



Summer Fuels Outlook

Based on the April 12, 2022 update to our [Short-Term Energy Outlook](#) (STEO), we currently forecast that the retail price of regular-grade gasoline will average \$3.84 per gallon (gal) in the United States this summer (the second and third quarters of the year), and that retail diesel prices will average \$4.57/gal. In real (inflation-adjusted) terms, gasoline and diesel prices this summer would be the highest since summer 2014. In addition, we forecast that U.S. consumption of gasoline will increase this summer but remain less than during the pre-pandemic summer of 2019. As a result, we estimate that the average U.S. household will spend about \$2,945 on gasoline in 2022, which, in real terms, is \$455 (18%) more than in 2021. We expect that summer 2022 U.S. diesel consumption will also increase, almost equaling consumption during the summer of 2019.

This outlook focuses on consumption of gasoline and diesel fuel in the United States, and their related prices ([Table SF01](#)). Consumption of these fuels typically peaks during the summer months. We update our forecasts related to these fuels monthly. We will publish a separate summer outlook for electricity markets in the May update of STEO.

The analysis in this report considers the summer driving season for gasoline and diesel fuel, which we define as the period from April through September. Heading into this summer, economic recovery from the COVID-19 pandemic and increased levels of geopolitical risk have driven up petroleum market prices and volatility. In most months from mid-2020 through February 2022, petroleum consumption was more than petroleum production globally, leading to declining oil stocks and causing a steady increase in the price of crude oil and retail petroleum products. The ultimate price U.S. consumers pay for gasoline and diesel this summer will depend on the course of global oil supply and demand in the coming months, which are very uncertain.

Significant supply uncertainty stems from the wide range of possible outcomes for the production and availability of Russian crude oil. Also, the recent U.S. government and other IEA member country announcements of releasing a combined 240 million barrels of oil from strategic stocks over the course of six months will add supply to the market this summer and presents further uncertainty to price effects this summer. Additionally, economic activity is a key driver of consumption; we make economic assumptions based on the U.S. macroeconomic model from S&P Global. As a result, our forecast assumes U.S. GDP will be 3.4% higher this summer compared with last summer. Stronger economic growth reflects rising employment and consumer expenditures, which typically point to increased consumption of gasoline and diesel. However, we also expect the highest real retail gasoline prices since 2014, which could limit demand for driving this summer.

Although we expect that ongoing effects of the COVID-19 pandemic will affect petroleum markets this summer less than they have during the past two summers, the potential for new COVID-19 variants and spikes in the number of cases could lead to behavioral shifts, which could limit travel and demand for transportation fuels.

Gasoline

We expect more U.S. consumption of gasoline and higher prices this summer compared with last summer. We forecast that the retail price of regular-grade gasoline in the United States will average \$3.84/gal during the summer of 2022. Last summer's average price was \$3.06/gal. In 2022, we expect real retail gasoline prices for the summer to be the highest since 2014. We forecast that U.S. gasoline consumption will average 9.2 million barrels per day (b/d), up 0.8% from last summer.

We expect more travel this summer than last summer, and consequently more U.S. gasoline consumption, because we assume that the effects of the COVID-19 pandemic on gasoline consumption will be less significant and that employment will continue to rise. The consequences of Russia's further invasion of Ukraine, along with increasing global economic activity that contributes to more oil consumption throughout this summer, results in our expectation of high crude oil prices. High crude oil prices are the primary driver of high U.S. motor gasoline prices.

In March 2022, the most recent month of actual data, U.S. regular grade retail gasoline prices averaged \$4.22/gal. We forecast that gasoline prices will decrease gradually throughout the summer. Russia's actions in Ukraine, sanctions imposed on Russia because of those actions, and the resulting departure of many private American and European companies from Russia have contributed to disruptions in global crude oil supply and availability. These oil supply disruptions have occurred at the same time that many OPEC producers have been unable to meet production targets, and as U.S. crude oil production growth has been slower than it was pre-pandemic, resulting in low global commercial petroleum inventories. We forecast that global commercial petroleum inventories will begin rebuilding this summer, and we expect that the European benchmark Brent oil price will average \$106 per barrel (b) this summer, \$35/b higher than last summer, but down from an average of \$117/b in March 2022. Some of the expected decline in oil prices this summer compared with March reflects the recent announcements of SPR releases from the United States and other IEA members. In addition, we forecast that gasoline refining margins (the difference between the price of wholesale gasoline and Brent crude oil) will average 47 cents/gal this summer, less than last summer's average of 55 cents/gal.

Consumption

We estimate that consumption of gasoline in the United States during the first quarter of 2022 (1Q22) averaged 8.4 million b/d, up from 8.0 million b/d in 1Q21, but less than 1Q19 consumption of 9.0 million b/d. We forecast that U.S. gasoline consumption from April through September 2022, the summer driving season, will average 9.2 million b/d, up 75,000 b/d from

the 2021 summer driving season, but down from 9.5 million b/d during that period in 2019. We forecast that monthly U.S. gasoline consumption during 2022 will peak in July at almost 9.4 million b/d, slightly more than consumption last July.

We expect that the combination of rising employment and decreasing effects of the COVID-19 pandemic on travel will increase U.S. gasoline consumption during the summer. Higher gasoline prices, however, may reduce recreational travel, limiting some potential gasoline consumption. Crude oil prices, the most significant driver of gasoline prices, are currently highly volatile, and that volatility contributes to high levels of uncertainty in our forecast. Changes in the underlying price of crude oil and gasoline may contribute to U.S. gasoline consumption being greater or less than our forecast.

Changes in U.S. gasoline consumption reflect both changes in how much travel takes place, which we measure as vehicle miles traveled (VMT), and changes in how efficient vehicles have become. We forecast 2.5% more U.S. VMT in the summer of 2022 than last summer, and 1.9% more than the summer of 2019.

Employment is a key driver of VMT. Based on the macroeconomic forecasts from S&P Global that we use in our outlook, we assume that U.S. non-farm employment will increase throughout 2022, causing gasoline consumption to rise. Gasoline consumed in commuting to work is a significant source of U.S. consumption and is less responsive to fuel prices. In our forecast, we assume that the most significant effects of the COVID-19 pandemic on commuting have largely dissipated. Increased workforce participation in work-from-home programs, however, is likely to continue, which could limit gasoline demand related to work commutes moving forward. A number of factors add uncertainty to our U.S. gasoline consumption forecast, including the effects on commuting from employees going into the office fewer days every week and people's willingness to take public transportation, and the share of new jobs that involve working from home.

Increasing average vehicle fuel efficiency in the United States partially offsets the effect of our forecast VMT on gasoline consumption. We forecast that U.S. vehicle efficiency will increase by 1.6% this summer compared to last.

Although cases of COVID-19 have fallen from their peaks in the United States, the possibility that cases could increase and some forms of regional travel or social restrictions could be re-imposed is another uncertainty that could limit growth in gasoline consumption. In addition, crude oil price volatility could cause gasoline prices to be higher or lower than forecast, which could affect gasoline demand.

Prices

We forecast U.S. retail gasoline prices will gradually fall from an average of \$4.22/gal in March 2022 to \$3.75/gal in July and to \$3.68/gal by September. In response to historic global oil market volatility following Russia's further invasion into Ukraine starting on February 24, U.S. retail gasoline prices [increased significantly](#) in March. According to our weekly [Gasoline and](#)

[Diesel Fuel Update](#), the U.S. regular-grade gasoline price on April 4, 2022, was \$4.17/gal, which was \$1.31/gal higher than at the same time last year but down 15 cents/gal from the mid-March peak of \$4.32/gal on March 14.

Current U.S. gasoline prices reflect high crude oil prices brought on by geopolitical risks related to Russia's further invasion of Ukraine, and associated sanctions and private sector boycotts of Russia. U.S. gasoline inventories ended March 2.6% below the previous five-year (2017–2021) average. We expect refinery utilization to continue increasing and remain elevated through the summer as long as [crack spreads](#) remain high, which will contribute to gasoline inventories rising above the five-year average by June and to gradually falling prices.

Significant differences in gasoline prices exist across the United States, and monthly average prices in some regions can significantly exceed the national average. Unplanned refinery outages and other supply disruptions in trade volumes or transport logistics can also lead to product prices temporarily rising higher than our regional forecasts. We forecast average summer 2022 retail gasoline prices to range from a high of \$4.67/gal on the West Coast to a low of \$3.48/gal on the Gulf Coast.

Because gasoline taxes and retail distribution costs are generally stable, movements in gasoline and diesel prices in the United States are primarily the result of changes in crude oil prices and wholesale margins, both of which are at high levels going into summer 2022. This year, however, the effect of taxes on retail gasoline prices is more uncertain than usual. Some states, including [Connecticut](#), [Georgia](#), and [Maryland](#), have passed temporary tax holidays which are likely to contribute to lower relative gasoline prices in those states until the holidays expire. The potential for those tax holidays to be extended and the potential for more states to announce similar measures create additional uncertainty in our forecast of gasoline prices this summer.

Brent crude oil prices in our forecast average \$106/b (\$2.52/gal) this summer, compared with an average of \$71/b (\$1.70/gal) last summer. Any difference between actual crude oil prices and our forecast would likely be reflected in retail gasoline prices. Because there are 42 gallons in a barrel of oil, and absent other factors specific to the gasoline and diesel fuel markets, each one dollar per barrel of sustained price change in crude oil compared with the forecast translates into a 2.4-cent-per-gallon change in product prices.

Recent increases in the volatility of crude oil prices highlight a wide range of potential crude oil prices that could develop over the summer. As we update our forecast monthly through the summer, our crude oil price forecast could change, depending on several factors. Notably, this outlook takes into account sanctions on Russia announced as of April 7, but the range of possible outcomes for resulting oil production in Russia given these sanctions is wide. Additional areas of risk include:

- Private sector divestments from, or possible additional U.S. or EU sanctions on, Russia
- OPEC+ members (excluding Russia) not meeting production targets
- Attacks on energy infrastructure in Saudi Arabia and the United Arab Emirates by Houthi forces in Yemen

Activity by U.S. upstream oil producers is another source of uncertainty. Although we still forecast growth in U.S. crude oil production this year, the relationship between high crude oil prices and increasing U.S. investment in crude oil production remains uncertain. Because of tight labor markets, constraints in equipment availability, and high input costs, as well as reductions in investment directed to drilling programs compared with pre-pandemic levels, the relationships between crude oil prices, rig deployment, and production, are potentially different from what they were over much of the past decade.

Global oil demand could also vary from our forecast levels. We currently expect global oil demand to rise by 1.8 million b/d in 3Q22 compared with 3Q21, but many factors, including potential new outbreaks of COVID-19, could drive this number higher or lower, which would affect oil prices. In addition, inflation and the conflict in Ukraine could affect economic growth, which would affect oil demand and oil price outcomes.

Oil futures and options trading is reflecting the uncertainty of market expectations of gasoline prices. Futures contracts for reformulated blendstock for oxygenate blending (RBOB), which makes up the petroleum component of reformulated gasoline, to be delivered at New York Harbor in June 2022 were traded during the five-day period ending April 7 at an average price of \$3.09/gal. The [market-derived probability](#) that the June RBOB futures contract will exceed \$3.10/gal when the contract expires at the end of May was 46%. An RBOB price of \$3.10/gal is consistent with a U.S. average regular-grade gasoline retail price that is about \$4.00/gal.

Refining

We expect U.S. wholesale gasoline margins, which we calculate as the difference between the wholesale price of gasoline and the Brent crude oil price, will average 47 cents/gal this summer. This average would be 8 cents/gal lower than last summer and 4 cents/gal higher than the previous five-summer average from 2017 through 2021. We forecast higher-than-average margins because of reduced U.S. refinery capacity compared with 2019 and low gasoline inventories in certain U.S. regions during the first half of the summer (2Q22).

U.S. wholesale gasoline margins began the year above their previous five-year average because of low gasoline inventories, and they have risen as demand increased in response to the renewal in economic activity as COVID-19 cases decreased in February. We forecast that gasoline inventories through the summer months will average 1% above their five-year average, which we expect will gradually add downward pressure to wholesale gasoline margins and retail prices as the summer goes on. U.S. average wholesale gasoline margins averaged 36 cents/gal in January and increased to 63 cents/gal in March, 26 cents/gal above the recent five-year March average. We forecast that summer wholesale gasoline margins will remain above their recent five-summer averages until July, and expect these margins to fall closer to the previous five-year average in 3Q22 as refinery utilization increases to meet distillate demand, contributing to more gasoline production. Our forecast U.S. wholesale gasoline margins fall from their March peak to average 39 cents/gal by September.

Finished motor gasoline is supplied in the United States through four sources:

- Domestic refinery output
- Fuel ethanol blending
- Imports of gasoline and gasoline blending components
- Withdrawals from primary inventories

We expect consumption of gasoline to be almost 80,000 b/d higher this summer compared with last summer. We expect 140,000 b/d more U.S. refinery production of gasoline this summer than last summer. We forecast fuel ethanol blending into gasoline this summer to be similar to last summer's level at 930,000 b/d, which would be nearly 10.1% of total gasoline consumption. We forecast that the United States will import about 40,000 b/d less gasoline (including both finished gasoline and blend components) than it exports, which would be a decrease in net imports of 20,000 b/d from last summer, when the United States was a net importer of gasoline. We expect the rate of stock withdrawals of gasoline in the United States to average almost 20,000 b/d this summer, which is 40,000 b/d less than last summer.

Inventories

At the beginning of the summer driving season (April 1), U.S. gasoline stocks totaled 236.8 million barrels, 0.9 million barrels less than a year ago and 6.3 million barrels (2.6%) less than the previous five-year (2017-21) average for beginning-of-season stocks. This summer, we forecast an average draw on U.S. gasoline stocks of almost 20,000 b/d. We forecast U.S. gasoline inventories will end the summer at 233.6 million barrels, 6.5 million barrels (2.9%) more than last year and 3.6 million barrels (1.6%) more than the five-year average. Stock withdrawals have become an increasingly significant source of motor gasoline supply in the United States during the summer in recent years, having averaged 71,500 b/d during the summers of 2017–21.

Expenditures

For all of 2022, we forecast that the regular-grade gasoline retail price will average \$3.74/gal in the United States, and that gasoline retail prices for all grades will average \$3.86/gal. As a result of these prices, we forecast that the average U.S. household will spend about \$2,945 on gasoline in 2022, which is \$455 (18%), on a real basis, more than in 2021. In addition to higher forecast gasoline prices, increased household spending on gasoline reflects our expectation of increased driving in 2022 compared with 2020 or 2021. How much individual households spend on gasoline ranges significantly, depending on a wide range of factors including employment status and the ability to work from home. We will publish an additional STEO supplement analyzing the ratio of gasoline expenditures to disposable income.

Diesel Fuel

Because diesel fuel is used extensively in industrial and commercial applications in the United States, diesel consumption is tied closely to economic activity. We expect that consumption this summer of distillate fuel (including diesel and heating oil) will surpass consumption last summer and essentially equal consumption during the summer of 2019, before the COVID-19 pandemic. We expect that U.S. diesel prices, however, will be higher this summer as a result of high crude

oil prices and low global inventories. As with gasoline, crude oil prices are the primary driver of diesel fuel prices and remain highly volatile and subject to uncertainties. Changes in crude oil markets could result in diesel prices that are higher or lower than forecast, which in turn could affect consumption.

An additional source of uncertainty lies in distillate trade and prices as a result of the petroleum market disruptions from Russia's further invasion of Ukraine. Many European countries traditionally import distillate from Russia, and global commercial distillate inventories remain low. Although we forecast increased U.S. distillate production, the extent to which U.S. refiners can increase distillate output and potentially exports remains uncertain and is likely to affect U.S. diesel prices. Most U.S. distillate exports in recent years have gone to countries in the western hemisphere. In 2021, the top five recipients of U.S. distillate exports were destinations in either North America or Central and South America, and any redirection of U.S. exports toward Europe might result in lower exports to other markets.

Consumption

Demand for diesel fuel in the United States—supported by demand for trucking, home delivery, and distribution of goods—has remained relatively strong since 2020 compared with demand for gasoline, which was more affected by the pandemic. In 1Q22, we estimate that diesel demand averaged 3.6 million b/d, up from 3.5 million b/d last year. During the 2022 summer driving season, we forecast that diesel consumption will average almost 3.9 million b/d, up almost 90,000 b/d from 2021 and slightly less than consumption in the 2019 summer driving season.

Because of diesel's use in the U.S. trucking and industrial sectors, its consumption reflects economic activity. Based on macroeconomic data from S&P Global, U.S. GDP in 2021 increased by 5.7%, and we assume that GDP will grow by 3.4% in 2022. Although we expect the U.S. economic growth rate to slow, increasing GDP should continue to support trucking and shipping activity and contribute to rising diesel consumption.

U.S. consumption of distillate fuel in our forecast, including diesel and heating oil, averages 4.0 million b/d this summer, up 2% (90,000 b/d) from last summer. However, we forecast that distillate consumption this summer will still be slightly lower (by less than 1%, 20,000 b/d) than in 2019.

Refining and prices

Distillate fuel is supplied in the United States through four sources:

- [Domestic refinery output](#)
- Biodiesel and renewable diesel blending
- Imports
- Withdrawals from primary inventories

We expect U.S. production of distillate fuel by refiners and blenders to average 5.4 million b/d this summer, up 610,000 b/d from last summer. We forecast that biodiesel production will

average about 100,000 b/d this summer, down slightly from last summer. We expect renewable diesel production, which is primarily produced for consumption in California and is [distinct from biodiesel](#), to average about 90,000 b/d this summer, up more than 40,000 b/d compared with 2021. Our forecast for net exports of distillate fuel averages 1.3 million b/d this summer, a 360,000 b/d increase from last summer.

Our forecast of wholesale U.S. diesel fuel margins averages 82 cents/gal this summer, 40 cents/gal higher than last summer and 43 cents/gal higher than the previous five-summer average. Russia has historically been a substantial producer and exporter of distillate fuel oil, particularly into Europe, where distillate is regularly consumed as a transportation fuel for light duty vehicles including automobiles. Sanctions and private company divestitures from business with Russia are likely to limit distillate exports from Russia, and in the medium term, may also reduce refinery operations in Russia. These potential supply disruptions are emerging as the world, and Europe in particular, is experiencing below average distillate inventories stemming from supply chain disruptions and winter heating demand. Market consideration of these factors together produced a large increase in the U.S. ultra-low-sulfur diesel crack spread during March 2022.

We forecast that U.S. diesel margins will remain historically high through the summer and international supply pressures will persist, contributing to higher overall refinery margins and increased refinery runs. Normally, gasoline margins drive U.S. refinery operations during the summer, when VMT domestically tends to increase. However, this year diesel margins are higher than gasoline margins, which suggests diesel margins may drive increased refinery runs this year.

We expect that a combination of several factors will drive U.S. retail diesel prices higher this summer compared with last summer. They include:

- High diesel crack spreads
- Low global inventories
- Increasing economic activity
- High crude oil prices

We forecast U.S. retail diesel fuel prices will average \$4.57/gal this summer, up from an average of \$3.28/gal last summer and up from the recent five-year summer average of \$2.92/gal. This 2022 average summer diesel price is the highest since 2014 in real terms. Our forecast for distillate is subject to substantial uncertainty based on changes in global distillate markets. Distillate is affected by many of the same uncertainties as the gasoline price forecast, particularly related to crude oil prices.

Inventories

We estimate that U.S. distillate inventories started this summer driving season (April 1) at 114.3 million barrels, down from 145.5 million barrels in 2021 and 23.1 million barrels (17%) less than the previous five-year average (2017–21) start-of-summer inventory. Distillate inventories in the

United States typically build during the summer to prepare for the winter heating season. We forecast the build this summer will average about 83,000 b/d, and end the summer at 129.4 million barrels, 9% less than the five-year average.

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

Table SF01. U.S. Motor Gasoline Summer Outlook

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

	2021			2022			Year-over-year Change (percent)		
	Q2	Q3	Season	Q2	Q3	Season	Q2	Q3	Season
Nominal Prices (dollars per gallon)									
WTI Crude Oil (Spot) ^a	1.58	1.68	1.63	2.42	<i>2.35</i>	<i>2.39</i>	53.8	40.0	46.6
Brent Crude Oil Price (Spot)	1.64	1.75	1.70	2.56	<i>2.48</i>	<i>2.52</i>	56.2	41.6	48.6
U.S. Refiner Average Crude Oil Cost	1.57	1.67	1.62	2.39	<i>2.32</i>	<i>2.35</i>	51.8	38.4	44.8
Wholesale Gasoline Price ^b	2.16	2.32	2.24	3.08	<i>2.90</i>	<i>2.99</i>	42.5	25.1	33.4
Wholesale Diesel Fuel Price ^b	2.04	2.19	2.12	3.49	<i>3.18</i>	<i>3.34</i>	70.7	45.4	57.6
Regular Gasoline Retail Price ^c	2.97	3.16	3.06	3.97	<i>3.72</i>	<i>3.84</i>	33.5	17.9	25.4
Diesel Fuel Retail Price ^c	3.21	3.36	3.28	4.82	<i>4.32</i>	<i>4.57</i>	50.0	28.5	39.0
Gasoline Consumption/Supply (million barrels per day)									
Total Consumption	9.068	9.132	9.100	9.129	<i>9.221</i>	<i>9.175</i>	0.7	1.0	0.8
Total Refinery and Blender Net Supply ^d	7.992	8.101	8.047	8.106	<i>8.265</i>	<i>8.186</i>	1.4	2.0	1.7
Fuel Ethanol Blending	0.934	0.937	0.935	0.927	<i>0.931</i>	<i>0.929</i>	-0.7	-0.7	-0.7
Total Stock Withdrawal ^e	0.004	0.111	0.058	-0.094	<i>0.127</i>	<i>0.017</i>			
Net Imports ^e	0.138	-0.017	0.060	0.190	<i>-0.102</i>	<i>0.043</i>			
Refinery Utilization (percent)	89.2	89.5	89.3	94.2	<i>95.2</i>	<i>94.7</i>			
Total Gasoline Stocks (million barrels)									
Beginning	237.6	237.2	237.6	236.8	<i>245.3</i>	<i>236.8</i>			
Ending	237.2	227.0	227.0	245.3	<i>233.6</i>	<i>233.6</i>			
Economic Indicators									
Real GDP (annualized billion 2012 dollars)	19,368	19,479	19,424	20,012	<i>20,158</i>	<i>20,085</i>	3.3	3.5	3.4
Real Income (annualized billion 2012 dollars)	15,807	15,641	15,724	15,241	<i>15,357</i>	<i>15,299</i>	-3.6	-1.8	-2.7
Non-Farm Employment (million jobs)	145.2	146.9	146.0	151.6	<i>152.4</i>	<i>152.0</i>	4.4	3.8	4.1

^a Spot Price of West Texas Intermediate (WTI) crude oil.

^b Price product sold by refiners to resellers.

^c Average retail price including taxes.

^d Finished gasoline net production minus gasoline blend components net inputs minus fuel ethanol blending and supply adjustment.

^e Total stock withdrawal and net imports includes both finished gasoline and gasoline blend components.

GDP = gross domestic product.

Notes: Minor discrepancies with other Energy Information Administration (EIA) published historical data are due to rounding. Historical data are printed in bold. Forecasts are in italic. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: latest data available from: EIA, *Petroleum Supply Monthly*, DOE/EIA-0109; Monthly Energy Review, DOE/EIA-0035; U.S. Department of Commerce, Bureau of Economic Analysis (GDP and income); Refinitiv (WTI and Brent crude oil spot prices). Macroeconomic projections are based on the S&P Global Macroeconomic Forecast Model.

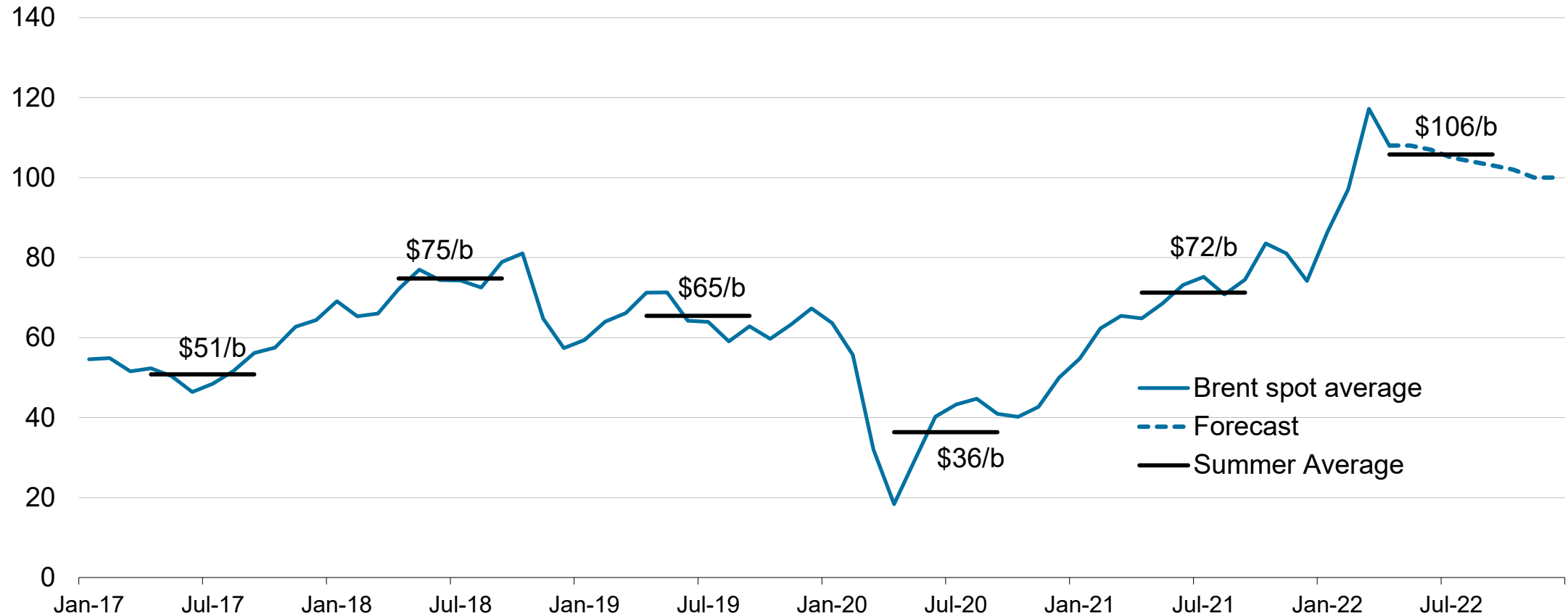
2022 Summer Fuels Outlook



April 12, 2022

Brent crude oil prices in our forecast average \$106 per barrel this summer (April–September), \$35 per barrel higher than last summer

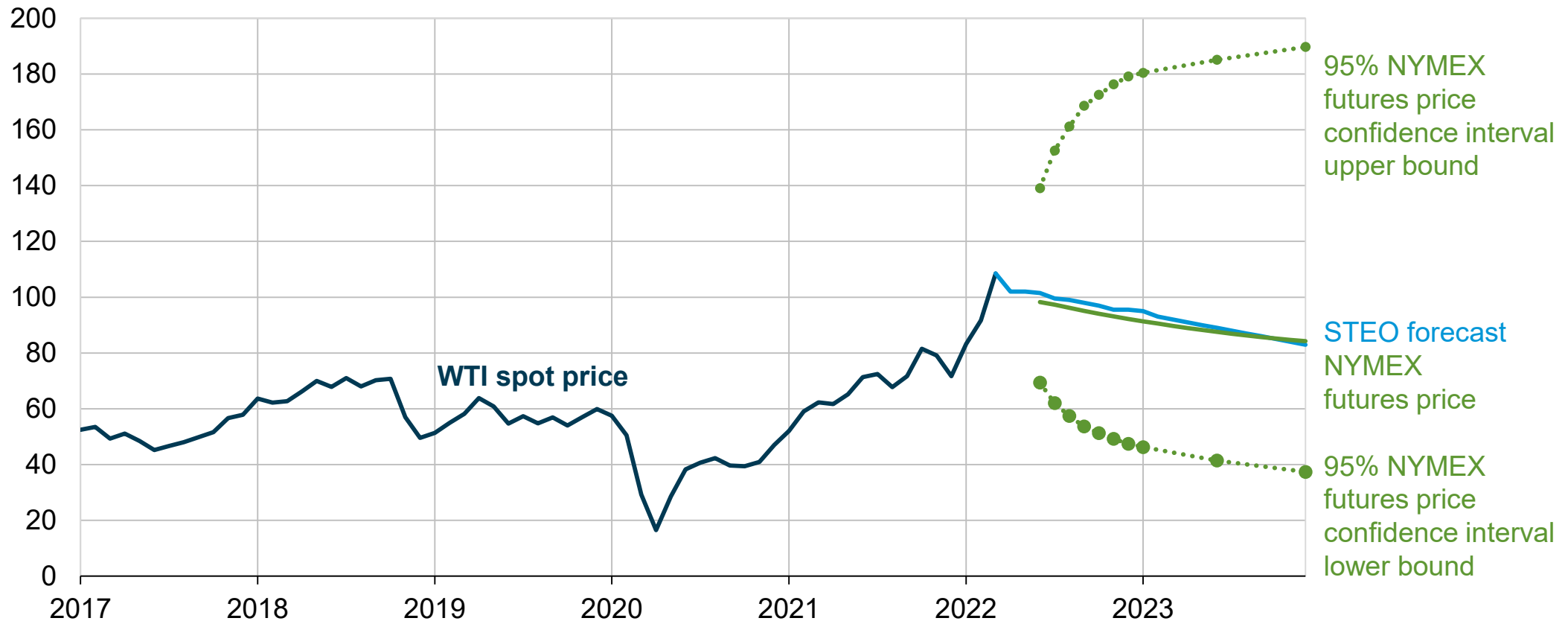
Brent crude oil spot price (monthly average)
dollars per barrel



Source: Refinitiv and EIA, Short-Term Energy Outlook, April 2022

EIA forecasts that monthly average West Texas Intermediate crude oil prices will remain above \$100/b through October 2022, but prices are uncertain

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

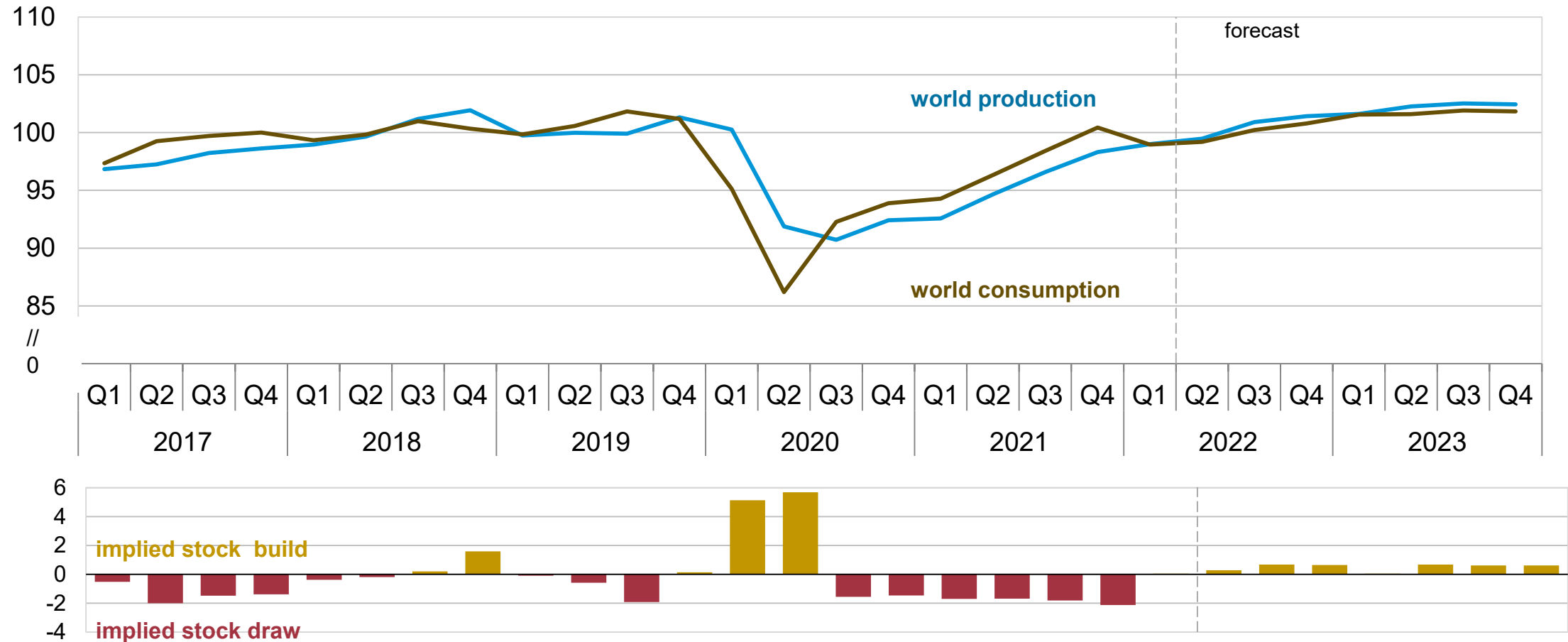


Note: Confidence interval derived from options market information for the five trading days ending April 1, 2022. Intervals not calculated for months with sparse trading in near-the-money options contracts.

Source: Refinitiv, CME Group, and EIA, *Short-Term Energy Outlook*, April 2022

Global liquid fuels inventories in the forecast increase through the remainder of 2022 as fuel production increases globally to meet increasing demand and higher prices

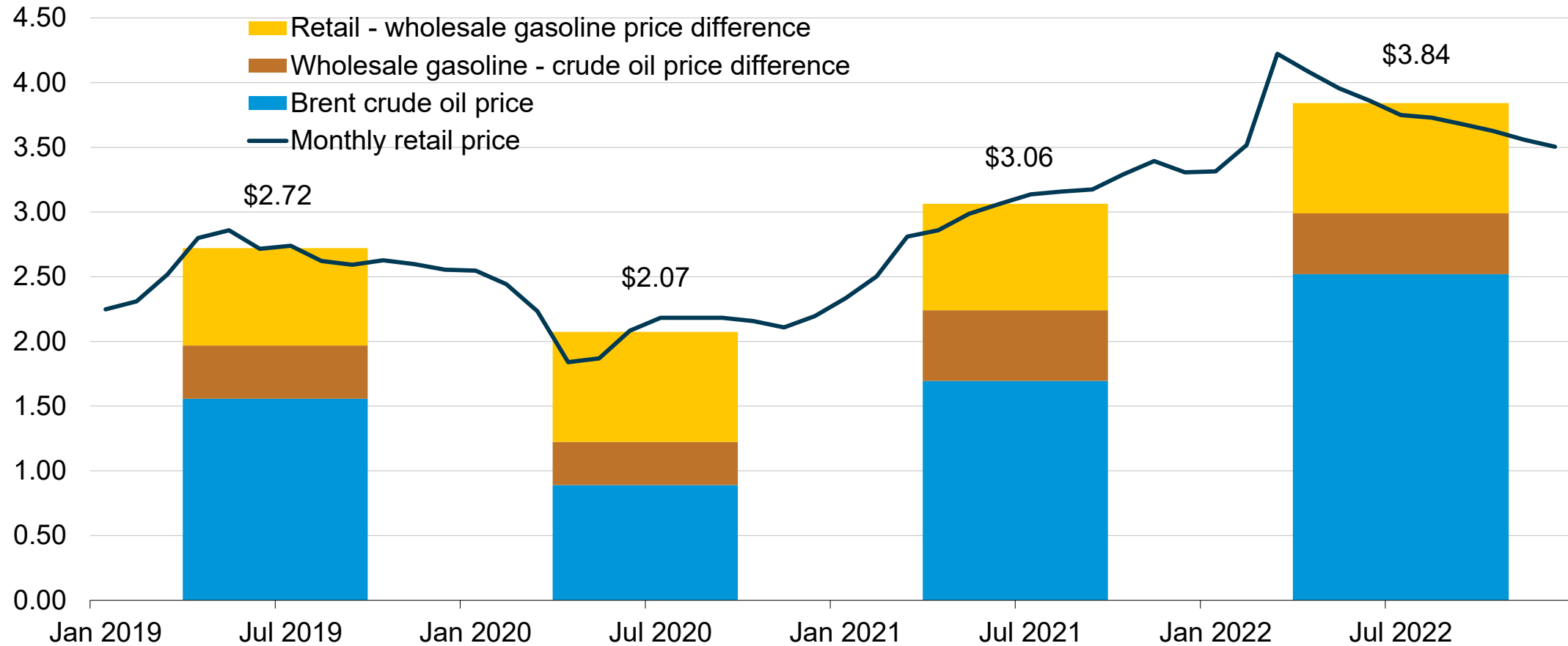
World liquid fuels production and consumption balance
million barrels per day



Source: EIA, Short-Term Energy Outlook, April 2022

The regular-grade gasoline retail price in the forecast averages \$3.84 per gallon in summer 2022 compared with \$3.06 per gallon last summer

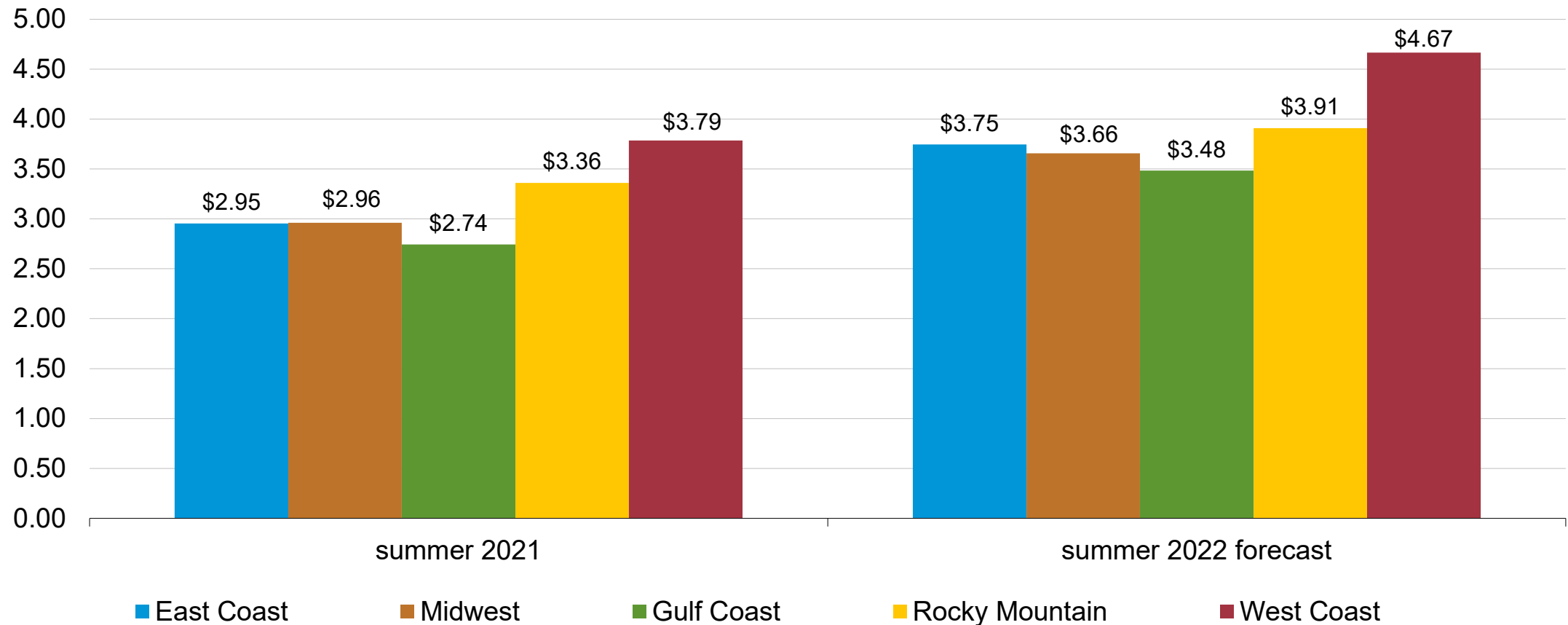
Regular-grade gasoline retail price
dollars per gallon



Source: EIA, Short-Term Energy Outlook, April 2022

Regular gasoline average summer retail prices vary by region and are typically the highest on the West Coast

U.S. regional summer average regular gasoline price
dollars per gallon



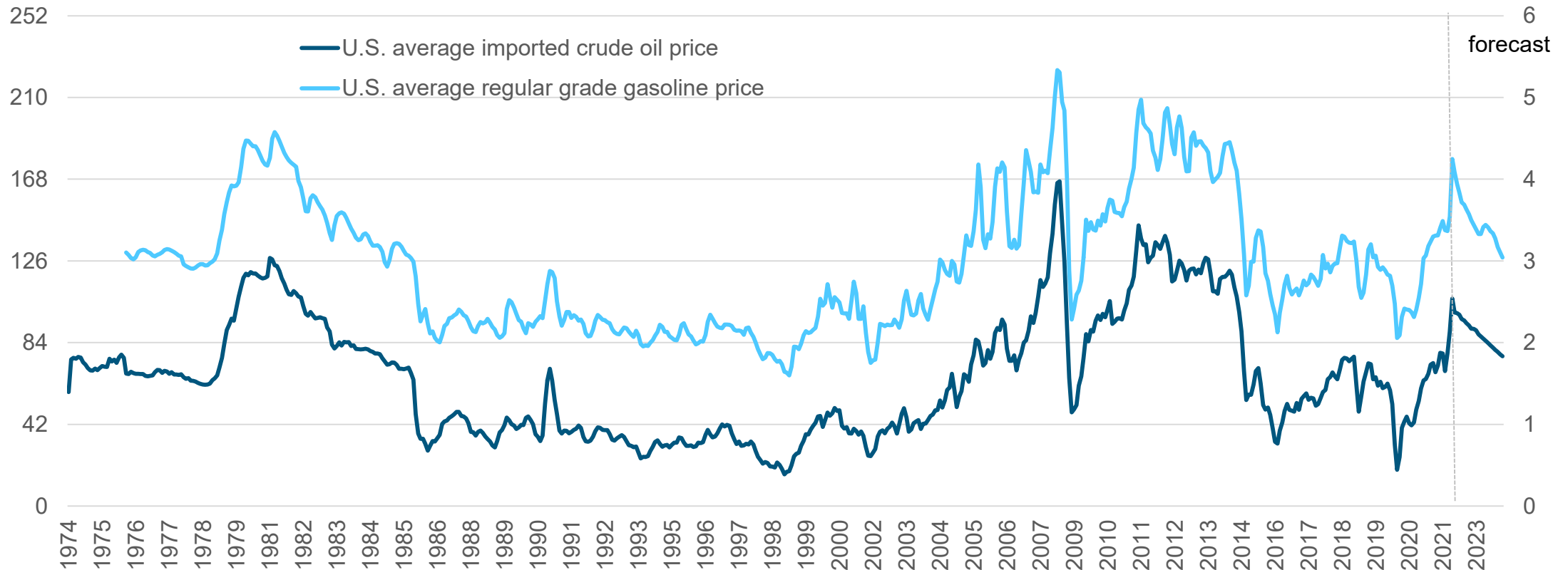
Source: EIA, *Short-Term Energy Outlook*, April 2022

On an inflation adjusted basis, we expect U.S. gasoline prices to be the highest since summer 2014 but less than the record levels seen in the summer of 2008

Real crude oil and gasoline prices (\$=Mar 2022)

dollars per barrel

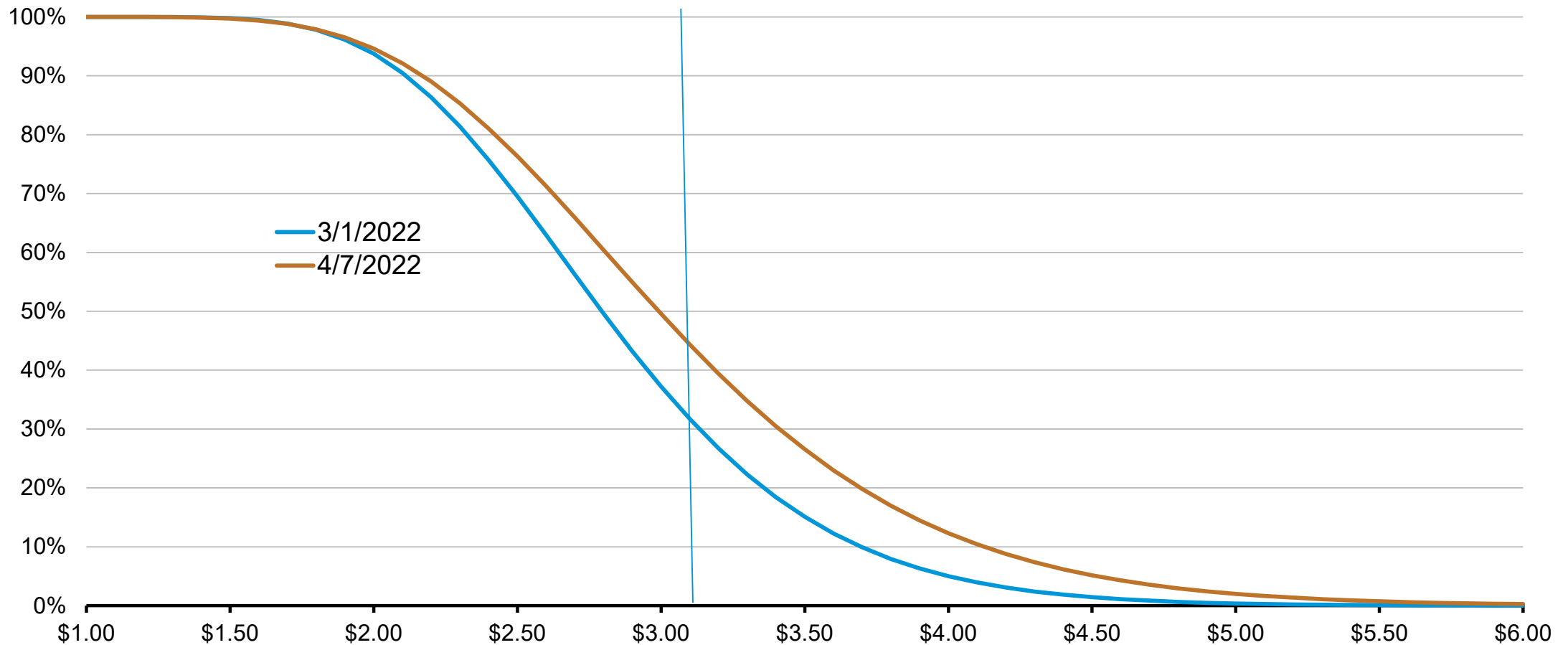
dollars per gallon



Source: EIA, Short-Term Energy Outlook, April 2022

Market-derived probabilities imply a 46% chance RBOB prices will exceed \$3.10 per gallon in June, a level roughly consistent with U.S. retail prices of \$4 per gallon

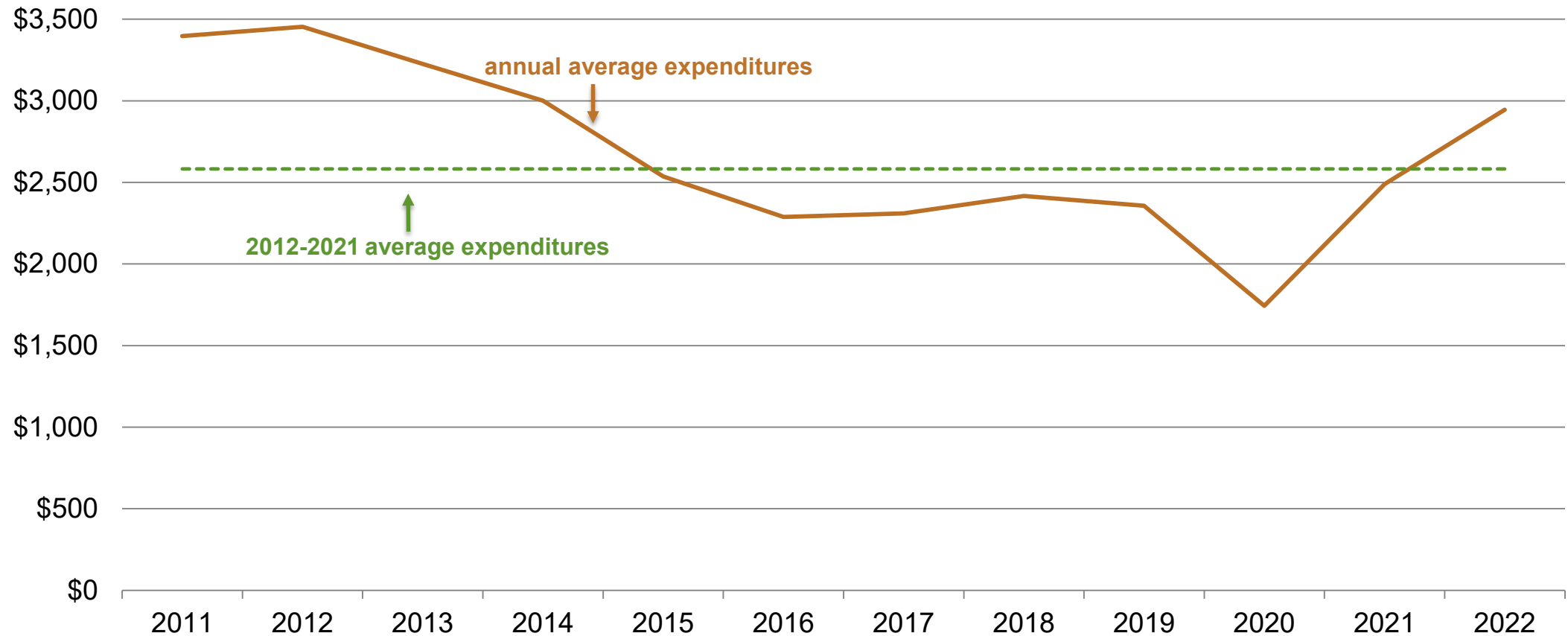
Probability of June 2022 RBOB expiring above different price levels
Dollars per gallon



Source: CME Group, and Bloomberg, L.P.; EIA, Short-Term Energy Outlook, April 2022

EIA expects that real household transportation fuel expenditures will increase by about \$450 on an annual basis in 2022 compared with 2021

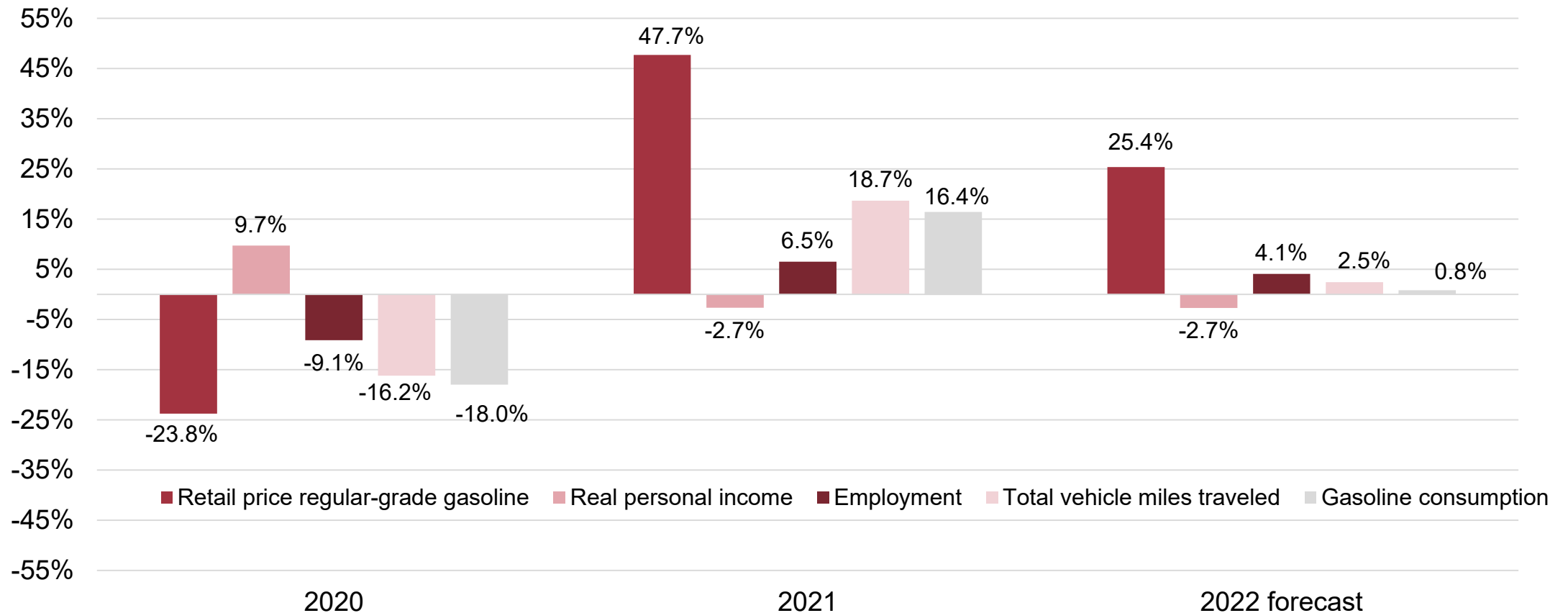
Average annual real household expenditures on gasoline and motor oil (\$=2022)



Source: U.S. Bureau of Labor Statistics, Consumer Expenditure Survey; EIA, Short-Term Energy Outlook, April 2022

In summer 2022, forecast growth in employment contributes to more driving, but the effect on gasoline consumption is partly offset by rising fuel efficiency and higher prices

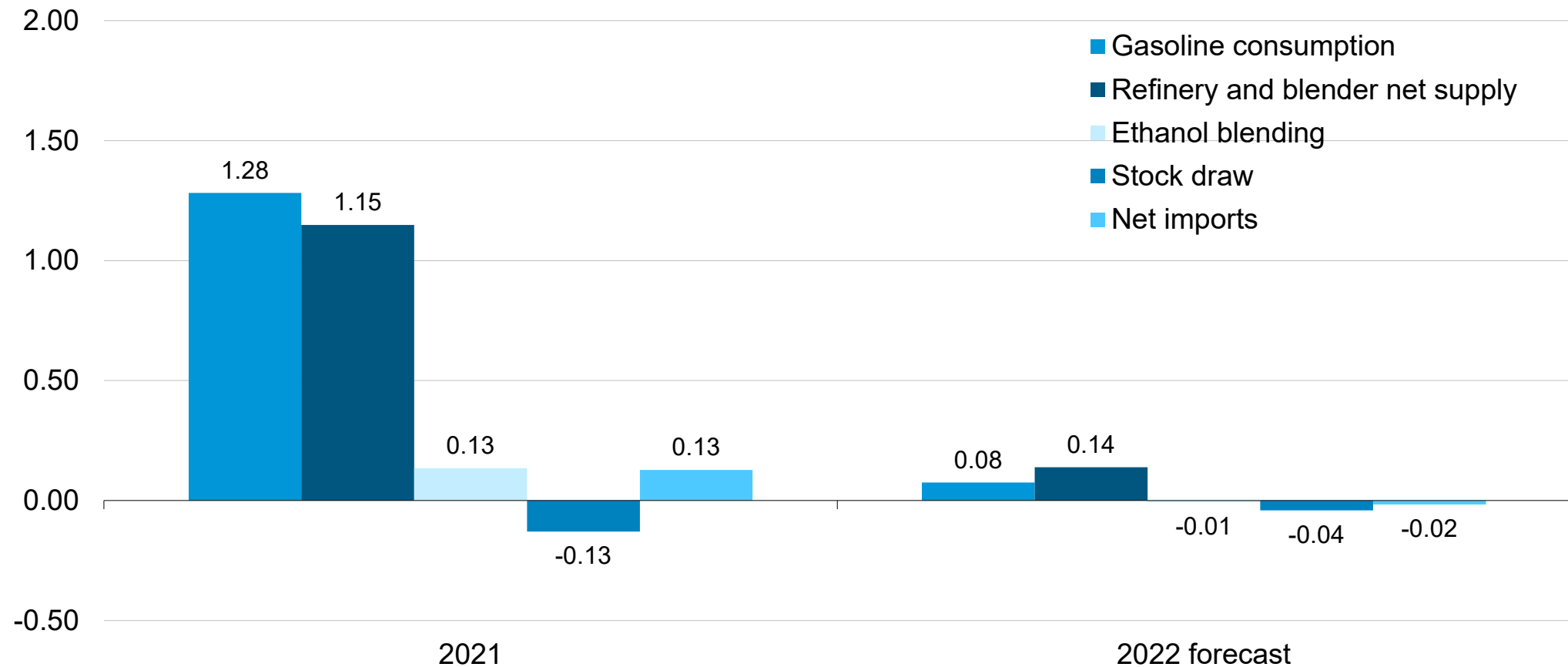
Summer gasoline market indicators
Percent change from prior summer



Source: EIA, Short-Term Energy Outlook, April 2022

Although we forecast gasoline consumption and production will increase compared with last summer, it is at a slower pace

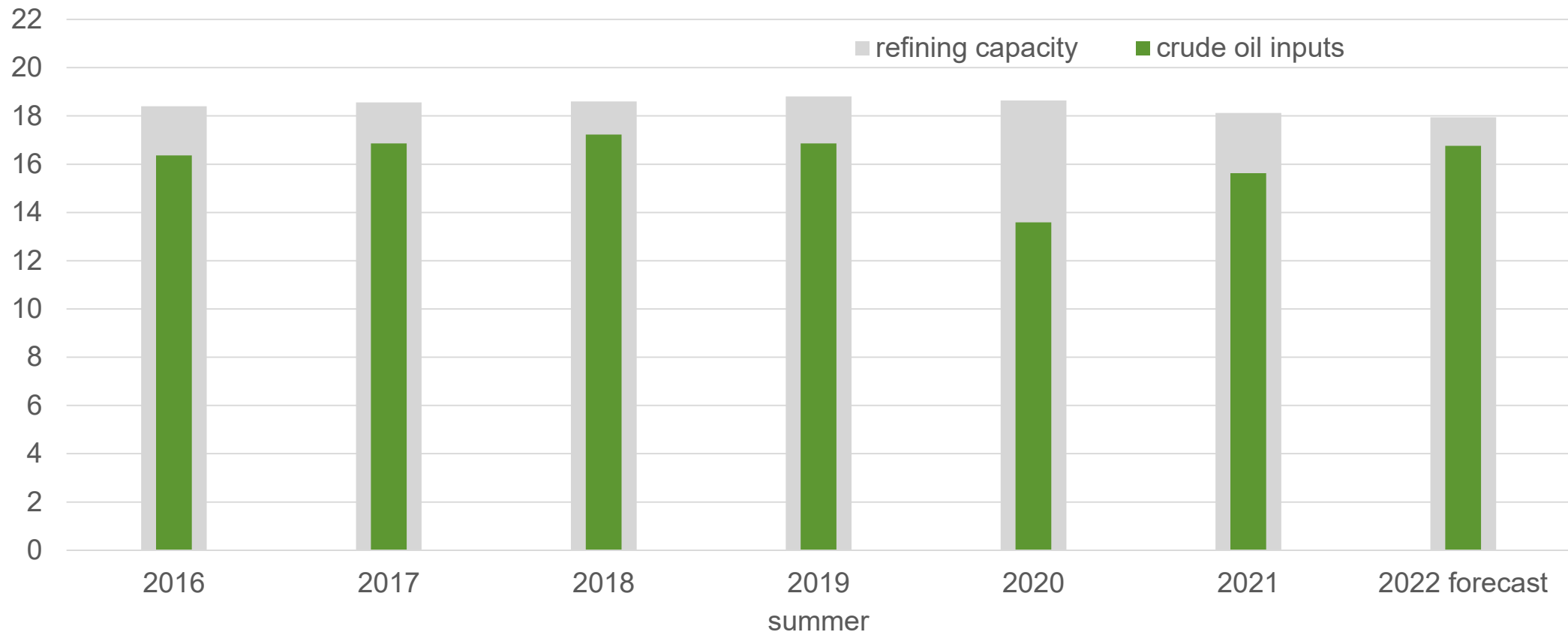
Summer gasoline supply and consumption growth
million barrels per day (y-o-y changes)



Source: EIA, Short-Term Energy Outlook, April 2022

Refinery inputs of crude oil and utilization in our forecast increase in the summer of 2022 compared with last summer

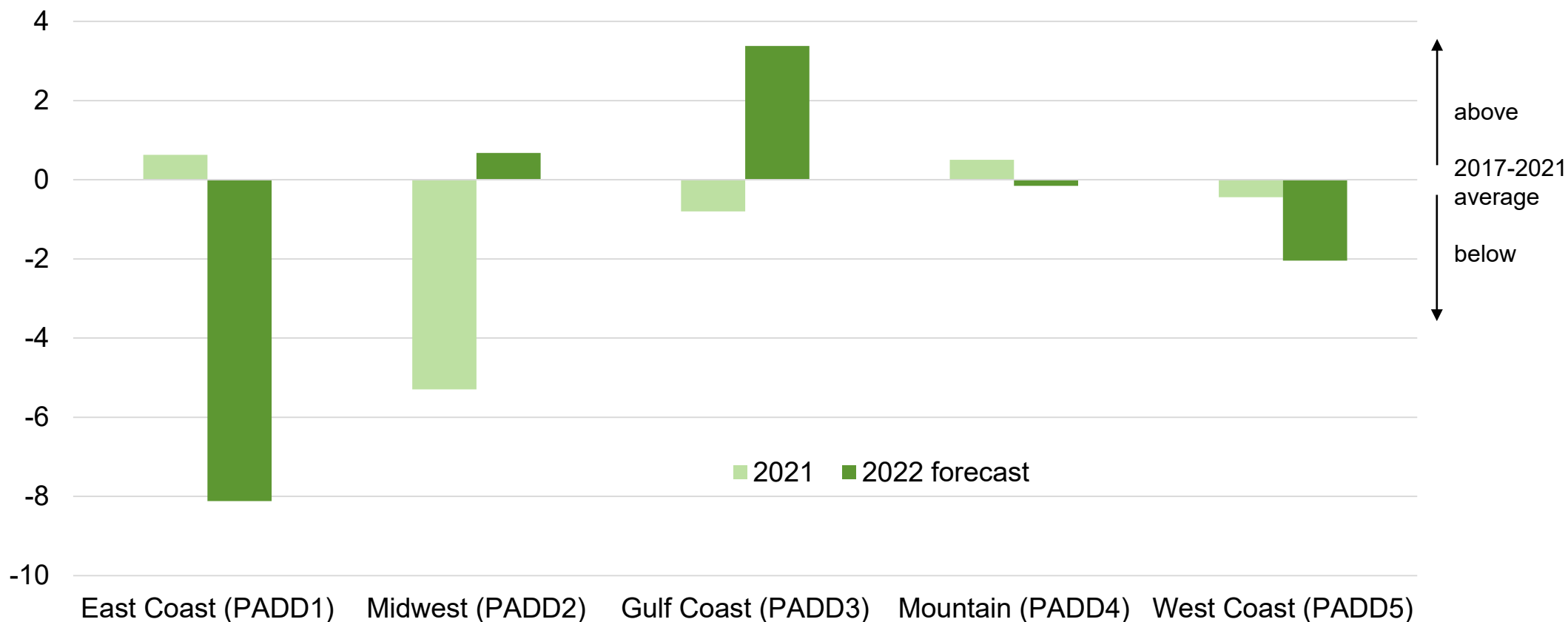
Summer U.S. refining capacity and refinery inputs of crude oil
million barrels per day



Source: EIA, Short-Term Energy Outlook, April 2022

End-of-March 2022 gasoline inventories on the East Coast and West Coast were below the previous five-year average, inventories in other regions were near or above average

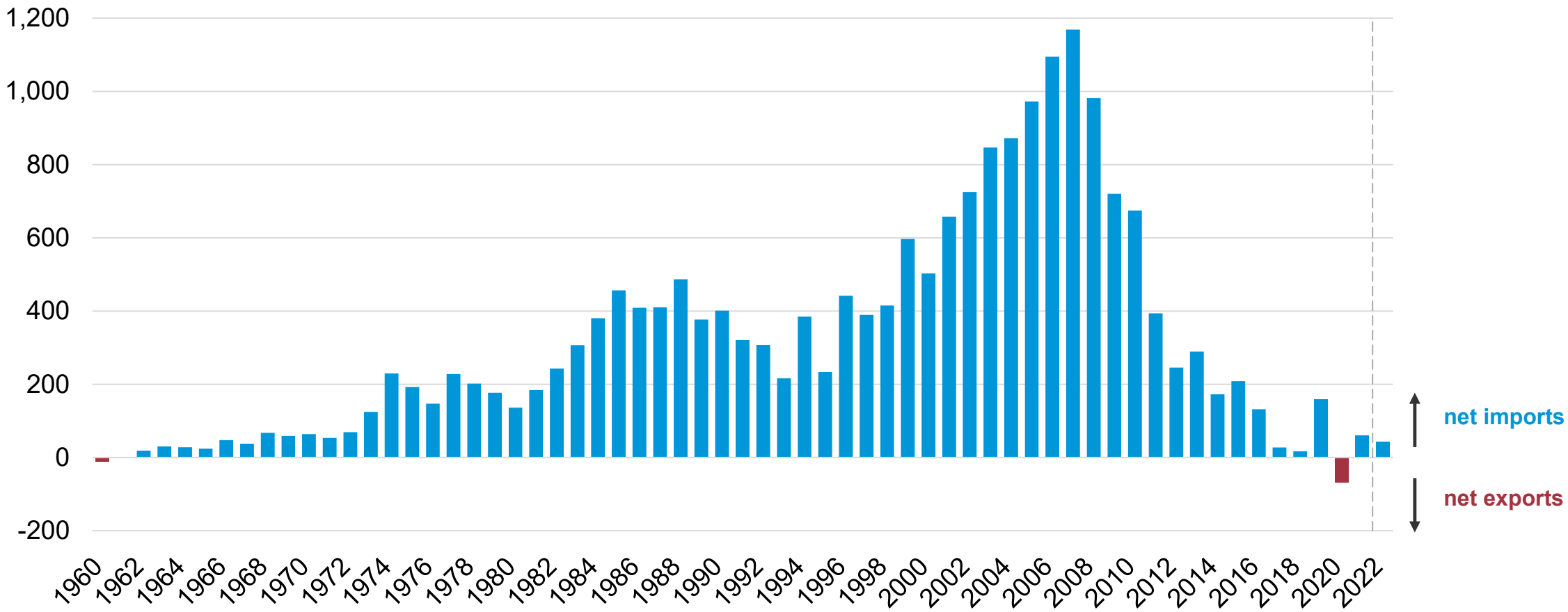
Motor gasoline end-of-March inventories difference from average by PAD district
million barrels per day



Source: EIA, Short-Term Energy Outlook, April 2022

We forecast the United States will import slightly more gasoline than it exports this summer

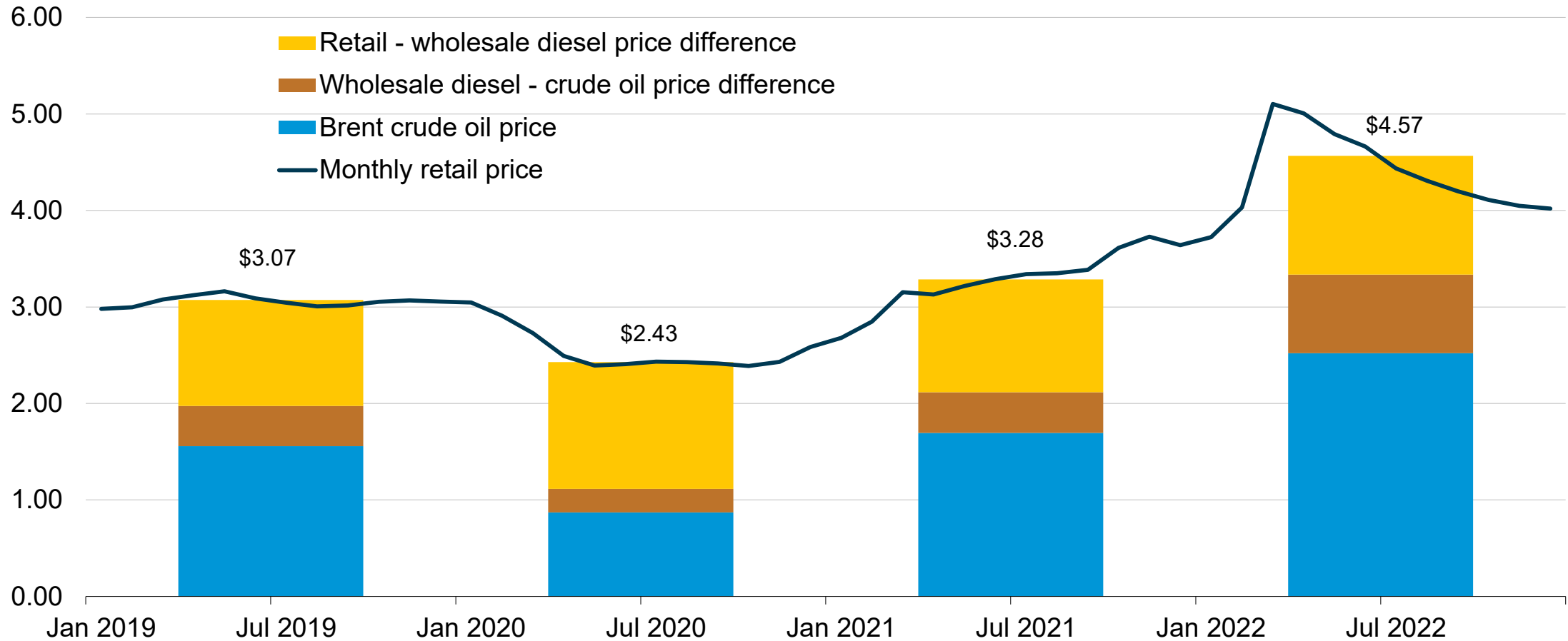
Summer gasoline net imports
thousand barrels per day



Source: EIA, Short-Term Energy Outlook, April 2022

The summer retail diesel price forecast averages \$4.57 per gallon, up from \$3.28 per gallon from last summer

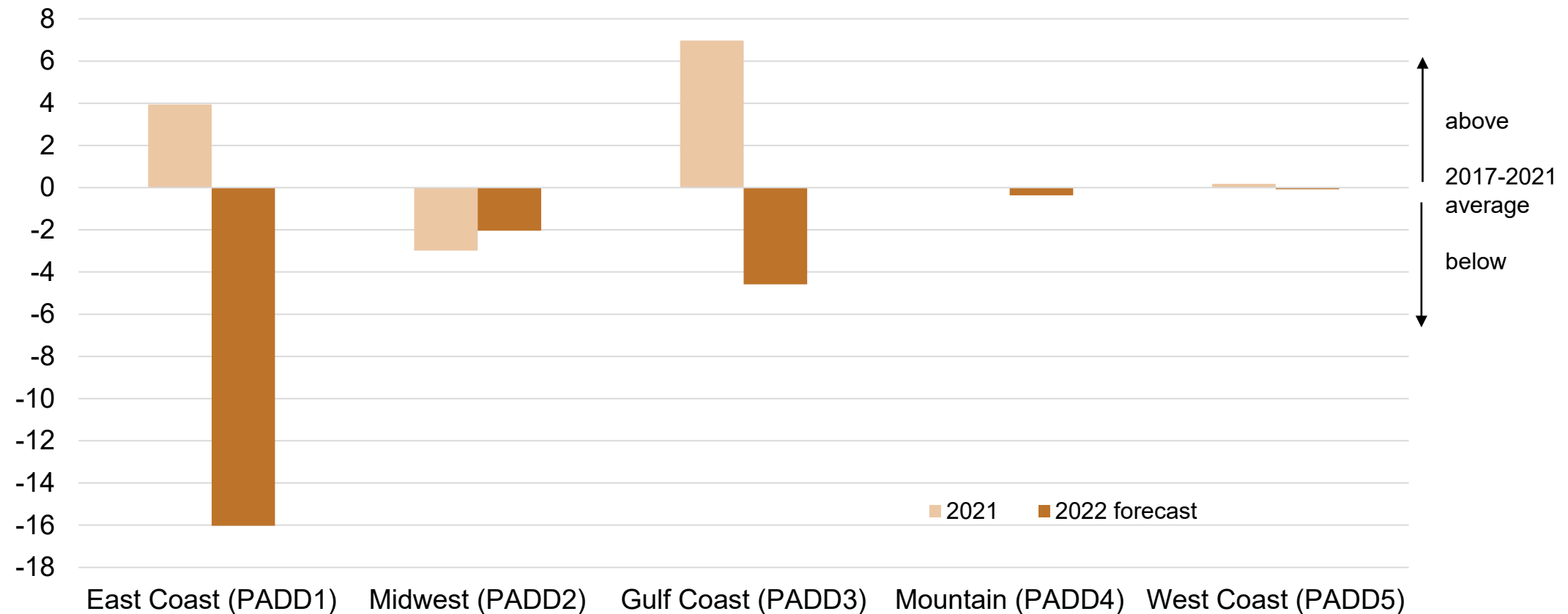
Diesel retail price
dollars per gallon



Source: EIA, Short-Term Energy Outlook, April 2022

End-of-March 2022 distillate inventories were lower than the five-year average levels in the East Coast, Gulf Coast, and Midwest and near average in other regions

Distillate fuel end-of-March inventories difference from average by PAD district
million barrels per day



Source: EIA, Short-Term Energy Outlook, April 2022

For more information

U.S. Energy Information Administration home page | www.eia.gov

Short-Term Energy Outlook | <http://www.eia.gov/outlooks/steo>

Annual Energy Outlook | <http://www.eia.gov/outlooks/aeo>

International Energy Outlook | <http://www.eia.gov/outlooks/ieo>

Monthly Energy Review | <https://www.eia.gov/totalenergy/data/monthly>

Today in Energy | www.eia.gov/todayinenergy