 = 100	114.1	113.4	114.0	115.6	114.8	116.1	117.2	117.6	117.9	118.0	118.0	117.9	114.3	116.4	118.0
Percent change from prior year	4.2	0.5	-2.7	-2.4	0.6	2.3	2.8	1.8	2.7	1.7	0.7	0.2	-0.2	1.9	1.3

(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, Turkiye, 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 June 6, 2024.

- = no data available

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

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 - June 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)	**12.63**	**12.75**	**13.07**	**13.26**	**12.94**	**13.17**	**13.33**	**13.50**	**13.51**	**13.68**	**13.76**	**13.88**	**12.93**	**13.24**	**13.71**
Alaska	0.44	0.43	0.40	0.43	0.43	0.41	0.39	0.42	0.42	0.40	0.38	0.41	0.43	0.41	0.40
Federal Gulf of Mexico (b)	1.87	1.77	1.94	1.87	1.79	1.82	1.81	1.82	1.88	1.89	1.86	1.88	1.86	1.81	1.88
Lower 48 States (excl GOM) (c)	10.31	10.55	10.73	10.96	10.73	10.95	11.13	11.26	11.21	11.39	11.52	11.59	10.64	11.02	11.43
Appalachia region	0.16	0.16	0.15	0.16	0.15	0.15	0.16	0.17	0.18	0.19	0.19	0.19	0.16	0.16	0.19
Bakken region	1.12	1.17	1.28	1.32	1.23	1.31	1.32	1.32	1.28	1.29	1.32	1.32	1.22	1.30	1.30
Eagle Ford region	1.15	1.19	1.20	1.16	1.09	1.03	1.09	1.13	1.12	1.14	1.16	1.16	1.17	1.08	1.15
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	5.73	5.81	5.88	6.05	6.08	6.30	6.38	6.46	6.48	6.60	6.68	6.75	5.87	6.31	6.63
Rest of Lower 48 States	2.12	2.19	2.19	2.23	2.15	2.12	2.14	2.15	2.12	2.14	2.14	2.14	2.18	2.14	2.13
Total Supply	**19.67**	**20.38**	**20.37**	**20.56**	**19.80**	**20.11**	**20.73**	**20.70**	**20.33**	**20.57**	**20.80**	**20.76**	**20.25**	**20.34**	**20.62**
Crude oil input to refineries	**15.25**	**16.15**	**16.51**	**15.93**	**15.39**	**16.36**	**16.33**	**15.68**	**15.07**	**15.88**	**15.97**	**15.56**	**15.96**	**15.94**	**15.63**
U.S. total crude oil production (a)	12.63	12.75	13.07	13.26	12.94	13.17	13.33	13.50	13.51	13.68	13.76	13.88	12.93	13.24	13.71
Transfers to crude oil supply	0.39	0.51	0.70	0.58	0.50	0.45	0.50	0.46	0.44	0.49	0.52	0.49	0.55	0.48	0.49
Crude oil net imports (d)	2.27	2.51	2.61	2.29	2.12	2.36	2.15	1.57	1.14	1.38	1.31	1.05	2.42	2.05	1.22
SPR net withdrawals (e)	0.01	0.26	-0.04	-0.04	-0.10	-0.10	-0.10	-0.07	0.00	0.00	0.00	0.00	0.05	-0.09	0.00
Commercial inventory net withdrawals	-0.39	0.12	0.41	-0.10	-0.23	0.04	0.22	-0.05	-0.30	0.10	0.17	-0.09	0.01	-0.01	-0.03
Crude oil adjustment (f)	0.34	0.00	-0.22	-0.06	0.16	0.44	0.23	0.27	0.29	0.24	0.21	0.24	0.01	0.27	0.24
Refinery processing gain	**0.97**	**1.01**	**1.07**	**1.05**	**0.91**	**1.04**	**1.06**	**1.04**	**0.96**	**1.01**	**1.05**	**1.04**	**1.03**	**1.01**	**1.02**
Natural Gas Plant Liquids Production	**6.01**	**6.42**	**6.58**	**6.70**	**6.51**	**6.57**	**6.63**	**6.61**	**6.64**	**6.79**	**6.79**	**6.86**	**6.43**	**6.58**	**6.77**
Renewables and oxygenate production (g)	**1.24**	**1.29**	**1.31**	**1.35**	**1.34**	**1.36**	**1.38**	**1.41**	**1.41**	**1.43**	**1.43**	**1.46**	**1.30**	**1.37**	**1.44**
Fuel ethanol production	1.00	1.00	1.02	1.05	1.04	1.04	1.04	1.04	1.03	1.02	1.02	1.04	1.02	1.04	1.03
Petroleum products adjustment (h)	**0.20**	**0.22**	**0.23**	**0.23**	**0.21**	**0.21**	**0.22**	**0.22**	**0.20**	**0.21**	**0.21**	**0.21**	**0.22**	**0.21**	**0.21**
Petroleum products transfers to crude oil supply	**-0.39**	**-0.51**	**-0.70**	**-0.58**	**-0.50**	**-0.45**	**-0.50**	**-0.46**	**-0.44**	**-0.49**	**-0.52**	**-0.49**	**-0.55**	**-0.48**	**-0.49**
Petroleum product net imports (d)	**-3.91**	**-3.71**	**-4.03**	**-4.56**	**-4.53**	**-4.69**	**-4.16**	**-4.17**	**-3.83**	**-3.82**	**-3.85**	**-4.28**	**-4.06**	**-4.39**	**-3.94**
Hydrocarbon gas liquids	-2.47	-2.39	-2.42	-2.58	-2.59	-2.80	-2.58	-2.48	-2.69	-2.79	-2.67	-2.66	-2.46	-2.61	-2.70
Unfinished oils	0.28	0.27	0.22	0.18	0.09	0.34	0.40	0.32	0.30	0.38	0.41	0.32	0.24	0.29	0.35
Other hydrocarbons and oxygenates	-0.05	-0.07	-0.04	-0.05	-0.06	-0.09	-0.06	-0.06	-0.09	-0.08	-0.07	-0.08	-0.05	-0.07	-0.08
Motor gasoline blending components	0.45	0.67	0.57	0.41	0.40	0.57	0.57	0.39	0.59	0.73	0.76	0.45	0.52	0.48	0.63
Finished motor gasoline	-0.75	-0.58	-0.67	-0.81	-0.76	-0.76	-0.67	-0.75	-0.69	-0.62	-0.73	-0.84	-0.70	-0.73	-0.72
Jet fuel	-0.05	0.01	-0.05	-0.09	-0.09	-0.06	-0.06	-0.05	0.01	0.08	0.08	0.06	-0.05	-0.06	0.06
Distillate fuel oil	-0.76	-0.97	-1.01	-1.01	-0.86	-1.17	-1.11	-0.98	-0.68	-0.86	-0.95	-0.90	-0.94	-1.03	-0.85
Residual fuel oil	0.01	-0.04	-0.03	0.00	-0.03	-0.05	-0.03	0.05	0.02	0.02	-0.02	0.05	-0.01	-0.01	0.02
Other oils (i)	-0.58	-0.61	-0.59	-0.61	-0.64	-0.69	-0.62	-0.62	-0.60	-0.67	-0.66	-0.68	-0.60	-0.64	-0.65
Petroleum product inventory net withdrawals	**0.30**	**-0.49**	**-0.61**	**0.44**	**0.47**	**-0.29**	**-0.22**	**0.38**	**0.32**	**-0.46**	**-0.29**	**0.39**	**-0.09**	**0.09**	**-0.01**
Consumption (million barrels per day)															
U.S. total petroleum products consumption	**19.66**	**20.38**	**20.37**	**20.56**	**19.80**	**20.11**	**20.73**	**20.70**	**20.33**	**20.57**	**20.80**	**20.76**	**20.25**	**20.34**	**20.62**
Hydrocarbon gas liquids	3.40	3.36	3.25	3.81	3.80	3.31	3.43	3.87	3.87	3.40	3.50	3.93	3.46	3.60	3.67
Other hydrocarbons and oxygenates	0.22	0.28	0.28	0.28	0.30	0.30	0.31	0.35	0.35	0.36	0.36	0.39	0.27	0.32	0.37
Motor gasoline	8.67	9.13	9.05	8.93	8.57	9.02	9.12	8.83	8.65	9.05	9.06	8.76	8.94	8.89	8.88
Fuel ethanol blended into motor gasoline	0.90	0.94	0.94	0.94	0.88	0.94	0.95	0.94	0.90	0.95	0.95	0.94	0.93	0.93	0.93
Jet fuel	1.55	1.67	1.72	1.66	1.58	1.73	1.75	1.69	1.66	1.77	1.80	1.76	1.65	1.69	1.75
Distillate fuel oil	4.01	3.93	3.90	3.90	3.82	3.75	3.89	3.96	3.99	3.95	3.90	3.96	3.93	3.85	3.95
Residual fuel oil	0.29	0.22	0.27	0.31	0.28	0.28	0.28	0.31	0.29	0.29	0.28	0.31	0.27	0.29	0.29
Other oils (i)	1.53	1.79	1.89	1.67	1.44	1.73	1.94	1.70	1.53	1.76	1.90	1.66	1.72	1.70	1.71
Total petroleum and other liquid fuels net imports (d)	**-1.64**	**-1.20**	**-1.42**	**-2.28**	**-2.41**	**-2.33**	**-2.00**	**-2.60**	**-2.69**	**-2.44**	**-2.54**	**-3.23**	**-1.64**	**-2.34**	**-2.73**
End-of-period inventories (million barrels)															
Total commercial inventory	**1230.8**	**1264.4**	**1283.4**	**1252.2**	**1230.3**	**1253.0**	**1253.0**	**1222.8**	**1220.8**	**1253.6**	**1263.9**	**1236.8**	**1252.2**	**1222.8**	**1236.8**
Crude oil (excluding SPR)	465.4	454.7	417.5	426.4	447.2	443.7	423.4	428.2	454.9	446.3	430.3	438.8	426.4	428.2	438.8
Hydrocarbon gas liquids	174.3	225.4	279.1	223.3	169.2	211.7	251.9	208.2	171.9	225.5	266.2	225.2	223.3	208.2	225.2
Unfinished oils	88.6	87.0	88.3	84.1	91.7	87.9	86.8	79.6	88.8	86.8	86.6	80.7	84.1	79.6	80.7
Other hydrocarbons and oxygenates	34.3	30.1	30.3	33.2	38.2	35.6	35.3	35.6	37.6	36.4	36.1	36.4	33.2	35.6	36.4
Total motor gasoline	225.3	223.2	227.6	241.3	233.4	226.1	219.1	232.4	229.2	218.9	215.7	228.5	241.3	232.4	228.5
Finished motor gasoline	14.7	17.6	15.3	18.1	14.6	16.5	17.6	19.6	15.9	15.5	14.2	20.0	18.1	19.6	20.0
Motor gasoline blending components	210.6	205.6	212.3	223.2	218.8	209.6	201.5	212.8	213.2	203.4	201.4	208.5	223.2	212.8	208.5
Jet fuel	37.7	42.7	43.5	39.8	42.2	42.0	43.3	39.7	37.1	37.9	39.5	35.3	39.8	39.7	35.3
Distillate fuel oil	112.3	112.6	119.2	130.7	121.2	123.5	121.8	126.4	117.7	120.5	119.1	120.3	130.7	126.4	120.3
Residual fuel oil	29.6	30.4	27.5	24.1	29.9	28.1	26.1	25.7	27.0	26.9	25.0	24.5	24.1	25.7	24.5
Other oils (i)	63.3	58.3	50.5	49.3	57.3	54.2	45.3	47.0	56.4	54.5	45.5	47.1	49.3	47.0	47.1
Crude oil in SPR (e)	**371.2**	**347.2**	**351.3**	**354.7**	**363.9**	**373.2**	**382.5**	**388.8**	**388.8**	**388.8**	**388.8**	**388.8**	**354.7**	**388.8**	**388.8**

(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 June 6, 2024.

- = no data available

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

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 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 - June 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	**6.45**	**7.23**	**7.31**	**7.04**	**6.95**	**7.41**	**7.37**	**6.96**	**7.10**	**7.62**	**7.54**	**7.23**	**7.01**	**7.17**	**7.37**
Natural gas processing plant production	**6.01**	**6.42**	**6.58**	**6.70**	**6.51**	**6.57**	**6.63**	**6.61**	**6.64**	**6.79**	**6.79**	**6.86**	**6.43**	**6.58**	**6.77**
Ethane	2.49	2.65	2.63	2.71	2.63	2.74	2.74	2.73	2.72	2.78	2.73	2.81	2.62	2.71	2.76
Propane	1.89	2.00	2.05	2.10	2.05	2.05	2.04	2.05	2.11	2.14	2.14	2.16	2.01	2.05	2.14
Butanes	0.99	1.06	1.09	1.10	1.07	1.11	1.14	1.16	1.16	1.17	1.19	1.20	1.06	1.12	1.18
Natural gasoline (pentanes plus)	0.64	0.73	0.81	0.79	0.75	0.67	0.71	0.67	0.65	0.70	0.73	0.69	0.74	0.70	0.69
Refinery and blender net production	**0.47**	**0.83**	**0.75**	**0.36**	**0.46**	**0.85**	**0.76**	**0.36**	**0.48**	**0.85**	**0.77**	**0.38**	**0.60**	**0.61**	**0.62**
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	0.01	0.01
Propane	0.27	0.29	0.28	0.27	0.27	0.29	0.28	0.26	0.27	0.29	0.29	0.28	0.28	0.27	0.28
Propylene (refinery-grade)	0.24	0.26	0.25	0.26	0.24	0.28	0.27	0.28	0.27	0.28	0.27	0.28	0.25	0.27	0.28
Butanes/butylenes	-0.05	0.28	0.21	-0.19	-0.05	0.27	0.20	-0.19	-0.07	0.27	0.20	-0.18	0.07	0.05	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	**3.40**	**3.36**	**3.25**	**3.81**	**3.80**	**3.31**	**3.43**	**3.87**	**3.87**	**3.40**	**3.50**	**3.93**	**3.46**	**3.60**	**3.67**
Ethane/Ethylene	1.99	2.19	2.07	2.25	2.24	2.23	2.24	2.26	2.23	2.24	2.25	2.27	2.13	2.24	2.25
Propane	0.98	0.62	0.62	0.95	1.02	0.54	0.63	1.02	1.13	0.61	0.71	1.07	0.79	0.80	0.88
Propylene (refinery-grade)	0.25	0.27	0.27	0.28	0.26	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.27	0.28	0.29
Butanes/butylenes	0.18	0.28	0.29	0.34	0.28	0.25	0.27	0.29	0.22	0.26	0.25	0.30	0.27	0.27	0.26
HGL net imports	**-2.47**	**-2.39**	**-2.42**	**-2.58**	**-2.59**	**-2.80**	**-2.58**	**-2.48**	**-2.69**	**-2.79**	**-2.67**	**-2.66**	**-2.46**	**-2.61**	**-2.70**
Ethane	-0.50	-0.49	-0.50	-0.40	-0.48	-0.51	-0.50	-0.50	-0.50	-0.51	-0.51	-0.55	-0.47	-0.50	-0.52
Propane/propylene	-1.40	-1.40	-1.45	-1.65	-1.60	-1.66	-1.45	-1.42	-1.50	-1.60	-1.49	-1.48	-1.47	-1.53	-1.52
Butanes/butylenes	-0.42	-0.41	-0.42	-0.41	-0.41	-0.49	-0.50	-0.41	-0.50	-0.53	-0.54	-0.48	-0.42	-0.45	-0.51
Natural gasoline (pentanes plus)	-0.15	-0.09	-0.06	-0.11	-0.11	-0.13	-0.13	-0.15	-0.19	-0.14	-0.13	-0.15	-0.10	-0.13	-0.15
HGL inventories (million barrels)	**174.3**	**225.4**	**279.1**	**223.3**	**169.2**	**211.7**	**251.9**	**208.2**	**171.9**	**225.5**	**266.2**	**225.2**	**223.3**	**208.2**	**225.2**
Ethane	54.3	51.5	58.0	65.8	58.3	59.6	60.9	60.0	60.0	63.2	61.4	62.3	65.8	60.0	62.3
Propane	55.83	79.2	102.2	79.8	51.7	62.1	82.3	69.7	46.0	64.8	85.2	73.0	79.8	69.7	73.0
Propylene (at refineries only)	1.13	1.1	1.2	0.9	0.9	1.3	1.6	1.5	1.4	1.6	1.8	1.6	0.9	1.5	1.6
Butanes/butylenes	40.2	70.1	90.2	50.1	35.1	64.8	82.8	53.9	44.3	74.4	95.7	67.1	50.1	53.9	67.1
Natural gasoline (pentanes plus)	22.9	23.4	27.4	26.8	23.2	23.9	24.3	23.1	20.3	21.4	22.2	21.3	26.8	23.1	21.3
Refining															
Total refinery and blender net inputs	**17.58**	**18.90**	**18.92**	**18.25**	**17.61**	**19.06**	**19.09**	**18.20**	**17.20**	**18.64**	**18.53**	**17.79**	**18.41**	**18.49**	**18.04**
Crude oil	15.25	16.15	16.51	15.93	15.39	16.36	16.33	15.68	15.07	15.88	15.97	15.56	15.96	15.94	15.63
HGL	0.66	0.49	0.56	0.78	0.69	0.47	0.53	0.73	0.61	0.47	0.52	0.71	0.62	0.60	0.58
Other hydrocarbons/oxygenates	1.13	1.20	1.21	1.18	1.12	1.21	1.20	1.17	1.14	1.19	1.19	1.17	1.18	1.18	1.17
Unfinished oils	0.19	0.21	0.00	0.12	-0.03	0.28	0.31	0.29	0.08	0.29	0.30	0.27	0.13	0.21	0.24
Motor gasoline blending components	0.34	0.85	0.64	0.23	0.43	0.74	0.72	0.33	0.29	0.81	0.54	0.08	0.52	0.55	0.43
Refinery Processing Gain	**0.97**	**1.01**	**1.07**	**1.05**	**0.91**	**1.04**	**1.06**	**1.04**	**0.96**	**1.01**	**1.05**	**1.04**	**1.03**	**1.01**	**1.02**
Total refinery and blender net production	**18.54**	**19.91**	**19.99**	**19.30**	**18.52**	**20.09**	**20.15**	**19.23**	**18.15**	**19.66**	**19.58**	**18.83**	**19.44**	**19.50**	**19.06**
HGL	0.47	0.83	0.75	0.36	0.46	0.85	0.76	0.36	0.48	0.85	0.77	0.38	0.60	0.61	0.62
Finished motor gasoline	9.28	9.83	9.81	9.64	9.24	9.83	9.82	9.60	8.97	9.59	9.50	9.31	9.64	9.63	9.34
Jet fuel	1.62	1.72	1.78	1.71	1.70	1.79	1.82	1.70	1.62	1.70	1.73	1.65	1.71	1.75	1.67
Distillate fuel oil	4.69	4.91	4.99	5.04	4.57	4.94	4.99	4.99	4.57	4.84	4.83	4.88	4.91	4.87	4.78
Residual fuel oil	0.27	0.27	0.27	0.28	0.37	0.30	0.29	0.26	0.28	0.27	0.28	0.25	0.27	0.31	0.27
Other oils (a)	2.21	2.35	2.40	2.26	2.17	2.38	2.46	2.34	2.24	2.41	2.47	2.36	2.30	2.34	2.37
Refinery distillation inputs	**15.78**	**16.75**	**17.02**	**16.47**	**15.80**	**16.76**	**16.76**	**16.07**	**15.49**	**16.28**	**16.42**	**15.97**	**16.51**	**16.35**	**16.04**
Refinery operable distillation capacity	**18.12**	**18.27**	**18.27**	**18.32**	**18.39**	**18.19**	**18.20**	**18.20**	**17.94**	**17.94**	**17.94**	**17.94**	**18.25**	**18.25**	**17.94**
Refinery distillation utilization factor	**0.87**	**0.92**	**0.93**	**0.90**	**0.86**	**0.92**	**0.92**	**0.88**	**0.86**	**0.91**	**0.92**	**0.89**	**0.90**	**0.90**	**0.89**

(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 June 6, 2024.

- = no data available

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

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 - June 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	2.45	2.58	2.51	2.44	2.54	2.70	2.64	2.41	2.64	2.50	2.57
Retail prices (dollars per gallon) (a)															
All grades United States average	**3.49**	**3.69**	**3.87**	**3.48**	**3.36**	**3.70**	**3.62**	**3.48**	**3.53**	**3.73**	**3.68**	**3.47**	**3.64**	**3.54**	**3.60**
Regular grade United States average	**3.38**	**3.58**	**3.76**	**3.36**	**3.24**	**3.58**	**3.49**	**3.35**	**3.40**	**3.60**	**3.55**	**3.33**	**3.52**	**3.42**	**3.47**
PADD 1	3.30	3.44	3.61	3.25	3.19	3.47	3.40	3.26	3.32	3.47	3.40	3.23	3.40	3.33	3.36
PADD 2	3.24	3.48	3.60	3.14	3.07	3.41	3.32	3.16	3.24	3.41	3.36	3.13	3.37	3.24	3.29
PADD 3	3.02	3.15	3.34	2.84	2.86	3.13	3.00	2.91	2.98	3.15	3.09	2.87	3.09	2.98	3.02
PADD 4	3.57	3.59	3.93	3.32	2.92	3.39	3.36	3.32	3.32	3.58	3.55	3.33	3.61	3.25	3.45
PADD 5	4.18	4.52	4.80	4.56	4.13	4.63	4.45	4.33	4.23	4.64	4.59	4.34	4.52	4.39	4.45
End-of-period inventories (million barrels) (b)															
Total U.S. gasoline inventories	**225.3**	**223.2**	**227.6**	**241.3**	**233.4**	**226.1**	**219.1**	**232.4**	**229.2**	**218.9**	**215.7**	**228.5**	**241.3**	**232.4**	**228.5**
PADD 1	52.7	57.1	58.8	60.1	54.9	55.6	54.4	56.9	56.6	53.8	53.2	55.1	60.1	56.9	55.1
PADD 2	49.5	45.2	46.9	54.6	54.6	47.1	45.8	51.9	52.9	45.9	46.3	50.8	54.6	51.9	50.8
PADD 3	84.1	85.0	84.9	90.2	85.4	85.9	82.6	85.4	81.5	82.6	80.9	85.6	90.2	85.4	85.6
PADD 4	7.8	6.8	7.2	7.9	8.6	7.4	7.5	7.9	8.0	7.4	7.7	8.2	7.9	7.9	8.2
PADD 5	31.2	29.0	29.9	28.5	29.9	30.1	28.8	30.3	30.2	29.2	27.5	28.8	28.5	30.3	28.8

(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 June 6, 2024.

- = no data available

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

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

U.S. Energy Information Administration | Short-Term Energy Outlook - June 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**	**109.9**	**110.9**	**112.0**	**112.5**	**114.1**	**114.4**	**115.6**	**113.1**	**111.5**	**114.1**
Alaska	1.1	1.0	0.9	1.0	1.1	1.0	0.9	1.0	1.0	0.9	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	1.9	1.8	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9
Lower 48 States (excl GOM) (b)	108.0	109.6	110.7	112.2	110.3	107.0	108.2	109.1	109.5	111.2	111.7	112.7	110.1	108.7	111.3
Appalachia region	35.4	35.7	36.0	36.7	36.0	34.7	33.5	33.7	34.6	35.0	34.7	34.8	36.0	34.5	34.8
Bakken region	2.8	3.0	3.2	3.3	3.2	3.1	3.2	3.2	3.0	3.3	3.3	3.3	3.1	3.2	3.2
Eagle Ford region	6.7	6.7	6.8	6.9	6.9	6.7	6.8	6.9	6.7	6.9	7.1	7.1	6.8	6.8	7.0
Haynesville region	16.5	16.6	16.4	16.0	16.2	13.9	14.9	14.8	14.9	15.1	15.6	16.3	16.4	14.9	15.5
Permian region	21.7	22.5	23.1	23.9	23.3	23.2	23.9	24.6	24.6	25.5	25.8	26.1	22.8	23.7	25.5
Rest of Lower 48 States	24.9	25.0	25.1	25.4	24.6	25.4	25.8	26.0	25.6	25.4	25.2	25.0	25.1	25.5	25.3
Total primary supply	**103.0**	**78.0**	**83.9**	**91.7**	**104.0**	**76.7**	**83.6**	**93.2**	**105.1**	**78.1**	**83.2**	**93.2**	**89.1**	**89.4**	**89.9**
Balancing item (c)	0.4	-0.4	-1.4	-0.7	-0.1	-0.5	1.7	1.6	1.2	1.0	2.1	1.4	-0.5	0.7	1.5
Total supply	**102.6**	**78.4**	**85.3**	**92.4**	**104.1**	**77.2**	**81.9**	**91.6**	**103.9**	**77.1**	**81.1**	**91.8**	**89.6**	**88.7**	**88.4**
U.S. total dry natural gas production	102.3	103.2	104.1	105.6	103.9	100.4	101.4	102.5	102.9	104.3	104.7	105.7	103.8	102.1	104.4
Net inventory withdrawals	12.0	-11.7	-6.4	0.3	12.7	-9.8	-5.7	4.2	15.6	-11.1	-6.8	3.3	-1.5	0.3	0.2
Supplemental gaseous fuels	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
Net imports	-11.8	-13.2	-12.6	-13.7	-12.8	-13.6	-13.9	-15.2	-14.9	-16.3	-17.0	-17.4	-12.8	-13.9	-16.4
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	11.2	11.6	13.4	13.7	13.8	14.4	15.3	11.9	12.1	14.3
Pipeline gross imports	8.4	7.3	7.9	8.2	9.0	6.8	7.2	7.5	8.3	7.0	7.2	7.5	8.0	7.6	7.5
Pipeline gross exports	8.9	8.7	9.2	8.9	9.4	9.2	9.5	9.3	9.5	9.5	9.9	9.6	9.0	9.4	9.6
Consumption (billion cubic feet per day)															
Total consumption	**103.0**	**78.0**	**83.9**	**91.7**	**104.0**	**76.7**	**83.6**	**93.2**	**105.1**	**78.1**	**83.2**	**93.2**	**89.1**	**89.4**	**89.9**
Residential	23.5	7.3	3.6	15.0	22.8	6.4	3.8	16.1	24.2	7.3	3.8	16.1	12.3	12.3	12.8
Commercial	14.5	6.4	4.7	10.7	14.3	6.2	5.2	11.3	14.8	6.7	5.2	11.3	9.1	9.2	9.5
Industrial	24.8	22.4	22.0	24.3	24.9	22.1	21.7	23.8	24.8	21.8	21.6	23.8	23.4	23.1	23.0
Electric power (e)	30.8	33.4	44.8	32.6	32.5	33.7	44.4	32.9	31.9	33.8	43.8	32.7	35.4	35.9	35.6
Lease and plant fuel	5.3	5.4	5.4	5.5	5.4	5.2	5.3	5.3	5.4	5.4	5.5	5.5	5.4	5.3	5.5
Pipeline and distribution	3.9	2.9	3.1	3.4	3.9	2.9	3.1	3.5	4.0	2.9	3.1	3.5	3.3	3.3	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**	**2,301**	**3,194**	**3,723**	**3,339**	**1,931**	**2,937**	**3,561**	**3,255**	**3,457**	**3,339**	**3,255**
East region	334	646	853	787	369	676	863	757	344	622	804	729	787	757	729
Midwest region	417	701	993	950	507	766	1,041	912	425	693	1,015	896	950	912	896
South Central region	919	1,138	1,092	1,183	1,002	1,194	1,207	1,157	832	1,130	1,182	1,143	1,183	1,157	1,143
Mountain region	79	171	239	228	168	216	246	208	125	192	239	205	228	208	205
Pacific region	74	216	278	280	231	314	331	275	180	273	289	253	280	275	253
Alaska	27	30	35	30	24	28	33	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:

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- = no data available

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

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 - June 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	2.76	2.25	2.69	2.84	2.21	2.16	2.72	3.14	3.33	3.16	3.44	3.56	2.63	2.56	3.37
Residential retail (a)															
United States average	14.72	16.19	22.33	13.72	12.76	15.68	20.59	12.53	11.50	14.10	19.84	12.47	15.19	13.68	12.80
New England	21.06	20.48	22.57	18.66	19.12	20.06	22.65	17.46	17.11	17.90	21.10	16.74	20.33	19.03	17.42
Middle Atlantic	15.60	16.03	20.74	14.33	13.44	14.83	19.44	13.02	11.98	13.46	18.77	13.05	15.64	13.96	13.02
East North Central	11.06	13.26	22.96	10.49	9.29	13.10	20.59	9.66	8.42	11.54	19.60	9.54	11.91	10.68	9.90
West North Central	13.24	15.41	22.07	11.29	10.61	13.39	20.45	10.61	9.54	12.36	19.72	10.49	13.42	11.59	10.81
South Atlantic	17.33	20.92	30.29	16.00	14.48	19.28	26.12	14.68	13.78	18.72	26.76	15.11	18.39	16.05	15.88
East South Central	13.63	16.66	23.41	13.47	11.57	16.09	21.64	12.11	10.92	14.92	21.73	12.36	14.56	12.84	12.53
West South Central	14.58	19.81	28.70	16.42	12.75	21.01	25.32	13.56	10.83	15.92	22.92	13.35	17.00	15.05	13.27
Mountain	12.61	13.86	18.75	12.88	12.56	15.12	20.13	12.95	11.90	14.04	19.02	12.41	13.29	13.66	12.92
Pacific	20.13	17.11	18.10	17.87	17.78	17.11	16.85	15.48	15.96	15.41	16.41	15.58	18.74	16.82	15.80
Commercial retail (a)															
United States average	11.81	10.48	10.89	9.82	9.79	9.82	9.89	8.40	8.45	9.09	9.87	8.71	10.89	9.37	8.80
New England	15.21	13.66	12.55	12.15	12.88	12.74	12.18	11.00	11.19	11.64	11.91	11.10	13.74	12.19	11.31
Middle Atlantic	11.94	9.25	8.06	9.48	10.49	8.71	7.59	7.82	8.55	7.98	7.74	8.20	10.23	9.05	8.25
East North Central	9.20	8.63	10.65	7.73	7.41	8.06	9.44	6.54	6.64	7.89	9.87	7.06	8.79	7.37	7.18
West North Central	11.58	11.33	11.77	8.39	8.53	8.85	9.62	7.30	7.51	8.28	9.76	7.70	10.66	8.28	7.85
South Atlantic	12.97	11.26	11.39	10.73	10.31	10.42	10.25	9.35	9.24	9.94	10.38	9.67	11.75	10.03	9.64
East South Central	11.89	10.94	11.80	10.55	9.91	10.61	10.89	9.33	8.90	10.04	11.13	9.77	11.30	9.95	9.60
West South Central	11.01	9.68	10.37	9.73	9.21	9.76	9.44	8.04	7.45	8.40	9.30	8.35	10.31	9.00	8.15
Mountain	10.76	10.77	12.16	10.66	10.07	9.82	10.49	9.04	8.93	9.45	10.32	9.01	10.87	9.75	9.19
Pacific	16.85	12.61	13.49	13.58	14.05	12.80	12.23	11.41	12.07	11.37	11.74	11.37	14.59	12.70	11.67
Industrial retail (a)															
United States average	6.12	3.76	3.87	4.38	4.47	3.51	3.70	4.46	5.07	4.27	4.35	4.89	4.59	4.07	4.67
New England	13.56	10.07	7.88	9.29	11.17	9.49	7.54	8.21	9.24	8.51	7.42	8.46	10.66	9.17	8.55
Middle Atlantic	11.94	8.97	7.89	9.35	10.14	7.99	7.34	8.02	8.53	7.58	7.88	8.49	10.33	8.69	8.27
East North Central	9.18	6.67	6.91	6.22	6.54	5.84	5.66	5.61	5.97	6.10	6.30	6.24	7.62	6.00	6.11
West North Central	8.23	4.54	4.33	4.69	5.21	3.55	3.66	4.43	5.37	4.52	4.57	5.13	5.64	4.26	4.93
South Atlantic	6.92	4.78	5.01	5.36	5.14	3.97	4.37	4.87	5.50	4.96	5.24	5.50	5.57	4.60	5.32
East South Central	5.46	3.74	4.10	4.33	4.13	3.26	3.88	4.47	5.01	4.47	4.70	5.01	4.44	3.96	4.81
West South Central	3.39	2.22	2.71	2.79	2.47	2.28	2.80	3.35	3.61	3.23	3.50	3.76	2.77	2.73	3.53
Mountain	8.90	7.73	8.05	7.76	8.17	7.19	6.75	6.11	6.06	5.97	6.28	6.05	8.19	7.13	6.07
Pacific	10.84	8.16	8.03	9.02	8.82	7.47	7.09	7.13	7.94	6.97	7.03	7.25	9.22	7.63	7.37

(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 June 6, 2024.

- = no data available

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

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

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

	2023				2024				2025				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2023	2024	2025
Supply (million short tons)															
Production	**148.7**	**142.3**	**145.6**	**140.8**	**126.4**	**108.7**	**139.3**	**131.7**	**127.1**	**110.7**	**134.1**	**128.5**	**577.5**	**506.1**	**500.3**
Appalachia	42.9	42.5	40.0	39.7	37.9	32.5	36.0	36.4	37.8	34.6	36.1	37.0	165.1	142.8	145.4
Interior	25.4	23.5	22.6	22.3	21.0	17.3	22.2	21.7	23.2	20.5	23.0	22.1	93.7	82.2	88.8
Western	80.4	76.4	83.0	78.9	67.5	59.0	81.0	73.6	66.1	55.6	75.0	69.4	318.7	281.0	266.1
Primary Inventory Withdrawals	**-1.6**	**0.3**	**3.6**	**0.1**	**-1.6**	**0.3**	**3.6**	**0.0**	**-1.8**	**0.2**	**3.4**	**-0.1**	**2.4**	**2.3**	**1.7**
Imports	**1.0**	**1.0**	**1.0**	**1.0**	**0.3**	**0.8**	**1.3**	**1.0**	**0.7**	**0.8**	**1.2**	**0.9**	**4.0**	**3.4**	**3.7**
Exports	**24.6**	**24.1**	**24.9**	**26.2**	**26.8**	**23.6**	**25.5**	**26.7**	**24.5**	**25.7**	**26.6**	**29.0**	**99.8**	**102.6**	**105.7**
Metallurgical Coal	12.4	12.6	13.6	12.7	14.3	11.4	11.9	12.1	11.4	12.7	12.7	13.2	51.3	49.8	49.9
Steam Coal	12.2	11.5	11.3	13.5	12.5	12.2	13.6	14.5	13.2	12.9	13.9	15.8	48.5	52.8	55.8
Total Primary Supply	**123.5**	**119.5**	**125.3**	**115.7**	**98.4**	**86.2**	**118.6**	**106.1**	**101.5**	**85.9**	**112.1**	**100.4**	**484.1**	**409.2**	**400.0**
Secondary Inventory Withdrawals	-20.1	-19.1	11.1	-15.1	-1.5	2.2	13.2	-13.2	-11.4	-3.3	17.4	-9.6	-43.1	0.7	-6.9
Waste Coal (a)	2.0	1.9	2.2	2.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	8.1	4.8	4.8
Total Supply	105.5	102.3	138.6	102.6	98.1	89.5	133.0	94.1	91.3	83.8	130.7	92.0	449.0	414.7	397.8
Consumption (million short tons)															
Coke Plants	**4.0**	**3.9**	**4.0**	**3.9**	**3.8**	**4.0**	**4.1**	**4.2**	**4.1**	**4.3**	**4.4**	**4.4**	**15.8**	**16.2**	**17.2**
Electric Power Sector (b)	**91.2**	**82.0**	**122.7**	**91.3**	**90.7**	**83.2**	**123.5**	**83.6**	**80.9**	**74.3**	**121.0**	**81.5**	**387.2**	**381.0**	**357.7**
Retail and Other Industry	**6.5**	**5.6**	**5.3**	**6.2**	**6.1**	**5.2**	**5.4**	**6.2**	**6.2**	**5.3**	**5.3**	**6.1**	**23.6**	**22.9**	**22.9**
Residential and Commercial	0.2	0.1	0.1	0.2	0.3	0.1	0.1	0.2	0.3	0.1	0.1	0.2	0.7	0.8	0.8
Other Industrial	6.3	5.5	5.1	6.0	5.8	5.1	5.3	6.0	5.9	5.1	5.2	5.9	22.9	22.2	22.1
Total Consumption	**101.7**	**91.5**	**132.0**	**101.4**	**100.6**	**92.4**	**133.0**	**94.1**	**91.3**	**83.8**	**130.7**	**92.0**	**426.5**	**420.1**	**397.8**
Discrepancy (c)	3.8	10.9	6.6	1.3	-2.5	-2.9	0.0	0.0	0.0	0.0	0.0	0.0	22.5	-5.3	0.0
End-of-period Inventories (million short tons)															
Primary Inventories (d)	**22.4**	**22.1**	**18.5**	**18.4**	**20.0**	**19.7**	**16.1**	**16.1**	**17.9**	**17.8**	**14.3**	**14.4**	**18.4**	**16.1**	**14.4**
Secondary Inventories	**113.3**	**132.3**	**121.2**	**136.3**	**137.7**	**135.6**	**122.4**	**135.6**	**147.0**	**150.3**	**132.9**	**142.5**	**136.3**	**135.6**	**142.5**
Electric Power Sector	109.0	127.7	116.6	131.4	133.6	131.2	117.7	130.9	143.0	146.0	128.3	137.9	131.4	130.9	137.9
Retail and General Industry	2.5	2.8	2.7	3.0	2.5	2.6	2.9	2.9	2.5	2.6	2.9	2.9	3.0	2.9	2.9
Coke Plants	1.7	1.7	1.7	1.7	1.5	1.6	1.6	1.6	1.4	1.5	1.5	1.5	1.7	1.6	1.5
Commercial & Institutional	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Coal Market Indicators															
Coal Miner Productivity (Tons per hour)	6.03	6.03	6.03	6.03	5.85	5.85	5.85	5.85	5.80	5.80	5.80	5.80	6.03	5.85	5.80
Total Raw Steel Production (Million short tons per day)	0.236	0.244	0.245	0.242	0.244	0.248	0.259	0.256	0.252	0.259	0.268	0.267	0.242	0.252	0.261
Cost of Coal to Electric Utilities (Dollars per million Btu)	2.57	2.49	2.51	2.51	2.50	2.51	2.51	2.46	2.46	2.44	2.44	2.40	2.52	2.49	2.43

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

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

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

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

- = no data available

Notes: EIA completed modeling and analysis for this report on June 6, 2024.

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

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: *Quarterly Coal Report* , DOE/EIA-0121; and *Electric Power Monthly* , Minor discrepancies with published historical data are due to independent rounding.

Forecasts: EIA Short-Term Integrated Forecasting System.

Table 7a. U.S. Electricity Industry Overview

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

	2023				2024				2025				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2023	2024	2025
Electricity Supply (billion kilowatthours)															
Electricity generation (a)	**987**	**984**	**1,209**	**998**	**1,024**	**1,035**	**1,238**	**1,013**	**1,022**	**1,053**	**1,251**	**1,023**	**4,178**	**4,310**	**4,349**
Electric power sector	949	947	1,168	958	984	997	1,197	973	983	1,014	1,210	983	4,022	4,151	4,190
Industrial sector	35	33	36	36	35	34	37	36	34	34	36	36	139	141	140
Commercial sector	4	4	5	4	4	4	5	5	4	4	5	5	17	18	18
Net imports	**8**	**6**	**3**	**2**	**2**	**4**	**10**	**8**	**11**	**12**	**15**	**11**	**19**	**25**	**48**
Total utility-scale power supply	**995**	**990**	**1,212**	**1,000**	**1,026**	**1,039**	**1,248**	**1,022**	**1,032**	**1,065**	**1,266**	**1,034**	**4,197**	**4,335**	**4,397**
Losses and Unaccounted for (b)	**42**	**52**	**51**	**52**	**52**	**69**	**55**	**46**	**41**	**67**	**53**	**46**	**197**	**223**	**206**
Small-scale solar generation (c)	**14**	**22**	**22**	**16**	**17**	**25**	**25**	**17**	**19**	**29**	**29**	**20**	**74**	**85**	**97**
Residential sector	10	15	15	11	12	17	17	12	13	20	20	13	50	58	66
Commercial sector	4	6	6	4	4	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
Electricity Consumption (billion kilowatthours)															
Sales to Ultimate Customers	**919**	**906**	**1,124**	**912**	**939**	**936**	**1,156**	**940**	**957**	**964**	**1,177**	**953**	**3,861**	**3,971**	**4,050**
Residential Sector	355	319	455	325	365	328	469	337	371	339	476	339	1,455	1,497	1,525
Commercial Sector	322	330	392	331	330	343	401	338	334	349	404	339	1,375	1,412	1,426
Industrial Sector	239	256	275	254	243	263	285	263	250	274	295	273	1,025	1,055	1,092
Transportation Sector	2	2	2	2	2	2	2	2	2	2	2	2	7	7	7
Direct Use (d)	**34**	**33**	**36**	**36**	**35**	**34**	**37**	**36**	**34**	**34**	**37**	**36**	**139**	**142**	**141**
Total Consumption	**953**	**939**	**1,161**	**948**	**974**	**970**	**1,193**	**975**	**991**	**998**	**1,213**	**988**	**4,000**	**4,112**	**4,191**
Average residential electricity usage per customer (kWh)	2,530	2,268	3,243	2,316	2,567	2,306	3,300	2,370	2,582	2,361	3,312	2,357	10,357	10,544	10,612
End-of-period Fuel Inventories Held by Electric Power Sector															
Coal (mmst)	109.0	127.7	116.6	131.4	133.6	131.2	117.7	130.9	143.0	146.0	128.3	137.9	131.4	130.9	137.9
Residual Fuel (mmb)	6.1	6.2	6.4	6.3	6.4	5.8	3.4	3.8	2.5	2.7	1.0	1.8	6.3	3.8	1.8
Distillate Fuel (mmb)	17.0	16.9	16.1	16.1	15.5	15.5	15.5	15.7	15.6	15.5	15.4	15.7	16.1	15.7	15.7
Prices															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	2.57	2.49	2.51	2.51	2.50	2.51	2.51	2.46	2.46	2.44	2.44	2.40	2.52	2.49	2.43
Natural Gas	4.98	2.60	2.92	3.19	3.37	2.38	2.68	3.29	3.70	3.17	3.36	3.69	3.36	2.91	3.47
Residual Fuel Oil	19.24	17.88	19.16	20.84	18.84	17.14	15.04	15.86	16.41	16.78	15.93	15.64	19.32	16.75	16.16
Distillate Fuel Oil	22.84	19.91	22.08	21.03	20.16	19.17	18.86	21.42	21.28	20.25	20.43	20.54	21.47	20.09	20.69
Prices to Ultimate Customers (cents per kilowatthour)															
Residential Sector	15.77	16.12	16.02	16.02	16.01	16.30	16.06	15.88	16.07	16.60	16.51	16.38	15.98	16.06	16.39
Commercial Sector	12.64	12.45	13.18	12.63	12.75	12.40	13.16	12.60	12.76	12.67	13.59	13.01	12.74	12.75	13.03
Industrial Sector	8.06	7.74	8.55	7.83	7.88	7.58	8.33	7.78	8.01	7.68	8.37	7.82	8.05	7.90	7.98
Wholesale Electricity Prices (dollars per megawatthour)															
ERCOT North hub	28.05	57.27	188.81	33.85	32.53	41.10	72.37	28.93	31.89	31.34	60.83	30.04	77.00	43.73	38.53
CAISO SP15 zone	92.54	30.00	67.59	50.54	33.41	10.32	27.66	36.71	41.14	22.78	44.11	44.08	60.17	27.03	38.03
ISO-NE Internal hub	52.63	32.55	40.41	39.84	47.50	32.25	45.41	54.68	68.27	42.72	53.22	52.26	41.36	44.96	54.12
NYISO Hudson Valley zone	44.65	31.38	39.45	36.35	43.48	29.52	38.64	34.98	50.08	35.22	46.89	36.65	37.96	36.65	42.21
PJM Western hub	36.49	35.41	43.27	42.17	35.76	37.50	51.18	42.73	49.55	44.31	53.44	45.60	39.34	41.79	48.23
Midcontinent ISO Illinois hub	31.39	32.13	40.60	33.58	32.52	29.71	41.86	37.50	45.00	42.51	49.46	43.06	34.42	35.40	45.01
SPP ISO South hub	28.96	34.56	46.96	28.50	31.66	33.43	43.40	35.86	39.98	41.28	51.32	40.03	34.74	36.09	43.15
SERC index, Into Southern	30.53	31.66	36.45	30.40	27.96	29.73	35.59	33.39	36.88	35.27	41.34	35.82	32.26	31.67	37.33
FRCC index, Florida Reliability	30.31	33.06	36.79	32.05	30.01	31.73	34.42	34.01	35.69	36.31	40.34	37.26	33.05	32.54	37.40
Northwest index, Mid-Columbia	105.99	58.61	82.36	79.49	99.74	39.27	41.57	51.13	56.34	34.32	57.12	60.11	81.61	57.93	51.97
Southwest index, Palo Verde	84.19	31.60	71.95	50.10	29.62	20.80	42.49	40.51	40.62	32.71	47.39	42.81	59.46	33.35	40.88

Notes: EIA completed modeling and analysis for this report on June 6, 2024.

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

kWh = kilowatthours. Btu = British thermal units.

Prices are not adjusted for inflation.

(a) Generation supplied by 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.

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).

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

Forecast data: EIA Short-Term Integrated Forecasting System.

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

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

	2023				2024				2025				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2023	2024	2025
Residential Sector															
New England	12.2	9.8	13.7	10.8	12.7	10.3	14.7	11.2	13.2	10.5	14.8	11.2	46.5	48.9	49.7
Middle Atlantic	33.3	27.5	40.1	30.2	36.2	28.5	42.5	30.5	37.1	29.5	43.2	30.7	131.2	137.8	140.5
E. N. Central	46.5	39.8	52.5	41.7	47.1	40.8	56.4	43.6	49.5	43.2	56.8	43.6	180.5	188.0	193.1
W. N. Central	29.4	24.1	30.8	24.2	28.8	23.1	32.5	26.1	30.8	24.5	33.1	26.4	108.6	110.5	114.7
S. Atlantic	87.2	83.8	117.9	84.2	91.6	87.9	124.4	87.4	92.7	91.9	126.7	87.7	373.0	391.3	399.0
E. S. Central	29.3	25.4	37.3	26.0	32.0	26.4	38.4	26.7	31.7	26.8	38.9	26.8	118.0	123.6	124.2
W. S. Central	51.6	52.4	86.9	49.5	52.7	54.6	81.8	50.7	53.1	55.1	83.6	51.6	240.4	239.8	243.5
Mountain	25.3	24.5	36.4	23.4	24.4	25.3	36.8	24.1	24.6	26.6	37.3	24.3	109.5	110.6	112.7
Pacific contiguous	39.5	30.2	38.7	33.8	37.8	29.4	40.1	35.0	37.2	30.3	40.6	35.1	142.2	142.3	143.1
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
Total	**355.4**	**318.6**	**455.4**	**325.2**	**364.5**	**327.6**	**468.7**	**336.6**	**371.1**	**339.4**	**476.0**	**338.7**	**1,454.7**	**1,497.4**	**1,525.2**
Commercial Sector															
New England	11.9	11.5	13.6	11.7	12.2	11.7	13.8	11.7	12.1	11.6	13.6	11.6	48.7	49.5	49.0
Middle Atlantic	35.0	33.1	39.7	34.4	35.9	34.1	40.6	34.4	35.7	34.2	40.5	34.3	142.2	144.9	144.7
E. N. Central	42.4	41.9	48.0	42.1	43.3	42.8	48.9	42.5	43.4	43.5	48.9	42.4	174.5	177.5	178.2
W. N. Central	25.3	25.1	28.6	25.0	25.5	25.2	30.0	26.3	26.7	25.9	30.3	26.6	104.0	106.9	109.5
S. Atlantic	75.4	81.7	96.5	80.4	78.6	87.2	100.3	83.2	81.2	89.9	102.2	84.4	333.9	349.3	357.7
E. S. Central	20.6	21.8	27.1	21.6	21.5	22.6	27.5	21.8	21.2	22.4	27.3	21.5	91.1	93.3	92.4
W. S. Central	47.5	51.2	63.6	50.7	48.2	54.9	64.1	52.3	49.7	55.3	64.8	53.0	213.1	219.6	222.8
Mountain	23.8	25.0	29.9	24.6	24.6	26.4	30.3	24.9	25.0	27.4	30.9	25.4	103.2	106.2	108.6
Pacific contiguous	38.9	37.0	43.6	39.4	38.4	37.3	44.0	39.6	37.6	37.4	43.7	39.2	158.8	159.2	157.9
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	1.4	5.3	5.4	5.4
Total	**322.0**	**329.7**	**391.9**	**331.3**	**329.5**	**343.4**	**400.8**	**338.0**	**334.0**	**349.0**	**403.6**	**339.5**	**1,374.9**	**1,411.8**	**1,426.1**
Industrial Sector															
New England	3.7	3.7	3.9	3.6	3.5	3.6	3.9	3.6	3.4	3.6	3.8	3.5	14.9	14.6	14.4
Middle Atlantic	17.3	17.7	18.9	17.3	17.3	18.3	19.1	17.4	17.3	18.5	19.3	17.6	71.3	72.1	72.7
E. N. Central	44.8	45.8	48.2	45.4	45.9	46.9	48.6	46.1	46.1	47.6	49.0	46.6	184.3	187.5	189.3
W. N. Central	24.1	25.5	27.2	25.8	25.1	25.7	27.9	26.6	25.6	26.6	28.7	27.4	102.6	105.3	108.4
S. Atlantic	33.5	35.2	36.4	34.0	33.6	36.0	36.6	34.4	34.0	36.9	37.4	35.1	139.1	140.6	143.4
E. S. Central	23.2	23.9	24.7	23.3	23.4	24.4	25.2	23.5	23.4	24.6	25.2	23.5	95.2	96.6	96.6
W. S. Central	53.6	62.4	68.6	62.5	54.0	66.0	76.2	69.6	59.9	73.2	84.0	76.3	247.2	265.8	293.5
Mountain	19.8	21.5	24.1	21.3	20.9	22.2	24.5	21.6	21.1	22.7	24.8	21.9	86.7	89.1	90.4
Pacific contiguous	18.3	19.2	21.9	19.6	18.2	18.9	21.8	19.5	18.0	19.0	21.8	19.5	79.0	78.5	78.3
AK and HI	1.1	1.2	1.3	1.2	1.2	1.2	1.3	1.2	1.2	1.2	1.3	1.2	4.8	4.8	4.8
Total	**239.4**	**256.2**	**275.3**	**254.1**	**243.1**	**263.2**	**285.1**	**263.5**	**250.0**	**273.7**	**295.3**	**272.8**	**1,024.9**	**1,054.8**	**1,091.7**
Total All Sectors (a)															
New England	27.9	25.1	31.4	26.2	28.5	25.8	32.5	26.6	28.9	25.9	32.4	26.4	110.6	113.4	113.6
Middle Atlantic	86.4	79.2	99.7	82.7	90.3	81.6	103.0	83.1	90.9	82.9	103.9	83.4	348.1	358.0	361.1
E. N. Central	133.8	127.6	148.9	129.4	136.4	130.6	154.1	132.4	139.2	134.4	154.8	132.7	539.7	553.5	561.1
W. N. Central	78.7	74.8	86.6	75.1	79.4	73.9	90.4	79.1	83.2	77.0	92.1	80.4	315.2	322.8	332.6
S. Atlantic	196.4	200.9	251.0	199.0	204.1	211.3	261.6	205.2	208.2	218.9	266.5	207.5	847.3	882.2	901.1
E. S. Central	73.1	71.1	89.1	70.9	76.9	73.4	91.0	72.0	76.3	73.7	91.3	71.8	304.3	313.4	313.2
W. S. Central	152.7	166.1	219.2	162.8	154.9	175.6	222.2	172.7	162.8	183.7	232.5	181.0	700.8	725.4	759.9
Mountain	68.9	71.1	90.4	69.3	69.9	74.0	91.5	70.6	70.7	76.7	93.0	71.6	299.6	306.0	311.9
Pacific contiguous	96.8	86.6	104.4	93.0	94.6	85.9	106.2	94.2	93.0	86.9	106.3	94.0	380.9	380.8	380.2
AK and HI	3.7	3.6	3.7	3.9	3.7	3.6	3.8	3.9	3.7	3.6	3.8	3.9	14.9	15.0	14.9
Total	**918.5**	**906.0**	**1,124.5**	**912.3**	**938.8**	**935.7**	**1,156.3**	**939.8**	**956.8**	**963.7**	**1,176.5**	**952.6**	**3,861.3**	**3,970.6**	**4,049.5**

Notes: EIA completed modeling and analysis for this report on June 6, 2024.

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

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).

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

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

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

Forecast data: EIA Short-Term Integrated Forecasting System.

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

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

	2023				2024				2025				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2023	2024	2025
Residential Sector															
New England	30.65	29.58	27.18	27.72	27.63	27.29	25.42	26.39	27.11	27.95	26.97	28.63	28.72	26.61	27.59
Middle Atlantic	19.70	19.13	19.86	19.63	19.64	19.79	20.58	20.25	20.33	20.50	21.30	20.90	19.61	20.09	20.79
E. N. Central	16.13	16.58	15.98	16.21	16.02	16.32	15.66	16.08	16.09	16.67	16.20	16.69	16.20	15.99	16.39
W. N. Central	11.85	13.52	14.23	12.65	12.28	13.58	13.88	12.33	12.12	13.64	14.11	12.58	13.08	13.03	13.12
S. Atlantic	14.30	14.74	14.54	14.64	14.52	14.67	14.06	14.07	14.19	14.67	14.37	14.56	14.55	14.31	14.44
E. S. Central	13.17	13.20	12.94	13.27	13.17	13.62	13.28	13.58	13.70	14.21	13.72	13.99	13.13	13.39	13.88
W. S. Central	13.57	13.57	13.51	13.75	13.47	13.66	13.74	13.64	13.42	13.84	13.96	13.79	13.59	13.64	13.78
Mountain	12.96	13.89	14.10	13.74	13.58	14.09	13.78	13.28	13.29	14.14	14.27	14.16	13.71	13.70	14.00
Pacific	19.60	22.32	23.94	21.02	22.04	24.49	25.37	21.81	22.94	25.62	26.09	22.07	21.70	23.43	24.19
U.S. Average	15.77	16.12	16.02	16.02	16.01	16.30	16.06	15.88	16.07	16.60	16.51	16.38	15.98	16.06	16.39
Commercial Sector															
New England	20.56	18.40	18.70	19.33	20.58	17.89	18.08	19.06	20.78	18.56	19.06	20.24	19.23	18.88	19.64
Middle Atlantic	14.86	14.89	16.41	15.19	15.09	15.10	16.53	15.30	15.28	15.43	16.99	15.71	15.38	15.55	15.90
E. N. Central	12.01	12.07	11.90	11.86	12.07	11.87	11.85	12.01	12.31	12.22	12.29	12.48	11.96	11.95	12.32
W. N. Central	9.95	10.66	11.38	9.90	9.93	10.62	11.28	9.86	9.97	10.85	11.63	10.14	10.50	10.45	10.68
S. Atlantic	11.32	10.95	10.90	11.01	11.16	10.60	10.47	10.57	10.88	10.66	10.77	10.94	11.03	10.68	10.81
E. S. Central	12.57	12.09	12.07	12.02	12.44	12.43	12.43	12.37	12.81	12.92	12.98	12.84	12.18	12.42	12.89
W. S. Central	9.35	8.83	9.54	9.14	9.06	8.77	9.89	9.70	9.72	9.73	10.93	10.36	9.23	9.38	10.23
Mountain	10.35	11.09	11.65	10.77	10.57	10.87	11.17	10.27	10.10	10.71	11.41	10.61	11.00	10.75	10.74
Pacific	18.06	18.84	22.70	19.62	19.51	20.00	23.44	19.85	19.47	19.95	23.47	20.06	19.90	20.80	20.84
U.S. Average	12.64	12.45	13.18	12.63	12.75	12.40	13.16	12.60	12.76	12.67	13.59	13.01	12.74	12.75	13.03
Industrial Sector															
New England	16.25	15.24	15.80	15.91	16.58	14.98	15.45	15.77	16.78	15.46	16.15	16.56	15.80	15.68	16.23
Middle Atlantic	8.21	7.72	7.82	7.76	8.19	7.95	7.98	7.79	8.37	8.03	8.01	7.78	7.87	7.98	8.04
E. N. Central	8.31	7.89	8.02	7.88	8.01	7.72	8.05	7.94	8.29	7.96	8.22	8.11	8.02	7.93	8.14
W. N. Central	7.44	7.79	8.43	7.29	7.42	7.90	8.53	7.46	7.69	8.12	8.72	7.61	7.75	7.84	8.05
S. Atlantic	7.72	7.38	8.07	7.54	7.64	7.39	8.13	7.69	7.95	7.56	8.33	7.81	7.68	7.71	7.91
E. S. Central	6.98	6.66	6.90	6.73	6.76	6.85	7.03	6.90	7.06	7.04	7.21	7.01	6.82	6.89	7.08
W. S. Central	6.56	5.95	7.27	6.16	6.03	5.27	6.30	5.78	5.81	5.01	6.01	5.62	6.50	5.86	5.62
Mountain	7.65	7.64	8.45	7.36	7.48	7.54	8.45	7.41	7.71	8.03	8.65	7.56	7.80	7.74	8.01
Pacific	11.81	12.47	14.83	13.19	12.57	13.08	15.50	13.77	13.30	14.09	16.26	14.41	13.15	13.81	14.59
U.S. Average	8.06	7.74	8.55	7.83	7.88	7.58	8.33	7.78	8.01	7.68	8.37	7.82	8.05	7.90	7.98
All Sectors (a)															
New England	24.39	22.26	22.02	22.28	23.19	21.21	21.05	21.67	23.15	21.91	22.30	23.27	22.73	21.77	22.65
Middle Atlantic	15.39	14.75	16.17	15.25	15.57	15.12	16.60	15.53	16.01	15.57	17.10	15.93	15.43	15.76	16.20
E. N. Central	12.20	11.97	12.08	11.86	12.06	11.77	12.04	11.93	12.32	12.14	12.43	12.33	12.03	11.96	12.31
W. N. Central	9.89	10.60	11.47	9.89	9.99	10.60	11.37	9.87	10.06	10.80	11.61	10.08	10.49	10.48	10.66
S. Atlantic	12.03	11.91	12.20	11.95	12.08	11.75	11.85	11.58	11.87	11.82	12.14	11.94	12.03	11.82	11.95
E. S. Central	11.04	10.66	11.00	10.74	11.02	11.00	11.30	11.03	11.42	11.43	11.70	11.36	10.87	11.10	11.49
W. S. Central	9.80	9.24	10.41	9.40	9.50	8.98	10.07	9.28	9.49	9.08	10.25	9.34	9.76	9.50	9.59
Mountain	10.53	11.01	11.79	10.72	10.70	10.98	11.49	10.42	10.50	11.11	11.82	10.88	11.07	10.94	11.13
Pacific	17.49	18.63	21.48	18.76	19.18	20.00	22.52	19.30	19.64	20.62	22.97	19.62	19.15	20.32	20.79
U.S. Average	12.66	12.41	13.20	12.50	12.75	12.41	13.15	12.42	12.80	12.64	13.46	12.72	12.72	12.71	12.93

Notes: EIA completed modeling and analysis for this report on June 6, 2024.

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

Historical data for average price of electricity to ultimate consumers represents the cost per unit of electricity sold and is calculated by dividing electric revenue from ultimate 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).

(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.

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

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

Forecast data: EIA Short-Term Integrated Forecasting System.

Table 7d part 1. U.S. Regional Electricity Generation, Electric Power Sector (billion kilowatthours), *continues on Table 7d part 2*

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

	2023				2024				2025				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2023	2024	2025
United States															
Natural gas	367.6	395.1	537.6	394.9	394.6	400.2	535.0	400.1	384.3	404.6	531.2	400.6	1,695.3	1,729.9	1,720.7
Coal	156.7	140.6	216.1	157.3	156.9	142.6	214.0	141.5	138.3	124.7	209.6	135.9	670.7	655.0	608.5
Nuclear	194.5	183.1	205.2	192.6	197.0	192.0	208.2	192.5	198.3	192.9	208.7	195.7	775.3	789.7	795.7
Renewable energy sources:	225.8	224.8	204.8	209.4	232.2	258.5	235.0	234.4	258.1	289.1	257.0	246.8	864.7	960.1	1,051.1
Conventional hydropower	60.8	64.1	58.5	55.2	63.5	67.8	61.7	58.7	69.5	78.0	63.3	58.3	238.7	251.7	269.1
Wind	125.9	102.6	84.6	111.8	122.4	112.8	90.4	119.9	127.6	116.6	93.2	123.8	425.0	445.6	461.2
Solar (a)	29.2	49.0	52.0	33.3	37.4	69.0	73.0	46.3	52.0	86.2	90.7	55.4	163.5	225.8	284.4
Biomass	5.6	5.1	5.7	4.7	5.0	5.3	5.9	5.2	5.3	5.2	5.8	5.1	21.1	21.4	21.4
Geothermal	4.2	4.0	4.0	4.2	3.9	3.5	3.9	4.2	3.7	3.0	4.0	4.2	16.5	15.5	15.0
Pumped storage hydropower	-1.6	-1.3	-1.8	-1.2	-1.1	-1.3	-1.7	-1.1	-1.2	-1.3	-1.7	-1.2	-5.9	-5.2	-5.4
Petroleum (b)	3.9	3.5	4.7	3.5	3.5	3.5	4.4	4.6	4.3	3.4	4.2	4.5	15.6	16.2	16.3
Other gases	0.8	0.7	0.9	0.8	0.7	0.8	0.9	0.8	0.8	0.8	0.9	0.8	3.2	3.3	3.3
Other nonrenewable fuels (c)	0.9	0.9	0.8	0.8	0.7	0.4	0.7	0.4	0.0	0.2	-0.1	-0.1	3.4	2.2	0.0
Total generation	**948.6**	**947.4**	**1,168.3**	**958.1**	**984.5**	**996.8**	**1,196.6**	**973.3**	**982.9**	**1,014.3**	**1,210.0**	**983.1**	**4,022.3**	**4,151.1**	**4,190.3**
New England (ISO-NE)															
Natural gas	11.5	12.3	15.8	12.5	12.8	12.2	18.1	12.5	11.1	11.7	17.4	10.8	52.2	55.6	51.1
Coal	0.1	0.0	0.0	0.1	0.0	0.0	0.2	0.1	0.3	0.0	0.3	0.1	0.2	0.3	0.6
Nuclear	7.1	3.4	6.9	5.8	7.0	7.3	7.2	5.6	7.0	6.1	7.2	7.2	23.2	27.1	27.5
Conventional hydropower	1.9	1.4	1.6	1.8	2.0	2.1	1.2	1.7	2.0	2.2	1.2	1.7	6.7	7.1	7.1
Nonhydro renewables (d)	2.6	2.8	2.6	2.4	2.8	3.0	3.1	3.4	3.6	3.5	3.5	3.9	10.4	12.3	14.4
Other energy sources (e)	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.4	0.7	0.2	0.2	0.4	1.0	1.1	1.5
Total generation	**23.6**	**20.2**	**27.2**	**22.8**	**25.0**	**24.9**	**30.0**	**23.7**	**24.6**	**23.6**	**29.8**	**24.2**	**93.7**	**103.6**	**102.2**
Net energy for load (f)	29.0	25.6	32.2	27.9	29.6	26.9	33.8	28.7	30.0	27.9	34.6	29.1	114.7	119.0	121.6
New York (NYISO)															
Natural gas	13.5	14.2	21.1	15.6	16.1	13.6	20.6	14.4	13.8	13.9	21.1	14.0	64.4	64.7	62.8
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	7.3	7.0	6.5	6.7	7.0	7.2	7.2	27.5	27.2	28.0
Conventional hydropower	7.1	6.6	6.9	7.0	7.5	7.2	7.1	7.2	7.0	6.9	6.9	7.1	27.6	29.1	27.9
Nonhydro renewables (d)	2.1	2.0	1.8	2.1	2.4	2.4	2.1	2.4	2.6	2.6	2.3	2.8	8.1	9.2	10.4
Other energy sources (e)	0.2	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.4	0.0	0.1	0.2	0.2	0.4	0.6
Total generation	**29.7**	**29.4**	**36.7**	**32.0**	**32.6**	**30.4**	**37.0**	**30.6**	**30.4**	**30.5**	**37.6**	**31.3**	**127.9**	**130.6**	**129.7**
Net energy for load (f)	36.1	33.3	42.1	35.5	37.0	34.8	44.7	36.2	37.6	36.6	45.7	36.8	147.0	152.6	156.7
Mid-Atlantic (PJM)															
Natural gas	85.1	81.5	112.3	85.4	93.5	83.4	104.0	83.3	94.0	91.3	109.5	88.4	364.3	364.3	383.1
Coal	28.3	22.9	36.2	25.7	29.1	26.6	38.3	23.7	24.0	16.7	33.7	20.3	113.1	117.7	94.7
Nuclear	67.6	65.7	70.6	68.8	68.9	64.5	71.7	68.3	67.4	66.3	71.3	67.5	272.6	273.4	272.6
Conventional hydropower	2.6	1.8	2.0	2.5	3.0	2.6	1.6	2.1	2.6	2.5	1.6	2.1	8.9	9.2	8.8
Nonhydro renewables (d)	13.1	12.0	9.8	12.4	13.9	15.3	12.8	14.0	15.2	16.6	13.7	14.9	47.2	56.0	60.5
Other energy sources (e)	0.3	0.1	0.2	0.4	0.2	0.2	0.2	0.6	0.3	0.2	0.2	0.6	1.0	1.2	1.2
Total generation	**197.1**	**183.9**	**231.0**	**195.1**	**208.6**	**192.6**	**228.6**	**192.0**	**203.4**	**193.7**	**230.1**	**193.7**	**807.2**	**821.8**	**820.8**
Net energy for load (f)	192.5	176.2	214.4	187.0	199.4	188.3	220.1	185.4	199.3	189.0	223.1	187.9	770.1	793.3	799.3
Southeast (SERC)															
Natural gas	63.7	65.7	82.4	62.6	62.1	67.2	84.9	66.2	67.1	71.9	86.5	64.9	274.4	280.4	290.4
Coal	23.7	26.5	39.7	25.2	30.5	25.4	39.3	21.5	22.7	23.6	42.4	24.0	115.0	116.7	112.7
Nuclear	51.7	52.9	57.4	57.4	55.9	57.4	59.6	54.9	56.5	58.8	60.6	57.1	219.3	227.7	233.0
Conventional hydropower	9.9	6.2	8.0	8.6	10.5	8.7	8.0	9.1	11.4	9.0	8.1	9.1	32.7	36.3	37.6
Nonhydro renewables (d)	4.9	7.2	7.4	5.0	5.4	7.9	7.7	5.6	6.2	9.6	9.3	6.1	24.5	26.7	31.1
Other energy sources (e)	-0.3	-0.2	-0.5	-0.4	0.0	-0.2	-0.4	-0.2	-0.1	-0.3	-0.4	-0.1	-1.3	-0.8	-0.9
Total generation	**153.6**	**158.2**	**194.5**	**158.4**	**164.4**	**166.4**	**199.1**	**157.1**	**163.8**	**172.6**	**206.5**	**161.1**	**664.7**	**687.0**	**703.9**
Net energy for load (f)	148.9	149.2	171.6	149.4	155.4	161.1	189.0	150.4	155.8	161.4	192.9	153.0	619.2	655.8	663.1
Florida (FRCC)															
Natural gas	38.3	48.8	59.0	42.9	40.3	48.1	57.5	42.8	36.1	46.4	56.5	41.5	189.0	188.8	180.4
Coal	2.7	2.6	3.9	2.5	1.4	1.5	2.6	1.2	1.6	2.1	2.7	0.9	11.7	6.7	7.3
Nuclear	7.4	7.5	8.0	7.1	7.5	7.7	7.9	6.8	7.8	7.4	7.5	7.7	29.9	29.9	30.4
Conventional hydropower	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.2	0.2
Nonhydro renewables (d)	3.5	4.2	4.1	3.1	3.9	5.5	5.3	4.0	5.1	6.7	6.3	4.8	14.8	18.7	22.9
Other energy sources (e)	0.6	0.5	0.6	0.4	0.3	0.5	0.5	0.4	0.5	0.5	0.6	0.4	2.1	1.8	2.0
Total generation	**52.5**	**63.6**	**75.7**	**55.9**	**53.4**	**63.4**	**73.9**	**55.2**	**51.2**	**63.0**	**73.5**	**55.4**	**247.7**	**246.0**	**243.1**
Net energy for load (f)	54.4	65.5	77.2	56.6	52.9	63.6	75.0	55.4	50.4	63.8	75.0	55.4	253.8	247.0	244.7

Notes: EIA completed modeling and analysis for this report on June 6, 2024.

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

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.

(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 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.

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

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

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 - June 2024

	2023				2024				2025				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2023	2024	2025
Midwest (MISO)															
Natural gas	45.4	54.7	67.3	47.8	48.9	58.2	71.9	51.7	54.6	59.4	72.9	53.8	215.2	230.8	240.7
Coal	43.0	38.0	57.3	44.9	42.8	38.1	58.7	43.5	39.8	37.3	56.6	41.1	183.2	183.2	174.9
Nuclear	23.4	21.1	24.3	18.4	20.9	21.8	24.2	23.0	22.4	20.9	24.1	22.2	87.2	89.9	89.6
Conventional hydropower	2.2	2.0	1.9	2.0	2.1	2.6	2.3	2.2	2.5	2.9	2.4	2.2	8.0	9.3	9.9
Nonhydro renewables (d)	30.3	26.5	19.4	29.8	31.7	28.3	21.9	32.4	36.4	32.0	24.3	34.0	106.0	114.3	126.6
Other energy sources (e)	0.8	0.7	1.3	0.8	0.6	1.2	1.4	1.4	0.9	1.1	1.3	1.3	3.6	4.6	4.6
Total generation	**145.1**	**142.9**	**171.5**	**143.6**	**147.2**	**150.3**	**180.3**	**154.2**	**156.6**	**153.6**	**181.6**	**154.6**	**603.2**	**632.0**	**646.4**
Net energy for load (f)	158.6	157.9	184.3	155.2	159.9	159.3	190.9	162.4	163.4	165.1	193.9	164.1	656.0	672.4	686.6
Central (Southwest Power Pool)															
Natural gas	15.8	21.6	30.5	18.3	19.8	20.1	26.9	15.8	16.1	19.5	26.4	15.5	86.1	82.6	77.4
Coal	20.4	17.2	27.4	18.4	17.7	17.0	28.2	17.2	17.5	15.5	27.8	16.1	83.4	80.0	76.9
Nuclear	4.3	4.3	4.3	4.4	4.3	3.1	4.3	3.5	4.2	4.3	4.2	3.1	17.2	15.2	15.9
Conventional hydropower	2.9	2.8	2.7	2.7	3.1	4.1	3.6	3.0	3.5	4.2	3.7	3.1	11.1	13.9	14.5
Nonhydro renewables (d)	31.4	25.6	22.5	29.4	30.6	29.4	24.6	31.6	31.0	30.3	25.9	33.2	108.9	116.2	120.3
Other energy sources (e)	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.7	0.7	0.6
Total generation	**75.0**	**71.6**	**87.6**	**73.3**	**75.7**	**73.8**	**87.8**	**71.3**	**72.5**	**73.9**	**88.2**	**71.1**	**307.5**	**308.7**	**305.6**
Net energy for load (f)	66.6	66.6	81.8	65.7	68.9	68.9	83.2	65.6	66.0	66.9	82.1	64.9	280.7	286.7	280.0
Texas (ERCOT)															
Natural gas	36.5	49.6	70.1	42.7	42.4	50.0	69.5	49.8	42.1	49.2	68.2	49.5	198.9	211.7	209.0
Coal	11.4	15.2	19.7	15.0	12.0	14.7	19.2	12.8	9.9	11.8	16.4	11.8	61.3	58.8	49.9
Nuclear	10.5	9.0	10.9	10.3	10.0	9.3	10.6	9.3	10.8	10.0	10.7	10.2	40.7	39.1	41.7
Conventional hydropower	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.6	0.7	0.6
Nonhydro renewables (d)	36.6	33.8	33.6	31.7	36.6	44.7	44.0	38.9	41.5	52.1	51.4	42.6	135.6	164.3	187.6
Other energy sources (e)	0.2	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.1	-0.1	-0.1	1.2	0.9	0.0
Total generation	**95.4**	**108.1**	**134.7**	**100.1**	**101.6**	**119.3**	**143.6**	**111.1**	**104.5**	**123.4**	**146.8**	**114.1**	**438.3**	**475.5**	**488.8**
Net energy for load (f)	94.2	109.8	140.6	100.0	101.0	119.3	143.6	111.1	104.5	123.4	146.8	114.1	444.5	475.0	488.8
Northwest															
Natural gas	24.3	17.9	27.8	23.9	25.7	20.9	28.0	25.1	22.0	13.1	24.6	24.5	93.9	99.7	84.1
Coal	20.2	14.4	23.6	20.2	17.4	13.9	20.1	15.1	16.3	12.3	22.1	15.4	78.4	66.6	66.1
Nuclear	2.4	1.0	2.5	2.5	2.5	2.5	2.4	2.4	2.4	1.2	2.4	2.4	8.4	9.9	8.5
Conventional hydropower	25.8	29.9	23.5	23.8	25.6	27.7	26.4	26.6	32.1	38.0	28.9	26.7	103.0	106.3	125.6
Nonhydro renewables (d)	18.9	19.2	17.8	17.5	18.9	21.2	21.6	19.3	20.1	23.3	22.2	19.9	73.3	81.0	85.5
Other energy sources (e)	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.8	0.7	0.5
Total generation	**91.8**	**82.6**	**95.4**	**88.0**	**90.3**	**86.4**	**98.8**	**88.7**	**93.0**	**87.9**	**100.3**	**89.0**	**357.8**	**364.2**	**370.3**
Net energy for load (f)	88.1	76.7	86.5	84.3	89.4	78.6	86.6	82.0	83.9	76.8	86.0	81.7	335.6	336.6	328.4
Southwest															
Natural gas	12.5	16.5	23.0	16.7	13.2	14.0	23.5	15.3	11.2	14.2	22.2	14.3	68.8	66.1	61.9
Coal	5.5	3.1	6.5	4.3	5.1	4.7	6.2	5.1	5.0	4.7	6.5	5.7	19.4	21.0	21.9
Nuclear	8.6	6.8	8.6	7.6	8.7	7.4	8.6	7.5	8.4	7.4	8.6	7.4	31.5	32.3	31.8
Conventional hydropower	1.4	2.5	2.0	1.4	1.7	2.3	2.2	1.7	1.9	2.3	2.0	1.5	7.3	7.9	7.5
Nonhydro renewables (d)	6.4	6.5	6.1	5.6	6.6	7.9	9.0	8.4	9.1	10.7	9.8	9.0	24.6	31.9	38.6
Other energy sources (e)	0.0	0.1	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	0.1	-0.2	-0.4
Total generation	**34.5**	**35.4**	**46.2**	**35.6**	**35.2**	**36.3**	**49.5**	**37.9**	**35.4**	**39.2**	**49.0**	**37.8**	**151.8**	**158.9**	**161.5**
Net energy for load (f)	28.3	32.9	45.8	29.9	28.9	33.6	45.0	29.4	28.5	35.2	45.2	29.5	136.9	136.9	138.4
California															
Natural gas	20.2	11.5	27.2	25.6	18.8	11.7	29.5	22.5	15.5	13.6	25.3	22.7	84.6	82.4	77.0
Coal	1.1	0.6	1.7	1.1	0.7	0.3	0.7	0.8	0.9	0.2	0.8	0.0	4.4	2.5	1.8
Nuclear	4.7	4.9	4.9	3.2	4.9	3.6	4.7	4.7	4.6	3.7	4.7	3.6	17.7	18.0	16.7
Conventional hydropower	6.5	10.5	9.4	4.9	7.2	9.8	8.8	4.7	6.0	9.3	8.1	4.3	31.3	30.5	27.7
Nonhydro renewables (d)	14.7	20.3	20.5	14.9	15.4	24.6	20.6	15.2	17.4	23.1	24.4	17.0	70.5	75.8	81.8
Other energy sources (e)	-0.6	-0.2	0.0	-0.2	-0.3	-0.5	0.1	-0.2	-0.6	-0.4	-0.3	-0.5	-1.0	-0.9	-1.8
Total generation	**46.7**	**47.7**	**63.7**	**49.5**	**46.8**	**49.5**	**64.3**	**47.6**	**43.8**	**49.5**	**62.9**	**47.1**	**207.6**	**208.3**	**203.3**
Net energy for load (f)	60.5	59.9	76.7	62.9	59.1	61.0	80.9	62.8	59.8	64.7	81.1	62.7	260.0	263.8	268.3

Notes: EIA completed modeling and analysis for this report on June 6, 2024.

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

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.

(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 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.

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

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

Table 7e. U.S. Electricity Generating Capacity (gigawatts at end of period)

U.S. Energy Information Administration | Short-Term Energy Outlook - June 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	486.4	487.9	488.4	489.1	488.4	486.5	487.7	488.4	488.2	490.7	491.7	491.7	489.1	488.4	491.7
Coal	184.0	180.4	178.3	177.1	176.3	175.0	175.0	174.3	174.3	170.6	168.8	162.2	177.1	174.3	162.2
Petroleum	28.1	27.9	27.9	27.9	27.9	27.4	27.4	27.2	27.2	26.2	26.2	26.0	27.9	27.2	26.0
Other gases	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3
Renewable energy sources															
Wind	143.0	144.4	144.6	147.6	148.8	151.7	152.0	154.9	155.0	155.5	156.7	160.0	147.6	154.9	160.0
Solar photovoltaic	73.3	76.8	80.5	90.1	95.9	109.2	114.9	126.3	130.1	136.8	140.7	154.5	90.1	126.3	154.5
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	2.7	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	2.7
Waste biomass	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
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	79.7	79.7	79.7	79.7	79.7	79.7	79.8	79.8	79.7	79.7	79.8
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	94.7	94.7	95.8	95.8	95.8	96.9	96.9	96.9	96.9	96.9	96.9	96.9	95.8	96.9	96.9
Battery storage	9.5	10.9	13.5	15.8	17.0	23.7	25.9	31.0	31.8	35.2	37.0	41.0	15.8	31.0	41.0
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	18.8	18.8	18.8	18.7	18.7	18.7	18.5	18.5	18.5	18.5	18.5	18.5	18.7	18.5	18.5
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	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Other gases	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
Renewable energy sources															
Wood biomass	5.4	5.3	5.3	5.2	5.2	5.2	5.2	5.3	5.3	5.3	5.3	5.3	5.2	5.3	5.3
Waste biomass	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.3	1.4	1.4	1.3
Solar	0.6	0.6	0.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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)															
Residential sector	27.8	29.6	31.4	32.9	33.8	35.1	36.4	37.7	39.1	40.5	41.9	43.3	32.9	37.7	43.3
Commercial sector	11.5	11.8	12.0	12.3	12.9	13.3	13.8	14.3	14.8	15.3	15.9	16.5	12.3	14.3	16.5
Industrial sector	2.4	2.5	2.5	2.6	2.6	2.7	2.7	2.8	2.9	2.9	3.0	3.1	2.6	2.8	3.1
All sectors total	**41.7**	**43.8**	**45.9**	**47.7**	**49.3**	**51.0**	**52.9**	**54.8**	**56.7**	**58.7**	**60.8**	**62.9**	**47.7**	**54.8**	**62.9**

Notes:

EIA completed modeling and analysis for this report on June 6, 2024.

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

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

Changes in capacity reflect various factors including new generators coming online, retiring generators, capacity uprates and derates, delayed planned capacity projects, cancelled projects, and other factors.

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

Data sources:

- Utility-scale capacity (power plants larger than one megawatt): EIA-860M Preliminary Monthly Electric Generator Inventory, March 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 - June 2024

	2023				2024				2025				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2023	2024	2025
Electric Power Sector															
Geothermal	0.014	0.014	0.014	0.014	0.013	0.012	0.013	0.014	0.013	0.010	0.014	0.014	0.056	0.053	0.051
Hydroelectric Power (a)	0.208	0.219	0.200	0.188	0.214	0.231	0.211	0.200	0.237	0.266	0.216	0.199	0.814	0.857	0.918
Solar (b)	0.100	0.167	0.177	0.114	0.128	0.236	0.249	0.158	0.177	0.294	0.310	0.189	0.558	0.770	0.970
Waste Biomass (c)	0.043	0.041	0.042	0.041	0.042	0.041	0.042	0.042	0.041	0.041	0.042	0.041	0.167	0.167	0.165
Wood Biomass	0.044	0.040	0.045	0.033	0.038	0.042	0.051	0.041	0.043	0.041	0.051	0.039	0.162	0.172	0.174
Wind	0.430	0.350	0.289	0.382	0.418	0.385	0.309	0.409	0.436	0.398	0.318	0.422	1.450	1.520	1.574
Subtotal	**0.838**	**0.830**	**0.766**	**0.773**	**0.853**	**0.947**	**0.875**	**0.865**	**0.947**	**1.051**	**0.949**	**0.905**	**3.207**	**3.539**	**3.852**
Industrial Sector															
Biofuel Losses and Co-products (d)	0.199	0.202	0.206	0.214	0.208	0.209	0.212	0.213	0.206	0.207	0.208	0.212	0.821	0.842	0.833
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	0.006	0.006	0.004	0.016	0.018	0.019
Waste Biomass (c)	0.041	0.040	0.037	0.042	0.041	0.039	0.038	0.042	0.041	0.039	0.039	0.041	0.160	0.160	0.160
Wood Biomass	0.318	0.300	0.299	0.307	0.305	0.322	0.344	0.349	0.340	0.336	0.348	0.351	1.224	1.320	1.375
Subtotal (e)	**0.568**	**0.553**	**0.554**	**0.573**	**0.565**	**0.582**	**0.607**	**0.614**	**0.597**	**0.595**	**0.607**	**0.615**	**2.249**	**2.368**	**2.414**
Commercial Sector															
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	0.021	0.014	0.016	0.023	0.024	0.016	0.019	0.027	0.027	0.019	0.069	0.079	0.092
Waste Biomass (c)	0.017	0.017	0.018	0.018	0.017	0.017	0.018	0.019	0.017	0.017	0.018	0.019	0.071	0.071	0.071
Wood Biomass	0.020	0.020	0.021	0.021	0.020	0.020	0.021	0.021	0.020	0.020	0.021	0.021	0.082	0.082	0.082
Subtotal (e)	**0.064**	**0.071**	**0.073**	**0.066**	**0.066**	**0.074**	**0.076**	**0.069**	**0.069**	**0.078**	**0.079**	**0.071**	**0.274**	**0.285**	**0.298**
Residential Sector															
Geothermal	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.040	0.039	0.040
Solar (f)	0.045	0.069	0.070	0.051	0.054	0.079	0.078	0.054	0.058	0.087	0.087	0.060	0.235	0.265	0.291
Wood Biomass	0.111	0.112	0.114	0.114	0.104	0.112	0.114	0.114	0.104	0.112	0.114	0.114	0.450	0.443	0.443
Subtotal	**0.166**	**0.191**	**0.193**	**0.174**	**0.168**	**0.201**	**0.202**	**0.177**	**0.172**	**0.209**	**0.210**	**0.183**	**0.725**	**0.748**	**0.774**
Transportation Sector															
Biodiesel, Renewable Diesel, and Other (g)	0.140	0.173	0.175	0.172	0.177	0.186	0.193	0.212	0.205	0.216	0.220	0.231	0.660	0.768	0.872
Ethanol (g)	0.268	0.284	0.286	0.286	0.267	0.285	0.290	0.286	0.268	0.285	0.288	0.287	1.125	1.127	1.128
Subtotal	**0.408**	**0.457**	**0.462**	**0.458**	**0.444**	**0.471**	**0.482**	**0.498**	**0.473**	**0.501**	**0.508**	**0.518**	**1.785**	**1.895**	**2.000**
All Sectors Total															
Biodiesel, Renewable Diesel, and Other (g)	0.140	0.173	0.175	0.172	0.177	0.186	0.193	0.212	0.205	0.216	0.220	0.231	0.660	0.768	0.872
Biofuel Losses and Co-products (d)	0.199	0.202	0.206	0.214	0.208	0.209	0.212	0.213	0.206	0.207	0.208	0.212	0.821	0.842	0.833
Ethanol (f)	0.281	0.298	0.299	0.300	0.279	0.298	0.303	0.299	0.281	0.298	0.301	0.300	1.177	1.179	1.180
Geothermal	0.030	0.029	0.030	0.030	0.029	0.028	0.029	0.030	0.028	0.026	0.030	0.030	0.120	0.116	0.115
Hydroelectric Power (a)	0.209	0.220	0.201	0.189	0.215	0.232	0.211	0.201	0.238	0.267	0.217	0.200	0.818	0.860	0.922
Solar (b)(f)	0.162	0.262	0.272	0.181	0.201	0.343	0.356	0.232	0.258	0.414	0.429	0.272	0.878	1.132	1.372
Waste Biomass (c)	0.102	0.098	0.097	0.101	0.101	0.098	0.099	0.102	0.099	0.098	0.098	0.101	0.398	0.399	0.396
Wood Biomass	0.493	0.472	0.478	0.475	0.468	0.496	0.530	0.524	0.507	0.510	0.533	0.524	1.918	2.017	2.075
Wind	0.430	0.350	0.289	0.382	0.418	0.385	0.309	0.409	0.436	0.398	0.318	0.422	1.450	1.520	1.574
Total Consumption	**2.045**	**2.104**	**2.048**	**2.044**	**2.095**	**2.275**	**2.242**	**2.222**	**2.258**	**2.434**	**2.354**	**2.292**	**8.241**	**8.834**	**9.338**

Notes: EIA completed modeling and analysis for this report on June 6, 2024.

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

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

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. Some biomass-based diesel may be consumed in the residential sector in heating oil.

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

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

Forecast data: EIA Short-Term Integrated Forecasting System.

Table 9a. U.S. Macroeconomic Indicators and CO2 Emissions

U.S. Energy Information Administration | Short-Term Energy Outlook - June 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)	22,112	22,225	22,491	22,679	22,769	22,894	23,016	23,108	23,187	23,262	23,345	23,444	22,377	22,947	23,309
Real Personal Consumption Expend.															
(billion chained 2017 dollars - SAAR)	15,313	15,344	15,461	15,587	15,684	15,817	15,915	15,989	16,051	16,109	16,174	16,248	15,426	15,851	16,145
Real Private Fixed Investment															
(billion chained 2017 dollars - SAAR)	3,906	3,956	3,981	4,016	4,068	4,078	4,090	4,113	4,142	4,164	4,182	4,201	3,965	4,087	4,172
Business Inventory Change															
(billion chained 2017 dollars - SAAR)	24	19	102	70	44	58	80	98	105	102	101	99	54	70	102
Real Government Expenditures															
(billion chained 2017 dollars - SAAR)	3,759	3,790	3,843	3,887	3,898	3,901	3,912	3,918	3,925	3,931	3,935	3,939	3,820	3,907	3,933
Real Exports of Goods & Services															
(billion chained 2017 dollars - SAAR)	2,525	2,465	2,497	2,528	2,534	2,551	2,578	2,601	2,621	2,644	2,670	2,701	2,504	2,566	2,659
Real Imports of Goods & Services															
(billion chained 2017 dollars - SAAR)	3,460	3,393	3,428	3,447	3,507	3,562	3,610	3,664	3,719	3,752	3,785	3,813	3,432	3,586	3,767
Real Disposable Personal Income															
(billion chained 2017 dollars - SAAR)	16,663	16,797	16,820	16,902	16,947	17,023	17,126	17,215	17,356	17,493	17,629	17,745	16,795	17,078	17,556
Non-Farm Employment															
(millions)	155.0	155.8	156.4	157.1	157.8	158.5	159.1	159.5	159.7	159.9	159.9	160.0	156.1	158.7	159.9
Civilian Unemployment Rate															
(percent)	3.5	3.6	3.7	3.7	3.8	3.9	3.8	3.8	3.9	4.0	4.1	4.1	3.6	3.8	4.0
Housing Starts															
(millions - SAAR)	1.37	1.46	1.38	1.48	1.40	1.37	1.41	1.40	1.40	1.39	1.38	1.38	1.42	1.40	1.39
Industrial Production Indices (Index, 2017=100)															
Total Industrial Production	102.6	102.8	103.2	102.7	102.4	102.9	103.3	103.4	103.5	103.7	103.9	104.3	102.8	103.0	103.9
Manufacturing	99.9	100.2	100.0	99.7	99.7	100.2	100.6	100.9	101.0	101.2	101.4	101.9	100.0	100.3	101.3
Food	105.1	103.6	101.6	102.4	101.7	102.4	103.1	103.8	104.2	104.6	105.0	105.6	103.2	102.8	104.8
Paper	87.8	86.6	86.7	88.0	88.0	88.9	89.5	89.7	89.7	89.9	89.9	90.3	87.3	89.0	89.9
Petroleum and Coal Products	88.5	89.9	91.3	92.9	92.3	93.7	95.1	95.2	95.1	94.9	94.6	94.5	90.7	94.1	94.8
Chemicals	103.2	103.8	103.5	102.8	103.5	105.1	106.2	106.9	107.4	108.2	108.6	109.5	103.3	105.4	108.4
Nonmetallic Mineral Products	111.4	108.6	107.4	107.5	103.4	103.6	105.3	106.0	106.6	107.3	107.9	108.6	108.7	104.6	107.6
Primary Metals	92.7	95.7	94.8	93.8	92.4	93.5	95.3	95.7	95.3	96.0	96.0	97.6	94.3	94.2	96.2
Coal-weighted Manufacturing (a)	95.7	96.2	96.0	95.9	94.6	95.5	97.1	97.4	97.4	97.9	97.9	98.7	96.0	96.2	97.9
Distillate-weighted Manufacturing (a)	99.3	99.1	98.7	98.8	97.6	98.4	99.6	100.0	100.2	100.5	100.8	101.4	99.0	98.9	100.7
Electricity-weighted Manufacturing (a)	96.4	96.8	96.9	96.6	96.3	97.2	98.3	98.7	98.8	99.3	99.5	100.3	96.7	97.6	99.5
Natural Gas-weighted Manufacturing (a)	94.0	94.1	94.5	94.4	94.3	95.2	96.5	96.8	96.7	97.2	97.2	97.8	94.2	95.7	97.2
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	3.15	3.17	3.19	3.20	3.22	3.24	3.05	3.14	3.21
Producer Price Index: All Commodities															
(index, 1982=1.00)	2.60	2.53	2.55	2.55	2.55	2.50	2.50	2.51	2.51	2.51	2.51	2.51	2.56	2.52	2.51
Producer Price Index: Petroleum															
(index, 1982=1.00)	3.09	2.91	3.17	2.82	2.79	2.72	2.53	2.61	2.65	2.68	2.66	2.56	3.00	2.66	2.64
GDP Implicit Price Deflator															
(index, 2017=100)	121.3	121.8	122.8	123.3	124.2	125.0	125.7	126.6	127.6	128.3	129.0	129.8	122.3	125.4	128.7
Miscellaneous															
Vehicle Miles Traveled (a)															
(million miles/day)	8,426	9,159	9,334	8,835	8,381	9,262	9,508	8,910	8,616	9,417	9,591	8,975	8,941	9,017	9,152
Raw Steel Production															
(million short tons per day)	0.236	0.244	0.245	0.242	0.244	0.248	0.259	0.256	0.252	0.259	0.268	0.267	0.242	0.252	0.261
Carbon Dioxide (CO2) Emissions (million metric tons)															
Petroleum	548	563	570	572	548	567	574	572	553	566	574	571	2,253	2,261	2,264
Natural Gas	501	383	416	456	515	376	415	463	512	383	413	463	1,756	1,770	1,772
Coal	186	167	240	185	181	171	244	174	169	156	241	170	778	770	736
Total Energy (c)	**1,237**	**1,115**	**1,228**	**1,214**	**1,246**	**1,116**	**1,236**	**1,210**	**1,236**	**1,107**	**1,230**	**1,207**	**4,794**	**4,808**	**4,780**

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

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

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

- = no data available

SAAR = Seasonally-adjusted annual rate

Notes: EIA completed modeling and analysis for this report on June 6, 2024.

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

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

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

Forecasts: EIA Short-Term Integrated Forecasting System. U.S. macroeconomic forecasts are based on the S&P Global model of the U.S. Economy.

Table 9b. U.S. Regional Macroeconomic Data

U.S. Energy Information Administration | Short-Term Energy Outlook - June 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	1,148	1,153	1,166	1,175	1,179	1,184	1,189	1,192	1,194	1,197	1,199	1,204	1,161	1,186	1,199
Middle Atlantic	3,192	3,202	3,235	3,255	3,270	3,290	3,309	3,321	3,331	3,339	3,349	3,362	3,221	3,297	3,345
E. N. Central	2,832	2,841	2,870	2,891	2,901	2,917	2,930	2,938	2,941	2,945	2,951	2,960	2,858	2,922	2,949
W. N. Central	1,353	1,360	1,377	1,384	1,389	1,397	1,404	1,407	1,411	1,414	1,418	1,423	1,369	1,399	1,417
S. Atlantic	4,092	4,107	4,154	4,192	4,208	4,232	4,256	4,275	4,291	4,307	4,324	4,344	4,136	4,243	4,317
E. S. Central	998	1,000	1,011	1,019	1,023	1,028	1,033	1,036	1,038	1,040	1,043	1,046	1,007	1,030	1,042
W. S. Central	2,563	2,590	2,634	2,664	2,677	2,694	2,711	2,727	2,743	2,757	2,772	2,789	2,613	2,702	2,765
Mountain	1,527	1,535	1,556	1,574	1,582	1,591	1,600	1,608	1,616	1,623	1,631	1,639	1,548	1,595	1,627
Pacific	4,249	4,277	4,327	4,362	4,375	4,397	4,418	4,438	4,456	4,472	4,489	4,509	4,304	4,407	4,482
Industrial Output, Manufacturing (Index, Year 2017=100)															
New England	96.3	96.2	95.8	95.2	95.2	95.7	96.0	96.2	96.4	96.5	96.7	97.2	95.9	95.8	96.7
Middle Atlantic	95.2	95.3	95.3	94.8	94.5	94.8	95.1	95.4	95.6	95.7	95.8	96.3	95.2	95.0	95.8
E. N. Central	96.6	96.8	96.6	96.1	95.8	96.3	96.7	97.0	96.9	97.1	97.2	97.5	96.5	96.5	97.2
W. N. Central	101.2	101.6	101.4	101.0	101.0	101.5	101.8	102.0	102.1	102.2	102.4	103.0	101.3	101.6	102.4
S. Atlantic	102.4	103.0	103.0	103.0	102.9	103.4	103.9	104.2	104.4	104.7	105.0	105.6	102.8	103.6	104.9
E. S. Central	100.1	100.4	100.1	99.9	99.9	100.5	101.1	101.3	101.3	101.3	101.4	101.8	100.1	100.7	101.4
W. S. Central	104.3	105.3	105.5	105.2	105.4	106.0	106.6	107.1	107.4	107.6	107.9	108.5	105.1	106.3	107.8
Mountain	111.0	111.3	111.2	111.1	111.5	112.1	112.5	112.8	113.0	113.3	113.6	114.2	111.1	112.2	113.5
Pacific	97.0	96.8	96.2	96.4	95.8	96.0	96.1	96.2	96.3	96.5	96.6	97.1	96.6	96.0	96.6
Real Personal Income (Billion $2017)															
New England	953	955	957	964	973	977	983	988	995	1,002	1,010	1,015	957	980	1,006
Middle Atlantic	2,518	2,530	2,543	2,553	2,575	2,585	2,600	2,613	2,632	2,651	2,668	2,683	2,536	2,593	2,658
E. N. Central	2,615	2,624	2,627	2,639	2,659	2,670	2,685	2,697	2,715	2,733	2,749	2,763	2,626	2,678	2,740
W. N. Central	1,295	1,296	1,300	1,302	1,309	1,313	1,318	1,323	1,333	1,342	1,352	1,360	1,298	1,316	1,347
S. Atlantic	3,712	3,728	3,741	3,769	3,809	3,831	3,860	3,884	3,920	3,954	3,988	4,017	3,737	3,846	3,970
E. S. Central	1,010	1,011	1,013	1,020	1,031	1,038	1,044	1,048	1,055	1,062	1,068	1,074	1,014	1,040	1,065
W. S. Central	2,318	2,311	2,327	2,342	2,365	2,377	2,394	2,408	2,430	2,451	2,472	2,491	2,325	2,386	2,461
Mountain	1,428	1,440	1,441	1,452	1,465	1,471	1,480	1,487	1,500	1,512	1,524	1,535	1,440	1,476	1,518
Pacific	3,087	3,109	3,115	3,128	3,154	3,167	3,185	3,201	3,226	3,249	3,273	3,293	3,110	3,177	3,260
Households (Thousands)															
New England	6,088	6,103	6,118	6,126	6,140	6,156	6,174	6,188	6,203	6,217	6,230	6,241	6,126	6,188	6,241
Middle Atlantic	16,074	16,101	16,128	16,146	16,180	16,216	16,255	16,293	16,331	16,368	16,400	16,429	16,146	16,293	16,429
E. N. Central	19,005	19,040	19,079	19,106	19,146	19,185	19,224	19,259	19,295	19,331	19,360	19,387	19,106	19,259	19,387
W. N. Central	8,702	8,729	8,754	8,773	8,798	8,821	8,845	8,868	8,891	8,913	8,933	8,951	8,773	8,868	8,951
S. Atlantic	27,263	27,363	27,466	27,554	27,673	27,791	27,913	28,026	28,133	28,237	28,328	28,418	27,554	28,026	28,418
E. S. Central	7,902	7,933	7,962	7,987	8,018	8,047	8,074	8,101	8,126	8,148	8,170	8,191	7,987	8,101	8,191
W. S. Central	15,960	16,022	16,091	16,150	16,220	16,291	16,370	16,445	16,519	16,592	16,658	16,720	16,150	16,445	16,720
Mountain	9,791	9,820	9,852	9,878	9,914	9,951	9,991	10,031	10,073	10,115	10,153	10,191	9,878	10,031	10,191
Pacific	18,984	19,002	19,028	19,041	19,072	19,105	19,147	19,183	19,219	19,255	19,288	19,320	19,041	19,183	19,320
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	20.6	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	22.8	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	31.8	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	8.8	8.9	8.9	8.9	8.8	8.7	8.8	8.9
W. S. Central	18.9	19.0	19.1	19.2	19.3	19.4	19.4	19.5	19.6	19.6	19.6	19.7	19.0	19.4	19.6
Mountain	11.8	11.9	12.0	12.1	12.2	12.2	12.3	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	24.9	24.4	24.8	24.9

- = no data available

Notes: EIA completed modeling and analysis for this report on June 6, 2024.

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

Regions refer to U.S. Census divisions.

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

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

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

Forecasts: U.S. macroeconomic forecasts are based on the IHS Markit model of the U.S. Economy.

Table 9c. U.S. Regional Weather Data

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

	2023				2024				2025				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2023	2024	2025
Heating Degree Days															
New England	2,713	813	90	1,926	2,761	791	131	2,037	2,943	818	130	2,028	5,541	5,719	5,920
Middle Atlantic	2,456	654	72	1,779	2,524	579	86	1,865	2,722	654	86	1,858	4,962	5,054	5,320
E. N. Central	2,726	699	95	1,897	2,655	555	121	2,134	3,001	701	120	2,129	5,418	5,465	5,952
W. N. Central	3,169	657	93	2,011	2,838	600	154	2,354	3,172	706	154	2,352	5,930	5,947	6,384
South Atlantic	1,059	191	10	891	1,250	138	13	883	1,272	178	12	876	2,150	2,284	2,338
E. S. Central	1,387	255	13	1,159	1,660	164	19	1,228	1,685	232	19	1,223	2,815	3,070	3,159
W. S. Central	928	92	1	693	1,074	50	5	766	1,094	85	5	763	1,714	1,894	1,947
Mountain	2,562	730	128	1,662	2,213	688	154	1,843	2,168	711	154	1,840	5,083	4,897	4,872
Pacific	1,835	662	100	1,040	1,539	596	94	1,161	1,443	583	94	1,158	3,637	3,390	3,279
U.S. Average	1,922	486	61	1,336	1,899	416	74	1,450	1,989	469	74	1,443	3,806	3,839	3,975
Heating Degree Days, Prior 10-year Average															
New England	3,151	859	106	2,093	3,110	855	98	2,056	3,030	846	97	2,052	6,209	6,120	6,025
Middle Atlantic	2,939	689	69	1,907	2,890	685	63	1,879	2,799	673	62	1,869	5,604	5,517	5,403
E. N. Central	3,215	741	93	2,169	3,159	735	91	2,113	3,030	718	86	2,090	6,218	6,097	5,924
W. N. Central	3,319	754	121	2,374	3,295	729	120	2,303	3,192	714	118	2,287	6,568	6,447	6,311
South Atlantic	1,403	190	10	905	1,357	188	9	896	1,310	182	9	880	2,508	2,449	2,382
E. S. Central	1,811	251	14	1,231	1,756	248	14	1,205	1,695	241	14	1,187	3,307	3,223	3,137
W. S. Central	1,188	95	3	762	1,164	90	3	730	1,123	86	3	722	2,048	1,987	1,934
Mountain	2,193	696	128	1,833	2,208	696	128	1,800	2,217	694	129	1,808	4,850	4,832	4,848
Pacific	1,444	523	75	1,148	1,472	540	77	1,130	1,499	552	81	1,147	3,191	3,218	3,279
U.S. Average	2,133	485	60	1,477	2,103	483	59	1,444	2,047	476	58	1,435	4,155	4,088	4,016
Cooling Degree Days															
New England	0	53	468	5	0	99	504	1	0	99	510	1	527	604	610
Middle Atlantic	0	91	580	10	0	164	650	5	0	183	657	5	681	820	844
E. N. Central	0	180	523	10	3	196	595	7	1	245	598	7	713	800	851
W. N. Central	1	319	708	14	11	255	730	11	5	297	733	11	1,042	1,006	1,046
South Atlantic	202	583	1,234	238	146	687	1,279	257	139	714	1,288	259	2,257	2,369	2,401
E. S. Central	64	444	1,099	73	41	570	1,123	68	34	545	1,128	68	1,681	1,801	1,775
W. S. Central	151	898	1,868	217	127	988	1,641	212	105	936	1,649	214	3,134	2,968	2,904
Mountain	3	350	1,025	98	9	396	1,010	83	20	450	1,014	83	1,476	1,498	1,568
Pacific	26	106	608	77	21	136	697	77	28	200	702	77	818	931	1,008
U.S. Average	68	362	940	104	53	421	959	105	51	446	967	106	1,474	1,538	1,569
Cooling Degree Days, Prior 10-year Average															
New England	0	87	480	2	0	83	483	2	0	85	499	2	569	568	586
Middle Atlantic	0	160	617	8	0	154	623	9	0	154	644	8	785	785	807
E. N. Central	1	234	561	10	1	231	566	10	1	227	588	10	805	808	827
W. N. Central	4	292	674	12	4	301	680	12	5	300	699	12	982	997	1,016
South Atlantic	144	675	1,192	272	153	673	1,212	270	157	678	1,234	277	2,283	2,308	2,345
E. S. Central	36	520	1,058	83	41	519	1,077	85	44	526	1,097	85	1,697	1,722	1,753
W. S. Central	101	861	1,549	223	109	872	1,585	228	118	893	1,605	227	2,734	2,794	2,843
Mountain	24	460	960	83	22	447	971	88	20	443	984	87	1,527	1,527	1,533
Pacific	32	213	676	86	32	201	677	88	30	193	677	85	1,006	998	985
U.S. Average	50	415	895	109	53	414	909	111	55	417	927	112	1,470	1,487	1,512

- = no data available

Notes: EIA completed modeling and analysis for this report on June 6, 2024.

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

Regional degree days for each period are calculated by EIA as contemporaneous period population-weighted averages of state degree day data published by the National Oceanic

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

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

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

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

Forecasts: Current month based on forecasts by the NOAA Climate Prediction Center (http://www.cpc.ncep.noaa.gov/pacdir/DDdir/NHOME3.shtml). Remaining months based on the 30-year trend.

Table 10a. Drilling Productivity Metrics

U.S. Energy Information Administration | Short-Term Energy Outlook - June 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	-	-	-	-	-	-	-	46	-	-
Bakken region	41	37	34	33	34	-	-	-	-	-	-	-	36	-	-
Eagle Ford region	78	67	55	55	57	-	-	-	-	-	-	-	64	-	-
Haynesville region	72	63	49	46	43	-	-	-	-	-	-	-	58	-	-
Permian region	352	349	326	311	312	-	-	-	-	-	-	-	334	-	-
Rest of Lower 48 States, excluding GOM	141	127	112	108	104	-	-	-	-	-	-	-	122	-	-
New wells drilled															
Appalachia region	293	286	249	226	241	-	-	-	-	-	-	-	1,054	-	-
Bakken region	240	223	202	200	206	-	-	-	-	-	-	-	865	-	-
Eagle Ford region	353	307	269	273	286	-	-	-	-	-	-	-	1,202	-	-
Haynesville region	221	192	148	133	124	-	-	-	-	-	-	-	694	-	-
Permian region	1,418	1,412	1,356	1,314	1,321	-	-	-	-	-	-	-	5,500	-	-
Rest of Lower 48 States, excluding GOM	816	767	722	662	606	-	-	-	-	-	-	-	2,967	-	-
New wells drilled per rig															
Appalachia region	5.7	5.7	5.7	5.7	5.7	-	-	-	-	-	-	-	22.9	-	-
Bakken region	5.9	6.0	6.0	6.1	6.1	-	-	-	-	-	-	-	23.9	-	-
Eagle Ford region	4.5	4.6	4.9	5.0	5.0	-	-	-	-	-	-	-	19.0	-	-
Haynesville region	3.1	3.0	3.0	2.9	2.9	-	-	-	-	-	-	-	12.0	-	-
Permian region	4.0	4.0	4.2	4.2	4.2	-	-	-	-	-	-	-	16.5	-	-
Rest of Lower 48 States, excluding GOM	5.8	6.1	6.5	6.2	5.8								24.4		
New wells completed															
Appalachia region	258	248	277	252	249	-	-	-	-	-	-	-	1,035	-	-
Bakken region	258	312	320	258	200	-	-	-	-	-	-	-	1,148	-	-
Eagle Ford region	454	406	372	307	344	-	-	-	-	-	-	-	1,539	-	-
Haynesville region	168	125	146	147	113	-	-	-	-	-	-	-	586	-	-
Permian region	1,459	1,347	1,381	1,401	1,321	-	-	-	-	-	-	-	5,588	-	-
Rest of Lower 48 States, excluding GOM	694	771	814	758	619	-	-	-	-	-	-	-	3,037	-	-
Cumulative drilled but uncompleted wells															
Appalachia region	830	868	840	814	806	-	-	-	-	-	-	-	814	-	-
Bakken region	584	495	377	319	325	-	-	-	-	-	-	-	319	-	-
Eagle Ford region	638	539	436	402	344	-	-	-	-	-	-	-	402	-	-
Haynesville region	716	783	785	771	782	-	-	-	-	-	-	-	771	-	-
Permian region	927	992	967	880	880	-	-	-	-	-	-	-	880	-	-
Rest of Lower 48 States, excluding GOM	2,573	2,569	2,477	2,381	2,368	-	-	-	-	-	-	-	2,381	-	-
Crude oil production from newly completed wells, one-year trend (thousand barrels per day) (a) (c)															
Appalachia region	14	14	14	13	12	-	-	-	-	-	-	-	14	-	-
Bakken region	51	56	60	60	60	-	-	-	-	-	-	-	57	-	-
Eagle Ford region	83	89	80	65	67	-	-	-	-	-	-	-	79	-	-
Haynesville region	0	0	0	0	0	-	-	-	-	-	-	-	0	-	-
Permian region	437	435	442	438	434	-	-	-	-	-	-	-	438	-	-
Rest of Lower 48 States, excluding GOM	78	81	85	82	79	-	-	-	-	-	-	-	82	-	-
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	-	-
Bakken region	1.2	1.4	1.7	1.8	1.8	-	-	-	-	-	-	-	1.5	-	-
Eagle Ford region	1.1	1.2	1.3	1.2	1.2	-	-	-	-	-	-	-	1.2	-	-
Haynesville region	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	0.0	-	-
Permian region	1.2	1.2	1.3	1.4	1.4	-	-	-	-	-	-	-	1.3	-	-
Rest of Lower 48 States, excluding GOM	0.5	0.6	0.7	0.8	0.7	-	-	-	-	-	-	-	0.6	-	-
Existing crude oil production change, one-year trend (thousand barrels per day) (a) (c)															
Appalachia region	-9.9	-13.2	-13.3	-13.0	-14.2	-	-	-	-	-	-	-	-12.4	-	-
Bakken region	-41.2	-33.4	-40.8	-52.1	-53.5	-	-	-	-	-	-	-	-41.9	-	-
Eagle Ford region	-74.3	-81.2	-86.6	-83.3	-81.2	-	-	-	-	-	-	-	-81.4	-	-
Haynesville region	-0.7	-0.9	-0.7	-0.5	-0.7	-	-	-	-	-	-	-	-0.7	-	-
Permian region	-410.6	-412.0	-398.2	-389.6	-397.1	-	-	-	-	-	-	-	-402.6	-	-
Rest of Lower 48 States, excluding GOM	-72.7	-67.8	-79.0	-84.1	-84.0	-	-	-	-	-	-	-	-75.9	-	-
Natural gas production from newly completed wells, one-year trend (million cubic feet per day) (a) (d)															
Appalachia region	1,320.0	1,352.7	1,435.4	1,422.1	1,388.1	-	-	-	-	-	-	-	1,383.0	-	-
Bakken region	59.3	63.1	63.8	67.2	73.4	-	-	-	-	-	-	-	63.4	-	-
Eagle Ford region	390.3	338.5	331.0	332.0	326.5	-	-	-	-	-	-	-	347.7	-	-
Haynesville region	994.1	920.4	755.4	600.7	541.1	-	-	-	-	-	-	-	816.4	-	-
Permian region	835.0	828.8	832.8	839.9	846.7	-	-	-	-	-	-	-	834.1	-	-
Rest of Lower 48 States, excluding GOM	385.2	359.6	422.8	466.0	435.9	-	-	-	-	-	-	-	408.7	-	-
Natural gas production from newly completed wells per rig, one-year trend (million cubic feet per day) (a) (d)															
Appalachia region	25.3	26.4	29.5	35.1	34.3	-	-	-	-	-	-	-	29.1	-	-
Bakken region	1.5	1.6	1.8	2.0	2.2	-	-	-	-	-	-	-	1.7	-	-
Eagle Ford region	5.1	4.4	5.4	6.1	5.9	-	-	-	-	-	-	-	5.3	-	-
Haynesville region	13.7	12.8	13.3	12.6	11.8	-	-	-	-	-	-	-	13.1	-	-
Permian region	2.4	2.4	2.4	2.6	2.7	-	-	-	-	-	-	-	2.5	-	-
Rest of Lower 48 States, excluding GOM	2.5	2.7	3.5	4.3	4.1	-	-	-	-	-	-	-	3.2	-	-
Existing natural gas production change, one-year trend (million cubic feet per day) (a) (c) (d)															
Appalachia region	-1,193.7	-1,209.8	-1,275.9	-1,306.8	-1,324.5	-	-	-	-	-	-	-	-1,247.0	-	-
Bakken region	-49.6	-52.7	-82.2	-78.2	-67.2	-	-	-	-	-	-	-	-65.8	-	-
Eagle Ford region	-312.9	-285.7	-308.9	-319.0	-313.0	-	-	-	-	-	-	-	-306.7	-	-
Haynesville region	-912.5	-912.3	-847.2	-772.4	-737.9	-	-	-	-	-	-	-	-860.6	-	-
Permian region	-650.5	-604.3	-607.6	-606.2	-644.1	-	-	-	-	-	-	-	-617.0	-	-
Rest of Lower 48 States, excluding GOM	-517.7	-371.6	-354.0	-451.2	-481.8	-	-	-	-	-	-	-	-423.3	-	-

(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 June 6, 2024.

- = no data available

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

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)	**8.18**	**8.33**	**8.46**	**8.66**	**8.52**	-	-	-	-	-	-	-	**8.41**	-	-
Austin Chalk formation	0.13	0.12	0.13	0.12	0.11	-	-	-	-	-	-	-	0.13	-	-
Bakken formation	1.08	1.11	1.19	1.24	1.17	-	-	-	-	-	-	-	1.16	-	-
Eagle Ford formation	1.00	1.02	1.02	0.96	0.89	-	-	-	-	-	-	-	1.00	-	-
Mississippian formation	0.14	0.14	0.13	0.13	0.12	-	-	-	-	-	-	-	0.13	-	-
Niobrara Codell formation	0.42	0.45	0.46	0.48	0.45	-	-	-	-	-	-	-	0.45	-	-
Permian formations	5.02	5.07	5.14	5.33	5.41	-	-	-	-	-	-	-	5.14	-	-
Woodford formation	0.11	0.11	0.10	0.10	0.09	-	-	-	-	-	-	-	0.10	-	-
Other U.S. formations	0.29	0.30	0.29	0.29	0.27	-	-	-	-	-	-	-	0.29	-	-
Total U.S. shale dry natural gas production (billion cubic feet per day) (a)	**81.1**	**81.1**	**80.9**	**81.1**	**79.7**	-	-	-	-	-	-	-	**81.0**	-	-
Bakken formation	2.2	2.3	2.5	2.6	2.4	-	-	-	-	-	-	-	2.4	-	-
Barnett formation	1.9	1.9	1.8	1.8	1.7	-	-	-	-	-	-	-	1.8	-	-
Eagle Ford formation	4.4	4.5	4.5	4.5	4.2	-	-	-	-	-	-	-	4.5	-	-
Fayetteville formation	0.9	0.9	0.9	0.9	0.8	-	-	-	-	-	-	-	0.9	-	-
Haynesville formation	14.6	14.8	14.6	14.3	14.0	-	-	-	-	-	-	-	14.6	-	-
Marcellus formation	25.6	25.4	25.4	25.8	25.3	-	-	-	-	-	-	-	25.5	-	-
Mississippian formation	2.3	2.2	2.1	2.1	2.1	-	-	-	-	-	-	-	2.2	-	-
Niobrara Codell formation	2.6	2.6	2.7	2.8	2.7	-	-	-	-	-	-	-	2.7	-	-
Permian formations	15.4	16.0	16.5	17.0	17.5	-	-	-	-	-	-	-	16.2	-	-
Utica formation	5.8	5.2	4.8	4.2	3.9	-	-	-	-	-	-	-	5.0	-	-
Woodford formation	3.1	3.0	2.9	2.9	2.8	-	-	-	-	-	-	-	3.0	-	-
Other U.S. formations	2.3	2.3	2.3	2.3	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 June 6, 2024.

- = no data available

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

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

Sources:

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

Appendix to the June 2024 *Short-Term Energy Outlook*

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

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

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

Table a1. Summary of Estimated Petroleum and Other Liquids Quantities

	Apr 2024	May 2024	Apr 2024 – May 2024 Average	Apr 2023 – May 2023 Average	2021 – 2023 Average
Global Petroleum and Other Liquids (million barrels per day)					
Global Petroleum and Other Liquids Production (a)	102.1	102.2	102.1	101.1	99.2
Global Petroleum and Other Liquids Consumption (b)	101.6	102.0	101.8	101.2	99.8
Biofuels Production (c)	2.7	3.0	2.9	2.8	2.8
Biofuels Consumption (c)	2.8	2.8	2.8	2.8	2.7
Iran Liquid Fuels Production	4.3	4.3	4.3	3.8	3.7
Iran Liquid Fuels Consumption	2.1	2.1	2.1	2.0	2.1
Petroleum and Petroleum Products Produced and Consumed in Countries Other Than Iran (million barrels per day)					
Production (d)	95.1	94.8	94.9	94.5	96.4
Consumption (d)	96.7	97.1	96.9	96.5	95.0
Production minus Consumption	-1.7	-2.3	-2.0	-1.9	1.4
World Inventory Net Withdrawals Including Iran	-0.5	-0.1	-0.3	0.1	0.7
Estimated OECD Inventory Level (e) (million barrels)	2,754	2,769	2,762	2,806	2,778
Surplus Production Capacity (million barrels per day)					
OPEC Surplus Crude Oil Production Capacity (f)	4.2	4.4	4.3	3.0	3.7

Note: The term "petroleum and other liquids" encompasses crude oil, lease condensate, natural gas liquids, biofuels, coal-to-liquids, gas-to-liquids, and refinery processing gains, which are important to consider in concert due to the inter-related supply, demand, and price dynamics of petroleum, petroleum products, and related fuels.

(a) Production includes crude oil (including lease condensates), natural gas liquids, other liquids, and refinery processing gains.

(b) Consumption of petroleum by the OECD countries is synonymous with "products supplied," defined in the glossary of the EIA Petroleum Supply Monthly, DOE/EIA-0109. Consumption of petroleum by the non-OECD countries is "apparent consumption," which includes internal consumption, refinery fuel, and loss, and bunkering.

(c) Biofuels production and consumption are based on EIA estimates as published in the International Energy Statistics. Biofuels production in the third quarter tends to be at its highest level in the year as ethanol production in Brazil reaches its seasonal peak and is typically lowest in the first quarter as seasonal production falls in the South/South-Central region of Brazil.

(d) Global production of petroleum and petroleum products outside of Iran is derived by subtracting biofuels production and Iran liquid fuels production from global liquid fuels production. The same method is used to calculate global consumption outside of Iran.

(e) Estimated inventory level is for OECD countries only.

(f) EIA defines surplus oil production capacity as potential oil production that could be brought online within 30 days and sustained for at least 90 days, consistent with sound business practices. This does not include oil production increases that could not be sustained without degrading the future production capacity of a field.
Data source: U.S. Energy Information Administration.

Table a2. Crude Oil and Petroleum Product Price Data

Item	Apr 2024	May 2024	Apr 2024 – May 2024 Average	Apr 2023 – May 2023 Average	2021 – 2023 Average
Brent Front Month Futures Price ($ per barrel)	89.00	83.00	86.00	79.25	84.06
WTI Front Month Futures Price ($ per barrel)	84.39	78.62	81.51	75.27	80.01
Dubai Front Month Futures Price ($ per barrel)	89.37	83.72	86.55	78.72	82.59
Brent 1st - 13th Month Futures Spread ($ per barrel)	8.35	5.13	6.74	4.37	7.69
WTI 1st - 13th Month Futures Spread ($ per barrel)	8.44	5.42	6.93	4.61	7.73
RBOB Front Month Futures Price ($ per gallon)	2.75	2.51	2.63	2.62	2.53
Heating Oil Front Month Futures Price ($ per gallon)	2.63	2.44	2.53	2.45	2.81
RBOB - Brent Futures Crack Spread ($ per gallon)	0.63	0.54	0.59	0.73	0.53
Heating Oil - Brent Futures Crack Spread ($ per gallon)	0.51	0.46	0.49	0.57	0.81

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