

2022

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)



ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934

For the fiscal year ended

December 31, 2022

OR



TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934

For the transition period from

to

Commission file number: 001-35349

Phillips 66

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

45-3779385

(I.R.S. Employer
Identification No.)

2331 CityWest Blvd., Houston, Texas 77042

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: 832-765-3010

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, \$0.01 Par Value	PSX	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. ☒ Yes ☐ No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. ☐ Yes ☒ No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. ☒ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). ☒ Yes ☐ No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☒ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). ☐ Yes ☒ No

The aggregate market value of common stock held by non-affiliates of the registrant on June 30, 2022, the last business day of the registrant's most recently completed second fiscal quarter, based on the closing price on that date of \$81.99, was \$39.4 billion. The registrant, solely for the purpose of this required presentation, had deemed its Board of Directors and executive officers to be affiliates, and deducted their stockholdings in determining the aggregate market value.

The registrant had 463,907,156 shares of common stock outstanding at January 31, 2023.

Documents incorporated by reference:

Portions of the Proxy Statement for the Annual Meeting of Stockholders to be held on May 10, 2023 (Part III).

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Unless otherwise indicated, “the company,” “we,” “our,” “us” and “Phillips 66” are used in this report to refer to the businesses of Phillips 66 and its consolidated subsidiaries.

This Annual Report on Form 10-K contains forward-looking statements including, without limitation, statements relating to our plans, strategies, objectives, expectations and intentions that are made pursuant to the “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995. The words “anticipate,” “estimate,” “believe,” “budget,” “continue,” “could,” “intend,” “may,” “plan,” “potential,” “predict,” “seek,” “should,” “will,” “would,” “expect,” “objective,” “projection,” “forecast,” “goal,” “guidance,” “outlook,” “effort,” “target” and similar expressions often identify forward-looking statements, but the absence of these words does not mean a statement is not forward-looking. The company does not undertake to update, revise or correct any forward-looking information unless required to do so under the federal securities laws. Readers are cautioned that such forward-looking statements should be read in conjunction with the company’s disclosures under the headings “Risk Factors” and “CAUTIONARY STATEMENT FOR THE PURPOSES OF THE ‘SAFE HARBOR’ PROVISIONS OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995.”

PART I

Items 1 and 2. BUSINESS AND PROPERTIES

CORPORATE STRUCTURE

Phillips 66, headquartered in Houston, Texas, was incorporated in Delaware in 2011 in connection with, and in anticipation of, a restructuring of ConocoPhillips that separated its downstream businesses into an independent, publicly traded company named Phillips 66. The two companies were separated by ConocoPhillips distributing to its stockholders all the shares of common stock of Phillips 66 after the market closed on April 30, 2012 (the separation). Phillips 66 stock trades on the New York Stock Exchange under the “PSX” stock symbol.

Effective October 1, 2022, we changed the organizational structure of the internal financial information reviewed by our President and Chief Executive Officer, and determined this resulted in a change in the composition of our operating segments. As part of the realignment, we moved the results and net assets of our Merey Sweeny vacuum distillation and delayed coker units at our Sweeny Refinery and the isomerization unit at our Lake Charles Refinery from our Midstream segment to our Refining segment. Additionally, commissions charged to the Refining segment by the Marketing & Specialties (M&S) segment related to sales of specialty products were eliminated and the costs of the sales organization were reclassified from the M&S segment to the Refining segment.

The segment realignment is presented for the year ended December 31, 2022, with the prior periods recast for comparability.

Our businesses are organized into four operating segments:

- 1) **Midstream**—Provides crude oil and refined petroleum product transportation, terminaling and processing services, as well as natural gas and natural gas liquids (NGL) transportation, storage, fractionation, gathering, processing and marketing services, mainly in the United States. As a result of a merger of DCP Midstream, LLC (DCP Midstream) and Gray Oak Holdings LLC (Gray Oak Holdings) on August 17, 2022, we began consolidating DCP Midstream, LLC Class A Segment; DCP Sand Hills Pipeline, LLC (DCP Sand Hills) and DCP Southern Hills Pipeline, LLC (DCP Southern Hills). On March 9, 2022, we also completed a merger between us and Phillips 66 Partners LP (Phillips 66 Partners). See Note 3—DCP Midstream, LLC and Gray Oak Holdings LLC Merger and Note 30—Phillips 66 Partners LP, in the Notes to Consolidated Financial Statements, for additional information on these transactions. This segment also includes our 16% investment in NOVONIX Limited (NOVONIX).
- 2) **Chemicals**—Consists of our 50% equity investment in Chevron Phillips Chemical Company LLC (CPCChem), which manufactures and markets petrochemicals and plastics on a worldwide basis.
- 3) **Refining**—Refines crude oil and other feedstocks into petroleum products, such as gasoline, distillates and aviation fuels, as well as renewable fuels, at 12 refineries in the United States and Europe.
- 4) **Marketing & Specialties**—Purchases for resale and markets refined petroleum products and renewable fuels, mainly in the United States and Europe. In addition, this segment includes the manufacturing and marketing of base oils and lubricants.

Corporate and Other includes general corporate overhead, interest expense, our investment in research of new technologies and various other corporate activities. Corporate assets include all cash, cash equivalents and income tax-related assets. Corporate and Other also includes restructuring costs related to our business transformation. See Note 31—Restructuring, in the Notes to Consolidated Financial Statements, for additional information regarding restructuring costs.

SEGMENT AND GEOGRAPHIC INFORMATION

MIDSTREAM

The Midstream segment consists of three business lines:

- **Transportation**—Transports crude oil and other feedstocks to our refineries and other locations, delivers refined petroleum products to market, and provides terminaling and storage services for crude oil and refined petroleum products.
- **NGL and Other**—Gathers, processes, transports and markets natural gas and transports, fractionates and markets NGL.
- **NOVONIX**—Represents our 16% investment in NOVONIX, a company that develops technology and supplies materials for lithium-ion batteries.

At December 31, 2022, our Midstream business was comprised of over 72,000 miles of crude oil, refined petroleum product, NGL and natural gas pipeline systems in the United States, including those partially owned or operated by our affiliates. We owned or operated 39 refined petroleum product terminals, 36 gathering and processing plants, 19 crude oil terminals, eight fractionation facilities, six NGL terminals, a petroleum coke exporting facility and various other storage and loading facilities.

DCP Midstream and Gray Oak Holdings Merger

On August 17, 2022, we announced a realignment of our economic and governance interests in DCP Midstream, LP (DCP LP) and Gray Oak Pipeline, LLC (Gray Oak Pipeline) resulting from the merger of DCP Midstream and Gray Oak Holdings. In connection with the merger, we were delegated DCP Midstream's governance rights over DCP LP and its general partner entities, referred to as DCP Midstream Class A Segment. Additionally, Enbridge Inc., our co-venturer, was delegated governance rights over Gray Oak Pipeline, referred to as DCP Midstream Class B Segment.

In connection with the merger of DCP Midstream and Gray Oak Holdings, our NGL and Other business includes DCP Midstream Class A Segment, DCP Sand Hills and DCP Southern Hills. Prior to August 18, 2022, our investments in DCP Midstream, DCP Sand Hills and DCP Southern Hills were accounted for using the equity method. We account for our remaining investment in Gray Oak Pipeline, now held through DCP Midstream Class B Segment, using the equity method.

See Note 3—DCP Midstream, LLC and Gray Oak Holdings LLC Merger, in the Notes to Consolidated Financial Statements, for additional information on the merger of DCP Midstream and Gray Oak Holdings.

DCP LP Public Common Unit Acquisition Agreement

On January 5, 2023, we entered into a definitive agreement with DCP LP, its subsidiaries and its general partner entities, pursuant to which one of our wholly owned subsidiaries will merge with and into DCP LP, with DCP LP surviving as a Delaware limited partnership. Under the terms of the agreement, at the effective time of the merger, each publicly held common unit representing a limited partner interest in DCP LP (other than the common units owned by DCP LP and DCP Midstream, GP, LP) issued and outstanding as of immediately prior to the effective time will be converted into the right to receive \$41.75 per common unit in cash, without interest. The merger will increase our economic interest in DCP LP from 43.3% to 86.8%. The transaction is expected to close in the second quarter of 2023, subject to customary closing conditions. The transaction was unanimously approved by the board of the general partner of DCP LP, based on the unanimous approval and recommendation of its special committee comprised entirely of independent directors after evaluation of the transaction by the special committee in consultation with independent financial and legal advisors. Concurrently with the execution of the agreement, affiliates of Phillips 66, which together own greater than a majority of the outstanding DCP LP common units, delivered their consent to approve the transaction. As a result, DCP LP has not solicited and is not soliciting approval of the transaction by any other holders of DCP LP common units. See Note 29—DCP Midstream Class A Segment, in the Notes to Consolidated Financial Statements, for additional information on the common unit acquisition agreement.

Phillips 66 Partners Merger

On March 9, 2022, we completed the merger between us and Phillips 66 Partners. The merger resulted in the acquisition of all limited partnership interests in Phillips 66 Partners not already owned by us. Upon closing, Phillips 66 Partners became a wholly owned subsidiary of Phillips 66 and its common units are no longer publicly traded. See Note 30—Phillips 66 Partners LP, in the Notes to Consolidated Financial Statements, for additional information on this merger transaction.

Transportation

We own or lease various assets to provide transportation, terminaling and storage services. These assets include crude oil, refined petroleum product, NGL, and natural gas pipeline systems; crude oil, refined petroleum product and NGL terminals; a petroleum coke handling facility; marine vessels; railcars and trucks.

Pipelines and Terminals

In connection with the merger of DCP Midstream and Gray Oak Holdings, our indirect interest in Gray Oak Pipeline was reduced to 6.5%. See Note 3—DCP Midstream, LLC and Gray Oak Holdings LLC Merger, in the Notes to Consolidated Financial Statements, for additional information.

The Dakota Access Pipeline is currently subject to litigation that could affect operations. See the “Dakota Access, LLC (Dakota Access) and Energy Transfer Crude Oil Company, LLC (ETCO)” section of Note 8—Investments, Loans and Long-Term Receivables, in the Notes to Consolidated Financial Statements, for additional information on this litigation.

Marine Vessels

At December 31, 2022, we had eight international-flagged crude oil, refined petroleum product and NGL tankers under time charter contracts, with capacities ranging in size from 300,000 to 1,100,000 barrels. Additionally, we had a variety of inland and offshore tug/barge units. These vessels are used primarily to transport crude oil and other feedstocks, as well as refined petroleum products for our refineries. In addition, the NGL tankers are used to export propane and butane from our fractionation, transportation and storage infrastructure.

Truck and Rail

Our truck and rail fleets support our feedstock and distribution operations. Rail movements are provided via a fleet of approximately 9,400 owned and leased railcars. Truck movements are provided through our wholly owned subsidiary, Sentinel Transportation LLC, and through numerous third-party trucking companies.

The following table depicts our ownership interest in major pipeline systems included in our Transportation business line at December 31, 2022:

Name	State of Origination/Terminus	Interest	Length (Miles)	Gross Capacity (MBD)
Crude Oil				
Bakken Pipeline	North Dakota/Texas	25 %	1,918	750
Bayou Bridge	Texas/Louisiana	40	213	480
Clifton Ridge	Louisiana	100	10	260
CushPo	Oklahoma	100	62	130
Eagle Ford Gathering	Texas	100	28	58
Glacier	Montana	79	800	124
Gray Oak Pipeline	Texas	7	862	900
Line 100	California	100	79	61
Line 200	California	100	228	100
Line 300	California	100	61	34
Line 400	California	100	153	46
Line O	Oklahoma/Texas	100	276	38
New Mexico Crude	New Mexico/Texas	100	227	106
North Texas Crude	Texas	100	142	34
Oklahoma Crude	Texas/Oklahoma	100	217	100
Sacagawea	North Dakota	50	95	183
STACK PL	Oklahoma	50	149	250
Sweeny Crude	Texas	100	56	617
West Texas Crude	Texas	100	1,079	140
Refined Petroleum Products				
ATA Line	Texas/New Mexico	50	293	34
Borger to Amarillo	Texas	100	93	74
Borger-Denver	Texas	100	38	39
Borger-Denver	Texas/Colorado	65	207	39
Borger-Denver	Colorado	70	152	39
Cherokee East	Oklahoma/Missouri	100	320	59
Cherokee North	Oklahoma/Kansas	100	29	55
Cherokee South	Oklahoma	100	98	47
Cross Channel Connector	Texas	100	5	184
Explorer	Texas/Indiana	22	1,830	660
Gold Line	Texas/Illinois	100	686	120
Heartland*	Kansas/Iowa	50	49	30
LAX Jet Line	California	50	19	25
Los Angeles Products	California	100	22	132
Paola Products	Kansas	100	106	120
Pioneer	Wyoming/Utah	50	562	63
Powder River	Colorado/Texas	100	350	13
Richmond	California	100	14	31
SAAL	Texas	33	102	32
SAAL	Texas	54	19	30
Seminole	Montana/Wyoming	100	342	44
Standish	Oklahoma/Kansas	100	92	77
Sweeny to Pasadena	Texas	100	120	335
Torrance Products	California	100	8	279
Watson Products	California	100	9	238
Yellowstone	Montana/Washington	46	710	68

Name	State of Origination/Terminus	Interest	Length (Miles)	Gross Capacity (MBD)
NGL				
Blue Line	Texas/Illinois	100 %	688	26
Brown Line	Oklahoma/Kansas	100	76	26
Conway to Wichita	Kansas	100	55	26
Medford	Oklahoma	100	42	25
Skelly-Belvieu	Texas	50	571	45
TX Panhandle Y1/Y2	Texas	100	249	78
Natural Gas				
Rockies Express**				
East to West	Ohio/Illinois	25	661	2.6 Bcf/d
West to East	Colorado/Ohio	25	1,712	1.8 Bcf/d
Sacagawea Gas	North Dakota	50	24	0.18 Bcf/d

* Total pipeline system is 419 miles. Phillips 66 has an ownership interest in multiple segments totaling 49 miles.

** Total pipeline system consists of three zones for a total of 1,712 miles. The third zone of the pipeline is bidirectional and can transport 2.6 Bcf/d of natural gas from east to west.

The following table depicts our ownership interest in terminal and storage facilities included in our Transportation business line at December 31, 2022:

Facility Name	Location	Commodity Handled	Interest	Gross Storage Capacity (MBbl)	Gross Rack Capacity (MBD)
Albuquerque	New Mexico	Refined Petroleum Products	100 %	274	20
Amarillo	Texas	Refined Petroleum Products	100	296	23
Beaumont	Texas	Crude Oil, Refined Petroleum Products	100	16,800	8
Belle Chasse*	Louisiana	Crude Oil, Refined Petroleum Products	100	8,200	N/A
Billings	Montana	Refined Petroleum Products	100	81	12
Billings Crude	Montana	Crude Oil	100	236	N/A
Borger	Texas	Crude Oil	70	772	N/A
Bozeman	Montana	Refined Petroleum Products	100	90	5
Buffalo Crude	Montana	Crude Oil	100	303	N/A
Casper	Wyoming	Refined Petroleum Products	100	365	7
Clifton Ridge	Louisiana	Crude Oil	100	3,800	N/A
Coalinga	California	Crude Oil	100	817	N/A
Colton	California	Refined Petroleum Products	100	207	20
Cushing	Oklahoma	Crude Oil	100	675	N/A
Cut Bank	Montana	Crude Oil	100	315	N/A
Denver	Colorado	Refined Petroleum Products	100	441	43
Des Moines	Iowa	Refined Petroleum Products	50	217	12
East St. Louis	Illinois	Refined Petroleum Products	100	1,529	55
Glenpool	Oklahoma	Refined Petroleum Products	100	571	18
Great Falls	Montana	Refined Petroleum Products	100	198	6
Hartford	Illinois	Refined Petroleum Products	100	1,468	21
Helena	Montana	Refined Petroleum Products	100	195	5
Jefferson City	Missouri	Refined Petroleum Products	100	103	15
Junction	California	Crude Oil, Refined Petroleum Products	100	524	N/A
Kansas City	Kansas	Refined Petroleum Products	100	1,410	50
Keene	North Dakota	Crude Oil	50	503	N/A
La Junta	Colorado	Refined Petroleum Products	100	99	5
Lake Charles Pipeline Storage	Louisiana	Refined Petroleum Products	50	3,143	N/A
Lincoln	Nebraska	Refined Petroleum Products	100	217	12
Linden	New Jersey	Refined Petroleum Products	100	360	95
Los Angeles	California	Refined Petroleum Products	100	156	80
Lubbock	Texas	Refined Petroleum Products	100	182	18
Medford Spheres	Oklahoma	NGL	100	70	N/A
Missoula	Montana	Refined Petroleum Products	50	365	14
Moses Lake	Washington	Refined Petroleum Products	50	216	10
Mount Vernon	Missouri	Refined Petroleum Products	100	365	40
North Salt Lake	Utah	Refined Petroleum Products	50	755	60
North Spokane	Washington	Refined Petroleum Products	100	492	N/A
Odessa	Texas	Crude Oil	100	521	N/A
Oklahoma City	Oklahoma	Crude Oil, Refined Petroleum Products	100	355	42

Facility Name	Location	Commodity Handled	Interest	Gross Storage Capacity (MBbl)	Gross Rack Capacity (MBD)
Palermo	North Dakota	Crude Oil	70 %	235	N/A
Paola	Kansas	Refined Petroleum Products	100	978	N/A
Pasadena	Texas	Refined Petroleum Products, NGL	100	3,558	65
Pecan Grove	Louisiana	Lubricant Base Stocks, Refined Petroleum Products	100	177	N/A
Ponca City	Oklahoma	Refined Petroleum Products	100	63	22
Ponca City Crude	Oklahoma	Crude Oil	100	1,229	N/A
Portland	Oregon	Refined Petroleum Products	100	650	38
Renton	Washington	Refined Petroleum Products	100	243	19
Richmond	California	Refined Petroleum Products	100	343	28
Rock Springs	Wyoming	Refined Petroleum Products	100	132	8
Sacramento	California	Refined Petroleum Products	100	146	12
Santa Margarita	California	Crude Oil	100	398	N/A
Sheridan	Wyoming	Refined Petroleum Products	100	94	6
South Texas Gateway	Texas	Crude Oil	25	8,600	N/A
Spokane	Washington	Refined Petroleum Products	100	351	20
Tacoma	Washington	Refined Petroleum Products	100	316	19
Torrance	California	Crude Oil, Refined Petroleum Products	100	2,128	N/A
Tremley Point	New Jersey	Refined Petroleum Products	100	1,701	25
Westlake	Louisiana	Refined Petroleum Products	100	128	10
Wichita Falls	Texas	Crude Oil	100	225	N/A
Wichita North	Kansas	Refined Petroleum Products	100	769	20
Wichita South	Kansas	Refined Petroleum Products	100	272	N/A

* Assets are held for sale.

The following table depicts our ownership interest in marine, rail and petroleum coke loading and offloading facilities included in our Transportation business line at December 31, 2022:

Facility Name	Location	Commodity Handled	Interest	Gross Loading Capacity*
Marine				
Beaumont	Texas	Crude Oil, Refined Petroleum Products	100 %	75
Belle Chasse**	Louisiana	Crude Oil	100	9
Clifton Ridge	Louisiana	Crude Oil, Refined Petroleum Products	100	50
Hartford	Illinois	Refined Petroleum Products	100	3
Pecan Grove	Louisiana	Lubricant Base Stocks, Refined Petroleum Products	100	6
Portland	Oregon	Refined Petroleum Products	100	10
Richmond	California	Refined Petroleum Products	100	3
South Texas Gateway	Texas	Crude Oil	25	120
Tacoma	Washington	Crude Oil	100	12
Tremley Point	New Jersey	Refined Petroleum Products	100	7
Rail				
Bayway	New Jersey	Crude Oil	100	75
Beaumont	Texas	Crude Oil	100	20
Ferndale	Washington	Crude Oil	100	35
Missoula	Montana	Refined Petroleum Products	50	41
Palermo	North Dakota	Crude Oil	70	100
Thompson Falls	Montana	Refined Petroleum Products	50	41
Petroleum Coke				
Lake Charles	Louisiana	Petroleum Coke	50	N/A

* Marine facilities in thousands of barrels per hour (MB/h); Rail in thousands of barrels daily (MBD).

** Assets are held for sale.

NGL and Other

As of December 31, 2022, our NGL and Other business was comprised of natural gas processing plants, NGL and natural gas pipeline systems, and fractionators in the United States, including those partially owned or operated by our affiliates.

Natural Gas Processing

DCP Midstream Class A Segment, through its subsidiary DCP LP, owned or operated 36 active natural gas processing facilities, with a net processing capacity of 5.5 billion cubic feet per day (Bcf/d). At some of these facilities, we fractionate NGL into individual components (ethane, propane, butane and natural gasoline).

Pipelines

We own a 33.33% direct interest in DCP Sand Hills and DCP Southern Hills and a 43.31% indirect interest in DCP LP, which owns a 66.67% interest in DCP Sand Hills and DCP Southern Hills. DCP Sand Hills and DCP Southern Hills own NGL pipeline systems that connect the Eagle Ford, Permian Basin and Midcontinent production areas to the Mont Belvieu, Texas, market hub.

Sweeny Hub Assets

The Sweeny Hub is a U.S. Gulf Coast NGL market hub, consisting of four fractionators with a total fractionation nameplate capacity of 550,000 BPD, a liquefied petroleum gas (LPG) export terminal, and NGL storage caverns. The fractionators are located adjacent to our Sweeny Refinery in Old Ocean, Texas, and supply purity ethane to the petrochemical industry and purity NGL to domestic and global markets. Raw NGL supply to the fractionators is delivered from nearby major pipelines, including the DCP Sand Hills Pipeline. The fractionators are supported by significant infrastructure including connectivity to two NGL supply pipelines, a pipeline connecting to the Mont Belvieu market hub and the Clemens Caverns storage facility with access to our LPG export terminal in Freeport, Texas. It also includes our C2G Pipeline, which is a 16-inch ethane pipeline that connects our Clemens Caverns storage facility to petrochemical facilities in Gregory, Texas, near Corpus Christi.

Frac 4 was completed in the third quarter of 2022, achieving full rates in the fourth quarter of 2022. Frac 4 added 150,000 BPD of nameplate capacity, bringing the total Sweeny Hub nameplate fractionation capacity to 550,000 BPD. The fractionators are supported by long-term customer commitments.

The Freeport LPG Export Terminal leverages our fractionation, transportation and storage infrastructure to supply petrochemical, heating and transportation markets globally. The terminal can simultaneously load a propane vessel and a butane vessel, and has a combined LPG export capacity of 260,000 BPD. In addition, the terminal has the capability to export natural gasoline (C5+) produced by the Sweeny Hub fractionators.

The following table depicts our ownership interest in major pipeline systems included in our NGL and Other business line at December 31, 2022:

Name	State of Origination/Terminus	Interest	Length (Miles)	Gross Capacity (MBD)
NGL				
Black Lake †	Louisiana/Texas	100 %	314	80
C2G	Texas	100	155	185
Chisholm	Oklahoma/Kansas	50	202	42
Front Range †	Colorado/Texas	33	450	260
Panola †	Texas	15	250	100
Powder River	Wyoming/Colorado	100	366	16
River Parish NGL	Louisiana	100	499	104
Seabreeze/Wilbreeze †	Texas	100	80	52
Sand Hills †*	New Mexico/Texas	100	1,400	500
Southern Hills †*	Kansas/Texas	100	950	192
Sweeny LPG	Texas	100	260	942
Sweeny NGL	Texas	100	18	204
Texas Express †	Texas	10	600	370
Wattenberg †	Colorado/Kansas	100	450	112
Natural Gas				
Cheyenne Connector †	Colorado	50	70	0.6 Bcf/d
Guadalupe †	Texas	Various	600	0.2 Bcf/d
Gulf Coast Express †	Texas	25	500	2.0 Bcf/d

† Owned by DCP LP. At December 31, 2022, Phillips 66 held a 43.31% indirect economic interest in DCP LP.

* Interest reflects Phillips 66's 33.33% direct interest in DCP Sand Hills and DCP Southern Hills, as well as its 43.31% indirect economic interest in DCP LP, which owns a direct two-thirds interest.

The following table depicts our ownership interest in terminal and storage facilities included in our NGL and Other business line at December 31, 2022:

Facility Name	Location	Commodity Handled	Interest	Gross Storage Capacity (MBbl)	Gross Rack Capacity (MBD)
Clemens	Texas	NGL	100 %	16,500	N/A
Freeport	Texas	Refined Petroleum Products, NGL	100	3,485	N/A
Marysville †	Michigan	NGL	100	8,000	N/A
River Parish	Louisiana	NGL	100	1,500	N/A
Spindletop †	Texas	Natural Gas	100	12 Bcf	N/A

† Owned by DCP LP. At December 31, 2022, Phillips 66 held a 43.31% indirect economic interest in DCP LP.

The following table depicts our ownership interest in a marine facility included in our NGL and Other business line at December 31, 2022:

Facility Name	Location	Commodity Handled	Interest	Gross Loading Capacity (MB/h)
Marine				
Freeport	Texas	Refined Petroleum Products, NGL	100 %	46

The following table depicts our ownership interest in NGL Fractionators included in our NGL and Other business line at December 31, 2022:

Facility Name	Location	Interest	Capacity (MBD)
Conway	Kansas	40 %	43
Enterprise †*	Texas	25	61
Gulf Coast Fractionators**	Texas	23	33
Mont Belvieu 1 †	Texas	20	32
Sweeny Frac 1	Texas	100	100
Sweeny Frac 2	Texas	100	150
Sweeny Frac 3	Texas	100	150
Sweeny Frac 4	Texas	100	150

† Owned by DCP LP. At December 31, 2022, Phillips 66 held a 43.31% indirect economic interest in DCP LP.

* Interest reflects Phillips 66's 12.5% direct interest, as well as its 43.31% indirect economic interest in DCP LP, which owns a direct 12.5% interest.

** This facility has been idled since December 2020, with plans to restart in the first quarter of 2024.

The following table depicts our operating data in Gathering and Processing assets included in our NGL and Other business line at December 31, 2022:

Regions	Plants	Approximate Gathering and Transmission Systems (Miles)	Approximate Net Nameplate Plant Capacity (MMcf/d)†
North	13	3,500	1,580
Midcontinent	6	23,000	1,110
Permian	10	15,000	1,220
South	7	6,500	1,630

† Plant capacity represents DCP LP's proportional ownership. At December 31, 2022, Phillips 66 held a 43.31% indirect economic interest in DCP LP.

NOVONIX

We own a 16% interest in NOVONIX, a Brisbane, Australia-based company that develops technology and supplies materials for lithium-ion batteries. Our investment in NOVONIX's ordinary shares, traded on the Australian Securities Exchange, supports an expansion of synthetic graphite production capacity at NOVONIX's Chattanooga, Tennessee, plant. In January 2022, we signed a technology development agreement with NOVONIX to advance the production and commercialization of next-generation anode materials for lithium-ion batteries. In February 2022, NOVONIX's American Depositary Receipts started trading on the Nasdaq Stock Market.

CHEMICALS

The Chemicals segment consists of our 50% equity investment in CPChem, which is headquartered in The Woodlands, Texas. At December 31, 2022, CPChem owned or had joint venture interests in 28 manufacturing facilities located in Belgium, Colombia, Qatar, Saudi Arabia, Singapore and the United States. Additionally, CPChem has two research and development centers in the United States.

CPChem produces and markets ethylene and other olefin products. The ethylene produced is primarily used by CPChem to produce polyethylene, normal alpha olefins (NAO) and polyethylene pipe. CPChem manufactures and markets aromatics and styrenics products, such as benzene, cyclohexane, styrene and polystyrene, as well as a variety of specialty chemical products including organosulfur chemicals, solvents, catalysts, and chemicals used in drilling and mining.

The manufacturing of petrochemicals and plastics involves the conversion of hydrocarbon-based raw material feedstocks into higher-value products, often through a thermal process referred to in the industry as “cracking.” For example, ethylene can be produced by cracking ethane, propane, butane, natural gasoline or certain refinery liquids, such as naphtha and gas oil. Ethylene primarily is used as a raw material in the production of plastics, such as polyethylene and polyvinyl chloride (PVC). Plastic resins, such as polyethylene, are manufactured in a thermal/catalyst process, and the produced output is used as a further raw material for various applications, such as packaging and plastic pipe.

The following table reflects CPChem’s petrochemicals and plastics product capacities at December 31, 2022:

	Millions of Pounds per Year*	
	U.S.	Worldwide
Ethylene	11,910	14,430
Propylene	2,675	3,180
High-density polyethylene	5,305	7,470
Low-density polyethylene	620	620
Linear low-density polyethylene	1,815	1,815
Polypropylene	—	310
Normal alpha olefins	2,335	2,850
Polyalphaolefins	125	255
Polyethylene pipe	500	500
Benzene	1,600	2,530
Cyclohexane	1,060	1,455
Styrene	1,050	1,875
Polystyrene	835	915
Specialty chemicals	440	575
Total	30,270	38,780

* Capacities include CPChem’s share in equity affiliates and excludes CPChem’s NGL fractionation capacity.

CPChem is growing its normal alpha olefins business with a second world-scale unit to produce 1-hexene, a critical component in high-performance polyethylene. The 586 million pounds per year unit will be located in Old Ocean, Texas. The project will utilize CPChem’s proprietary technology. In addition, CPChem is expanding its propylene splitting capacity by 1 billion pounds per year with a new unit located at its Cedar Bayou facility. Both projects are expected to start up in the second half of 2023.

In early 2022, CPChem announced its first commercial sales of Marlex® Anew™ Circular Polyethylene, which uses advanced recycling technology to convert difficult-to-recycle plastic waste into high-quality raw materials. CPChem is working to further expand production volumes, targeting annual production of 1 billion pounds of circular polyethylene by 2030.

CPChem is developing world-scale petrochemical facilities on the U.S. Gulf Coast and in Ras Laffan, Qatar, jointly with its co-venturer. CPChem announced final investment decision in November 2022 for the Golden Triangle Polymers facility in Orange, Texas, a 51% CPChem owned joint venture, that will increase ethylene capacity by 4.6 billion pounds per year and high-density polyethylene capacity by 4.4 billion pounds per year. In January 2023, CPChem announced final investment decision in the Ras Laffan Petrochemical project, a 30% CPChem owned joint venture, that will increase ethylene capacity by 4.6 billion pounds per year and high-density polyethylene capacity by 3.7 billion pounds per year. Both projects are expected to start up in 2026.

REFINING

Our Refining segment refines crude oil and other feedstocks into petroleum products, such as gasoline, distillates and aviation fuels, as well as renewable fuels, at 12 refineries in the United States and Europe.

The Alliance Refinery, located in Belle Chasse, Louisiana, sustained significant impacts from Hurricane Ida in August 2021. In the fourth quarter of 2021, we shut down our Alliance Refinery.

The table below depicts information for each of our owned and joint venture refineries at December 31, 2022:

Region/Refinery	Location	Interest	Thousands of Barrels Daily				Clean Product Yield Capability
			Net Crude Throughput Capacity		Net Clean Product Capacity**		
			At December 31 2022	Effective January 1 2023	Gasolines	Distillates	
Atlantic Basin/Europe							
Bayway	Linden, NJ	100 %	258	258	155	130	92 %
Humber	N. Lincolnshire, United Kingdom	100	221	221	95	115	81
MiRO*	Karlsruhe, Germany	19	58	58	25	27	87
			537	537			
Gulf Coast							
Lake Charles	Westlake, LA	100	264	264	105	115	70
Sweeny	Old Ocean, TX	100	265	265	158	125	86
			529	529			
Central Corridor							
Wood River	Roxana, IL	50	173	173	88	70	81
Borger	Borger, TX	50	75	75	50	35	91
Ponca City	Ponca City, OK	100	217	217	120	100	93
Billings	Billings, MT	100	66	66	37	30	90
			531	531			
West Coast							
Ferndale	Ferndale, WA	100	105	105	65	39	84
Los Angeles	Carson/Wilmington, CA	100	139	139	85	65	90
San Francisco***	Arroyo Grande/Rodeo, CA	100	120	75	60	65	85
			364	319			
			1,961	1,916			

* Mineraloelraffinerie Oberrhein GmbH.

** Clean product capacities are maximum rates for each clean product category, independent of each other. They are not additive when calculating the clean product yield capability for each refinery.

*** The Santa Maria facility in Arroyo Grande, California, ceased operations in February 2023, which will reduce net crude throughput capacity.

Primary crude oil characteristics and sources of crude oil for our owned and joint venture refineries are as follows:

	Characteristics				Sources				
	Sweet	Medium Sour	Heavy Sour	High TAN*	United States	Canada	South and Central America	Europe	Middle East & Africa
Bayway	●	●			●	●		●	●
Humber	●		●	●	●			●	●
MiRO	●	●	●		●			●	●
Lake Charles	●	●	●	●	●	●	●	●	●
Sweeny	●	●	●	●	●	●	●		
Wood River	●		●	●	●	●			
Borger	●	●	●		●	●			
Ponca City	●	●	●		●	●			
Billings		●	●	●	●	●			
Ferndale	●	●			●	●			●
Los Angeles		●	●	●	●	●	●		●
San Francisco	●	●	●	●	●	●	●	●	●

* High TAN (Total Acid Number): acid content greater than or equal to 1.0 milligram of potassium hydroxide (KOH) per gram.

Atlantic Basin/Europe Region

Bayway Refinery

The Bayway Refinery is located on the New York Harbor in Linden, New Jersey. Bayway's facilities include crude distilling, naphtha reforming, fluid catalytic cracking, solvent deasphalting, hydrosulfurization and alkylation units. The complex also includes a polypropylene plant with the capacity to produce up to 775 million pounds per year. The refinery produces a high percentage of transportation fuels, as well as petrochemical feedstocks, residual fuel oil and home heating oil. Refined petroleum products are distributed to East Coast customers by pipeline, barge, railcar and truck.

Humber Refinery

The Humber Refinery is located on the east coast of England in North Lincolnshire, United Kingdom, approximately 180 miles north of London. Humber's facilities include crude distilling, naphtha reforming, fluid catalytic cracking, hydrosulfurization, thermal cracking and delayed coking units. The refinery has two coking units with associated calcining plants. Humber is the only coking refinery in the United Kingdom, and a producer of high-quality specialty graphite and anode-grade petroleum cokes. The refinery also produces a high percentage of transportation fuels. The majority of the light oils produced by the refinery are distributed to customers in the United Kingdom by pipeline, railcar and truck, while the other refined petroleum products are exported throughout the world.

MiRO Refinery

The MiRO Refinery is located on the Rhine River in Karlsruhe, Germany, approximately 95 miles south of Frankfurt, Germany. MiRO is the largest refinery in Germany and operates as a joint venture in which we own an 18.75% interest. Facilities include crude distilling, naphtha reforming, fluid catalytic cracking, petroleum coking and calcining, hydrosulfurization, isomerization, ethyl tert-butyl ether and alkylation units. MiRO produces a high percentage of transportation fuels. Other products produced include petrochemical feedstocks, home heating oil, bitumen, and anode- and fuel-grade petroleum cokes. Refined petroleum products are distributed to customers in Germany, Switzerland, France, and Austria by truck, railcar and barge.

Gulf Coast Region

Lake Charles Refinery

The Lake Charles Refinery is located in Westlake, Louisiana, approximately 150 miles east of Houston, Texas. Refinery facilities include crude distilling, naphtha reforming, fluid catalytic cracking, alkylation, hydrocracking, hydrodesulfurization, isomerization and delayed coking units. Refinery facilities also include a specialty coker and calciner. The refinery produces a high percentage of transportation fuels. Other products produced include off-road diesel, home heating oil, feedstock for our Excel Paralubes joint venture in our M&S segment, and high-quality specialty graphite and fuel-grade petroleum cokes. A majority of the refined petroleum products are distributed to customers in the southeastern and eastern United States by truck, railcar, barge or major common carrier pipelines. Additionally, refined petroleum products are exported to customers primarily in Latin America and Europe by waterborne cargo.

Sweeny Refinery

The Sweeny Refinery is located in Old Ocean, Texas, approximately 65 miles southwest of Houston, Texas. Refinery facilities include crude distilling, naphtha reforming, fluid catalytic cracking, alkylation, hydrodesulfurization, aromatics units, a vacuum distillation unit, and a delayed coking unit. The refinery produces a high percentage of transportation fuels. Other products include petrochemical feedstocks, home heating oil and fuel-grade petroleum coke. A majority of the refined petroleum products are distributed to customers throughout the Midcontinent region, southeastern and eastern United States by pipeline, barge and railcar. Additionally, refined petroleum products are exported to customers primarily in Latin America by waterborne cargo.

Central Corridor Region

WRB Refining LP (WRB)

We are the operator and managing partner of WRB, a 50 percent-owned joint venture that owns the Wood River and Borger refineries.

- *Wood River Refinery*

The Wood River Refinery is located in Roxana, Illinois, about 15 miles northeast of St. Louis, Missouri, at the confluence of the Mississippi and Missouri rivers. Refinery facilities include crude distilling, naphtha reforming, fluid catalytic cracking, alkylation, hydrocracking, hydrodesulfurization and delayed coking units. The refinery produces a high percentage of transportation fuels. Other products produced include petrochemical feedstocks, asphalt and fuel-grade petroleum coke. Refined petroleum products are distributed to customers throughout the Midcontinent region by pipeline, railcar, barge and truck.

- *Borger Refinery*

The Borger Refinery is located in Borger, Texas, in the Texas Panhandle, approximately 50 miles north of Amarillo, Texas. Refinery facilities include crude distilling, naphtha reforming, fluid catalytic cracking, alkylation, hydrodesulfurization, and delayed coking units. The refinery produces a high percentage of transportation fuels, as well as fuel-grade petroleum coke, NGL and solvents. Refined petroleum products are distributed to customers in West Texas, New Mexico, Colorado and the Midcontinent region by company-owned and common carrier pipelines.

Ponca City Refinery

The Ponca City Refinery is located in Ponca City, Oklahoma, approximately 95 miles northwest of Tulsa, Oklahoma. Refinery facilities include crude distilling, naphtha reforming, fluid catalytic cracking, alkylation, hydrodesulfurization, and delayed coking units. The refinery produces a high percentage of transportation fuels and anode-grade petroleum coke. Refined petroleum products are primarily distributed to customers throughout the Midcontinent region by company-owned and common carrier pipelines.

Billings Refinery

The Billings Refinery is located in Billings, Montana. Refinery facilities include crude distilling, naphtha reforming, fluid catalytic cracking, alkylation, hydrodesulfurization and delayed coking units. The refinery produces a high percentage of transportation fuels and fuel-grade petroleum coke. Refined petroleum products are distributed to customers in Montana, Wyoming, Idaho, Utah, Colorado and Washington by pipeline, railcar and truck.

West Coast Region

Ferndale Refinery

The Ferndale Refinery is located on Puget Sound in Ferndale, Washington, approximately 20 miles south of the U.S.-Canada border. Facilities include crude distillation, naphtha reforming, fluid catalytic cracking, alkylation and hydrodesulfurization units. The refinery produces a high percentage of transportation fuels. Other products produced include residual fuel oil, which is supplied to the northwest marine bunker fuel market. Most of the refined petroleum products are distributed to customers in the northwest United States by pipeline and barge.

Los Angeles Refinery

The Los Angeles Refinery consists of two facilities linked by pipeline located five miles apart in Carson and Wilmington, California, approximately 15 miles southeast of Los Angeles. The Carson facility serves as the front end of the refinery by processing crude oil, and the Wilmington facility serves as the back end of the refinery by upgrading the intermediate products to finished products. Refinery facilities include crude distillation, naphtha reforming, fluid catalytic cracking, alkylation, hydrocracking, and delayed coking units. The refinery produces a high percentage of transportation fuels. The refinery produces California Air Resources Board (CARB)-grade gasoline. Other products produced include fuel-grade petroleum coke. Refined petroleum products are distributed to customers in California, Nevada and Arizona by pipeline and truck.

San Francisco Refinery

The San Francisco Refinery consists of two facilities linked by our pipelines. The Santa Maria facility is located in Arroyo Grande, California, 200 miles south of San Francisco, California, while the Rodeo facility is located in the San Francisco Bay Area. Intermediate refined products from the Santa Maria facility are shipped by pipeline to the Rodeo facility for upgrading into finished petroleum products. Refinery facilities include crude distillation, naphtha reforming, hydrocracking, hydrodesulfurization and delayed coking units, as well as a calciner. The refinery currently produces a high percentage of transportation fuels, including CARB-grade gasoline. Other products produced include fuel-grade petroleum coke. The majority of the refined petroleum products are distributed to customers in California by pipeline and barge. Additionally, refined petroleum products are exported to customers primarily in Latin America by waterborne cargo.

We are advancing our conversion plans at the San Francisco Refinery in Rodeo, California, to meet the growing demand for renewable fuels. The hydrotreater feedstock flexibility project reached full rates of 8,000 BPD (120 million gallons per year) of renewable diesel production in July 2021. Separately, the Rodeo Renewed refinery conversion project is expected to be finished in early 2024, subject to permitting and approvals. Consequently, we ceased operations of the Santa Maria facility in February 2023. Upon completion, the converted facility will initially have over 50,000 BPD (800 million gallons per year) of renewable fuels production capacity. The conversion will reduce emissions from the facility and produce lower carbon-intensity transportation fuels. We plan to distribute our renewable diesel through new and existing channels, including approximately 600 branded retail sites in California.

MARKETING AND SPECIALTIES

Our M&S segment purchases for resale and markets refined petroleum products, such as gasoline, distillates and aviation fuels, as well as renewable fuels, mainly in the United States and Europe. In addition, this segment includes the manufacturing and marketing of specialty products, such as base oils and lubricants.

Marketing

Marketing—United States

We market gasoline, diesel and aviation fuel through marketer and joint venture outlets that utilize the *Phillips 66*, *Conoco* or *76* brands. At December 31, 2022, we had approximately 7,200 branded outlets in 48 states and Puerto Rico.

Our wholesale operations utilize a network of marketers operating approximately 5,100 outlets. We place a strong emphasis on the wholesale channel of trade because of its relatively lower capital requirements. In addition, we hold brand-licensing agreements covering approximately 1,330 sites. Our refined petroleum products are marketed on both a branded and unbranded basis. A high percentage of our branded marketing sales are in the Midcontinent, Rockies and West Coast regions, where our wholesale marketing network secures efficient offtake from our refineries. We also utilize consignment fuel arrangements with several marketers whereby we own the fuel inventory and pay the marketers a monthly fee.

In the Gulf Coast and East Coast regions, most sales are conducted via the unbranded channel of trade, which does not require a highly integrated marketing network to secure product placement for refinery pull through. We have export capability at our U.S. coastal refineries to meet international demand.

In addition to automotive gasoline and diesel, we produce and market aviation gasoline and jet fuel. Aviation gasoline and jet fuel are sold through dealers and independent marketers at approximately 770 *Phillips 66* branded locations.

We participate in joint ventures engaged in retail convenience store operations in the West Coast and Central regions. These joint ventures enable us to secure long-term placement of our refinery production and extend participation in the retail value chain. At December 31, 2022, our retail joint ventures had approximately 950 outlets.

Marketing—International

We have marketing operations in four European countries. Our European marketing strategy is to sell primarily through owned, leased or joint venture retail sites using a low-cost, high-volume approach. We use the *JET* brand name to market retail and wholesale products in Austria, Germany and the United Kingdom. In addition, we have an equity interest in a joint venture that markets refined petroleum products in Switzerland under the *Coop* brand name.

We also market aviation fuels, LPG, heating oils, marine bunker fuels, and other secondary refined products to commercial customers and into the bulk or spot markets in the above countries.

At December 31, 2022, we had approximately 1,270 marketing outlets in Europe, of which approximately 980 were company owned and approximately 290 were dealer owned. We had interests in approximately 330 additional sites through our *Coop* joint venture operations in Switzerland, and we held brand-licensing agreements covering approximately 70 sites in Mexico.

In July 2022, we completed the formation of a 50-50 joint venture between us and H2 Energy Europe to set up and operate a network of up to 250 hydrogen retail refueling stations across Germany, Austria and Denmark by 2026.

Specialties

Lubricants

We manufacture and sell automotive, commercial, industrial and specialty lubricants which are marketed worldwide under the *Phillips 66*, *Kendall*, *Red Line* and other private label brands.

In addition, we own a 50% interest in Excel Paralubes LLC (Excel Paralubes), an operated joint venture that owns a hydrocracked lubricant base oil manufacturing plant located adjacent to the Lake Charles Refinery. The facility has a capacity to produce 22,200 BPD of high-quality Group II clear hydrocracked base oils. Excel Paralubes markets the produced base oil under the *Pure Performance* brand. The facility's feedstock is sourced primarily from our Lake Charles Refinery.

ENERGY RESEARCH & INNOVATION

Our Energy Research & Innovation organization, located in Bartlesville, Oklahoma, includes scientists and engineers working in over 200 labs on our 440 acre research campus to develop new technologies focused on advancing our business and solving tomorrow's energy challenges. Areas of focus for 2022 included feedstock characterization, renewables processing, and process optimization to enhance margins in our Refining segment and in areas associated with the energy transition such as carbon mitigation, hydrogen, batteries and fuel cell technologies with the goal to better position Phillips 66 for the energy transition.

HUMAN CAPITAL

Phillips 66 employees, our human capital, are guided by our values of safety, honor and commitment. Together, we operate as a high-performing organization by building breadth and depth in capabilities, pursuing excellence and doing the right thing. We empower our people to create and innovate, and to work in ways that are designed to enable us to deliver industry leading performance. In 2022, we progressed our Business Transformation initiatives, which included streamlining processes and implementing new digital technologies to drive smarter and more efficient ways of working. These initiatives enabled us to redesign the organizational structure of our workforce. At December 31, 2022, we had approximately 13,000 employees working toward our vision of providing energy and improving lives.

We believe maintaining and enhancing a high-performing organization is critical to our success. Our employees promote our culture and are integral to achieving our strategic goals and maximizing long-term shareholder value. We strive for continuous improvement of our high-performing organization, as we believe that our employees differentiate us in the marketplace. The human capital measures and objectives that we focus on in managing our business and that we believe are important to understand our business, include:

- **Safety**—Safety is the cornerstone of our business. We endeavor to protect the health and safety of everyone who has a role in our operations and the communities in which we operate. We employ rigorous employee training and audit programs to drive ongoing improvement in personal safety as we strive for zero incidents. We also include safety metrics along with metrics for process safety and environmental performance in our annual bonus program to incentivize and reward safe operations. Under the variable cash incentive program, our personal safety performance is measured by our total recordable rate (TRR), which measures the number of incidents per 200,000 hours worked. In 2022, our combined workforce TRR of 0.11 was industry leading and 30 times better than the U.S. manufacturing average.
- **Culture**—Phillips 66 fosters behaviors that promote our culture. "Our Energy in Action" is a set of core behaviors embedded in all of the company's talent and business processes to drive accountability. Those behaviors include working for the greater good; creating an environment of trust; seeking different perspectives; and achieving excellence.

In addition, we believe a high level of performance can only be achieved through an inclusive culture and diverse workforce. Our executive inclusion and diversity (I&D) council, chaired by our President and Chief Executive Officer and comprised of executives and business leaders, sets and monitors the execution of our inclusion and diversity strategy. Members of the I&D council also serve as global sponsors of our 10 Employee Resource Groups (ERGs), a network of resources that support the company's performance by proactively developing our employees in unique ways that help them realize their full potential and that align with our corporate objective of fostering a diverse workforce. These ERGs are organizations formed around a shared set of experiences and perspectives, and are focused on professional development, networking, recruiting, raising cultural awareness, and community involvement.

Historically, we have conducted biennial employee engagement surveys to gather employee perspectives on their experience. The results of the survey are shared with our employees and board of directors. Management analyzes findings to identify progress on previous recommendations and areas of continued opportunity. When last administered in 2021, we expanded the scope of the survey to include assessments of Our Energy in Action and a culture of inclusion. In 2022, we conducted two global pulse surveys to gauge employee sentiment around our business transformation initiatives. Survey results helped us address gaps in understanding, gain alignment and better demonstrate our progress. Starting in 2023, we are transitioning to quarterly surveys instead of a biennial survey to enable us to capture real-time feedback on metrics such as employee engagement, manager effectiveness, performance enablement and our culture.

- **Capability**—We strive to build depth and breadth in our skills. We drive employee development through technical training and providing opportunities for job rotations, as well as assisting employees with obtaining and sharpening managerial skills through targeted development programs and promotional moves. Our performance management process identifies coaching and training needs.

We also have a robust succession planning practice and work each year to identify successors for certain positions within the company. As part of the process, quarterly sessions are held with executives to monitor and guide leadership development for our key corporate positions.

- **Performance**—We focus on delivering exceptional, sustainable results. We work towards retention of top talent and have advanced the effectiveness of our performance management process by embedding Our Energy in Action into the process so that we drive desired behaviors. Additionally, “High Performing Organization” is one of the metrics used in our variable cash incentive program. Measures used are foundational metrics, such as employee engagement and I&D efforts, talent attraction, retention and development, as well as our organization’s ability to adapt and respond to changing market conditions or other external factors.

COMPETITION

In the Midstream segment, our crude oil and products pipelines face competition from other crude oil and products pipeline companies, major integrated oil companies, and independent crude oil gathering and marketing companies. Competition is based primarily on quality of customer service, competitive rates and proximity to customers and market hubs. In addition, the Midstream segment competes with numerous integrated petroleum companies, as well as natural gas processing, transmission and distribution companies, to deliver natural gas and NGL to end users. Principal methods of competing include economically securing the right to purchase raw natural gas for gathering systems, managing the pressure of those systems, operating efficient NGL and gas processing plants and securing markets for the products produced.

In the Chemicals segment, CPChem is ranked among the top 10 producers in many of its major product lines according to published industry sources, based on average 2022 production capacity. Petroleum products, petrochemicals and plastics are typically delivered into the worldwide commodity markets. Our Refining and M&S segments compete primarily in the United States and Europe. We are one of the largest refiners of petroleum products in the United States. Elements of competition for both our Chemicals and Refining segments include product improvement, new product development, low-cost structures, ability to run advantaged feedstocks, and efficient manufacturing and distribution systems. In the marketing portion of the business, competitive factors include product properties, reliability of supply, customer service, price and credit terms, advertising and sales promotion, and development of customer loyalty to branded products.

GENERAL

At December 31, 2022, we held a total of 517 active patents in 22 countries worldwide, including 405 active U.S. patents. The overall profitability of any business segment is not dependent on any single patent, trademark, license or franchise.

In support of our goal to attain zero incidents, we have implemented a comprehensive Health, Safety and Environmental (HSE) management system to support consistent management of HSE risks across our enterprise. The management system is designed to ensure that personal safety, process safety, and environmental impact risks are identified, and mitigation steps are taken to reduce the risk. The management system requires periodic audits to ensure compliance with government regulations, as well as our internal requirements. Our commitment to continuous improvement is reflected in annual goal setting and performance measurement.

We are subject to various laws and government regulations concerning environmental matters and employee safety and health in the United States and other countries. In addition, various states have authority under the federal statutes and many state and local governments have adopted environmental and employee safety and health laws and regulations, some of which are similar to federal requirements. State and federal authorities may seek fines and penalties for violating these laws and regulations. The material effects of compliance with these government regulations upon our capital expenditures, earnings and competitive position are primarily associated with environmental regulations. See the environmental information contained in “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations—Capital Resources and Liquidity—Contingencies” under the captions “Environmental” and “Climate Change.” It includes information on expensed and capitalized environmental costs for 2022 and those expected for 2023 and 2024.

Website Access to SEC Reports

Our Internet website address is <http://www.phillips66.com>. Information contained on our Internet website is not part of this Annual Report on Form 10-K.

Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and any amendments to these reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 are available on our website, free of charge, as soon as reasonably practicable after such reports are filed with, or furnished to, the U.S. Securities and Exchange Commission (SEC). Alternatively, you may access these reports at the SEC’s website at <http://www.sec.gov>.

Item 1A. RISK FACTORS

You should carefully consider the following risk factors in addition to the other information included in this Annual Report on Form 10-K. Each of these risk factors could adversely affect our business, operating results and financial condition, as well as the value of an investment in our common stock. These risk factors do not identify all risks that we face; our operations could also be affected by factors, events or uncertainties that are not presently known to us or that we do not currently consider to present significant risks to our operations.

Risks Related to Our Manufacturing and Operations

Our financial results are affected by changing commodity prices and margins for refined petroleum, petrochemical and plastics products.

Our financial results are largely affected by the relationship, or margin, between the prices at which we sell refined petroleum, petrochemical and plastics products and the prices for crude oil and other feedstocks used in manufacturing these products. Historically, margins have been volatile, and we expect they will continue to be volatile in the future.

The costs of feedstocks and the prices at which we can ultimately sell our products depend on numerous factors beyond our control, including regional and global supply and demand, which are subject to, among other things, production levels, levels of refined petroleum product inventories, productivity and growth of economies, and governmental regulation. We do not produce crude oil and must purchase all of the crude we process. The prices for crude oil and refined petroleum products can fluctuate based on global, regional and local market conditions, as well as by type and class of products, which can reduce margins and have a significant impact on our refining, wholesale marketing and retail operations, revenues, operating income and cash flows. Also, crude oil supply contracts generally have market-based pricing provisions. We normally purchase our refinery feedstocks weeks before manufacturing and selling the refined petroleum products. We also purchase refined petroleum products produced by others for sale to our customers. Changes in prices that occur between the time we purchase feedstocks or products and when we sell the refined petroleum products could have a significant effect on our financial results.

The price of crude oil also influences prices for petrochemical and plastics products and the feedstocks used to manufacture the products. Our Chemicals segment uses feedstocks that are derivatively produced in the refining of crude oil and the processing of natural gas, and those feedstock prices can fluctuate widely for a variety of reasons, including changes in worldwide energy prices and the supply and availability of the feedstocks. Due to the highly competitive nature of most of the products sold by our Chemicals segment, market position cannot necessarily be protected by product differentiation or by passing on cost increases to customers. As a result, price increases in raw materials may not correlate with changes in the prices at which petrochemical and plastics products are sold, thereby negatively affecting margins and the results of operations of our Chemicals segment.

Sustained or prolonged declines in commodity prices and margins for our products may adversely affect our results of operations, liquidity, access to the capital markets, and our ability to fund our capital priorities, including share repurchases and dividends.

Market conditions, including commodity prices, may impact the earnings, financial condition and cash flows of our Midstream business.

Our Midstream business is affected by the price of and demand for crude oil, natural gas and NGL, which have historically been volatile. The prices for crude oil, natural gas and NGL depend upon factors beyond our control, including global and local demand, production levels, imports and exports, seasonality and weather conditions, economic and political conditions domestically and internationally, and governmental regulations. Decreases in energy prices can decrease drilling activity, production rates and investments by third parties in the development of new crude oil and natural gas reserves. Sustained periods of low prices can also cause producers to significantly curtail or limit their oil and gas drilling operations, which could substantially delay the production and delivery of volumes of crude oil, natural gas and NGL.

The volume of crude oil and refined petroleum products transported or stored in our pipelines and terminal facilities depends on the demand for and availability of crude oil and refined petroleum products in the areas serviced by our assets. A period of sustained low demand or prices for crude oil could lead to a decline in drilling activity and production, which would lead to a decrease in the volumes of crude oil transported through our pipelines and terminal facilities, negatively affecting our earnings and cash flows. Likewise, our earnings and cash flows would be negatively impacted by a period of sustained lower demand for refined petroleum products, which could lead to lower refinery utilization and result in a decrease in the volumes of refined petroleum product transported through our pipelines and terminal facilities.

The natural gas gathered, processed, transported, sold and stored by us is delivered into pipelines for further delivery to end-users, including fractionation facilities. Demand for these services may be substantially reduced due to lower rates of natural gas production as a result of declining commodity prices. Commodity prices, including when ethane prices are low relative to natural gas prices, can also negatively impact throughput volumes of NGL transported, fractionated and stored. Additionally, revenues and cash flows can increase or decrease as the price of natural gas and NGL fluctuates because of certain contractual arrangements whereby natural gas is purchased for an agreed percentage of proceeds from the sale of the residue gas and/or NGL resulting from its processing activities.

Additionally, the level of production from natural gas wells will naturally decline over time. In order to maintain or increase throughput levels on our gathering and transportation pipeline systems and NGL pipelines and the asset utilization rates at our natural gas processing plants, we must continually obtain new supplies. The level of successful drilling activity and prices of, and demand for, natural gas and crude oil, as well as producers' desire and ability to obtain necessary permits are some of the factors that may affect new supplies of natural gas and NGL. If we are not able to obtain new supplies of natural gas to replace the natural decline in volumes from existing wells or because of competition, throughput on our pipelines and the utilization rates of our treating and processing facilities would decline. This could have a material adverse effect on our business, results of operations, financial position and cash flows, and our ability to make cash distributions.

Our operations are subject to planned and unplanned downtime, business interruptions, and operational hazards, any of which could adversely impact our ability to operate and could adversely impact our financial condition, results of operations and cash flows.

Our operating results are largely dependent on the continued operation of facilities and assets owned and operated by us and our equity affiliates. Interruptions may materially reduce productivity and thus, the profitability, of operations during and after downtime, including for planned turnarounds and scheduled maintenance activities. In the past, we and certain of our equity affiliates also have temporarily shut down facilities due to the threat of severe weather, such as hurricanes. Additionally, the availability of natural gas and electricity necessary to operate our assets can be affected by weather, pipeline interruptions, grid outages, and logistics disruptions, which may also cause us to temporarily curtail or shut down operations. Although we take precautions to ensure and enhance the safety of our operations and minimize the risk of disruptions, our operations are also subject to hazards inherent in chemicals, refining and midstream businesses, such as explosions, fires, refinery or pipeline releases or other incidents, power outages, labor disputes, restrictive governmental regulation or other natural or man-made disasters, such as geopolitical conflicts and acts of terrorism, including cyber intrusion. The inability to operate facilities or assets due to any of these events could significantly impair our ability to manufacture, process, store or transport products.

Any casualty occurrence involving our assets or operations could result in serious personal injury or loss of human life, significant damage to property and equipment, environmental pollution, impairment of operations and substantial losses to us. For assets located near populated areas, including residential areas, commercial business centers, industrial sites and other public gathering areas, the level of damage resulting from these risks could be greater. Damages resulting from an incident involving any of our assets or operations may result in our being named as a defendant in one or more lawsuits asserting potentially substantial claims or in our being assessed potentially substantial fines by governmental authorities. Should any of these risks materialize at any of our equity affiliates, it could have a material adverse effect on the business and financial condition of the equity affiliate and negatively impact their ability to make future distributions to us.

We are subject to interruptions of supply and offtake, as well as increased costs, as a result of our reliance on third-party transportation of crude oil, NGL and refined petroleum products.

We often utilize the services of third parties to transport crude oil, NGL and refined petroleum products to and from our facilities. In addition to our own operational risks, we could experience interruptions of supply or increases in costs to deliver refined petroleum products to market if the ability of the pipelines or vessels to transport crude oil or refined petroleum products is disrupted because of weather events, accidents, governmental regulations or third-party actions. A prolonged disruption of the ability of a pipeline or vessel to transport crude oil, NGL or refined petroleum products to or from one or more of our refineries or other facilities could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Public health crises, epidemics and pandemics, such as the COVID-19 pandemic have had and could continue to have a material adverse effect on our business. Any future widespread health crises could materially and adversely impact our business in the future.

Our global operations expose us to risks associated with public health crises and outbreaks of epidemics, pandemics, or contagious diseases, such as COVID-19. The COVID-19 pandemic and the associated containment efforts had a serious adverse impact on the economy and a material adverse effect on our business, as the demand for crude oil, gasoline, jet fuel, diesel fuel and other refined products was significantly reduced.

Even if a virus or other illness does not spread significantly, the perceived risk of infection or health risk may result in reduced demand for our products and materially affect our business. As we cannot predict the duration or scope of any public health crisis, epidemic or pandemic, the negative financial impact to our results cannot be reasonably estimated and could be material. Factors that will influence the impact on our business and operations include the duration and extent of such events, including the virulence of the infection, the timing of vaccine development and distribution across the world and its impact on economic recovery, the extent of imposed or recommended containment and mitigation measures and their impact on our operations, and the general economic consequences of public health crises, epidemics and pandemics, such as the COVID-19 pandemic.

To the extent any public health crisis, epidemic or pandemic adversely affected or affects our business and financial results, it may also have the effect of heightening many of the other risks that could adversely affect our business described below, such as risks associated with industry capacity utilization, volatility in the price and availability of raw materials, material adverse changes in customer relationships including any failure of a customer to perform its obligations under agreements with us, and risks associated with worldwide or regional economic conditions.

Competition Risks

Refining and marketing competitors that produce their own feedstocks, have more extensive retail outlets, or have greater financial resources may have a competitive advantage.

The refining and marketing industry is highly competitive with respect to both feedstock supply and refined petroleum product markets. We compete with many companies for available supplies of crude oil and other feedstocks and for outlets for our refined petroleum products. We do not produce any of our crude oil feedstocks. Some of our competitors, however, obtain a portion of their feedstocks from their own production and some have more extensive retail outlets than we have. Competitors that have their own production or extensive retail outlets (and greater brand-name recognition) are at times able to offset losses from refining operations with profits from producing or retailing operations, and may be better positioned to withstand periods of depressed refining margins or feedstock shortages.

Some of our competitors also have materially greater financial and other resources than we have. Such competitors have a greater ability to bear the economic risks inherent in all aspects of our business. In addition, we compete with other industries that provide alternative means to satisfy the energy and fuel requirements of our industrial, commercial and individual customers.

Volatility in market demand for our petrochemical and plastics products and midstream transportation services and the risk of overbuild in these industries could negatively impact the results of operations of our businesses.

We and our equity affiliates have made and continue to make significant investments to meet market demand for our products and services, such as investments in midstream infrastructure and construction of new petrochemicals facilities. Similar investments have been made, and additional investments may be made in the future, by us, our competitors or by new entrants to the markets and industries we serve. The success of these investments largely depends on the realization of anticipated market demand, and these projects typically require significant development periods, during which time demand for our products or services may change, or additional investments by competitors may be made that could result in an overbuild of supply. Any of these or other competitive forces could materially adversely affect our results of operations, financial position or cash flows, as well as our return on capital employed.

Strategic Performance and Future Growth Risks

Large capital projects can take many years to complete, and market conditions could deteriorate significantly between the project approval date and the project startup date, negatively impacting expected project returns.

Our basis for approving a large-scale capital project is the expectation that it will deliver an acceptable rate of return on the capital invested. We base these forecasted project economics on our best estimate of future market conditions including the regulatory and operating environment. For example, we are in the process of converting our San Francisco refinery into a renewable fuels facility to meet growing demand for renewable fuels. Most large-scale projects take several years to complete. During this multiyear period, market conditions can change from those we forecast, and these changes could be significant. Accordingly, we may not be able to realize our expected returns from a large investment in a capital project, and this could negatively impact our results of operations, cash flows and our return on capital employed.

Plans we or our joint ventures may have to expand or construct assets or develop new technologies, and plans for our future performance are subject to risks associated with societal and political pressures and other forms of opposition to the future development, transportation and use of carbon-based fuels. Such risks could adversely impact our results of operations.

Certain of our plans are based upon the assumption that societal sentiment will continue to enable, and existing regulations will remain in place to allow for, the future development, transportation and use of carbon-based fuels. A portion of our growth strategy is dependent on our and our joint ventures' ability to capture growth opportunities in the Midstream and Chemicals segments. Policy decisions relating to the production, refining, transportation, marketing and use of carbon-based fuels are subject to political pressures and the influence and protests of environmental and other special interest groups. For example, the construction or expansion of pipelines can involve numerous regulatory, permitting, environmental, political, and legal uncertainties, many of which are beyond our control. We may not be able to identify or execute growth projects, and those that are identified may not be completed on schedule or at the budgeted cost, if at all. In addition, our revenues may not increase immediately upon the expenditure of funds on a particular project. Delays or cost increases related to capital spending programs or the inability to complete growth projects could negatively impact our reputation, results of operations, cash flows and our return on capital employed.

In addition, our Energy Research & Innovation organization works to develop new technologies focused on advancing our business, including renewable fuels research and energy transition programs. Our efforts to research and develop new technologies is subject to a multitude of factors and conditions, many of which are out of our control. Examples of such factors include evolving government regulation, the pace of changes in technology, the successful development and deployment of existing or new technologies and business solutions on a commercial scale, competition from third parties in developing new technologies and the availability, timing and cost of equipment.

Political and economic developments could affect our operations and materially reduce our profitability and cash flows.

Actions of federal, state, local and international governments through legislation or regulation, executive order, permit or other review of infrastructure or facility development, and commercial restrictions could delay projects, increase costs, limit development, or otherwise reduce our profitability both in the United States and abroad. Any such actions may affect many aspects of our operations, including:

- Requiring permits or other approvals that may impose unforeseen or unduly burdensome conditions or potentially cause delays in our operations.
- Further limiting or prohibiting construction or other activities in environmentally sensitive or other areas.
- Requiring increased capital costs to construct, maintain or upgrade equipment, facilities or infrastructure.
- Restricting the locations where we may construct facilities or requiring the relocation of facilities.

In addition, the U.S. government can prevent or restrict us from doing business in foreign countries and from doing business with entities affiliated with foreign governments, which can include state oil companies and U.S. subsidiaries of those companies. The Office of Foreign Assets Control (OFAC) of the U.S. Department of the Treasury administers and enforces economic and trade sanctions based on U.S. foreign policy and national security matters. The effect of any such OFAC sanctions could disrupt transactions with or operations involving entities affiliated with sanctioned countries, and could limit our ability to obtain optimum crude slates and other refinery feedstocks and effectively distribute refined petroleum products.

Other political and economic risks include global pandemics; financial market turmoil; economic volatility and global economic slowdown; currency exchange rate fluctuations; short-term and long-term inflationary pressures; import or export restrictions and changes in trade regulations; supply chain disruptions; acts of terrorism, war, civil unrest and other political risks; limitations in the availability of labor to develop, staff and manage operations; and potentially adverse tax developments. If any of these events occur, our businesses and results of operations may be adversely affected.

We may not be able to effectively identify, whether through acquisition, investment or development, lower-carbon opportunities on favorable terms, or at all, and failure to do so could limit our growth, our ability to participate in the energy transition, and our ability to meet our environmental goals and targets.

Part of our strategy includes capturing growth opportunities in our Emerging Energy business to further advance our participation in the energy transition and meet our greenhouse gas (GHG) emissions reduction targets. This strategy depends on our ability to successfully identify and evaluate acquisition and investment opportunities or develop and commercialize new technologies. The number of lower-carbon opportunities may be limited, and we will compete with other energy companies for these limited opportunities, which could make them more expensive and the returns for our business less attractive and possibly cause us to refrain from making them at all. Further, certain lower-carbon opportunities will depend on technological and other advancements that may not be within our control and may not come to fruition or be economically feasible in the near term. Any new opportunities also may depend on the viability of new assets or businesses that are contingent on public policy mechanisms including investment tax credits, subsidies, renewable portfolio standards and carbon trading plans. These mechanisms have been implemented at the state and federal levels to support the development of renewable energy, demand-side, and other clean infrastructure technologies. The availability and continuation of public policy support mechanisms will drive a significant part of the economics and viability of lower-carbon and clean energy investments generally, as well as our participation in them. If we are unable to identify and consummate acquisitions and investments, our ability to execute a portion of our growth strategy and meet our environmental goals may be impeded.

Regulatory and Environmental, Climate and Weather Risks

Climate change and severe weather may adversely affect our and our joint ventures' facilities and ongoing operations.

The potential physical effects of climate change and severe weather, as well as other chronic physical effects such as water shortages and rising sea levels, on our operations are highly uncertain and depend upon the unique geographic and environmental factors present. We have systems in place to manage potential acute physical risks, including those that may be caused by climate change, but if any such events were to occur, they could have an adverse effect on our assets and operations. Examples of potential physical risks include floods, hurricane-force winds, wildfires, freezing temperatures and snowstorms, as well as rising sea levels at our coastal facilities. We have incurred, and will continue to incur, costs to protect our assets from physical risks and to employ processes, to the extent available, to mitigate such risks.

We operate facilities located in coastal regions of the United States, which have been impacted by hurricanes that have required us to temporarily, or even permanently, shut down operations at those sites. For example, due to significant damages from Hurricane Ida, we shut down the Alliance Refinery. CPChem also operates facilities on the Gulf Coast and has had to temporarily shut down sites in the past as a result of hurricanes. Any extreme weather events or rising sea levels may disrupt the ability to operate our facilities located near coastal areas or to transport crude oil, refined petroleum or petrochemical and plastics products in these areas. Extended periods of such disruption could have an adverse effect on our results of operations. We could also incur substantial costs to prevent or repair damage to these facilities. Finally, depending on the severity and duration of any extreme weather events or climate conditions, our operations may need to be modified and material costs incurred, which could materially and adversely affect our business, financial condition and results of operations.

There are certain environmental hazards and risks inherent in our operations that could adversely affect those operations and our financial results.

The operation of refineries, power plants, fractionators, pipelines, terminals, gas processing facilities and vessels is inherently subject to the risks of spills, discharges or other inadvertent releases of petroleum or hazardous substances. If any of these events had previously occurred or occurs in the future in connection with any of our refineries, pipelines or refined petroleum products terminals, or in connection with any facilities that receive our wastes or byproducts for treatment or disposal, other than events for which we are indemnified, we could be liable for all costs and penalties associated with their remediation under federal, state, local and international environmental laws or common law, and could be liable for property damage to third parties caused by contamination from releases and spills.

We expect to continue to incur substantial capital expenditures and operating costs as a result of our compliance with existing and future environmental laws and regulations.

Our business is subject to numerous laws and regulations relating to the protection of the environment. These laws and regulations continue to increase in both number and complexity and affect our operations with respect to, among other things:

- The discharge of pollutants into the environment.
- Emissions into the atmosphere, such as nitrogen oxides, sulfur dioxide and mercury emissions, and GHG emissions, as they are, or may become, regulated.
- The quantity of renewable fuels that must be blended into motor fuels.
- The handling, use, storage, transportation, disposal and cleanup of hazardous materials and hazardous and nonhazardous wastes.
- The dismantlement and abandonment of our facilities and restoration of our properties at the end of their useful lives.

To the extent these expenditures, as with all costs, are not ultimately reflected in the prices of our products and services, our business, financial condition, results of operations and cash flows in future periods could be materially adversely affected.

The adoption of climate change legislation or regulation could result in increased operating costs and reduced demand for the refined petroleum products we produce.

Currently, multiple legislative and regulatory measures to address GHG and other emissions are in various phases of consideration, promulgation or implementation. These include actions to develop international, federal, regional or statewide programs, which could require reductions in our GHG or other emissions, establish a carbon tax and decrease the demand for our refined products. Requiring reductions in these emissions could result in increased costs to (i) operate and maintain our facilities, (ii) install new emission controls at our facilities and (iii) administer and manage any emissions programs, including acquiring emission credits or allotments.

For example, in 2017, the California state legislature adopted Assembly Bill 398, which provides direction and parameters on utilizing cap and trade after 2020 to meet the 40% reduction target for GHG emissions from 1990 levels by 2030 specified in Senate Bill 32. Compliance with the cap and trade program is demonstrated through a market-based credit system. Additionally, on August 25, 2022, the California Air Resources Board (CARB) adopted regulations that effectively ban the in-state sales of new cars containing internal combustion engines beginning in 2035. Also, on December 15, 2022, CARB adopted its “2022 Scoping Plan for Achieving Carbon Neutrality,” which purports to provide a road map for California to achieve carbon neutrality (which it defines as removing as many carbon emissions from the atmosphere as it emits) by year 2045. Other states are proposing, or have already promulgated, low carbon fuel standards or similar initiatives to reduce emissions from the transportation sector. If we are unable to pass the costs of compliance on to our customers, sufficient credits are unavailable for purchase, we have to pay a significantly higher price for credits, or if we are otherwise unable to meet our compliance obligation, our financial condition and results of operations could be adversely affected.

Federal, regional and state climate change and air emissions goals and regulatory programs are complex, subject to change and impose considerable uncertainty due to a number of factors including technological feasibility, legal challenges and potential changes in federal policy. Increasing concerns about climate change and carbon intensity have also resulted in heightened societal awareness and a number of international and national measures to limit GHG emissions. Additional stricter regulatory measures and investor pressure can be expected in the future and any of these changes may have a material adverse impact on our business or financial condition.

International climate change-related efforts, such as the 2015 United Nations Conference on Climate Change, which led to the creation of the Paris Agreement, may impact the regulatory framework of states whose policies directly influence our present and future operations. Although the United States had previously withdrawn from the Paris Agreement, it has since taken the steps necessary to rejoin, which was effective in February 2021. The U.S. climate change strategy and the impact to our industry and operations due to GHG regulation is unknown at this time.

Increased regulation of the fossil fuel industry, particularly with respect to hydraulic fracturing, could result in reductions or delays in U.S. production of crude oil and natural gas, which could adversely impact our results of operations.

Most of the crude oil and gas production of our Midstream segment’s customers is being produced from unconventional oil shale reservoirs. These reservoirs require hydraulic fracturing completion processes to release the hydrocarbons from the rock so they can flow through casing to the surface. Hydraulic fracturing involves the injection of water, sand and chemicals under pressure into a formation to stimulate hydrocarbon production. The EPA, as well as several state agencies, have commenced studies and/or convened hearings regarding the potential environmental impacts of hydraulic fracturing activities. At the same time, certain environmental groups have suggested that additional laws may be needed to more closely and uniformly regulate the hydraulic fracturing process, and legislation has been proposed to provide for such regulation. In addition, some communities have adopted measures to ban hydraulic fracturing in their communities.

Also, certain interest groups have also proposed ballot initiatives and constitutional amendments designed to restrict crude oil and natural gas development generally. If ballot initiatives, local, state, or national restrictions or prohibitions are adopted and result in more stringent limitations on the production and development of crude oil and natural gas, producers may experience delays or curtailment in the permitting or pursuit of exploration, development or production activities. In addition to these proposed ballot initiatives and constitutional amendments, municipalities, such as the City of Los Angeles, have already enacted or contemplate enacting complete or partial bans on oil and gas exploration and production activities.

If legislative and regulatory initiatives cause a material decrease in the drilling of new wells and related servicing activities, it may reduce crude oil, natural gas and NGL supplies, negatively affecting the volume of products available to our Midstream segment and increasing feedstock prices for our Chemicals and Refining segments, resulting in a material adverse effect on our financial position, results of operations and cash flows.

Compliance with the EPA's Renewable Fuel Standard (RFS) could adversely affect our financial results.

The EPA has implemented the RFS pursuant to the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007. The RFS program sets annual renewable volume obligation (RVO) requirements for the quantity of renewable fuels, such as ethanol, that must be blended into motor fuels consumed in the United States. To provide certain flexibility in compliance options available to the industry, a Renewable Identification Number (RIN) is assigned to each gallon of renewable fuel produced in, or imported into, the United States. As a producer of petroleum-based motor fuels, we are obligated to blend renewable fuels into the products we produce at a rate that is at least commensurate to the EPA's RVO requirements and, to the extent we do not, we must purchase RINs in the open market to satisfy our obligation under the RFS program.

We are exposed to the volatility in the market price of RINs. We cannot predict the future prices of RINs. RINs prices are dependent upon a variety of factors, including EPA regulations, the availability of RINs for purchase, and levels of transportation fuels produced, which can vary significantly from quarter to quarter. If sufficient RINs are unavailable for purchase, if we have to pay a significantly higher price for RINs, if we purchase RINs that are ultimately determined to be invalid, or if we are otherwise unable to meet the EPA's RVO requirements, including because the EPA mandates a blending quantity of renewable fuel that exceeds the amount that is commercially feasible to blend into motor fuel (a situation commonly referred to as "the blend wall"), our operations could be materially adversely impacted, up to and including a reduction in produced motor fuel for sale in the United States.

Societal, technological, political and scientific developments around emissions and fuel efficiency may decrease demand for transportation fuels.

Developments aimed at reducing GHG emissions may decrease the demand or increase the cost for our transportation fuels. Societal attitudes toward these products and their relationship to the environment may significantly affect our effectiveness in marketing our products. Government efforts to steer the public toward non-petroleum-based fuel dependent modes of transportation may foster a negative perception toward transportation fuels or increase costs of our products, thus affecting the public's attitude toward our major product. Advanced technology and increased use of vehicles that do not use petroleum-based transportation fuels or that are powered by hybrid engines would reduce demand for motor fuel. We may also incur increased production costs, which we may not be able to pass along to our customers.

Additionally, renewable fuels, alternative energy mandates and energy conservation efforts could reduce demand for refined petroleum products. Tax incentives and other subsidies can make renewable fuels and alternative energy more competitive with refined petroleum products than they otherwise might be, which may reduce refined petroleum product margins and hinder the ability of refined petroleum products to compete with renewable fuels.

These developments could potentially have a material adverse effect on our business, financial condition, results of operations and cash flows.

Continuing political and social concerns about the issues of climate change may result in changes to our business and significant expenditures, including litigation-related expenses.

Increasing attention to global climate change has resulted in increased investor attention and an increased risk of public and private litigation, which could increase our costs or otherwise adversely affect our business. For example, shareholder activism has recently been increasing in our industry, and shareholders may attempt to effect changes to our business or governance, whether by shareholder proposals, public campaigns, proxy solicitations or otherwise. Additionally, cities, counties, and other governmental entities in several states in the U.S. began filing lawsuits against energy companies in 2017, including Phillips 66. The lawsuits seek damages allegedly associated with climate change, and the plaintiffs are seeking unspecified damages and abatement under various tort theories. Similar lawsuits may be filed in other jurisdictions. While we believe these lawsuits are an inappropriate vehicle to address the challenges associated with climate change and will vigorously defend against them for lacking factual and legal merit, the ultimate outcome and impact to us of any such litigation cannot be predicted with certainty, and we could incur substantial legal costs associated with defending these and similar lawsuits in the future. Additionally, governments and private parties are also increasingly filing lawsuits or initiating regulatory action based on allegations that certain public statements regarding climate change and other Environmental, Social and Corporate Governance (ESG) related matters and practices by companies are false and misleading “greenwashing” that violate deceptive trade practices and consumer protection statutes. While we are currently not a party to any of these lawsuits, they present a high degree of uncertainty regarding the extent to which energy companies face an increased risk of liability stemming from climate change or ESG disclosures and practices. Any of these risks could result in unexpected costs, negative sentiments about our company, disruptions in our operations, increases to our operating expenses and reduced demand for our products, which in turn could have an adverse effect on our business, financial condition and results of operations.

Increased concerns regarding plastic waste in the environment, consumers selectively reducing their consumption of plastic products due to recycling concerns, or new or more restrictive regulations and rules related to plastic waste could reduce demand for CPChem’s plastic products and could negatively impact our equity interest.

There is a growing concern with the accumulation of plastic, including microplastics, and other packaging waste in the environment. Additionally, plastics have recently faced increased public backlash and scrutiny. Policy measures to address this concern are being discussed or implemented by governments at all levels. In addition, a host of single-use plastic bans and taxes have been passed by countries around the world and counties and municipalities throughout the U.S. Increased regulation of, or prohibition on, the use of certain plastic products could reduce demand for certain of the products CPChem produces, which could negatively impact its financial condition, results of operations and cash flows, thereby negatively impacting our equity earnings, and cash distributions that we receive, from CPChem.

Cybersecurity and Data Privacy Risks

Security breaches and other disruptions could compromise our information and expose us to liability, which would cause our business and reputation to suffer.

Our information technology and infrastructure, or information technology and infrastructure of our third-party service providers (e.g., cloud-based service providers), may be vulnerable to attacks by malicious actors or breached due to human error, malfeasance or other disruptions, including ransomware and other malware, phishing and social engineering schemes. Any such breaches could compromise our networks and the information stored there could be accessed, publicly disclosed, lost or stolen. Any such access, disclosure or other loss of information could result in one or more of the following outcomes: (i) a loss of intellectual property, proprietary information, or employee, customer or vendor data; (ii) public disclosure of sensitive information; (iii) increased costs to prevent, respond to, or mitigate cybersecurity events, such as deploying additional personnel and protection technologies, training employees, and engaging third-party experts and consultants; (iv) systems interruption; (v) disruption of our business operations; (vi) remediation costs for repairs of system damage; (vii) reputational damage that adversely affects customer or investor confidence; and (viii) damage to our competitiveness, stock price, and long-term stockholder value. Although we have experienced occasional, actual or attempted breaches of our cybersecurity, we do not believe that any of these breaches has had a material effect on our business, operations or financial condition.

A breach may also result in legal claims or proceedings against us by our shareholders, employees, customers, vendors, and governmental authorities (U.S. and non-U.S.). Our infrastructure protection technologies and disaster recovery plans may not be able to prevent a technology systems breach or systems failure, which could have a material adverse effect on our financial position or results of operations. Furthermore, the continuing and evolving threat of cyberattacks has resulted in increased regulatory focus on prevention. To the extent we face increased regulatory requirements, we may be required to expend significant additional resources to meet such requirements.

Increasing regulatory focus on privacy and cybersecurity issues and expanding laws could expose us to increased liability, subject us to lawsuits, investigations and other liabilities and restrictions on our operations that could significantly and adversely affect our business.

Along with our own data and information collected in the normal course of our business, we and our partners collect and retain certain data that is subject to specific laws and regulations. The transfer and use of this data both domestically and across international borders is becoming increasingly complex. This data is subject to governmental regulation at the federal, state, international, national, provincial and local levels in many areas of our business, including data privacy and security laws such as the European Union (EU) General Data Protection Regulation (GDPR) and the California Consumer Privacy Act (CCPA).

The GDPR applies to activities related to personal data that are conducted from an establishment in the EU. As interpretation and enforcement of the GDPR evolves, it creates a range of new compliance obligations, which could cause us to incur additional costs. Failure to comply could result in significant penalties that may materially adversely affect our business, reputation, results of operations, and cash flows.

The CCPA, which came into effect on January 1, 2020, gives California residents specific rights in relation to their personal information, requires that companies take certain actions, including notifications for security incidents and may apply to activities regarding personal information that is collected by us, directly or indirectly, from California residents. As interpretation and enforcement of the CCPA evolves, it creates a range of new compliance obligations, with the possibility for significant financial penalties for noncompliance that may materially adversely affect our business, reputation, results of operations, and cash flows.

Comprehensive privacy laws with some similarities to the CCPA have been proposed or passed at the U.S. federal and state levels, such as the Colorado Privacy Act. Additionally, the Federal Trade Commission and many state attorneys general are interpreting federal and state consumer protection laws to impose standards for the online collection, use, dissemination and security of data as well as requiring disclosures about these practices. Existing data privacy laws, or any laws that may become applicable to our business, pose increasingly complex compliance challenges and potentially elevate our costs. Any failure by us to comply with these laws and regulations, including as a result of a security or privacy breach, could result in significant penalties and liabilities for us. Additionally, if we acquire a company that has violated or is not in compliance with applicable data protection laws, we may incur significant liabilities and penalties as a result.

Risks Related to Our Equity Investments and Pending Merger

Our investments in joint ventures decrease our ability to manage risk.

We conduct some of our operations, including parts of our Midstream, Refining and Marketing and Specialties (M&S) segments, and our entire Chemicals segment, through joint ventures in which we share control with our joint venture partners. Our joint venture partners may have economic, business or legal interests or goals that are inconsistent with ours or those of the joint venture, or our joint venture participants may be unable to meet their economic or other obligations, and we may be required to fulfill those obligations alone. Failure by us, or an entity in which we have a joint venture interest, to adequately manage the risks associated with any acquisitions or joint ventures could have a material adverse effect on the financial condition or results of operations of our joint ventures and, in turn, our business and operations.

One of our subsidiaries serves as the managing member of the general partner of a publicly traded master limited partnership (MLP), DCP LP, which may increase our exposure to legal liability, including with respect to our pending acquisition of the publicly held common units of DCP LP.

One of our subsidiaries acts as the managing member of the general partner of DCP LP, a publicly traded MLP, and is responsible for conducting, directing and managing all activities associated with DCP LP. Our control of the activities of DCP LP may increase the possibility that we could be subject to claims of breach of fiduciary duties, including claims of conflicts of interest, related to DCP LP.

Additionally, our control of the general partner of DCP LP increases the possibility that we and the officers and directors of the general partner of DCP LP could be subject to litigation related to the pending acquisition of the publicly held common units of DCP LP. While we will evaluate and defend against any lawsuits vigorously, an unfavorable resolution of any such lawsuit could delay or prevent the consummation of this transaction and the costs of the defense of such lawsuits and other effects of such lawsuits could have a material adverse effect on our financial condition, results of operations and cash flows.

The integration of DCP LP's operations into Phillips 66 may not be as successful as anticipated, and Phillips 66 may not realize all of the anticipated benefits of the integration.

We have not previously directly managed the assets owned by DCP LP. Difficulties in integrating DCP LP into our existing midstream business may result in DCP LP and Phillips 66 performing differently than expected, in operational challenges or in the failure to realize the operational and commercial synergies and cost savings that we expect to capture from the integration. Phillips 66's and DCP LP's existing businesses could also be negatively impacted by the integration. Potential difficulties that may be encountered in the integration process include, among other factors:

- the inability to successfully integrate the businesses of DCP LP into Phillips 66 in a manner that permits Phillips 66 to achieve the full revenue, cost savings and synergies anticipated;
- complexities associated with managing the larger, more complex, integrated business;
- integrating personnel from the two companies while maintaining focus on providing consistent, high-quality products and services;
- integrating operational and business information technology systems;
- loss of key employees;
- integrating relationships with customers, vendors and business partners;
- performance shortfalls at one or both of the companies as a result of the diversion of management's attention caused by the integration process; and
- the disruption of, or the loss of momentum in, each company's ongoing business or inconsistencies in standards, controls, procedures and policies.

Indebtedness, Capital Markets and Financial Risks

Uncertainty and illiquidity in credit and capital markets can impair our ability to obtain credit and financing on acceptable terms and can adversely affect the financial strength of our business partners.

Our ability to obtain credit and capital depends in large measure on the state of the credit and capital markets, which is beyond our control. Our ability to access credit and capital markets may be restricted at a time when we would like, or need, access to those markets, which could constrain our flexibility to react to changing economic and business conditions. In addition, the cost and availability of debt and equity financing may be adversely impacted by unstable or illiquid market conditions. Protracted uncertainty and illiquidity in these markets also could have an adverse impact on our lenders, commodity transaction counterparties, or our customers, preventing them from meeting their obligations to us.

From time to time, our cash needs may exceed our cash from our consolidated operations and joint venture distributions, and our business could be materially and adversely affected if we are unable to obtain necessary funds from financing activities. From time to time, we may need to supplement cash generated from operations with proceeds from financing activities. Uncertainty and illiquidity in financial markets may materially impact the ability of the participating financial institutions to fund their commitments to us under our liquidity facilities that are supported by a broad syndicate of financial institutions. Accordingly, we may not be able to obtain the full amount of the funds available under our liquidity facilities to satisfy our cash requirements, and our failure to do so could have a material adverse effect on our operations and financial position.

Investor sentiment towards climate change, fossil fuels and sustainability could adversely affect our business, the market price for our common stock and our access to and cost of capital.

There have been efforts in recent years aimed at the investment community, including investment advisors, sovereign wealth funds, public pension funds, universities, and other groups, to promote the divestment of energy companies, as well as to pressure lenders and other financial services companies to limit or curtail activities with energy companies. If these efforts are successful, our stock price, our ability to access capital markets and our cost of capital may be negatively impacted.

Members of the investment community are also increasing their focus on sustainability practices, including practices related to GHG emissions, climate change, diversity and inclusion, environmental justice and other sustainability-related matters. As a result, we may face increasing pressure regarding our sustainability disclosures and practices. Additionally, members of the investment community may screen companies such as ours for sustainability performance before investing in our stock or participating in our financing activities. If we are unable to meet the sustainability standards set by these investors, we may lose investors, our stock price may be negatively impacted, our access to capital markets and lenders may be curtailed, and our reputation may be negatively affected.

Our efforts to accurately report on sustainability-related issues expose us to operational, reputational, financial, legal, and other risks. Standards for tracking and reporting on sustainability-related matters, including climate-related matters, have not been harmonized and continue to evolve. Processes and controls for reporting on sustainability matters are subject to evolving and disparate standards of identification, measurement, and reporting on such metrics, including any climate change and sustainability-related public company disclosure requirements adopted by the SEC, and such standards may change over time, which could result in significant revisions to our current sustainability practices and disclosures.

We do not fully insure against all potential losses, including those from extreme weather events, and, therefore, our business, financial condition, results of operations and cash flows could be adversely affected by unexpected or underinsured liabilities and increased costs.

We maintain insurance coverage in amounts we believe to be prudent, including against many, but not all, potential liabilities arising from operating hazards. Uninsured or underinsured liabilities arising from operating hazards, including but not limited to, explosions, fires, refinery or pipeline releases or other incidents involving our assets or operations, including weather events, could reduce the funds available to us for capital and investment spending and could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Deterioration in our credit profile could increase our costs of borrowing money, limit our access to the capital markets and commercial credit, and could trigger co-venturer rights under joint venture arrangements.

Our credit ratings could be lowered or withdrawn entirely by a rating agency if, in its judgment, the circumstances warrant. If a rating agency were to downgrade our rating below investment grade, our borrowing costs would increase, and our funding sources could decrease.

In addition, a failure by Phillips 66 to maintain an investment grade rating could affect its business relationships with suppliers and operating partners. For example, Phillips 66's agreement with Chevron Corporation (Chevron) regarding CPCChem permits Chevron to buy Phillips 66's 50% interest in CPCChem for fair market value if Phillips 66 experiences a change in control or if both Standard & Poor's Financial Services LLC and Moody's Investors Service, Inc. lower its credit ratings below investment grade and the credit rating from either rating agency remains below investment grade for 365 days thereafter, with fair market value determined by agreement or by nationally recognized investment banks. As a result of these factors, a downgrade of credit ratings could have a material adverse impact on Phillips 66's future operations and financial position.

The level of returns on pension and postretirement plan assets and the actuarial assumptions used for valuation purposes could affect our earnings and cash flows in future periods.

Assumptions used in determining projected benefit obligations and the expected return on plan assets for our pension plans and other postretirement benefit plans are evaluated by us based on a variety of independent sources of market information and in consultation with outside actuaries. If we determine that changes are warranted in the assumptions used, such as the discount rate, expected long-term rate of return, or health care cost trend rate, our future pension and postretirement benefit expenses and funding requirements could increase. In addition, several factors could cause actual results to differ significantly from the actuarial assumptions that we use. Funding obligations are determined based on the value of assets and liabilities on a specific date as required under relevant regulations. Future pension funding requirements, and the timing of funding payments, could be affected by legislation enacted by governmental authorities.

We may incur losses as a result of our forward contracts and derivative transactions.

We currently use commodity derivative instruments, and we expect to use them in the future. If the instruments we utilize to hedge our exposure to various types of risk are not effective, we may incur losses. Derivative transactions involve the risk that counterparties may be unable to satisfy their obligations to us. The risk of counterparty default is heightened in a poor economic environment. In addition, we may be required to incur additional costs in connection with future regulation of derivative instruments to the extent it is applicable to us.

We are subject to continuing contingent liabilities of ConocoPhillips following the separation. Further, ConocoPhillips has indemnified us for certain matters, but may not be able to satisfy its obligations to us in the future.

In connection with our separation from ConocoPhillips, we entered into an Indemnification and Release Agreement and certain other agreements pursuant to which ConocoPhillips agreed to indemnify us for certain liabilities, and we agreed to indemnify ConocoPhillips for certain liabilities. Indemnities that we may be required to provide are not subject to any cap and may be significant. Third parties could also seek to hold us responsible for any of the liabilities that ConocoPhillips has agreed to retain. Further, the indemnity from ConocoPhillips may not be sufficient to protect us against the full amount of such liabilities, and ConocoPhillips may not be able to fully satisfy its indemnification obligations. Each of these risks could negatively affect our business, results of operations and financial condition.

Item 1B. UNRESOLVED STAFF COMMENTS

None.

Item 3. LEGAL PROCEEDINGS

From time to time, we may be involved in litigation and claims arising out of our operations in the normal course of business. Additionally, we have elected a \$300,000 threshold to disclose certain proceedings arising under federal, state or local environmental laws when a governmental authority is a party to the proceedings. The following matters are disclosed in accordance with that requirement. We do not currently believe that the eventual outcome of any matters reported, individually or in the aggregate, could have a material adverse effect on our business, financial condition, results of operations or cash flows.

Further, our U.S. refineries are implementing two separate consent decrees, regarding alleged violations of the Federal Clean Air Act, with the EPA, five states and one local air pollution agency. Some of the requirements and limitations contained in the decrees provide for stipulated penalties for violations. Stipulated penalties under the decrees are not automatic, but must be requested by one of the agency signatories. As part of periodic reports under the decrees or other reports required by permits or regulations, we occasionally report matters that could be subject to a request for stipulated penalties. If a specific request for stipulated penalties meeting the reporting threshold set forth in SEC rules is made pursuant to these decrees based on a given reported exceedance, we will separately report that matter and the amount of the proposed penalty.

New Matters

The EPA and U.S. Department of Justice (DOJ) notified Phillips 66 that the government will seek penalties for alleged violations of the 2019 consent decree (Civil Action No. 3:18-cv-01484-SMY-GCS) at our Wood River Refinery. We expect that penalties paid for the enforcement action will exceed \$300,000. We are working with EPA and DOJ to resolve this matter.

Matters Previously Reported (unresolved or resolved since the quarterly report on Form 10-Q for the quarterly period ended September 30, 2022)

On July 2, 2020, the South Coast Air Quality Management District (SCAQMD) issued a demand for penalties totaling \$2,697,575. The penalty demand proposes to resolve 26 Notices of Violation (NOVs) issued between 2017 and 2020 for alleged violations of air permit and air pollution regulatory requirements at the Los Angeles Refinery. We are working with SCAQMD to resolve these NOVs.

In 2018, the Colorado Department of Public Health and Environment (CDPHE) issued a Compliance Advisory in relation to an improperly permitted facility flare and related air emissions from flare operations at one of DCP LP's gas processing plants, which DCP LP self-disclosed to CDPHE in December 2017. Following information exchanges and discussions with CDPHE, a resolution was proposed pursuant to which the plant's air permit would be revised, and DCP LP would be assessed an administrative penalty and economic benefit payment. A revised air permit was issued in May 2019, but the parties had not yet entered into a final settlement agreement to complete the matter. Subsequently, in July 2020, CDPHE issued a Notice of Violation in relation to amine treater emissions at this plant, which DCP LP self-disclosed to CDPHE in April 2020. DCP LP is engaging with CDPHE as to this and the flare-related matter, including possible settlement terms, although these matters, which have since been combined, may result in formal legal proceedings. It is possible that resolution of this matter may include an administrative penalty and economic benefit payment, further revisions to the facility air permit, or installation of emissions management equipment, or a combination of these, that could result in costs that exceed \$1 million.

See Note 16—Contingencies and Commitments, in the Notes to Consolidated Financial Statements, for additional information.

Item 4. MINE SAFETY DISCLOSURES

Not applicable.

INFORMATION ABOUT OUR EXECUTIVE OFFICERS

<u>Name</u>	<u>Position Held</u>	<u>Age*</u>
Mark E. Lashier	President and Chief Executive Officer	61
Zhanna Golodryga	Executive Vice President, Emerging Energy and Sustainability	67
Brian M. Mandell	Executive Vice President, Marketing and Commercial	59
Kevin J. Mitchell	Executive Vice President and Chief Financial Officer	56
Timothy D. Roberts	Executive Vice President, Midstream and Chemicals	61
Vanessa L. Allen Sutherland	Executive Vice President, Government Affairs, General Counsel and Corporate Secretary	51
Richard G. Harbison	Senior Vice President, Refining	57
J. Scott Pruitt	Vice President and Controller	58

* On February 22, 2023.

There are no family relationships among any of the executive officers named above or any member of our Board of Directors. The Board of Directors annually elects the officers to serve until a successor is elected and qualified or as otherwise provided in our By-Laws. Set forth below is information about the executive officers identified above.

Mark E. Lashier is President and Chief Executive Officer of Phillips 66, a position he has held since July 2022. Previously, Mr. Lashier served as President and Chief Operating Officer of Phillips 66 from April 2021 to July 2022; President and Chief Executive Officer of CPChem from August 2017 to April 2021; and as Executive Vice President, Commercial of CPChem from August 2015 to August 2017.

Zhanna Golodryga is Executive Vice President, Emerging Energy and Sustainability of Phillips 66, a position she has held since October 2022. Previously, Ms. Golodryga served as Senior Vice President, Chief Digital and Administrative Officer from April 2017 to October 2022.

Brian M. Mandell is Executive Vice President, Marketing and Commercial of Phillips 66, a position he has held since March 2019. Mr. Mandell served as Senior Vice President, Marketing and Commercial from August 2018 to March 2019; Senior Vice President, Commercial from November 2016 to August 2018; and President, Global Marketing from March 2015 to November 2016.

Kevin J. Mitchell is Executive Vice President and Chief Financial Officer of Phillips 66, a position he has held since January 2016. Previously, Mr. Mitchell served as Vice President, Investor Relations from September 2014 to January 2016.

Timothy D. Roberts is Executive Vice President, Midstream and Chemicals of Phillips 66, a position he has held since August 2018. Previously, Mr. Roberts served as Executive Vice President, Marketing and Commercial from January 2017 to August 2018 and as Executive Vice President Strategy and Business Development from April 2016 to January 2017.

Vanessa L. Allen Sutherland is Executive Vice President, Government Affairs, General Counsel and Corporate Secretary of Phillips 66, a position she has held since January 2022. Ms. Sutherland previously served as Executive Vice President and Chief Legal Officer of Norfolk Southern Corporation from April 2020 to January 2022, Senior Vice President Government Relations and Chief Legal Officer from August 2019 to April 2020, Senior Vice President Law and Chief Legal Officer from April 2019 to August 2019, and Vice President Law from June 2018 to April 2019. Prior to joining Norfolk Southern Corporation, Ms. Sutherland served as Chairperson of the U.S. Chemical Safety and Hazard Investigation Board from August 2015 to June 2018.

Richard G. Harbison is Senior Vice President, Refining of Phillips 66, a position he has held since June 2022. Mr. Harbison previously served as Vice President, San Francisco Refinery from March 2021 to May 2022, General Manager, San Francisco Refinery from June 2020 to February 2021, Manager, Lake Charles Manufacturing Complex from February 2016 to May 2020 and Manager of the Ferndale Refinery from August 2014 to January 2016.

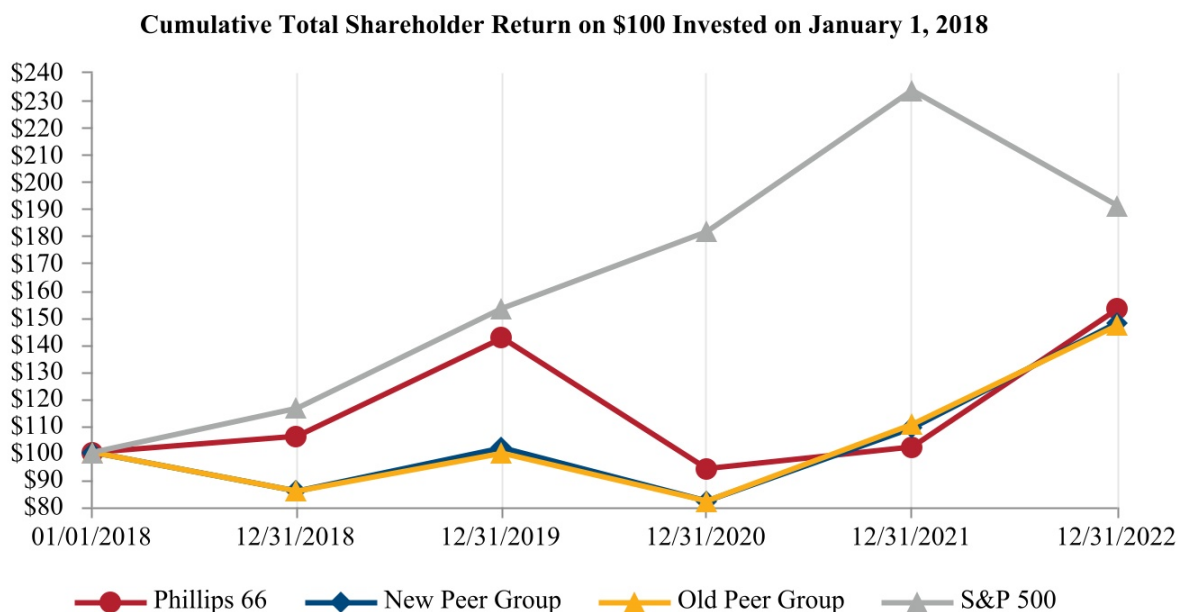
J. Scott Pruitt is Vice President and Controller of Phillips 66, a position he has held since August 2021. Mr. Pruitt previously served as General Auditor from September 2020 to August 2021 and Assistant Controller from May 2012 to September 2020.

PART II

Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Phillips 66's common stock is traded on the New York Stock Exchange under the symbol "PSX." At January 31, 2023, the number of stockholders of record of our shares was 30,117.

Performance Graph



As a result of our annual reevaluation of our peer group, we made modifications to our peer group in 2022 to reflect companies that we believe are more closely aligned with our size and lines of business. The composition of our New Peer Group and Old Peer Group are discussed below. The above performance graph represents cumulative total stockholder return, which assumes reinvestment of dividends, of a \$100 investment in our common stock, our self-constructed peer group for the year ended December 31, 2022 (the New Peer Group), our self-constructed peer group for the year ended December 31, 2021 (the Old Peer Group), and the S&P 500 Index, for the five years ended December 31, 2022.

The New Peer Group consists of CVR Energy, Inc.; Delek US Holdings, Inc.; Dow Inc.; HF Sinclair Corporation; LyondellBasell Industries N.V.; Marathon Petroleum Corporation; ONEOK, Inc.; PBF Energy Inc.; Targa Resources Corp.; Valero Energy Corporation; Westlake Chemical Corporation; and The Williams Companies, Inc. Additionally, HollyFrontier Corporation was included as a peer for periods prior to its acquisition by HF Sinclair Corporation in March 2022. Additionally, Andeavor was included as a peer for periods prior to its acquisition by Marathon Petroleum Corporation in October 2018.

The Old Peer Group consists of Delek US Holdings, Inc.; Dow Inc.; HF Sinclair Corporation; LyondellBasell Industries N.V.; Magellan Midstream Partners, L.P.; Marathon Petroleum Corporation; MPLX LP; ONEOK, Inc.; PBF Energy Inc.; Targa Resources Corp.; Valero Energy Corporation; Westlake Chemical Corporation; and The Williams Companies, Inc. Additionally, HollyFrontier Corporation was included as a peer for periods prior to its acquisition by HF Sinclair Corporation in March 2022. Additionally, Andeavor was included as a peer for periods prior to its acquisition by Marathon Petroleum Corporation in October 2018.

Issuer Purchases of Equity Securities

In March 2020, we announced that we had temporarily suspended our share repurchases to preserve liquidity in response to the global economic disruption caused by the COVID-19 pandemic. We resumed purchasing shares under our share repurchase program in the second quarter of 2022. On November 7, 2022, our Board of Directors approved a \$5 billion increase to our share repurchase program. Any future share repurchases pursuant to the share repurchase program will be made at the discretion of management and will depend on various factors including our share price, results of operations, financial condition and cash required for future business plans.

Period	Total Number of Shares Purchased*	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs**	Millions of Dollars	
				Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs	
October 1-31, 2022	2,100,323	\$ 95.78	2,100,323	\$	1,523
November 1-30, 2022	2,346,608	108.33	2,346,608		6,269
December 1-31, 2022	2,870,176	102.74	2,870,176		5,974
Total	7,317,107	\$ 102.54	7,317,107		

* Includes repurchase of shares of common stock from company employees in connection with the company's broad-based employee incentive plans, when applicable.

** Since July 2012, our Board of Directors has authorized an aggregate of \$20 billion of repurchases of our outstanding common stock. Repurchases pursuant to the current authorizations do not have an expiration date. The share repurchases are expected to be funded primarily through available cash. We are not obligated to repurchase any shares of common stock pursuant to these authorizations and may commence, suspend or terminate repurchases at any time. Shares of stock repurchased are held as treasury shares.

Item 6. [RESERVED]

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Management's Discussion and Analysis is the company's analysis of its financial performance and financial condition, and of significant trends that may affect future performance. It should be read in conjunction with the consolidated financial statements and notes thereto included elsewhere in this Annual Report on Form 10-K.

The terms "earnings" and "loss" as used in Management's Discussion and Analysis refer to net income (loss) attributable to Phillips 66. The terms "results," "before-tax income" or "before-tax loss" as used in Management's Discussion and Analysis refer to income (loss) before income taxes.

EXECUTIVE OVERVIEW AND BUSINESS ENVIRONMENT

Phillips 66 is a diversified energy company with Midstream, Chemicals, Refining, and Marketing and Specialties (M&S) operating segments. At December 31, 2022, we had total assets of \$76.4 billion.

Executive Overview

We reported earnings of \$11 billion and generated \$10.8 billion in cash from operating activities for the full year of 2022. During 2022, we used available cash to pay down \$2.4 billion in debt, fund capital expenditures and investments of \$2.2 billion, pay dividends on our common stock of \$1.8 billion and repurchase \$1.5 billion of our common stock. We ended 2022 with \$6.1 billion of cash and cash equivalents and approximately \$6.7 billion of total committed capacity available under our credit facilities.

DCP Midstream, LLC (DCP Midstream) and Gray Oak Holdings LLC (Gray Oak Holdings) Merger

On August 17, 2022, we announced a realignment of our economic and governance interests in DCP Midstream, LP (DCP LP) and Gray Oak Pipeline, LLC (Gray Oak Pipeline) resulting from the merger of DCP Midstream and Gray Oak Holdings. In connection with the merger, we were delegated DCP Midstream's governance rights over DCP LP and its general partner entities, referred to as DCP Midstream Class A Segment. Additionally, Enbridge Inc., our co-venturer, was delegated governance rights over Gray Oak Pipeline, referred to as DCP Midstream Class B Segment.

In connection with the merger of DCP Midstream and Gray Oak Holdings, our NGL and Other business includes DCP Midstream Class A Segment, DCP Sand Hills Pipeline, LLC (DCP Sand Hills) and DCP Southern Hills Pipeline, LLC (DCP Southern Hills). Prior to August 18, 2022, our investments in DCP Midstream, DCP Sand Hills and DCP Southern Hills were accounted for using the equity method. We account for our remaining investment in Gray Oak Pipeline, now held through DCP Midstream Class B Segment, using the equity method.

See Note 3—DCP Midstream, LLC and Gray Oak Holdings LLC Merger, in the Notes to Consolidated Financial Statements, for additional information on the merger of DCP Midstream and Gray Oak Holdings.

DCP LP Public Common Unit Acquisition Agreement

On January 5, 2023, we entered into a definitive agreement with DCP LP, its subsidiaries and its general partner entities, pursuant to which one of our wholly owned subsidiaries will merge with and into DCP LP, with DCP LP surviving as a Delaware limited partnership. Under the terms of the agreement, at the effective time of the merger, each publicly held common unit representing a limited partner interest in DCP LP (other than the common units owned by DCP LP and DCP Midstream GP, LP) issued and outstanding as of immediately prior to the effective time will be converted into the right to receive \$41.75 per common unit in cash, without interest. The merger will increase our economic interest in DCP LP from 43.3% to 86.8%. The transaction is expected to close in the second quarter of 2023, subject to customary closing conditions. The transaction was unanimously approved by the board of the general partner of DCP LP, based on the unanimous approval and recommendation of its special committee comprised entirely of independent directors after evaluation of the transaction by the special committee in consultation with independent financial and legal advisors. Concurrently with the execution of the agreement, affiliates of Phillips 66, which together own greater than a majority of the outstanding DCP LP common units, delivered their consent to approve the transaction. As a result, DCP LP has not solicited and is not soliciting approval of the transaction by any other holders of DCP LP common units. See Note 29—DCP Midstream Class A Segment, in the Notes to Consolidated Financial Statements, for additional information on the common unit acquisition agreement.

Phillips 66 Partners Merger

On March 9, 2022, we completed the merger between us and Phillips 66 Partners LP (Phillips 66 Partners). The merger resulted in the acquisition of all limited partnership interests in Phillips 66 Partners not already owned by us. Upon closing, Phillips 66 Partners became a wholly owned subsidiary of Phillips 66 and its common units are no longer publicly traded. See Note 30—Phillips 66 Partners LP, in the Notes to Consolidated Financial Statements, for additional information on this merger transaction.

CEO Transition

On April 12, 2022, Greg C. Garland, announced his intention to retire from his position as Chief Executive Officer of Phillips 66, effective July 1, 2022. Mr. Garland continues to serve as Executive Chairman of the Board with an expected retirement date from this position in 2024. Mark E. Lashier was promoted to the position of President and Chief Executive Officer effective July 1, 2022.

We continue to focus on the following strategic priorities:

- Operating Excellence. Our commitment to operating excellence guides everything we do. We are committed to protecting the health and safety of everyone who has a role in our operations and the communities in which we operate. Continuous improvement in safety, environmental stewardship, reliability and cost efficiency is a fundamental requirement for our company and employees. We employ rigorous training and audit programs to drive ongoing improvement in both personal and process safety as we strive for zero incidents. In 2022, we achieved a combined workforce total recordable rate of 0.11.

Since we cannot control commodity prices, controlling operating expenses and overhead costs, within the context of our commitment to safety and environmental stewardship, is a high priority. We continue to progress our multi-year business transformation initiative focused on identifying and implementing opportunities to improve our cost structure enterprise wide. We are executing on our initiatives to achieve a sustainable run-rate cost reduction of at least \$800 million and a sustaining capital reduction of at least \$200 million per year by the end of 2023.

We are committed to protecting the environment and strive to reduce our environmental footprint throughout our operations. Optimizing utilization rates and product yield at our refineries through reliable and safe operations enables us to capture the value available in the market in terms of prices and margins. During 2022, our worldwide refining crude oil capacity utilization rate was 90% and our worldwide refining clean product yield was 84%.

- **Growth.** A disciplined capital allocation process ensures we invest in projects that are expected to generate competitive returns. Our strategy primarily focuses on investing in high-return growth opportunities in the Midstream and Chemicals segments, as well as our investments in renewable fuels projects to advance a lower-carbon future. In 2023, we have budgeted \$2 billion in capital expenditures and investments, which includes \$1.1 billion of growth capital. Approximately 50% of growth capital is expected to support lower-carbon opportunities. In Midstream, we have budgeted \$639 million for capital expenditures and investments, of which \$310 million is for growth capital projects directed towards enhancing our integrated natural gas liquids (NGL) value chain from wellhead to market. In Refining, we have budgeted \$1.1 billion for capital expenditures and investments, of which \$448 million is for the continued conversion of the San Francisco Refinery in Rodeo, California into a renewable fuels facility.

In Chemicals, our share of expected self-funded capital spending by Chevron Phillips Chemical Company LLC (CPCChem) is \$925 million, of which \$702 million is for growth capital projects. CPCChem plans to use its growth capital to fund development of its petrochemical projects in the U.S. Gulf Coast and Qatar, as well as expand its propylene splitting capacity and normal alpha olefins production.

As part of our strategy to grow our Midstream NGL business, on January 5, 2023, we entered into a definitive agreement to acquire all of the publicly held common units of DCP LP, which will increase our economic interest in DCP LP from 43.3% to 86.8% at closing. This transaction will be accounted for as an equity transaction and is expected to close in the second quarter of 2023, subject to customary closing conditions. We expect to fund this transaction with a combination of cash and debt.

- **Returns.** We plan to enhance Refining returns by focusing on low-capital, higher-return projects that increase asset reliability, improve market capture and reduce costs. Our M&S segment will continue to develop and enhance our retail network, including energy transition opportunities.
- **Distributions.** We believe shareholder value is enhanced through, among other things, a secure, competitive and growing dividend, complemented by share repurchases. In 2022, we paid \$1.8 billion of dividends on our common stock. In the second quarter of 2022, we increased our quarterly dividend by 5% to \$0.97 per common share. In the first quarter of 2023, we increased our quarterly dividend by 8% to \$1.05 per common share. Regular dividends demonstrate the confidence our Board of Directors and management have in our capital structure and operations' capability to generate free cash flow throughout the business cycle. In the second quarter of 2022, we resumed repurchasing shares under our share repurchase program. In 2022, we repurchased \$1.5 billion, or 16.6 million shares, of our common stock. On November 7, 2022, our Board of Directors approved a \$5 billion increase to our share repurchase program, bringing the total amount of share repurchases authorized by our Board of Directors since July 2012 to an aggregate of \$20 billion.

At the discretion of our Board of Directors, we are targeting to return \$10 billion to \$12 billion to our shareholders through a combination of dividends and share repurchases in the period from July 1, 2022 through December 31, 2024. The amount and timing of future dividend payments and the level and timing of future share repurchases will depend on various factors including our share price, results of operations, financial condition and cash required for future business plans.

- **High-Performing Organization.** We strive to attract, develop and retain individuals with the knowledge and skills to implement our business strategy and who support our values and culture. Throughout the company, we focus on promoting an inclusive workplace that enables our diverse workforce to innovate, create value and deliver extraordinary performance. We also focus on getting results in the right way and embracing our values as a common bond, and we believe success is both what we do and how we do it. We encourage collaboration throughout our company, while valuing differences, respecting diversity, and creating a great place to work. We foster an environment of learning and development through structured programs focused on enhancing functional and technical skills where employees are engaged in our business and committed to their own, as well as the company's, success.

Business Environment

The Midstream segment includes our Transportation and NGL businesses. Our Transportation business contains fee-based operations not directly exposed to commodity price risk. Our NGL business, including DCP Midstream Class A Segment, DCP Sand Hills and DCP Southern Hills from August 18, 2022, forward, contains both fee-based operations and operations directly impacted by NGL, natural gas and condensate prices. During 2022, NGL and natural gas prices increased, compared with 2021, supported by increasing liquified natural gas exports and higher crude oil prices.

The Chemicals segment consists of our 50% equity investment in CPChem. The chemicals and plastics industry is mainly a commodity-based industry where the margins for key products are based on supply and demand, as well as cost factors. Compared with 2021, the benchmark high-density polyethylene chain margin decreased significantly in 2022, due to soft demand and increasing capacity, resulting in lower plant operating rates.

Our Refining segment results are driven by several factors, including market crack spreads, refinery throughput, feedstock costs, product yields, turnaround activity, and other operating costs. The price of U.S. benchmark crude oil, West Texas Intermediate (WTI) at Cushing, Oklahoma, increased to an average of \$94.44 per barrel during 2022, compared with an average of \$67.96 per barrel in 2021. Market crack spreads are used as indicators of refining margins and measure the difference between market prices for refined petroleum products and crude oil. Worldwide market crack spreads increased to an average of \$34.26 per barrel during 2022, compared with an average of \$17.09 per barrel in 2021. The increases in crude oil prices and market crack spreads were primarily driven by improving demand for refined petroleum products, as economic activities gradually recovered as the impacts from the COVID-19 pandemic moderated, as well as tightening supply due to the Russia-Ukraine war and refinery closures that occurred during the pandemic.

Results for our M&S segment depend largely on marketing fuel and lubricant margins and sales volumes of our refined petroleum products. While marketing fuel and lubricant margins are primarily driven by market factors, largely determined by the relationship between supply and demand, marketing fuel margins, in particular, are influenced by trends in spot prices, and where applicable, retail prices for refined petroleum products in the regions and countries where we operate.

RESULTS OF OPERATIONS

Basis of Presentation

Effective August 18, 2022, forward, in connection with the merger of DCP Midstream and Gray Oak Holdings we began consolidating the results of DCP Midstream Class A Segment, DCP Sand Hills and DCP Southern Hills. As a result of this transaction, we began presenting the results of DCP Midstream Class A Segment within the results of our NGL and Other business. Prior periods also have been updated to reflect the results of our equity investment in DCP Midstream prior to August 18, 2022, within the results of our NGL and Other business. See Note 3—DCP Midstream, LLC and Gray Oak Holdings LLC Merger, Note 4—Business Combination, and Note 18—Fair Value Measurements, in the Notes to Consolidated Financial Statements, for additional information on the merger of DCP Midstream and Gray Oak Holdings.

Effective October 1, 2022, we changed the organizational structure of the internal financial information reviewed by our President and Chief Executive Officer, and determined this resulted in a change in the composition of our operating segments. As part of the realignment, we moved the results and net assets of our Mersey Sweeny vacuum distillation and delayed coker units at our Sweeny Refinery and the isomerization unit at our Lake Charles Refinery from our Midstream segment to our Refining segment. Additionally, commissions charged to the Refining segment by the M&S segment related to sales of specialty products were eliminated and the costs of the sales organization were reclassified from the M&S segment to the Refining segment. Further, we are no longer presenting disaggregated business line results for our Chemicals and M&S segments to align with changes in our internal financial reporting.

Effective January 1, 2022, we began reporting our investment in NOVONIX Limited (NOVONIX) as a separate business line within our Midstream segment. Previously it was included in our NGL and Other business line.

The segment realignment and business line reporting changes are presented for the year ended December 31, 2022, with the prior periods recast for comparability.

Consolidated Results

A summary of income (loss) before income taxes by business segment with a reconciliation to net income (loss) attributable to Phillips 66 follows:

	Millions of Dollars		
	Year Ended December 31		
	2022	2021	2020
Midstream	\$ 4,734	1,500	(116)
Chemicals	856	1,844	635
Refining	7,816	(2,353)	(6,023)
Marketing and Specialties	2,402	1,723	1,421
Corporate and Other	(1,169)	(974)	(881)
Income (loss) before income taxes	14,639	1,740	(4,964)
Income tax expense (benefit)	3,248	146	(1,250)
Net income (loss)	11,391	1,594	(3,714)
Less: net income attributable to noncontrolling interests	367	277	261
Net income (loss) attributable to Phillips 66	\$ 11,024	1,317	(3,975)

2022 vs. 2021

Net income attributable to Phillips 66 for the year ended December 31, 2022, was \$11,024 million, compared with \$1,317 million for the year ended December 31, 2021. The improvement was primarily due to higher realized refining margins, an aggregate before-tax gain of \$3,013 million recognized in our Midstream segment in connection with the merger of DCP Midstream and Gray Oak Holdings, lower impairments in the Refining segment, and improved international marketing fuel margins. These improvements were partially offset by an increase in income tax expense, lower equity earnings from CPChem, and an unrealized decrease in the fair value of our investment in NOVONIX.

2021 vs. 2020

Net income attributable to Phillips 66 for the year ended December 31, 2021, was \$1,317 million, compared with net loss attributable to Phillips 66 of \$3,975 million for the year ended December 31, 2020. The improvement was primarily due to lower impairments, improved realized refining margins and higher equity earnings from CPChem, partially offset by income tax impacts from improved results.

See Note 4—Business Combination, and Note 18—Fair Value Measurements, in the Notes to Consolidated Financial Statements, for additional information on the gain recognized in connection with the merger of DCP Midstream and Gray Oak Holdings. See Note 11—Impairments, and Note 18—Fair Value Measurements, in the Notes to Consolidated Financial Statements, for information on impairments recorded in 2021 and 2020. See Note 23—Income Taxes, in the Notes to Consolidated Financial Statements, for additional information on income taxes.

See the “Segment Results” section for additional information on our segment results.

Statement of Operations Analysis

2022 vs. 2021

Sales and other operating revenues and purchased crude oil and products increased 52% and 47%, respectively, in 2022. These increases were mainly due to higher prices for refined petroleum products, crude oil and NGL.

Other income increased \$2,283 million in 2022, primarily due to an aggregate gain of \$3,013 million recognized in our Midstream segment in connection with the merger of DCP Midstream and Gray Oak Holdings. The impact of this gain was partially offset by an unrealized investment loss on our investment in NOVONIX, compared with an unrealized gain in 2021. See Note 4—Business Combination, and Note 18—Fair Value Measurements, in the Notes to Consolidated Financial Statements, for additional information on the aggregate gain. See Note 8—Investments, Loans and Long-Term Receivables, in the Notes to Consolidated Financial Statements, for additional information regarding our investment in NOVONIX.

Operating expenses increased 19% in 2022, mainly attributable to higher utility costs driven by increased natural gas and power prices and higher turnaround and other maintenance expenses.

Selling, general and administrative expenses increased 24% in 2022, primarily driven by higher employee-related expenses, restructuring costs due to our business transformation and increased selling expenses driven by rising refined petroleum product prices.

Impairments decreased 96% in 2022 primarily due to a before-tax impairment of \$1,298 million recorded in the third quarter of 2021 associated with our Alliance Refinery. See Note 11—Impairments, in the Notes to Consolidated Financial Statements, for additional information.

Taxes other than income taxes increased 29% in 2022, primarily due to tax credits received from renewable diesel blending activity at our San Francisco Refinery in the third quarter of 2021, as well as higher property and other taxes.

Income tax expense increased \$3,102 million in 2022 primarily due to improved results. See Note 23—Income Taxes, in the Notes to Consolidated Financial Statements, for more information regarding our income taxes.

Net income attributable to noncontrolling interests increased 32% in 2022. The increase was primarily driven by the consolidation of DCP Midstream Class A Segment, DCP Sand Hills and DCP Southern Hills, which resulted in us reflecting the additional noncontrolling interest owned by the public common and preferred unitholders of DCP LP, as well as Enbridge's noncontrolling interest in DCP Midstream Class A Segment, on our consolidated statement of operations. The increase was partially offset by a decrease due to the merger between us and Phillips 66 Partners that occurred in the first quarter of 2022 and resulted in Phillips 66 Partners becoming a wholly owned subsidiary of Phillips 66. See Note 3—DCP Midstream, LLC and Gray Oak Holdings LLC Merger, and Note 30—Phillips 66 Partners LP, in the Notes to Consolidated Financial Statements, for additional information on the merger of DCP Midstream and Gray Oak Holdings and the Phillips 66 Partners merger, respectively.

2021 vs. 2020

Sales and other operating revenues and purchased crude oil and products increased 74% and 77%, respectively, in 2021. These increases were mainly due to higher prices for refined petroleum products, crude oil and NGL, as well as increased volumes for refined petroleum products and crude oil.

Equity in earnings of affiliates increased \$1,713 million in 2021. The increase was primarily due to higher equity earnings from CPChem mainly driven by increased margins, WRB Refining LP (WRB) resulting from improved realized refining margins and higher refinery production, and Excel Paralubes LLC (Excel Paralubes) attributable to higher base oil margins. See Chemicals segment analysis in the “Segment Results” section for additional information on CPChem.

Net gain on dispositions decreased 83% in 2021, mainly reflecting a before-tax gain of \$84 million recognized in the second quarter of 2020 associated with a co-venturer’s acquisition of an ownership interest in the consolidated holding company that owned an interest in Gray Oak Pipeline. See Note 30—Phillips 66 Partners LP, in the Notes to Consolidated Financial Statements, for additional information.

Other income increased \$388 million in 2021, primarily driven by an unrealized gain of \$365 million related to the change in fair value of our investment in NOVONIX, which we acquired in the third quarter of 2021. See Note 8—Investments, Loans and Long-Term Receivables, in the Notes to Consolidated Financial Statements, for additional information on our investment in NOVONIX.

Operating expenses increased 13% in 2021, mainly attributable to higher utility costs driven by increased commodity prices, higher employee-related expenses, and increased maintenance and repair costs.

Selling, general and administrative expenses increased 13% in 2021, primarily driven by higher selling expenses due to rising refined petroleum product prices and demand, increased employee-related expenses, and a benefit received from a legal settlement in the first quarter of 2020.

Depreciation and amortization increased 15% in 2021, mainly due to asset retirements related to the shutdown of our Alliance Refinery. See Note 9—Properties, Plants and Equipment, in the Notes to Consolidated Financial Statements, for additional information regarding asset retirements related to the Alliance Refinery.

Impairments decreased 65% in 2021. See Note 11—Impairments, in the Notes to Consolidated Financial Statements, for additional information regarding impairments.

Taxes other than income taxes decreased 12% in 2021, primarily driven by tax credits received from renewable diesel blending activity at our San Francisco Refinery in 2021, and lower property and franchise taxes.

Interest and debt expense increased 16% in 2021, primarily driven by lower capitalized interest due to the completion of capital projects and the placement of assets into service, as well as higher average debt principal balances resulting from new debt issuances in the second and fourth quarters of 2020.

We had income tax expense of \$146 million in 2021, compared with an income tax benefit of \$1,250 million in 2020, primarily due to before-tax income in 2021 versus a before-tax loss in 2020. See Note 23—Income Taxes, in the Notes to Consolidated Financial Statements, for more information regarding our income taxes.

Segment Results

Midstream

	Year Ended December 31		
	2022	2021	2020
	Millions of Dollars		
Income (Loss) Before Income Taxes			
Transportation	\$ 1,176	678	508
NGL and Other	4,000	452	(624)
NOVONIX	(442)	370	—
Total Midstream	\$ 4,734	1,500	(116)

	Thousands of Barrels Daily		
Transportation Volumes			
Pipelines*	3,089	3,271	3,005
Terminals	2,981	2,790	2,971
Operating Statistics			
NGL fractionated**	529	410	249
NGL production***	423	394	399

* Pipelines represent the sum of volumes transported through each separately tariffed consolidated pipeline segment, excluding NGL pipelines.

** Includes 100% of DCP Midstream Class A Segment's volumes from August 18, 2022, forward.

*** Includes 100% of DCP Midstream Class A Segment's volumes.

	Dollars Per Gallon		
Market Indicator			
Weighted-Average NGL Price*	\$ 1.00	0.83	0.41

* Based on index prices from the Mont Belvieu market hub, which are weighted by NGL component mix.

The Midstream segment provides crude oil and refined petroleum product transportation, terminaling and processing services; NGL production, transportation, storage, fractionation, processing and marketing services; natural gas gathering, compressing, treating, processing, storage, transportation and marketing services; and condensate recovery. These activities are mainly in the United States. This segment also includes our investment in NOVONIX.

In connection with the merger of DCP Midstream and Gray Oak Holdings, the results of our Transportation business reflect a decrease in our indirect economic interest in Gray Oak Pipeline to 6.5% from August 18, 2022, forward. Prior to August 18, 2022, the Transportation results presented in the table above reflect Gray Oak Holdings' 65% economic interest in Gray Oak Pipeline. In addition, the results of our NGL and Other business include the consolidated results of DCP Midstream Class A Segment, DCP Sand Hills and DCP Southern Hills from August 18, 2022, forward. Prior to August 18, 2022, our investments in DCP Midstream, DCP Sand Hills and DCP Southern Hills were accounted for using the equity method. As a result of the merger and consolidation, equity earnings from our investment in DCP Midstream prior to the merger have been included with the results of our NGL and Other business.

2022 vs. 2021

Results from our Midstream segment increased \$3,234 million in 2022, compared with 2021.

Results from our Transportation business increased \$498 million in 2022, compared with 2021. The increase was primarily due to a before-tax impairment of \$198 million recorded in the first quarter of 2021 related to Phillips 66 Partners' decision to exit the Liberty Pipeline project, a before-tax gain of \$182 million from the transfer of a 35.75% indirect economic interest in Gray Oak Pipeline to our co-venturer as part of the merger of DCP Midstream and Gray Oak Holdings, and lower depreciation and amortization expense from logistic assets that were retired in the fourth quarter of 2021 as part of the planned conversion of the Alliance Refinery to a terminal.

Results from our NGL and Other business increased \$3,548 million in 2022, compared with 2021. The increase was primarily due to before-tax gains totaling \$2,831 million recognized from remeasuring our previously held equity investments in DCP Midstream, DCP Sand Hills and DCP Southern Hills to their fair values in connection with the merger of DCP Midstream and Gray Oak Holdings. Additionally, the increased results reflect the consolidation of DCP Midstream Class A Segment, DCP Sand Hills and DCP Southern Hills from August 18, 2022, forward, as well as improved Sweeny Hub results.

In 2022, the fair value of our investment in NOVONIX decreased by \$442 million compared with an increase of \$370 million in 2021. We acquired this investment in September 2021.

See Note 11—Impairments, and Note 8—Investments, Loans and Long-Term Receivables, in the Notes to Consolidated Financial Statements, for additional information on impairments and our investment in NOVONIX, respectively. See Note 4—Business Combination, and Note 18—Fair Value Measurements, in the Notes to Consolidated Financial Statements, for additional information regarding the before-tax gains.

See the “Executive Overview and Business Environment” section for information on market factors impacting 2022 results.

2021 vs. 2020

Midstream's results increased \$1,616 million in 2021, compared with 2020.

Results from our Transportation business increased \$170 million in 2021, compared with 2020. The increase was primarily due to improved earnings from our equity affiliates, lower asset impairments, and increased pipeline volumes and tariffs. These increases were partially offset by a before-tax gain of \$84 million recognized in the second quarter of 2020 associated with a co-venturer's acquisition of an ownership interest in the consolidated holding company that owned an interest in Gray Oak Pipeline, and increased depreciation and amortization expense from logistic assets that were retired in the fourth quarter of 2021 as part of the planned conversion of the Alliance Refinery to a terminal.

Results from our NGL and Other business increased \$1,076 million in 2021, compared with 2020. The increase in 2021 reflects a \$1,161 million before-tax impairment of our investment in DCP Midstream recorded in the first quarter of 2020, partially offset by higher utility costs due to increased natural gas prices.

The fair value of our investment in NOVONIX increased \$370 million in 2021, compared with 2020. We acquired this investment in September 2021.

See Note 11—Impairments, Note 30—Phillips 66 Partners LP and Note 8—Investments, Loans and Long-Term Receivables, in the Notes to Consolidated Financial Statements, for additional information on impairments, the before-tax gain and our investment in NOVONIX, respectively.

Chemicals

	Year Ended December 31		
	2022	2021	2020
	Millions of Dollars		
Income Before Income Taxes	\$ 856	1,844	635
	Millions of Pounds		
CPChem Externally Marketed Sales Volumes*	23,749	24,067	25,360
Olefins and Polyolefins Capacity Utilization (percent)	91 %	95	99

* Represents 100% of CPChem's outside sales of produced petrochemical products, as well as commission sales from equity affiliates.

The Chemicals segment consists of our 50% interest in CPChem, which we account for under the equity method. CPChem uses NGL and other feedstocks to produce petrochemicals. These products are then marketed and sold or used as feedstocks to produce plastics and other chemicals. CPChem produces and markets ethylene and other olefin products. Ethylene produced is primarily consumed within CPChem for the production of polyethylene, normal alpha olefins and polyethylene pipe. CPChem manufactures and markets aromatics and styrenics products, such as benzene, cyclohexane, styrene and polystyrene, as well as manufactures and/or markets a variety of specialty chemical products. Unless otherwise noted, amounts referenced below reflect our net 50% interest in CPChem.

2022 vs. 2021

Before-tax income from the Chemicals segment decreased \$988 million in 2022, compared with 2021. The decrease was primarily due to lower margins driven by decreased sale prices, higher feedstock and utility costs, as well as decreased results from CPChem's equity affiliates.

See the "Executive Overview and Business Environment" section for information on market factors impacting CPChem's 2022 results.

2021 vs. 2020

Before-tax income from the Chemicals segment increased \$1,209 million in 2021, compared with 2020. The increase was primarily due to improved margins driven by increased sale prices reflecting strong demand and tight supply, partially offset by higher utility, turnaround, maintenance and repair costs.

Refining

	Year Ended December 31		
	2022	2021	2020
	Millions of Dollars		
Income (Loss) Before Income Taxes			
Atlantic Basin/Europe	\$ 2,402	1	(1,207)
Gulf Coast	2,091	(1,759)	(1,964)
Central Corridor	2,415	72	(642)
West Coast	908	(667)	(2,210)
Worldwide	\$ 7,816	(2,353)	(6,023)

	Dollars Per Barrel		
Income (Loss) Before Income Taxes			
Atlantic Basin/Europe	\$ 12.05	0.01	(7.08)
Gulf Coast	10.29	(7.30)	(9.18)
Central Corridor	24.64	0.75	(6.97)
West Coast	7.86	(5.90)	(19.98)
Worldwide	12.69	(3.69)	(10.26)

Realized Refining Margins*			
Atlantic Basin/Europe	\$ 20.30	7.48	2.17
Gulf Coast	18.25	5.65	2.64
Central Corridor	24.96	9.65	7.17
West Coast	24.31	7.70	3.43
Worldwide	21.55	7.42	3.77

* See the "Non-GAAP Reconciliations" section for a reconciliation of this non-GAAP measure to the most directly comparable measure under generally accepted accounting principles in the United States (GAAP), income (loss) before income taxes per barrel.

	Thousands of Barrels Daily		
	Year Ended December 31		
	2022	2021	2020
Operating Statistics			
Refining operations*			
Atlantic Basin/Europe			
Crude oil capacity	537	537	537
Crude oil processed	524	479	434
Capacity utilization (percent)	98 %	89	81
Refinery production	549	522	470
Gulf Coast**			
Crude oil capacity	529	720	769
Crude oil processed	488	592	533
Capacity utilization (percent)	92 %	82	69
Refinery production	565	662	586
Central Corridor			
Crude oil capacity	531	531	530
Crude oil processed	469	461	431
Capacity utilization (percent)	88 %	87	81
Refinery production	487	476	446
West Coast			
Crude oil capacity	364	364	364
Crude oil processed	290	284	279
Capacity utilization (percent)	80 %	78	77
Refinery production	315	308	301
Worldwide			
Crude oil capacity	1,961	2,152	2,200
Crude oil processed	1,771	1,816	1,677
Capacity utilization (percent)	90 %	84	76
Refinery production	1,916	1,968	1,803

* Includes our share of equity affiliates.

** Excludes operating statistics of the Alliance Refinery beginning on October 1, 2021.

The Refining segment refines crude oil and other feedstocks into petroleum products, such as gasoline, distillates and aviation fuels, as well as renewable fuels, at 12 refineries in the United States and Europe. In the fourth quarter of 2021, we shut down our Alliance Refinery.

2022 vs. 2021

Results from the Refining segment increased \$10,169 million in 2022, compared with 2021. The improved results were primarily due to higher realized refining margins driven by improved market crack spreads, partially offset by higher operating costs. In addition, 2021 included a before-tax impairment of \$1,288 million associated with our Alliance Refinery. See Note 11—Impairments, in the Notes to Consolidated Financial Statements, for additional information regarding this impairment.

Our worldwide refining crude oil capacity utilization rate was 90% and 84% in 2022 and 2021, respectively. The increase in 2022 was primarily driven by improved demand for refined petroleum products due to supply constraints caused by the conflict between Russia and Ukraine and easing of restrictions from the COVID-19 pandemic.

See the “Executive Overview and Business Environment” section for information on industry crack spreads and other market factors impacting this year’s results.

2021 vs. 2020

Results from the Refining segment increased \$3,670 million in 2021, compared with 2020. The improved results in 2021 were primarily due to higher realized refining margins and lower asset impairments, partially offset by increased utility expenses and higher costs related to the shutdown of our Alliance Refinery. The improved realized refining margins in 2021 were mainly attributable to increased market crack spreads, partially offset by higher RIN costs, lower clean product differentials and decreased secondary products margins. See Note 11—Impairments, in the Notes to Consolidated Financial Statements, for additional information regarding impairments recorded in our Refining segment during 2021 and 2020.

Our worldwide refining crude oil capacity utilization rate was 84% and 76% in 2021 and 2020, respectively. The increase in 2021 was primarily driven by improved market demand for refined petroleum products following the administration of COVID-19 vaccines and the easing of pandemic restrictions.

Marketing and Specialties

	Year Ended December 31		
	2022	2021	2020
	Millions of Dollars		
Income Before Income Taxes	\$ 2,402	1,723	1,421
	Dollars Per Barrel		
Income Before Income Taxes			
U.S.	\$ 1.95	1.74	1.42
International	7.44	4.13	4.84
Realized Marketing Fuel Margins*			
U.S.	\$ 2.34	2.19	1.87
International	8.29	5.96	6.34
<i>* See the "Non-GAAP Reconciliations" section for a reconciliation of this non-GAAP measure to the most directly comparable GAAP measure, income before income taxes per barrel.</i>			
	Dollars Per Gallon		
U.S. Average Wholesale Prices*			
Gasoline	\$ 3.30	2.46	1.56
Distillates	3.86	2.36	1.47
<i>* On third-party branded refined petroleum product sales, excluding excise taxes.</i>			
	Thousands of Barrels Daily		
Marketing Refined Petroleum Product Sales			
Gasoline	1,167	1,154	1,021
Distillates	962	959	895
Other	18	17	17
	2,147	2,130	1,933

The M&S segment purchases for resale and markets refined petroleum products, such as gasoline, distillates and aviation fuels, as well as renewable fuels, mainly in the United States and Europe. In addition, this segment includes the manufacturing and marketing of base oils and lubricants.

2022 vs. 2021

Before-tax income from the M&S segment increased \$679 million in 2022, compared with 2021. The increase in 2022 was primarily driven by improved realized international marketing fuel margins and higher results from our specialty lubricants and other businesses.

See the "Executive Overview and Business Environment" section for information on marketing fuel margins and other market factors impacting 2022 results.

2021 vs. 2020

Before-tax income from the M&S segment increased \$302 million in 2021, compared with 2020. The increase in 2021 was primarily driven by higher realized U.S. marketing fuel margins and increased equity earnings from Excel Paralubes due to improved base oil margins, partially offset by lower realized international marketing fuel margins.

Corporate and Other

	Millions of Dollars		
	Year Ended December 31		
	2022	2021	2020
Loss Before Income Taxes			
Net interest expense	\$ (537)	(583)	(485)
Corporate overhead and other	(632)	(391)	(396)
Total Corporate and Other	\$ (1,169)	(974)	(881)

Net interest expense consists of interest and financing expense, net of interest income and capitalized interest. Corporate overhead and other includes general and administrative expenses, technology costs, environmental costs associated with sites no longer in operation, restructuring costs related to our business transformation, foreign currency transaction gains and losses, and other costs not directly associated with an operating segment.

2022 vs. 2021

Net interest expense decreased \$46 million in 2022, compared with 2021, primarily driven by increased interest income, partially offset by increased interest expense as a result of consolidating DCP Midstream Class A Segment from August 18, 2022, forward. See Note 14—Debt, in the Notes to Consolidated Financial Statements, for additional information regarding debt.

Corporate overhead and other increased \$241 million in 2022, compared with 2021. The increase was primarily due to restructuring costs associated with our business transformation for consulting fees, severance and an impairment related to assets held for sale, as well as higher employee related expenses. See Note 28—Segment Disclosures and Related Information, and Note 31—Restructuring, in the Notes to Consolidated Financial Statements, for additional information regarding restructuring costs.

2021 vs. 2020

Net interest expense increased \$98 million in 2021, compared with 2020, primarily driven by lower capitalized interest due to the completion of capital projects and the placement of assets into service, and higher average debt principal balances reflecting debt issuances in the second and fourth quarters of 2020, as well as costs associated with early debt retirement in 2021. See Note 14—Debt, in the Notes to Consolidated Financial Statements, for additional information on the debt repayment in 2021.

Corporate overhead and other decreased \$5 million in 2021, compared with 2020.

CAPITAL RESOURCES AND LIQUIDITY

Financial Indicators

	Millions of Dollars, Except as Indicated		
	2022	2021	2020
Cash and cash equivalents	\$ 6,133	3,147	2,514
Net cash provided by operating activities	10,813	6,017	2,111
Short-term debt	529	1,489	987
Total debt	17,190	14,448	15,893
Total equity	34,106	21,637	21,523
Percent of total debt to capital*	34 %	40	42
Percent of floating-rate debt to total debt	— %	3	12

* Capital includes total debt and total equity.

To meet our short- and long-term liquidity requirements, we use a variety of funding sources but rely primarily on cash generated from operating activities and debt financing. During 2022, we generated \$10.8 billion in cash from operations. We used available cash to pay down \$2.4 billion in debt, fund capital expenditures and investments of \$2.2 billion, pay dividends on our common stock of \$1.8 billion and repurchase \$1.5 billion of our common stock. During 2022, cash and cash equivalents increased \$3 billion to \$6.1 billion.

Significant Sources of Capital

Operating Activities

During 2022, cash generated by operating activities was \$10.8 billion, a \$4.8 billion increase compared with 2021. The increase was primarily due to higher earnings resulting from improved realized refining margins, partially offset by working capital impacts and lower distributions from equity affiliates.

During 2021, cash generated by operating activities was \$6 billion, a \$3.9 billion increase compared with 2020. The increase was primarily due to improved realized refining margins, a U.S. federal income tax refund of \$1.1 billion received in the second quarter of 2021, and higher cash distributions from our equity affiliates, partially offset by higher operating expenses.

Our short- and long-term operating cash flows are highly dependent upon refining and marketing margins, NGL prices and chemicals margins. Prices and margins in our industry are typically volatile, and are driven by market conditions over which we have little or no control. Absent other mitigating factors, as these prices and margins fluctuate, we would expect a corresponding change in our operating cash flows.

The level and quality of output from our refineries also impact our cash flows. Factors such as operating efficiency, maintenance turnarounds, market conditions, feedstock availability, and weather conditions can affect output. We actively manage the operations of our refineries, and any variability in their operations typically has not been as significant to cash flows as that caused by margins and prices. Our worldwide refining crude oil capacity utilization was 90%, 84% and 76% in 2022, 2021 and 2020, respectively. Our worldwide refining clean product yield was 84%, 83% and 84% in 2022, 2021 and 2020, respectively.

Equity Affiliate Operating Distributions

Our operating cash flows are also impacted by distribution decisions made by our equity affiliates, including CPChem. Over the three years ended December 31, 2022, our operating cash flows included aggregate distributions from our equity affiliates of \$6 billion, including \$2.8 billion from CPChem. We cannot control the amount of future dividends from equity affiliates; therefore, future dividend payments by these equity affiliates are not assured.

Tax Refunds

We received a U.S. federal income tax refund of \$1.1 billion in the second quarter of 2021.

Credit Facilities and Commercial Paper

Phillips 66 and Phillips 66 Company

On June 23, 2022, we entered into a new \$5 billion revolving credit facility (the Facility) with Phillips 66 Company as the borrower and Phillips 66 as the guarantor and a scheduled maturity date of June 22, 2027. The Facility replaced our previous \$5 billion revolving credit facility with Phillips 66 as the borrower and Phillips 66 Company as the guarantor. The Facility contains usual and customary covenants that are similar to the previous revolving credit facility, including a maximum consolidated net debt-to-capitalization ratio of 65% as of the last day of each fiscal quarter. We have the option to increase the overall capacity to \$6 billion, subject to certain conditions. We also have the option to extend the scheduled maturity of the Facility for up to two additional one-year terms, subject to, among other things, the consent of the lenders holding the majority of the commitments and of each lender extending its commitment. Outstanding borrowings under the Facility bear interest at either (a) the Adjusted Term Secured Overnight Financing Rate (SOFR) (as described in the Facility) in effect from time to time plus the applicable margin; or (b) the reference rate (as described in the Facility) plus the applicable margin. The Facility also provides for customary fees, including commitment fees. The pricing levels for the commitment fees and interest-rate margins are determined based on the ratings in effect for our senior unsecured long-term debt from time to time. We may at any time prepay outstanding borrowings, in whole or in part, without premium or penalty. At December 31, 2022 and 2021, no amount had been drawn under our revolving credit facilities.

Phillips 66 also has a \$5 billion uncommitted commercial paper program for short-term working capital needs that is supported by the Facility. Commercial paper maturities are contractually limited to 365 days. At December 31, 2022 and 2021, no borrowings were outstanding under the program.

Phillips 66 Partners

In connection with entering into the Facility, we terminated Phillips 66 Partners' \$750 million revolving credit facility.

DCP Midstream Class A Segment

DCP LP has a credit facility under its amended credit agreement (the Credit Agreement), with a borrowing capacity of up to \$1.4 billion that matures on March 18, 2027. The Credit Agreement grants DCP LP the option to increase the revolving loan commitment by an aggregate principal amount of up to \$500 million and to extend the term for up to two additional one-year periods, subject to requisite lender approval. Indebtedness under the Credit Agreement bears interest at either: (a) an adjusted SOFR (as described in the Credit Agreement) plus the applicable margin; or (b) the base rate (as described in the Credit Agreement) plus the applicable margin. The Credit Agreement also provides for customary fees, including commitment fees. The cost of borrowing under the Credit Agreement is determined by a ratings-based pricing grid based on DCP LP's credit rating. At December 31, 2022, DCP LP had no borrowings outstanding under the Credit Agreement. At December 31, 2022, \$10 million in letters of credit had been issued that are supported by the Credit Agreement.

DCP LP has an accounts receivable securitization facility (the Securitization Facility) that provides for up to \$350 million of borrowing capacity through August 2024 at an adjusted SOFR and includes an uncommitted option to increase the total commitments under the Securitization Facility by up to an additional \$400 million. Under the Securitization Facility, certain of DCP LP's wholly owned subsidiaries sell or contribute receivables to another of DCP LP's consolidated subsidiaries, DCP Receivables LLC (DCP Receivables), a bankruptcy-remote special purpose entity created for the sole purpose of the Securitization Facility. At December 31, 2022, \$40 million of borrowings were outstanding under the Securitization Facility, which are secured by its accounts receivable at DCP Receivables.

Total Committed Capacity Available

At December 31, 2022, we had approximately \$6.7 billion of total committed capacity available under the credit facilities described above. At December 31, 2021, we had approximately \$5.7 billion of total committed capacity available under our revolving credit facilities.

Other Debt Issuances and Financings

Senior Unsecured Notes

In November 2021, Phillips 66 closed its public offering of \$1 billion aggregate principal amount of 3.300% senior unsecured notes due 2052. Interest on the Senior Notes due 2052 is payable semiannually on March 15 and September 15 of each year, commencing on March 15, 2022. Proceeds received from the public offering were \$982 million, net of underwriters' discounts and commissions, as well as debt issuance costs. In December 2021, Phillips 66 used the proceeds from this offering, together with cash on hand, to repay \$1 billion in aggregate principal amount of its \$2 billion 4.300% Senior Notes due April 2022.

In November 2020, Phillips 66 closed its public offering of \$1.75 billion aggregate principal amount of senior unsecured notes consisting of:

- \$450 million aggregate principal amount of Floating Rate Senior Notes due 2024.
- \$800 million aggregate principal amount of 0.900% Senior Notes due 2024.
- \$500 million aggregate principal amount of 1.300% Senior Notes due 2026.

The Floating Rate Senior Notes bear interest at a floating rate, reset quarterly, equal to the three-month London Interbank Offered Rate plus 0.62% per year, subject to adjustment. In December 2021, we used cash on hand to repay the \$450 million Floating Rate Senior Notes due 2024. Interest on the Senior Notes due 2024 and 2026 is payable semiannually on February 15 and August 15 of each year, commencing on February 15, 2021. Proceeds received from the public offering of senior unsecured notes in November 2020 were \$1.74 billion, net of underwriters' discounts and commissions, as well as debt issuance costs.

In June 2020, Phillips 66 closed its public offering of \$1 billion aggregate principal amount of senior unsecured notes consisting of:

- \$150 million aggregate principal amount of 3.850% Senior Notes due 2025.
- \$850 million aggregate principal amount of 2.150% Senior Notes due 2030.

In April 2020, Phillips 66 closed its public offering of \$1 billion aggregate principal amount of senior unsecured notes consisting of:

- \$500 million aggregate principal amount of 3.700% Senior Notes due 2023.
- \$500 million aggregate principal amount of 3.850% Senior Notes due 2025.

Interest on the Senior Notes due 2023 is payable semiannually on April 6 and October 6 of each year, commencing on October 6, 2020. The Senior Notes due 2025 issued in June 2020 constitute a further issuance of the Senior Notes due 2025 originally issued in April 2020. The \$650 million in aggregate principal amount of Senior Notes due 2025 is treated as a single class of debt securities. Interest on the Senior Notes due 2025 is payable semiannually on April 9 and October 9 of each year, commencing on October 9, 2020. Interest on the Senior Notes due 2030 is payable semiannually on June 15 and December 15 of each year, commencing on December 15, 2020. Proceeds received from the public offerings of senior unsecured notes in June and April of 2020 were \$1,008 million exclusive of accrued interest received, and \$993 million, respectively, net of underwriters' discounts or premiums and commissions, as well as debt issuance costs.

Term Loan Facility

In April 2021, Phillips 66 Partners entered into a \$450 million term loan agreement with a one-year term and borrowed the full amount. The term loan agreement was repaid upon maturity in April 2022 without premium or penalty.

In March 2020, we entered into a \$1 billion 364-day delayed draw term loan agreement (the Facility) and borrowed \$1 billion under the Facility shortly thereafter. In November 2020, we repaid \$500 million of borrowings outstanding under the Facility, and the Facility was amended to extend the maturity date of the remaining \$500 million to November 20, 2023. In September 2021, we repaid the outstanding borrowings of \$500 million.

Phillips 66 Availability of Debt Financing

We have an A3 credit rating, with a stable outlook, from Moody's Investors Service and a BBB+ credit rating, with a stable outlook, from Standard & Poor's. These investment grade ratings have served to lower our borrowing costs and facilitate access to a variety of lenders. We do not have any ratings triggers on any of our corporate debt that would cause an automatic default, and thereby impact our access to liquidity, in the event of a rating downgrade by one or both rating agencies. Failure to maintain investment grade ratings could prohibit us from accessing the commercial paper market, although we would expect to be able to access funds under our liquidity facilities mentioned above.

DCP LP Availability of Debt Financing

DCP LP has a BBB+ credit rating, with a stable outlook, from Standard and Poor's; a BBB- credit rating, with a stable outlook, from Fitch Ratings; and a Ba1 credit rating, with a positive outlook, from Moody's Investors Service. These ratings facilitate DCP LP access to a variety of lenders. DCP LP does not have any ratings triggers on any of its corporate debt that would cause an automatic default, and thereby impact access to liquidity, in the event of a rating downgrade by one or more rating agencies.

Off-Balance Sheet Arrangements

Lease Residual Value Guarantees

Under the operating lease agreement for our headquarters facility in Houston, Texas, we have the option, at the end of the lease term in September 2025, to request to renew the lease, purchase the facility or assist the lessor in marketing it for resale. We have a residual value guarantee associated with the operating lease agreement with a maximum potential future exposure of \$514 million at December 31, 2022. We also have residual value guarantees associated with railcar and airplane leases with maximum potential future exposures totaling \$156 million. These leases have remaining terms of five to nine years.

Dakota Access, LLC (Dakota Access) and Energy Transfer Crude Oil Company, LLC (ETCO)

In 2020, the trial court presiding over litigation brought by the Standing Rock Sioux Tribe (the Tribe) ordered the U.S. Army Corps of Engineers (USACE) to prepare an Environmental Impact Statement (EIS) addressing an easement under Lake Oahe in North Dakota. The court later vacated the easement. Although the easement is vacated, the USACE has no plans to stop pipeline operations while it proceeds with the EIS, and the Tribe's request for a shutdown was denied in May 2021. In June 2021, the trial court dismissed the litigation entirely. Once the EIS is completed, new litigation or challenges may be filed.

In February 2022, the U.S. Supreme Court (the Court) denied Dakota Access' writ of certiorari requesting the Court to review the lower court's decision to order the EIS and vacate the easement. Therefore, the requirement to prepare the EIS stands. Also in February 2022, the Tribe withdrew as a cooperating agency, causing the USACE to halt the EIS process while the USACE engaged with the Tribe on their reasons for withdrawing. The draft EIS process resumed in August 2022, and release is expected in Spring 2023.

Dakota Access and ETCO have guaranteed repayment of senior unsecured notes issued by a wholly owned subsidiary of Dakota Access in March 2019. On April 1, 2022, Dakota Access' wholly owned subsidiary repaid \$650 million aggregate principal amount of its outstanding senior notes upon maturity. We funded our 25% share, or \$163 million, with a capital contribution of \$89 million in March 2022 and \$74 million of distributions we elected not to receive from Dakota Access in the first quarter of 2022. At December 31, 2022, the aggregate principal amount outstanding of Dakota Access' senior unsecured notes was \$1.85 billion.

In conjunction with the notes offering, Phillips 66 Partners, now a wholly owned subsidiary of Phillips 66, and its co-venturers in Dakota Access also provided a Contingent Equity Contribution Undertaking (CECU). Under the CECU, the co-venturers may be severally required to make proportionate equity contributions to Dakota Access if there is an unfavorable final judgment in the above-mentioned ongoing litigation. At December 31, 2022, our 25% share of the maximum potential equity contributions under the CECU was approximately \$467 million.

If the pipeline is required to cease operations, and should Dakota Access and ETCO not have sufficient funds to pay ongoing expenses, we could be required to support our 25% share of the ongoing expenses, including scheduled interest payments on the notes of approximately \$20 million annually, in addition to the potential obligations under the CECU at December 31, 2022.

See Note 15—Guarantees, in the Notes to Consolidated Financial Statements, for additional information on our guarantees.

Capital Requirements

Capital Expenditures and Investments

For information about our capital expenditures and investments, see the “Capital Spending” section below.

Debt Financing

Our debt balance at December 31, 2022, was \$17.2 billion and our total debt-to-capital ratio was 34%.

In December 2022, Phillips 66 repaid its 3.700% senior notes due April 2023 with an aggregate principal amount of \$500 million.

After our consolidation of DCP Midstream Class A Segment on August 17, 2022, DCP LP repaid \$470 million of borrowings under its accounts receivable securitization and revolving credit facilities that were outstanding on the acquisition date.

In April 2022, upon maturity, Phillips 66 repaid its 4.300% senior notes with an aggregate principal amount of \$1.0 billion and Phillips 66 Partners repaid its \$450 million term loan.

See Note 14—Debt, in the Notes to Consolidated Financial Statements, for our annual debt maturities over the next five years and more information on debt repayments.

Debt Exchange

On May 5, 2022, Phillips 66 Company, a wholly owned subsidiary of Phillips 66, completed offers to exchange (the Exchange Offers) all validly tendered notes of seven different series of notes issued by Phillips 66 Partners (collectively, the Old Notes), with an aggregate principal amount of approximately \$3.5 billion, for notes issued by Phillips 66 Company (collectively, the New Notes). The New Notes are fully and unconditionally guaranteed by Phillips 66 and rank equally with Phillips 66 Company’s other unsecured and unsubordinated indebtedness, and the guarantees rank equally with Phillips 66’s other unsecured and unsubordinated indebtedness.

Old Notes with an aggregate principal amount of approximately \$3.2 billion were tendered in the Exchange Offers. The New Notes have the same interest rates, interest payment dates and maturity dates as the Old Notes. Holders that validly tendered before the end of the early participation period on April 19, 2022 (the Early Participation Date), received New Notes with an aggregate principal amount equivalent to the Old Notes, while holders that validly tendered after the Early Participation Date, but before the Expiration Date, received New Notes with an aggregate principal amount 3% less than the Old Notes. Substantially all of the Old Notes exchanged were tendered during the Early Participation Period.

Joint Venture Loans

Starting in 2020 and extending through the second quarter of 2022, we and our co-venturer provided member loans to WRB. By December 31, 2022, WRB had repaid all outstanding member loans. At December 31, 2021, our share of the outstanding member loan balance, including accrued interest, was \$595 million. The need for additional loans to WRB in 2023 will depend on market conditions.

DCP Midstream and Gray Oak Holdings Merger

On August 17, 2022, we and our co-venturer, Enbridge, agreed to merge DCP Midstream and Gray Oak Holdings with DCP Midstream as the surviving entity. As part of the merger, we made a net cash payment of \$306 million.

DCP LP Public Common Unit Acquisition Agreement

On January 5, 2023, we entered into a definitive agreement with DCP LP, its subsidiaries and its general partner entities, pursuant to which one of our wholly owned subsidiaries will merge with and into DCP LP, with DCP LP surviving as a Delaware limited partnership. Under the terms of the agreement, at the effective time of the merger, each publicly held common unit representing a limited partner interest in DCP LP (other than the common units owned by DCP LP and DCP Midstream GP, LP) issued and outstanding as of immediately prior to the effective time will be converted into the right to receive \$41.75 per common unit in cash, without interest. The merger will increase our economic interest in DCP LP from 43.3% to 86.8%. The transaction is expected to close in the second quarter of 2023, subject to customary closing conditions.

If the merger is successfully completed, we will pay approximately \$3.8 billion in cash consideration, which we expect to fund through a combination of cash generated from operating activities and debt.

The transaction was unanimously approved by the board of the general partner of DCP LP, based on the unanimous approval and recommendation of its special committee comprised entirely of independent directors after evaluation of the transaction by the special committee in consultation with independent financial and legal advisors. Concurrently with the execution of the agreement, affiliates of Phillips 66, which together own greater than a majority of the outstanding DCP LP common units, delivered their consent to approve the transaction. As a result, DCP LP has not solicited and is not soliciting approval of the transaction by any other holders of DCP LP common units.

See Note 3—DCP Midstream, LLC and Gray Oak Holdings LLC Merger and Note 29—DCP Midstream Class A Segment, in the Notes to the Consolidated Financial Statements, for additional information on the merger of DCP Midstream and Gray Oak Holdings.

DCP LP Cash Distributions to Unitholders

DCP LP's partnership agreement requires that, within 45 days after the end of each quarter, DCP LP distributes all available cash. Since the merger on August 18, 2022, DCP LP made cash distributions of \$51 million to common unitholders other than Phillips 66, \$19 million to Series A preferred unitholders, \$6 million to Series B preferred unitholders and \$2 million to Series C preferred unitholders. See Note 29—DCP Midstream Class A Segment, in the Notes to the Consolidated Financial Statements, for additional information.

On January 24, 2023, the board of directors of DCP Midstream GP, LLC, declared a quarterly distribution on DCP LP's common units of \$0.43 per common unit and a quarterly distribution on DCP LP's Series B and Series C Preferred Units of \$0.4922 and \$0.4969 per unit, respectively. The distribution on the common units was paid on February 14, 2023, to unitholders of record on February 3, 2023. The Series B distribution will be paid on March 15, 2023, to unitholders of record on March 1, 2023. The Series C distribution will be paid on April 17, 2023, to unitholders of record on April 3, 2023.

DCP LP Preferred Units

DCP LP redeemed its Series A preferred units with an aggregate liquidation preference of \$500 million in December 2022. DCP LP funded this redemption from available cash and borrowings under its accounts receivable securitization facility.

Merger with Phillips 66 Partners

On March 9, 2022, we completed a merger between us and Phillips 66 Partners. The merger resulted in the acquisition of all limited partnership interests in Phillips 66 Partners not already owned by us in exchange for 41.8 million shares of Phillips 66 common stock issued from treasury stock. Phillips 66 Partners common unitholders received 0.50 shares of Phillips 66 common stock for each outstanding Phillips 66 Partners common unit. Phillips 66 Partners' perpetual convertible preferred units were converted into common units at a premium to the original issuance price prior to being exchanged for Phillips 66 common stock. Upon closing, Phillips 66 Partners became a wholly owned subsidiary of Phillips 66 and its common units are no longer publicly traded. See Note 30—Phillips 66 Partners LP, in the Notes to Consolidated Financial Statements, for additional information on the merger transaction.

Dividends

On February 8, 2023, our Board of Directors declared a quarterly cash dividend of \$1.05 per common share, representing an 8% increase. The dividend is payable March 1, 2023, to holders of record at the close of business on February 21, 2023.

Share Repurchases

In March 2020, we announced that we had temporarily suspended our share repurchases to preserve liquidity in response to the global economic disruption caused by the COVID-19 pandemic. We resumed purchasing shares under our share repurchase program in the second quarter of 2022. On November 7, 2022, our Board of Directors approved a \$5 billion increase to our share repurchase program. Since July 2012, our Board of Directors has authorized an aggregate of \$20 billion of repurchases of our outstanding common stock. The authorizations do not have expiration dates. Future share repurchases are expected to be funded primarily through available cash. We are not obligated to repurchase any shares of common stock pursuant to these authorizations and may commence, suspend or terminate repurchases at any time. In 2022, we repurchased 16.6 million shares at an aggregate cost of \$1.5 billion. Since the inception of our share repurchase program in 2012, we have repurchased 175.9 million shares at an aggregate cost of \$14 billion. Shares of stock repurchased are held as treasury shares.

Employee Benefit Plan Contributions

During the year ended December 31, 2022, we contributed \$125 million to our U.S. pension and other postretirement benefit plans and \$23 million to our international pension plans.

Contractual Obligations

Our contractual obligations primarily consist of purchase obligations, outstanding debt principal and interest obligations, operating and finance lease obligations, and asset retirement and environmental obligations.

Purchase Obligations

Our purchase obligations represent agreements to purchase goods or services that are enforceable, legally binding and specify all significant terms. We expect these purchase obligations will be fulfilled with operating cash flows in the period when due. As of December 31, 2022, our purchase obligations totaled \$106.5 billion, with \$44.4 billion due within one year.

The majority of our purchase obligations are market-based contracts, including exchanges and futures, for the purchase of products such as crude oil and raw NGL. The products are used to supply our refineries and fractionators and optimize our supply chain. At December 31, 2022, product purchase commitments with third parties and related parties were \$54.6 billion and \$26.1 billion, respectively. The remaining purchase obligations mainly represent agreements to access and utilize the capacity of third-party equipment and facilities, including pipelines and product terminals, to transport, process, treat, and store products, and our net share of purchase commitments for materials and services for jointly owned facilities where we are the operator.

Debt Principal and Interest Obligations

As of December 31, 2022, our aggregate principal amount of outstanding debt was \$17.2 billion, with \$529 million due within one year. Our obligations for interest on the debt totaled \$10.2 billion, with \$776 million due within one year. See Note 14—Debt, in the Notes to Consolidated Financial Statements, for additional information regarding our outstanding debt principal and interest obligations.

Finance and Operating Lease Obligations

See Note 20—Leases, in the Notes to Consolidated Financial Statements, for information regarding our lease obligations and timing of our expected lease payments.

Asset Retirement and Environmental Obligations

See Note 12—Asset Retirement Obligations and Accrued Environmental Costs, in the Notes to Consolidated Financial Statements, for information regarding asset retirement and environmental obligations.

Capital Spending

Our capital expenditures and investments represent consolidated capital spending.

	Millions of Dollars			
	2023 Budget	2022	2021	2020
Capital Expenditures and Investments				
Midstream*	\$ 639	1,043	733	1,735
Chemicals	—	—	—	—
Refining	1,118	928	784	828
Marketing and Specialties	134	89	202	173
Corporate and Other	108	134	141	184
Total Capital Expenditures and Investments	1,999	2,194	1,860	2,920
Selected Equity Affiliates**				
CPChem	925	701	367	284
WRB	216	177	229	175
	\$ 1,141	878	596	459

* Includes 100% of DCP Midstream Class A Segment, DCP Sand Hills and DCP Southern Hills capital expenditures and investments from August 18, 2022, forward, net of acquired cash.

** Our share of joint ventures' capital spending.

Midstream

Capital spending in our Midstream segment was \$3.5 billion for the three-year period ended December 31, 2022, including:

- Continued development and expansion of fractionation capacity at our Sweeny Hub. We completed two NGL fractionators (Sweeny Fracs 2 and 3) which commenced operations in 2020. We completed and started operations of Sweeny Frac 4 in the third quarter of 2022.
- Completion of construction on our C2G Pipeline, a new 16-inch ethane pipeline that connects our Clemens Caverns storage facility to petrochemical facilities in Gregory, Texas, near Corpus Christi.
- Net cash payment in connection with the merger of DCP Midstream and Gray Oak Holdings.
- Contributions to fund the Gray Oak Pipeline project and South Texas Gateway Terminal development activities.
- Investments in NOVONIX and a renewable feedstock processing plant.
- Contributions to Dakota Access for a pipeline optimization project, including a contribution to fund our 25% share of Dakota Access' debt repayment.
- Spending associated with other return, reliability, and maintenance projects in our Transportation and NGL businesses.

Chemicals

During the three-year period ended December 31, 2022, CPChem had a self-funded capital program that totaled \$2.7 billion on a 100% basis. Capital spending was primarily for the development of petrochemical projects on the U.S. Gulf Coast and in the Middle East, as well as sustaining, debottlenecking and optimization projects on existing assets.

Refining

Capital spending for the Refining segment during the three-year period ended December 31, 2022, was \$2.5 billion, primarily for refinery upgrade projects to enhance the yield of high-value products, renewable fuels projects, improvements to the operating integrity of key processing units, and safety-related projects.

Key projects funded during the three-year period included:

- Installation of facilities to improve clean product yield at the Ponca City and Sweeny refineries, as well as the jointly owned Wood River Refinery.
- Installation of facilities to improve product value at the Lake Charles Refinery.
- Installation of facilities to produce renewable fuels at our San Francisco and Humber refineries.

Marketing and Specialties

Capital spending for the M&S segment during the three-year period ended December 31, 2022, was primarily for investment in retail marketing joint ventures in the U.S. West Coast and Central regions; the continued acquisition, development and enhancement of retail sites in Europe; and acquisition of a commercial fleet fueling business in California, which will provide further placement opportunities for renewable diesel production to end-use customers.

Corporate and Other

Capital spending for Corporate and Other during the three-year period ended December 31, 2022, was primarily for information technology and facilities.

2023 Budget

Our 2023 capital budget is \$2 billion, including \$865 million for sustaining capital and \$1.1 billion for growth capital. Approximately 50% of growth capital is expected to support lower-carbon opportunities. Our projected \$2 billion capital budget excludes our portion of planned capital spending by our major joint ventures CPChem and WRB totaling \$1.1 billion.

The Midstream capital budget of \$639 million includes a growth capital budget of \$310 million which will be directed toward enhancing our integrated NGL value chain from wellhead to market. The Midstream capital budget also includes \$329 million for sustaining projects. The Midstream expected spend includes 100% of DCP LP's sustaining capital of \$150 million and \$125 million of growth capital. In Refining, the total capital budget of \$1.1 billion consists of \$389 million for reliability, safety and environmental projects and \$729 million for growth capital. Refining's growth capital includes the continued conversion of the San Francisco Refinery into a renewable fuels facility. The M&S capital budget of \$134 million reflects the continued development and enhancement of our retail network, including energy transition opportunities. The Corporate and Other capital budget is \$108 million primarily for digital transformation and information technology projects.

Contingencies

A number of lawsuits involving a variety of claims that arose in the ordinary course of business have been filed against us or are subject to indemnifications provided by us. We also may be required to remove or mitigate the effects on the environment of the placement, storage, disposal or release of certain chemical, mineral and petroleum substances at various active and inactive sites. We regularly assess the need for financial recognition or disclosure of these contingencies. In the case of all known contingencies (other than those related to income taxes), we accrue a liability when the loss is probable and the amount is reasonably estimable. If a range of amounts can be reasonably estimated and no amount within the range is a better estimate than any other amount, then the minimum of the range is accrued. We do not reduce these liabilities for potential insurance or third-party recoveries. If applicable, we accrue receivables for probable insurance or other third-party recoveries. In the case of income tax-related contingencies, we use a cumulative probability-weighted loss accrual in cases where sustaining a tax position is uncertain.

Based on currently available information, we believe it is remote that future costs related to known contingent liability exposures will exceed current accruals by an amount that would have a material adverse impact on our consolidated financial statements. As we learn new facts concerning contingencies, we reassess our position both with respect to accrued liabilities and other potential exposures. Estimates particularly sensitive to future changes include contingent liabilities recorded for environmental remediation, tax and legal matters. Estimated future environmental remediation costs are subject to change due to such factors as the uncertain magnitude of cleanup costs, the unknown time and extent of such remedial actions that may be required, and the determination of our liability in proportion to that of other potentially responsible parties. Estimated future costs related to tax and legal matters are subject to change as events evolve and as additional information becomes available during the administrative and litigation processes.

Legal and Tax Matters

Our legal and tax matters are handled by our legal and tax organizations. These organizations apply their knowledge, experience and professional judgment to the specific characteristics of our cases and uncertain tax positions. We employ a litigation management process to manage and monitor the legal proceedings. Our process facilitates the early evaluation and quantification of potential exposures in individual cases and enables the tracking of those cases that have been scheduled for trial and/or mediation. Based on professional judgment and experience in using these litigation management tools and available information about current developments in all our cases, our legal organization regularly assesses the adequacy of current accruals and determines if adjustment of existing accruals, or establishment of new accruals, is required. In the case of income tax-related contingencies, we monitor tax legislation and court decisions, the status of tax audits and the statute of limitations within which a taxing authority can assert a liability. See Note 23—Income Taxes, in the Notes to Consolidated Financial Statements, for additional information about income tax-related contingencies.

Environmental

We are subject to numerous international, federal, state and local environmental laws and regulations. Among the most significant of these international and federal environmental laws and regulations are the:

- U.S. Federal Clean Air Act, which governs air emissions.
- U.S. Federal Clean Water Act, which governs discharges into bodies of water.
- European Union Regulation for Registration, Evaluation, Authorization and Restriction of Chemicals (EU REACH), which governs production, marketing and use of chemicals and the United Kingdom's legislation for the Registration, Evaluation, Authorization and Restriction of Chemicals (UK REACH), which replaced EU REACH in the United Kingdom in 2021 following the United Kingdom's exit from the European Union (BREXIT).
- U.S. Federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), which imposes liability on generators, transporters and arrangers of hazardous substances at sites where hazardous substance releases have occurred or are threatening to occur.
- U.S. Federal Resource Conservation and Recovery Act (RCRA), which governs the treatment, storage and disposal of solid waste.
- U.S. Federal Emergency Planning and Community Right-to-Know Act (EPCRA), which requires facilities to report toxic chemical inventories to local emergency planning committees and response departments.
- U.S. Federal Oil Pollution Act of 1990 (OPA90), under which owners and operators of onshore facilities and pipelines as well as owners and operators of vessels are liable for removal costs and damages that result from a discharge of crude oil into navigable waters of the United States.
- European Union Trading Directive resulting in the European Union Emissions Trading Scheme (EU ETS), which uses a market-based mechanism to incentivize the reduction of greenhouse gas (GHG) emissions, as well as the United Kingdom Emissions Trading Scheme (UK ETS), which replaced the EU ETS in the United Kingdom in 2021, following BREXIT.

These laws and their implementing regulations set limits on emissions and, in the case of discharges to water, establish water quality limits. They also, in most cases, require permits in association with new or modified operations. These permits can require an applicant to collect substantial information in connection with the application process, which can be expensive and time consuming. In addition, there can be delays associated with notice and comment periods and the agency's processing of the application. Many of the delays associated with the permitting process are beyond the control of the applicant.

Other foreign countries and many states where we operate also have, or are developing, similar environmental laws and regulations governing these same types of activities. While similar, in some cases these regulations may impose additional, or more stringent, requirements that can add to the cost and difficulty of developing infrastructure and marketing and transporting products across state and international borders. For example, in California the South Coast Air Quality Management District (SCAQMD) approved amendments to the Regional Clean Air Incentives Market (RECLAIM) that became effective in 2016, which require a phased reduction of nitrogen oxide emissions through 2022, affecting refineries in the Los Angeles metropolitan area. In 2017, SCAQMD required additional nitrogen oxide emissions reductions through 2025 and, on November 5, 2021, promulgated new regulations to replace the RECLAIM program with a traditional command and control regulatory regime.

The ultimate financial impact arising from environmental laws and regulations is neither clearly known nor easily determinable as new standards, such as air emission standards, water quality standards and stricter fuel regulations, continue to evolve. However, environmental laws and regulations, including those that may arise to address concerns about global climate change, are expected to continue to have an increasing impact on our operations in the United States and in other countries in which we operate. Notable areas of potential impacts include air emissions compliance and remediation obligations in the United States.

An example of this in the fuels area is the Energy Independence and Security Act of 2007 (EISA). It requires fuel producers and importers to provide additional renewable fuels for transportation motor fuels and stipulates a mix of various types. RINs form the mechanism used by the EPA to record compliance with the Renewable Fuel Standard (RFS). If an obligated party has more RINs than it needs to meet its obligation, it may sell or trade the extra RINs, or instead choose to “bank” them for use the following year. We have met the requirements to date while establishing implementation, operating and capital strategies, along with advanced technology development, to address projected future renewable volume obligation (RVO) requirements. On December 1, 2022, the EPA proposed RVO for the 2023, 2024 and 2025 compliance years, as well as RIN generation from renewable electricity utilized as a transportation fuel (eRINs). These standards increase cellulosic volumes, which reflect the EPA’s forecast for increasing eRIN volumes beginning in 2024. They also increase total advanced biofuel volumes, which reflect the EPA’s forecast for increasing eRIN volumes beginning in 2024. In addition, they increase total advanced biofuel volumes from the 5.63 billion gallons established for the 2022 compliance year to 7.43 billion gallons in 2025. If adopted, we may experience a decrease in demand for refined petroleum products and increased program costs if not fully recovered in the market. This program continues to be the subject of possible Congressional review and re-promulgation in revised form, and the EPA’s final regulations establishing RVO requirements have been and continue to be subject to legal challenge, further creating uncertainty regarding RVO requirements.

We are required to purchase RINs in the open market to satisfy the portion of our obligation under the RFS that is not fulfilled by blending renewable fuels into the motor fuels we produce. For the years ended December 31, 2022, 2021 and 2020, we incurred expenses of \$478 million, \$441 million and \$342 million, respectively, associated with our obligation to purchase RINs in the open market to comply with the RFS for our wholly owned refineries. These expenses are included in the “Purchased crude oil and products” line item on our consolidated statement of operations. Our jointly owned refineries also incurred expenses associated with the purchase of RINs in the open market, of which our share was \$437 million, \$351 million and \$133 million for the years ended December 31, 2022, 2021 and 2020, respectively. These expenses are included in the “Equity in earnings of affiliates” line item on our consolidated statement of operations. The amount of these expenses and fluctuations between periods is primarily driven by the market price of RINs, refinery production, blending activities, and RVO requirements.

We also are subject to certain laws and regulations relating to environmental remediation obligations associated with current and past operations. Such laws and regulations include CERCLA and RCRA and their state equivalents. Remediation obligations include cleanup responsibility arising from petroleum releases from underground storage tanks located at numerous previously and currently owned and/or operated petroleum-marketing outlets throughout the United States. Federal and state laws require contamination caused by such underground storage tank releases be assessed and remediated to meet applicable standards. In addition to other cleanup standards, many states have adopted cleanup criteria for methyl tertiary-butyl ether (MTBE) for both soil and groundwater and both the EPA and many states may adopt cleanup standards for per- and polyfluoroalkyl substances (PFAS), which may have been a constituent in certain firefighting foams used or stored at or near some of our facilities.

At RCRA-permitted facilities, we are required to assess environmental conditions. If conditions warrant, we may be required to remediate contamination caused by prior operations. In contrast to CERCLA, which is often referred to as “Superfund,” the cost of corrective action activities under RCRA corrective action programs typically is borne solely by us. We anticipate increased expenditures for RCRA remediation activities may be required, but such annual expenditures for the near term are not expected to vary significantly from the range of such expenditures we have experienced over the past few years. Longer-term expenditures are subject to considerable uncertainty and may fluctuate significantly.

We occasionally receive requests for information or notices of potential liability from the EPA and state environmental agencies alleging that we are a potentially responsible party under CERCLA or an equivalent state statute. On occasion, we also have been made a party to cost recovery litigation by those agencies or by private parties. These requests, notices and lawsuits assert potential liability for remediation costs at various sites that typically are not owned by us, but allegedly contain wastes attributable to our past operations. As of December 31, 2021, we reported that we had been notified of potential liability under CERCLA and comparable state laws at 25 sites within the United States. In 2022, we were notified of one potentially new site through a CERCLA Section 104(e) information request issued by the EPA, and four sites that were deemed resolved and closed, accordingly, leaving 22 unresolved sites with potential liability at December 31, 2022.

For the majority of Superfund sites, our potential liability will be less than the total site remediation costs because the percentage of waste attributable to us, versus that attributable to all other potentially responsible parties, is relatively low. Although liability of those potentially responsible is generally joint and several for federal sites and frequently so for state sites, other potentially responsible parties at sites where we are a party typically have had the financial strength to meet their obligations, and where they have not, or where potentially responsible parties could not be located, our share of liability has not increased materially. Many of the sites for which we are potentially responsible are still under investigation by the EPA or the state agencies concerned. Prior to actual cleanup, those potentially responsible normally assess site conditions, apportion responsibility and determine the appropriate remediation. In some instances, we may have no liability or attain a settlement of liability. Actual cleanup costs generally occur after the parties obtain the EPA or equivalent state agency approval of a remediation plan. There are relatively few sites where we are a major participant, and given the timing and amounts of anticipated expenditures, neither the cost of remediation at those sites nor such costs at all CERCLA sites, in the aggregate, is expected to have a material adverse effect on our competitive or financial condition.

We incur costs related to the prevention, control, abatement or elimination of environmental pollution. Expensed environmental costs were \$728 million in 2022 and are expected to be approximately \$800 million in 2023 and 2024. Capitalized environmental costs were \$88 million in 2022 and are expected to be approximately \$140 million and \$250 million, in 2023 and 2024, respectively. These amounts do not include capital expenditures made for other purposes that have an indirect benefit on environmental compliance.

Accrued liabilities for remediation activities are not reduced for potential recoveries from insurers or other third parties and are not discounted (except those assumed in a business combination, which we record on a discounted basis).

Many of these liabilities result from CERCLA, RCRA and similar state laws that require us to undertake certain investigative and remedial activities at sites where we conduct, or once conducted, operations or at sites where our generated waste was disposed. We also have accrued for a number of sites we identified that may require environmental remediation, but which are not currently the subject of CERCLA, RCRA or state enforcement activities. If applicable, we accrue receivables for probable insurance or other third-party recoveries. In the future, we may incur significant costs under both CERCLA and RCRA. Remediation activities vary substantially in duration and cost from site to site, depending on the mix of unique site characteristics, evolving remediation technologies, diverse regulatory agencies and enforcement policies, and the presence or absence of potentially liable third parties. Therefore, it is difficult to develop reasonable estimates of future site remediation costs.

Notwithstanding any of the foregoing, and as with other companies engaged in similar businesses, environmental costs and liabilities are inherent concerns in certain of our operations and products, and there can be no assurance that those costs and liabilities will not be material. However, we currently do not expect any material adverse effect on our results of operations or financial position as a result of compliance with current environmental laws and regulations.

Climate Change

There has been a broad range of proposed or promulgated state, national and international laws focusing on GHG emissions reduction, including various regulations proposed or issued by the EPA. These proposed or promulgated laws apply or could apply in states and/or countries where we have interests or may have interests in the future. Laws regulating GHG emissions continue to evolve, and while it is not possible to accurately estimate either a timetable for implementation or our future compliance costs relating to implementation, such laws potentially could have a material impact on our results of operations and financial condition as a result of increasing costs of compliance, lengthening project implementation and agency reviews, or reducing demand for certain hydrocarbon products. Examples of legislation or precursors for possible regulation that do or could affect our operations include:

- EU ETS, which is part of the European Union's policy to combat climate change and is a key tool for reducing industrial GHG emissions. EU ETS impacts factories, power stations and other installations across all EU member states. As a result of the United Kingdom's exit from the EU (BREXIT), those types of entities in the United Kingdom are now subject to the UK ETS, rather than the EU ETS.
- EU Renewable Energy Directive II, which increases the EU's energy consumption from renewable sources in the electricity, heat, and transportation sectors to 32% by 2030.

- United Kingdom’s Renewable Fuel Obligation, which is intended to reduce the GHG emissions from fuel used in the United Kingdom transportation sector by encouraging the supply of renewable fuels.
- California’s Senate Bill No. 32, which requires reduction of California’s GHG emissions to 40% below the 1990 emission level by 2030, and Assembly Bill 398, which extends the California GHG emission cap and trade program through 2030. Other GHG emissions programs in the western U.S. states have been enacted or are under consideration or development, including amendments to California’s Low Carbon Fuel Standard, California’s Advanced Clean Cars and Trucks Programs, California’s Carbon Neutrality by 2045 Scoping Plan, Oregon’s Low Carbon Fuel Standard and Climate Protection Plan, and Washington’s carbon reduction programs.
- United States’ Inflation Reduction Act, which contains tax inducements and other provisions that incentivize investment, development, and deployment of alternative energy sources and technologies, which is intended to accelerate the energy transition.
- The U.S. Supreme Court decision in Massachusetts v. EPA, 549 U.S. 497, 127 S. Ct. 1438 (2007), confirming that the EPA has the authority to regulate carbon dioxide as an “air pollutant” under the Federal Clean Air Act.
- The EPA’s announcement on March 29, 2010 (published as “Interpretation of Regulations that Determine Pollutants Covered by Clean Air Act Permitting Programs,” 75 Fed. Reg. 17004 (April 2, 2010)), and the EPA’s and U.S. Department of Transportation’s joint promulgation of a Final Rule on April 1, 2010, that triggers regulation of GHGs under the Clean Air Act. These collectively may lead to more climate-based claims for damages, and may result in longer agency review time for development projects to determine the extent of potential climate change.
- The EPA’s 2015 Final Rule regulating GHG emissions from existing fossil fuel-fired electrical generating units under the Federal Clean Air Act, commonly referred to as the Clean Power Plan. The EPA commenced rulemaking in 2017 to rescind the Clean Power Plan and, in August 2018, the EPA proposed the Affordable Clean Energy (ACE) rule as its replacement. On January 19, 2021, the U.S. Court of Appeals for the District of Columbia invalidated the ACE rule and remanded the matter to the EPA, essentially restarting this rulemaking process.
- Carbon taxes in certain jurisdictions.
- GHG emission cap and trade programs in certain jurisdictions.

In the EU, the first phase of the EU ETS completed at the end of 2007. Phase II was undertaken from 2008 through 2012, and Phase III ran from 2013 through to 2020. Phase IV runs from January 1, 2021 through 2030 and sectors covered under the ETS must reduce their GHG emissions by 43% compared to 2005 levels and there is agreement between the EU Member States, the European Parliament, and the EU Commission (which is pending ratification by the EU Council and European Parliament) to increase the Phase IV GHG emissions reduction to 63% by 2030 compared to 2005 levels. The United Kingdom is no longer part of the EU ETS and, instead, has been under the UK ETS since 2021. Phillips 66 has assets that are subject to the EU ETS and assets that are subject to the UK ETS.

From November 30 to December 12, 2015, more than 190 countries, including the United States, participated in the United Nations Climate Change Conference in Paris, France. The conference culminated in what is known as the “Paris Agreement,” which, upon certain conditions being met, entered into force on November 4, 2016. The Paris Agreement establishes a commitment by signatory parties to pursue domestic GHG emission reductions. In 2017, President Trump announced his intention to withdraw the United States from the Paris Agreement and that withdrawal became effective on November 4, 2020. On January 20, 2021, President Biden signed the “Acceptance on Behalf of the United States of America,” which allows the United States to rejoin the Paris Agreement. The United States officially rejoined the Paris Agreement in February 2021, which could lead to additional GHG emission reduction requirements for sources in the United States.

In the United States, some additional form of regulation is likely to be forthcoming at the state or federal levels with respect to GHG emissions. Such regulation could take any of several forms that may result in additional financial burden in the form of taxes, the restriction of output, investments of capital to maintain compliance with laws and regulations, or required acquisition or trading of emission allowances.

Compliance with changes in laws and regulations that create a GHG emission trading program, GHG reduction requirements or carbon taxes could significantly increase our costs, reduce demand for fossil energy derived products, impact the cost and availability of capital and increase our exposure to litigation. Such laws and regulations could also increase demand for less carbon intensive energy sources.

An example of one such program is California's cap and trade program, which was promulgated pursuant to the State's Global Warming Solutions Act. The program had been limited to certain stationary sources, which include our refineries in California, but beginning in January 2015 was expanded to include emissions from transportation fuels distributed in California. Inclusion of transportation fuels in California's cap and trade program as currently promulgated has increased our cap and trade program compliance costs. The ultimate impact on our financial performance, either positive or negative, from this and similar programs, will depend on a number of factors, including, but not limited to:

- Whether and to what extent legislation or regulation is enacted.
- The nature of the legislation or regulation, such as a cap and trade system or a tax on emissions.
- The GHG reductions required.
- The price and availability of offsets.
- The demand for, and amount and allocation of allowances.
- Technological and scientific developments leading to new products or services.
- Any potential significant physical effects of climate change, such as increased severe weather events, changes in sea levels and changes in temperature.
- Whether, and the extent to which, increased compliance costs are ultimately reflected in the prices of our products and services.

We consider and take into account anticipated future GHG emissions in designing and developing major facilities and projects, and implement energy efficiency initiatives to reduce GHG emissions. Data on our GHG emissions, legal requirements regulating such emissions, and the possible physical effects of climate change on our coastal assets are incorporated into our planning, investment, and risk management decision-making. We are working to continuously improve operational and energy efficiency through resource and energy conservation throughout our operations.

In February 2022, we announced our intention to reduce our Scope 1 and Scope 2 GHG emissions intensity related to our operations by 50% of 2019 levels by the year 2050. This new target builds upon our previously announced 2030 GHG emissions intensity targets to reduce Scope 1 and Scope 2 emissions from our operations by 30% and Scope 3 emissions from our energy products by 15% compared to 2019 levels.

In addition to the disclosures above, we have issued our 2022 Sustainability Report that is accessible on our website and provides more detailed information on our Environmental, Social and Corporate Governance initiatives, including detailed information on environmental metrics.

CRITICAL ACCOUNTING ESTIMATES

The preparation of financial statements in conformity with GAAP requires management to select appropriate accounting policies and to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. See Note 1—Summary of Significant Accounting Policies, in the Notes to Consolidated Financial Statements, for descriptions of our major accounting policies. Some of these accounting policies involve judgments and uncertainties to such an extent that there is a reasonable likelihood that materially different amounts would have been reported under different conditions, or if different assumptions had been used. The following discussion of critical accounting estimates addresses accounting areas where the nature of accounting estimates or assumptions could be material due to the levels of subjectivity and judgment necessary to account for highly uncertain matters or the susceptibility of such matters to change.

Business Combination

In accounting for a business combination, assets acquired, liabilities assumed and noncontrolling interests are recorded based on estimated fair values as of the date of acquisition. The excess or shortfall of the purchase price when compared to the fair value of the net tangible and identifiable intangible assets acquired, if any, is recorded as goodwill or a bargain purchase gain, respectively. A significant amount of judgment is made in estimating the individual fair value of property, plant and equipment, intangible assets, noncontrolling interests and other assets and liabilities. We use available information to make these fair value determinations and engage third-party specialists in the valuation process as necessary.

The fair values of assets acquired, liabilities assumed and noncontrolling interests as of the acquisition date are often estimated using a combination of approaches, including the income approach, which requires us to project future cash flows and apply an appropriate discount rate; the cost approach, which requires estimates of replacement costs and depreciation and obsolescence estimates; and the market approach which uses market data and adjusts for entity specific differences. The estimates used in determining fair values are based on assumptions believed to be reasonable, but which are inherently uncertain. Accordingly, actual results may differ materially from the estimated results used to determine fair value.

See Note 4—Business Combination, and Note 18—Fair Value Measurements, in the Notes to Consolidated Financial Statements, for additional information on the merger of DCP Midstream and Gray Oak Holdings and fair value measurements.

Impairment of Long-Lived Assets and Equity Method Investments

Long-lived assets used in operations are assessed for impairment whenever changes in facts and circumstances indicate a possible significant deterioration in future expected cash flows. If the sum of the undiscounted expected future before-tax cash flows of an asset group is less than the carrying value, including applicable liabilities, the carrying value is written down to estimated fair value. Individual assets are grouped for impairment purposes based on a judgmental assessment of the lowest level for which there are identifiable cash flows that are largely independent of the cash flows of other assets. Because there usually is a lack of quoted market prices for long-lived assets, the fair value of impaired assets is typically determined using one or more of the following methods: the present value of expected future cash flows using discount rates and other assumptions believed to be consistent with those used by principal market participants; a market multiple for similar assets; historical market transactions including similar assets, adjusted using principal market participant assumptions when necessary; or replacement cost adjusted for physical deterioration and economic obsolescence. The expected future cash flows used for impairment reviews and related fair value calculations are based on judgmental assessments, including future volumes, commodity prices, operating costs, margins, discount rates and capital project decisions, considering all available information at the date of review.

Investments in nonconsolidated entities accounted for under the equity method are assessed for impairment when there are indicators of a loss in value, such as a lack of sustained earnings capacity or a current fair value less than the investment's carrying amount. When it is determined that an indicated impairment is other than temporary, a charge is recognized for the difference between the investment's carrying value and its estimated fair value. When determining whether a decline in value is other than temporary, management considers factors such as the duration and extent of the decline, the investee's financial condition and near-term prospects, and our ability and intention to retain our investment for a period that allows for recovery. When quoted market prices are not available, the fair value is usually based on the present value of expected future cash flows using discount rates and other assumptions believed to be consistent with those used by principal market participants and observed market earnings multiples of comparable companies, if appropriate. Different assumptions could affect the timing and the amount of an impairment of an investment in any period.

See Note 11—Impairments, in the Notes to Consolidated Financial Statements, for information about impairments recorded in 2022, 2021 and 2020.

GUARANTOR FINANCIAL INFORMATION

We have various cross guarantees between Phillips 66 and its wholly owned subsidiary Phillips 66 Company (together, the Obligor Group) with respect to publicly held debt securities. Phillips 66 conducts substantially all of its operations through subsidiaries, including Phillips 66 Company, and those subsidiaries generate substantially all of its operating income and cash flow. Phillips 66 has fully and unconditionally guaranteed the payment obligations of Phillips 66 Company with respect to its publicly held debt securities. In addition, Phillips 66 Company has fully and unconditionally guaranteed the payment obligations of Phillips 66 with respect to its publicly held debt securities. All guarantees are full and unconditional. At December 31, 2022, \$12 billion of senior unsecured notes outstanding has been guaranteed by the Obligor Group.

See the “Significant Sources of Capital” section for additional information regarding the Exchange Offers by Phillips 66 Company for existing senior notes of Phillips 66 Partners that settled in May 2022.

Summarized financial information of the Obligor Group is presented on a combined basis. Intercompany transactions among the members of the Obligor Group have been eliminated. The financial information of non-guarantor subsidiaries has been excluded from the summarized financial information. Significant intercompany transactions and receivable/payable balances between the Obligor Group and non-guarantor subsidiaries are presented separately in the summarized financial information.

The summarized results of operations for the year ended December 31, 2022, and the summarized financial position at December 31, 2022, of the Obligor Group on a combined basis were:

Summarized Combined Statement of Operations		Millions of Dollars
Sales and other operating revenues	\$	131,315
Revenues and other income—non-guarantor subsidiaries		3,643
Purchased crude oil and products—third parties		74,787
Purchased crude oil and products—related parties		21,125
Purchased crude oil and products—non-guarantor subsidiaries		25,240
Income before income taxes		7,244
Net income		5,240

Summarized Combined Balance Sheet		Millions of Dollars
Accounts and notes receivable—third parties	\$	5,485
Accounts and notes receivable—related parties		1,376
Due from non-guarantor subsidiaries, current		741
Total current assets		15,566
Investments and long-term receivables		10,433
Net properties, plants and equipment		11,652
Goodwill		1,047
Due from non-guarantor subsidiaries, noncurrent		2,163
Other assets associated with non-guarantor subsidiaries		2,144
Total noncurrent assets		29,209
Total assets		44,775
Due to non-guarantor subsidiaries, current	\$	2,297
Total current liabilities		11,148
Long-term debt		12,060
Due to non-guarantor subsidiaries, noncurrent		7,088
Total noncurrent liabilities		25,223
Total liabilities		36,371
Total equity		8,404
Total liabilities and equity		44,775

NON-GAAP RECONCILIATIONS

Refining

Our realized refining margins measure the difference between (a) sales and other operating revenues derived from the sale of petroleum products manufactured at our refineries and (b) costs of feedstocks, primarily crude oil, used to produce the petroleum products. The realized refining margins are adjusted to include our proportional share of our joint venture refineries' realized margins, as well as to exclude those items that are not representative of the underlying operating performance of a period, which we call "special items." The realized refining margins are converted to a per-barrel basis by dividing them by total refinery processed inputs (primarily crude oil) measured on a barrel basis, including our share of inputs processed by our joint venture refineries. Our realized refining margin per barrel is intended to be comparable with industry refining margins, which are known as "crack spreads." As discussed in "Executive Overview and Business Environment—Business Environment," industry crack spreads measure the difference between market prices for refined petroleum products and crude oil. We believe realized refining margin per barrel calculated on a similar basis as industry crack spreads provides a useful measure of how well we performed relative to benchmark industry refining margins.

The GAAP performance measure most directly comparable to realized refining margin per barrel is the Refining segment's "income (loss) before income taxes per barrel." Realized refining margin per barrel excludes items that are typically included in a manufacturer's gross margin, such as depreciation and operating expenses, and other items used to determine income (loss) before income taxes, such as general and administrative expenses. It also includes our proportional share of joint venture refineries' realized refining margins and excludes special items. Because realized refining margin per barrel is calculated in this manner, and because realized refining margin per barrel may be defined differently by other companies in our industry, it has limitations as an analytical tool. Following are reconciliations of income (loss) before income taxes to realized refining margins:

Realized Refining Margins	Millions of Dollars, Except as Indicated				
	Atlantic Basin/Europe	Gulf Coast	Central Corridor	West Coast	Worldwide
Year Ended December 31, 2022					
Income before income taxes	\$ 2,402	2,091	2,415	908	7,816
Plus:					
Taxes other than income taxes	53	87	57	91	288
Depreciation, amortization and impairments	203	250	147	279	879
Selling, general and administrative expenses	41	19	62	31	153
Operating expenses	1,242	1,230	809	1,486	4,767
Equity in (earnings) losses of affiliates	9	7	(763)	—	(747)
Other segment (income) expense, net	(6)	1	2	(1)	(4)
Proportional share of refining gross margins contributed by equity affiliates	93	—	1,668	—	1,761
Special items:					
Regulatory compliance costs	9	26	22	13	70
Realized refining margins	\$ 4,046	3,711	4,419	2,807	14,983
Total processed inputs (<i>thousands of barrels</i>)	199,319	203,269	97,997	115,457	616,042
Adjusted total processed inputs (<i>thousands of barrels</i>)*	199,319	203,269	177,112	115,457	695,157
Income before income taxes per barrel (<i>dollars per barrel</i>)**	\$ 12.05	10.29	24.64	7.86	12.69
Realized refining margins (<i>dollars per barrel</i>)***	20.30	18.25	24.96	24.31	21.55
Year Ended December 31, 2021					
Income (loss) before income taxes	\$ 1	(1,759)	72	(667)	(2,353)
Plus:					
Taxes other than income taxes	69	74	51	49	243
Depreciation, amortization and impairments	210	1,683	139	240	2,272
Selling, general and administrative expenses	32	34	30	37	133
Operating expenses	981	1,352	648	1,220	4,201
Equity in losses of affiliates	9	11	164	—	184
Other segment (income) expense, net	9	(7)	(11)	4	(5)
Proportional share of refining gross margins contributed by equity affiliates	123	—	609	—	732
Special items:					
Certain tax impacts	(4)	—	—	—	(4)
Regulatory compliance costs	(20)	(28)	(27)	(13)	(88)
Realized refining margins	\$ 1,410	1,360	1,675	870	5,315
Total processed inputs (<i>thousands of barrels</i>)	188,697	240,859	95,595	112,994	638,145
Adjusted total processed inputs (<i>thousands of barrels</i>)*	188,697	240,859	173,230	112,994	715,780
Income (loss) before income taxes per barrel (<i>dollars per barrel</i>)**	\$ 0.01	(7.30)	0.75	(5.90)	(3.69)
Realized refining margins (<i>dollars per barrel</i>)***	7.48	5.65	9.65	7.70	7.42

* Adjusted total processed inputs include our proportional share of processed inputs of an equity affiliate.

** Income (loss) before income taxes divided by total processed inputs.

*** Realized refining margins per barrel, as presented, are calculated using the underlying realized refining margin amounts, in dollars, divided by adjusted total processed inputs, in barrels. As such, recalculated per barrel amounts using the rounded margins and barrels presented may differ from the presented per barrel amounts.

Realized Refining Margins	Millions of Dollars, Except as Indicated				
	Atlantic Basin/Europe	Gulf Coast	Central Corridor	West Coast	Worldwide
Year Ended December 31, 2020					
Loss before income taxes	\$ (1,207)	(1,964)	(642)	(2,210)	(6,023)
<i>Plus:</i>					
Taxes other than income taxes	61	110	51	89	311
Depreciation, amortization and impairments	643	985	571	1,460	3,659
Selling, general and administrative expenses	27	37	28	35	127
Operating expenses	775	1,394	497	1,000	3,666
Equity in losses of affiliates	10	3	363	—	376
Other segment (income) expense, net	1	1	(2)	5	5
Proportional share of refining gross margins contributed by equity affiliates	67	—	298	—	365
<i>Special items:</i>					
Certain tax impacts	(6)	—	—	—	(6)
Realized refining margins	\$ 371	566	1,164	379	2,480
Total processed inputs (<i>thousands of barrels</i>)	170,536	213,871	92,050	110,602	587,059
Adjusted total processed inputs (<i>thousands of barrels</i>)*	170,536	213,871	162,693	110,602	657,702
Loss before income taxes per barrel (<i>dollars per barrel</i>)**	\$ (7.08)	(9.18)	(6.97)	(19.98)	(10.26)
Realized refining margins (<i>dollars per barrel</i> ***)	2.17	2.64	7.17	3.43	3.77

* Adjusted total processed inputs include our proportional share of processed inputs of an equity affiliate.

** Loss before income taxes divided by total processed inputs.

*** Realized refining margins per barrel, as presented, are calculated using the underlying realized refining margin amounts, in dollars, divided by adjusted total processed inputs, in barrels. As such, recalculated per barrel amounts using the rounded margins and barrels presented may differ from the presented per barrel amounts.

Marketing

Our realized marketing fuel margins measure the difference between (a) sales and other operating revenues derived from the sale of fuels in our M&S segment and (b) costs of those fuels. The realized marketing fuel margins are adjusted to exclude those items that are not representative of the underlying operating performance of a period, which we call “special items.” The realized marketing fuel margins are converted to a per-barrel basis by dividing them by sales volumes measured on a barrel basis. We believe realized marketing fuel margin per barrel demonstrates the value uplift our marketing operations provide by optimizing the placement and ultimate sale of our refineries’ fuel production.

Within the M&S segment, the GAAP performance measure most directly comparable to realized marketing fuel margin per barrel is the marketing business’ “income before income taxes per barrel.” Realized marketing fuel margin per barrel excludes items that are typically included in gross margin, such as depreciation and operating expenses, and other items used to determine income before income taxes, such as general and administrative expenses. Because realized marketing fuel margin per barrel excludes these items, and because realized marketing fuel margin per barrel may be defined differently by other companies in our industry, it has limitations as an analytical tool. Following are reconciliations of income before income taxes to realized marketing fuel margins:

Millions of Dollars, Except as Indicated						
	U.S.			International		
	2022	2021	2020	2022	2021	2020
Realized Marketing Fuel Margins						
Income before income taxes	\$ 1,329	1,180	870	765	403	454
Plus:						
Depreciation and amortization	14	14	12	72	76	70
Selling, general and administrative expenses	808	758	623	251	253	246
Equity in earnings of affiliates	(71)	(48)	(31)	(115)	(113)	(108)
Other operating (revenues) expenses*	(508)	(424)	(327)	(62)	8	(27)
Other (income) expense, net	24	9	1	(7)	7	6
Marketing margins	1,596	1,489	1,148	904	634	641
Less: margin for nonfuel related sales	—	—	—	51	53	46
Realized marketing fuel margins	\$ 1,596	1,489	1,148	853	581	595
Total fuel sales volumes (<i>thousands of barrels</i>)	680,930	680,102	613,869	102,862	97,529	93,773
Income before income taxes per barrel (<i>dollars per barrel</i>)	\$ 1.95	1.74	1.42	7.44	4.13	4.84
Realized marketing fuel margins (<i>dollars per barrel</i>)**	2.34	2.19	1.87	8.29	5.96	6.34

* Includes other nonfuel revenues and expenses.

** Realized marketing fuel margins per barrel, as presented, are calculated using the underlying realized marketing fuel margin amounts, in dollars, divided by sales volumes, in barrels. As such, recalculated per barrel amounts using the rounded margins and barrels presented may differ from the presented per barrel amounts.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Financial Instrument Market Risk

We and certain of our subsidiaries are exposed to market risks produced by changes in the prices of crude oil, refined petroleum product, NGL, natural gas, renewable feedstock and electric power, as well as fluctuations in interest rates and foreign currency exchange rates. We and certain of our subsidiaries may hold and use derivative contracts to manage these risks.

As a result of the merger, we included the assets and liabilities of DCP Midstream, LLC's Class A Segment (DCP Midstream Class A Segment), DCP Sand Hills Pipeline, LLC and DCP Southern Hills Pipeline, LLC in our consolidated balance sheet as of December 31, 2022, and the results of their operations and cash flows are reported in our consolidated statements of operations and cash flows from August 18, 2022 through December 31, 2022.

DCP Midstream Class A Segment's market risks are solely attributable to market risks of DCP Midstream, LP (DCP LP), because DCP LP is the sole operational asset in DCP Midstream Class A Segment.

DCP LP is exposed to market risks, including changes in commodity prices and interest rates. DCP LP uses financial instruments such as forward contracts, swaps and futures to mitigate the effects of these risks. See Note 3—DCP Midstream, LLC and Gray Oak Holdings LLC Merger, in the Notes to Consolidated Financial Statements, for additional information on the structure of the merger.

Commodity Price Risk

Generally, our policy is to remain exposed to the market prices of commodities. Consistent with this policy, we use derivative contracts to convert our exposure from fixed-price sales or purchase contracts, often specified in contracts with refined petroleum product customers, back to floating market prices. We also use futures, forwards, swaps and options in various markets to accomplish the following objectives:

- Balance physical systems or meet our refinery requirements and market demand. In addition to cash settlement prior to contract expiration, certain exchange-traded futures may be settled by physical delivery of the underlying commodity.
- Enable us to use the market knowledge gained from our physical commodity market activities to capture market opportunities, such as moving physical commodities to more profitable locations, storing commodities to capture seasonal or time premiums, and blending commodities to capture quality upgrades. Derivatives may be utilized to optimize these activities.
- Manage the risk to our cash flows from price exposures on specific crude oil, refined petroleum product, NGL, renewable feedstock and natural gas transactions.

These objectives optimize the value of our supply chain and may reduce our exposure to fluctuations in market prices.

Phillips 66's use of derivative instruments is governed by an "Authority Limitations" document approved by our Board of Directors. This document prohibits the use of highly leveraged derivatives or derivative instruments without sufficient market liquidity for comparable valuations, and establishes Value at Risk (VaR) limits. Compliance with these limits is monitored daily by our global risk group.

Phillips 66 uses a VaR model to estimate the loss in fair value that could potentially result on a single day from the effect of adverse changes in market conditions on the derivative commodity instruments held or issued. Using Monte Carlo simulation, a 95% confidence level and a one-day holding period, the VaR for derivative commodity instruments issued or held at December 31, 2022 and 2021, was immaterial to our cash flows and results of operations.

DCP LP's use of derivative instruments is governed by a comprehensive risk management policy and a risk management committee that monitors and manages market risks associated with commodity prices. The risk management committee is composed of DCP LP's senior executives who receive regular briefings on positions and exposures, credit exposures and overall risk management in the context of market activities. The risk management committee is responsible for the overall management of commodity price and credit risks, including monitoring exposure limits. The estimated loss in fair value that could potentially result on a single day from the effect of adverse changes in market conditions on derivative commodity instruments held or issued is not expected to be material to our cash flows and results of operations.

Interest Rate Risk

Our use of fixed- or variable-rate debt directly exposes us to interest rate risk. Fixed-rate debt, such as our senior notes, exposes us to changes in the fair value of our debt due to changes in market interest rates. Fixed-rate debt also exposes us to the risk that we may need to refinance maturing debt with new debt at higher rates, or that we may be obligated to pay rates higher than the current market. Variable-rate debt, such as our floating-rate notes or borrowings under our revolving credit facility, exposes us to short-term changes in market rates that impact our interest expense. The following tables provide information about our debt instruments that are sensitive to changes in U.S. interest rates. These tables present principal cash flows and related weighted-average interest rates by expected maturity dates. Weighted-average variable rates are based on effective rates at each reporting date. The carrying amount of our floating-rate debt approximates its fair value. The fair value of the fixed-rate financial instruments is estimated based on observable market prices.

Expected Maturity Date	Millions of Dollars, Except as Indicated			
	Fixed Rate Maturity	Average Interest Rate	Floating Rate Maturity	Average Interest Rate
Year-End 2022				
2023	\$ 500	3.88 %	\$ —	— %
2024	1,100	1.32	40	5.33
2025	1,975	4.43	—	—
2026	992	2.42	—	—
2027	500	5.63	—	—
Remaining years	12,040	4.67	25	4.72
Total	\$ 17,107		\$ 65	
Fair value	\$ 15,871		\$ 65	

Expected Maturity Date	Millions of Dollars, Except as Indicated			
	Fixed Rate Maturity	Average Interest Rate	Floating Rate Maturity	Average Interest Rate
Year-End 2021				
2022	\$ 1,000	4.30 %	\$ 450	0.98 %
2023	500	3.70	—	—
2024	1,100	1.32	—	—
2025	1,150	3.74	—	—
2026	1,000	2.43	—	—
Remaining years	9,026	4.31	25	0.70
Total	\$ 13,776		\$ 475	
Fair value	\$ 15,353		\$ 475	

Foreign Currency Risk

We are exposed to foreign currency exchange rate fluctuations related to our international operations. Generally, we do not hedge our foreign currency risk.

Phillips 66's Chief Executive Officer and Chief Financial Officer monitor risks effecting its operations resulting from commodity prices, interest rates and foreign currency exchange rates. In addition, DCP LP's risk management committee monitors risks effecting its operations resulting from commodity prices and interest rates.

For additional information about our use of derivative instruments, see Note 17—Derivatives and Financial Instruments, in the Notes to Consolidated Financial Statements.

CAUTIONARY STATEMENT FOR THE PURPOSES OF THE “SAFE HARBOR” PROVISIONS OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

This report includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. You can normally identify our forward-looking statements by the words “anticipate,” “estimate,” “believe,” “budget,” “continue,” “could,” “intend,” “may,” “plan,” “potential,” “predict,” “seek,” “should,” “will,” “would,” “expect,” “objective,” “projection,” “forecast,” “goal,” “guidance,” “outlook,” “effort,” “target” and similar expressions that convey the prospective nature of events or outcomes, but the absence of such words does not mean a statement is not forward-looking.

We based the forward-looking statements on our current expectations, estimates and projections about us, our operations, our joint ventures and entities in which we have equity interests, as well as the industries in which we and they operate. We caution you not to place undue reliance on these forward-looking statements as they are not guarantees of future performance and involve assumptions that, while made in good faith, may prove to be incorrect, and involve risks and uncertainties we cannot predict. In addition, we based many of these forward-looking statements on assumptions about future events that may prove to be inaccurate. Accordingly, our actual outcomes and results may differ materially from what we have expressed or forecast in any forward-looking statements. Such differences could result from a variety of factors, including:

- Fluctuations in NGL, crude oil, refined petroleum product and natural gas prices and refining, marketing and petrochemical margins.
- Changes in governmental policies relating to NGL, crude oil, natural gas or refined petroleum products pricing, regulation or taxation, including exports.
- Capacity constraints in, or other limitations on, the pipelines, storage and fractionation facilities to which we deliver natural gas or NGL and the availability of alternative markets and arrangements for our natural gas and NGL.
- Actions taken by OPEC and non-OPEC oil producing countries impacting supply and demand and correspondingly, commodity prices.
- The ability to achieve the expected benefits of the integration of DCP LP and any other benefits that may result from the buy-in of DCP’s publicly-held common units, if consummated.
- Unexpected changes in costs or technical requirements for constructing, modifying or operating our facilities or transporting our products.
- Unexpected technological or commercial difficulties in manufacturing, refining or transporting our products, including chemical products.
- Lack of, or disruptions in, adequate and reliable transportation for our NGL, crude oil, natural gas and refined petroleum products.
- The level and success of drilling and quality of production volumes around our midstream assets.
- The inability to timely obtain or maintain permits, including those necessary for capital projects.
- The inability to comply with government regulations or make capital expenditures required to maintain compliance.
- Changes to worldwide government policies relating to renewable fuels, climate change and greenhouse gas emissions that adversely affect programs like the renewable fuel standards program, low carbon fuel standards and tax credits for biofuels.
- General domestic and international economic and political developments including armed hostilities, including the Russia-Ukraine war, expropriation of assets, and other political, economic or diplomatic developments, including those caused by public health issues, outbreaks of diseases and pandemics.
- The impact on commercial activity and demand for refined petroleum products from any widespread public health crisis, as well as the extent and duration of recovery of economies and demand for our products following any such crisis.

- Failure to complete definitive agreements and feasibility studies for, and to complete construction of, announced and future capital projects on time and within budget.
- Potential disruption or interruption of our operations or damage to our facilities due to accidents, weather and climate events, civil unrest, insurrections, political events, terrorism or cyberattacks.
- The inability to meet our sustainability goals, including reducing our GHG emissions intensity, developing and protecting new technologies, and commercializing lower-carbon opportunities.
- Failure of new products and services to achieve market acceptance.
- International monetary conditions and exchange controls.
- Substantial investments required, or reduced demand for products, as a result of existing or future environmental rules and regulations, including GHG emissions reductions and reduced consumer demand for refined petroleum products.
- Liability resulting from litigation or for remedial actions, including removal and reclamation obligations under environmental regulations.
- Changes in tax, environmental and other laws and regulations (including alternative energy mandates) applicable to our business.
- Political and societal concerns about climate change that could result in changes to our business or operations or increase expenditures, including litigation-related expenses.
- Changes in estimates or projections used to assess fair value of intangible assets, goodwill and property and equipment and/or strategic decisions or other developments with respect to our asset portfolio that cause impairment charges.
- Limited access to capital or significantly higher cost of capital related to changes to our credit profile or illiquidity or uncertainty in the domestic or international financial markets.
- The creditworthiness of our customers and the counterparties to our transactions, including the impact of bankruptcies.
- The operation, financing and distribution decisions of our joint ventures that we do not control.
- The factors generally described in “Item 1A. Risk Factors” in this report.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

PHILLIPS 66

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Report of Management

Management prepared, and is responsible for, the consolidated financial statements and the other information appearing in this Annual Report. The consolidated financial statements present fairly the company's financial position, results of operations and cash flows in conformity with generally accepted accounting principles in the United States. In preparing its consolidated financial statements, the company includes amounts that are based on estimates and judgments management believes are reasonable under the circumstances. The company's financial statements have been audited by Ernst & Young LLP, an independent registered public accounting firm appointed by the Audit and Finance Committee of the Board of Directors. Management has made available to Ernst & Young LLP all of the company's financial records and related data, as well as the minutes of stockholders' and directors' meetings.

Assessment of Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting. Phillips 66's internal control system was designed to provide reasonable assurance to the company's management and directors regarding the preparation and fair presentation of published financial statements.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

Management assessed the effectiveness of the company's internal control over financial reporting as of December 31, 2022. In making this assessment, it used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control—Integrated Framework* (2013). Based on this assessment, management concluded the company's internal control over financial reporting was effective as of December 31, 2022.

On August 17, 2022, the company and a co-venturer completed the merger of DCP Midstream, LLC and Gray Oak Holdings, LLC. As a result of the merger and the governance rights delegated to the company over DCP Midstream, LLC's Class A Segment, the company began consolidating the financial results of DCP Midstream, LLC's Class A Segment, DCP Sand Hills Pipeline, LLC and DCP Southern Hills Pipeline, LLC. The company has accounted for the consolidation of these entities as a business combination. Accordingly, the acquired assets and assumed liabilities of these entities are included in our consolidated balance sheet as of December 31, 2022, and the results of operations and cash flows of these entities are reported in our consolidated statements of operations and cash flows from August 18, 2022 through December 31, 2022. As permitted by the Securities and Exchange Commission for acquisitions completed during the reporting year, we have elected to exclude these entities from the company's assessment of internal control over financial reporting as of December 31, 2022. These entities represented approximately 22% of consolidated total assets as of December 31, 2022 and approximately 3% of total revenues and other income for the year ended December 31, 2022.

Ernst & Young LLP has issued an audit report on the company's internal control over financial reporting as of December 31, 2022, and their report is included herein.

/s/ Mark E. Lashier

Mark E. Lashier
President and Chief Executive Officer

/s/ Kevin J. Mitchell

Kevin J. Mitchell
Executive Vice President and
Chief Financial Officer

Date: February 22, 2023

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Phillips 66

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Phillips 66 (the Company) as of December 31, 2022 and 2021, the related consolidated statements of operations, comprehensive income (loss), changes in equity, and cash flows, for each of the three years in the period ended December 31, 2022, and the related notes (collectively referred to as the financial statements). In our opinion, based on our audits and, for 2022, the report of other auditors, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with U.S. generally accepted accounting principles.

We did not audit the 2022 financial statements of DCP Midstream, LP (DCP LP), a consolidated subsidiary, which reflect total assets constituting approximately 18% at December 31, 2022, and total revenues constituting approximately 3% for the year then ended. Those statements were audited by other auditors whose report has been furnished to us, and our opinion, insofar as it relates to the amounts included for DCP LP for 2022, is based solely on the report of the other auditors.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 22, 2023 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits and the report of other auditors provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit and finance committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Consolidation of DCP Midstream

Description of the Matter

As discussed in Note 3 to the consolidated financial statements, the Company and its co-venturer merged DCP Midstream, LLC (DCP Midstream) and Gray Oak Holdings LLC (Gray Oak Holdings) on August 17, 2022, with DCP Midstream as the surviving entity.

The Company determined that each of the two classes of membership interests (the Class A and B Segments) of DCP Midstream should be evaluated for consolidation separately under the variable interest consolidation model. The Company determined it is the primary beneficiary of the Class A Segment due to the governance rights it has as the managing member of that segment, and the initial consolidation was accounted for as a business combination. The Class B Segment is accounted for using the equity method of accounting.

Evaluating the Company's determination that the Class A and B Segments should be evaluated for consolidation separately was complex and required us to use significant judgment when assessing the effect of the contractual rights and obligations of the Company and its co-venturer in DCP Midstream and the Class A and B Segments on such determination.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of the Company's controls over its application of the variable interest consolidation model to DCP Midstream.

To test the Company's application of the variable interest consolidation model, our audit procedures included identifying the relevant contractual rights and obligations of the Company and its co-venturer in DCP Midstream and the Class A and B Segments, making inquiries of management and legal counsel as to the interpretation and operation of such terms, and evaluating their effect on the Company's consolidation conclusions. In particular, significant judgment was required in evaluating the Company's determination that essentially all of the assets, liabilities and equity of the Class A and B Segments are separate from the overall DCP Midstream entity, and that the two segments should be separately evaluated for consolidation. We also have evaluated the Company's disclosures in relation to this matter.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2011.

Houston, Texas
February 22, 2023

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Phillips 66

Opinion on Internal Control over Financial Reporting

We have audited Phillips 66's internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Phillips 66 (the Company), maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on the COSO criteria.

As indicated in the accompanying Report of Management, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of DCP Midstream, LLC's Class A Segment, DCP Sand Hills Pipeline, LLC and DCP Southern Hills Pipeline, LLC, which are included in the 2022 consolidated financial statements of the Company and constituted approximately 22% of total assets as of December 31, 2022 and approximately 3% of total revenues and other income, for the year then ended. Our audit of internal control over financial reporting of the Company also did not include an evaluation of the internal control over financial reporting of DCP Midstream, LLC's Class A Segment, DCP Sand Hills Pipeline, LLC and DCP Southern Hills Pipeline, LLC.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2022 and 2021, the related consolidated statements of operations, comprehensive income (loss), changes in equity and cash flows for each of the three years in the period ended December 31, 2022, and the related notes and our report dated February 22, 2023, expressed an unqualified opinion thereon, based on our audit and the report of the other auditors.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included under the heading "Assessment of Internal Control Over Financial Reporting" in the accompanying "Report of Management." Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP

Houston, Texas
February 22, 2023

Report of Independent Registered Public Accounting Firm

To the Board of Directors of DCP Midstream GP, LLC and the Unitholders of DCP Midstream, LP

Opinion on the Financial Statements

We have audited the consolidated balance sheets of DCP Midstream, LP and subsidiaries (the "Partnership") as of December 31, 2022 and 2021, the related consolidated statements of operations, comprehensive (loss) income, changes in equity, and cash flows, for each of the three years in the period ended December 31, 2022, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Partnership as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America.

We did not audit the financial statements of Gulf Coast Express Pipeline, LLC, the Partnership's investment which is accounted for by use of the equity method. The consolidated financial statements of the Partnership include its equity investment in Gulf Coast Express Pipeline, LLC of \$408 million and \$422 million as of December 31, 2022 and 2021, and its equity earnings in Gulf Coast Express Pipeline, LLC of \$67 million, \$63 million, and \$66 million for the years ended December 31, 2022, 2021, and 2020, respectively. Those statements were audited by other auditors whose report has been furnished to us, and our opinion, insofar as it relates to the amounts included for Gulf Coast Express Pipeline, LLC is based solely on the report of the other auditors.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Partnership's internal control over financial reporting as of December 31, 2022, based on the criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 17, 2023, expressed an unqualified opinion on the Partnership's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Partnership's management. Our responsibility is to express an opinion on the Partnership's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Partnership in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits and the report of the other auditors provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Property, Plant and Equipment, Net - Determination of Impairment Indicators— Refer to Notes 2, 10 and 13 to the financial statements

Critical Audit Matter Description

The Partnership periodically evaluates whether the carrying value of long-lived assets has been impaired when circumstances indicate the carrying value of long-lived assets may not be recoverable. Management considers various factors when determining if long-lived assets should be evaluated for impairment including a significant adverse change in the business climate, a current period operating or cash flow loss combined with a history of losses, a significant adverse change in the extent or manner in which an asset is used, or a current expectation that the asset will be sold or otherwise disposed of before the end of its useful life.

The Partnership's determination of whether impairment indicators exist for long-lived assets requires management to apply significant judgment. When events or circumstances exist that indicate the carrying value of long-lived assets may not be recoverable, the Partnership evaluates its long-lived assets for impairment by comparing the carrying amount of the applicable asset group to the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset ("recoverability analysis"). If management determines the carrying value is not recoverable, the impairment loss is measured as the excess of the asset's carrying value over its fair value. The property, plant and equipment, net balance was \$7,763 million as of December 31, 2022.

We identified the identification of impairment indicators for property, plant and equipment and the associated recoverability analysis as a critical audit matter because of the significant assumptions management makes when determining whether events or changes in circumstances have occurred indicating that the carrying amounts of property, plant and equipment may not be recoverable as well as the significant judgements and assumptions made in the undiscounted cash flow analysis used to evaluate recoverability.

This required a high degree of auditor judgment, including an increased extent of effort related to evaluating indicators of impairment and auditing whether management appropriately identified impairment indicators and assessed recoverability.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the identification of impairment indicators and recoverability analysis for long-lived assets included the following, among others:

- We tested the effectiveness of internal controls over financial reporting related to management's identification of possible impairment indicators for long-lived assets that may indicate the carrying amount of long-lived assets may not be recoverable.
- We tested the effectiveness of controls over estimates of future volumes of raw natural gas, or other applicable throughput.

- We evaluated management's analysis of impairment indicators by:
 - Assessing whether long-lived assets having indicators of impairment were appropriately identified
 - Considering industry and analysts reports and the impact of macroeconomic factors, such as adverse changes in the regulatory environment, legislation or other factors that may represent impairment indicators not previously contemplated in management's analysis
 - Evaluating management's judgments around historical trends, macroeconomic and industry conditions, and whether projections are consistent with the Partnership's operating strategy
 - Evaluating management's forecasts by comparing such forecasts to: information included in the Partnership's public disclosures, recent results of operations, trends in operational data for asset groups such as measures of profitability over recent years and quarters
 - Inquiry of management over whether long-lived assets may be sold or otherwise disposed of significantly before the end of the assets' previously estimated useful life
 - Inspecting minutes of the board of directors and committees of executive management to understand if there were factors that would represent potential impairment indicators for long-lived assets
- For asset groups for which a recoverability analysis was performed, we evaluated management's estimates of future volumes by:
 - Comparing recent actual results to management's historical forecasts
 - Evaluating the reasonableness of volumetric assumptions by comparing forecasts to permits and rig count data
 - Researching industry trends
 - Performing a sensitivity analysis to evaluate the change in undiscounted cash flows that would result from changes in underlying volumetric assumptions
 - Comparing historical results to management's future assumptions

/s/ Deloitte & Touche LLP

Denver, Colorado
February 17, 2023

We have served as the Partnership's auditor since 2004.

Consolidated Statement of Operations

Phillips 66

Years Ended December 31	Millions of Dollars		
	2022	2021	2020
Revenues and Other Income			
Sales and other operating revenues	\$ 169,990	111,476	64,129
Equity in earnings of affiliates	2,968	2,904	1,191
Net gain on dispositions	7	18	108
Other income	2,737	454	66
Total Revenues and Other Income	175,702	114,852	65,494
Costs and Expenses			
Purchased crude oil and products	149,932	102,102	57,707
Operating expenses	6,111	5,147	4,563
Selling, general and administrative expenses	2,168	1,744	1,544
Depreciation and amortization	1,629	1,605	1,395
Impairments	60	1,498	4,252
Taxes other than income taxes	530	410	464
Accretion on discounted liabilities	23	24	22
Interest and debt expense	619	581	499
Foreign currency transaction (gains) losses	(9)	1	12
Total Costs and Expenses	161,063	113,112	70,458
Income (loss) before income taxes	14,639	1,740	(4,964)
Income tax expense (benefit)	3,248	146	(1,250)
Net Income (Loss)	11,391	1,594	(3,714)
Less: net income attributable to noncontrolling interests	367	277	261
Net Income (Loss) Attributable to Phillips 66	\$ 11,024	1,317	(3,975)
Net Income (Loss) Attributable to Phillips 66 Per Share of Common Stock (dollars)			
Basic	\$ 23.36	2.97	(9.06)
Diluted	23.27	2.97	(9.06)
Weighted-Average Common Shares Outstanding (thousands)			
Basic	471,497	440,028	439,530
Diluted	473,731	440,364	439,530

See Notes to Consolidated Financial Statements.

Consolidated Statement of Comprehensive Income (Loss)

Phillips 66

Years Ended December 31	Millions of Dollars		
	2022	2021	2020
Net Income (Loss)	\$ 11,391	1,594	(3,714)
Other comprehensive income (loss)			
Defined benefit plans			
Net actuarial gain (loss) arising during the period	191	320	(261)
Amortization of net actuarial loss, prior service credit and settlements	90	122	144
Plans sponsored by equity affiliates	80	96	(77)
Income taxes on defined benefit plans	(85)	(127)	41
Defined benefit plans, net of income taxes	276	411	(153)
Foreign currency translation adjustments	(295)	(74)	156
Income taxes on foreign currency translation adjustments	4	4	(5)
Foreign currency translation adjustments, net of income taxes	(291)	(70)	151
Cash flow hedges	—	3	(5)
Income taxes on hedging activities	—	—	1
Hedging activities, net of income taxes	—	3	(4)
Other Comprehensive Income (Loss), Net of Income Taxes	(15)	344	(6)
Comprehensive Income (Loss)	11,376	1,938	(3,720)
Less: comprehensive income attributable to noncontrolling interests	367	277	261
Comprehensive Income (Loss) Attributable to Phillips 66	\$ 11,009	1,661	(3,981)

See Notes to Consolidated Financial Statements.

Consolidated Balance Sheet

Phillips 66

At December 31	Millions of Dollars	
	2022	2021
Assets		
Cash and cash equivalents	\$ 6,133	3,147
Accounts and notes receivable (net of allowances of \$67 million in 2022 and \$44 million in 2021)	9,497	6,138
Accounts and notes receivable—related parties	1,488	1,332
Inventories	3,276	3,394
Prepaid expenses and other current assets	1,528	686
Total Current Assets	21,922	14,697
Investments and long-term receivables	14,950	14,471
Net properties, plants and equipment	35,163	22,435
Goodwill	1,486	1,484
Intangibles	831	813
Other assets	2,090	1,694
Total Assets	\$ 76,442	55,594
Liabilities		
Accounts payable	\$ 10,748	7,629
Accounts payable—related parties	575	832
Short-term debt	529	1,489
Accrued income and other taxes	1,397	1,254
Employee benefit obligations	764	638
Other accruals	1,876	959
Total Current Liabilities	15,889	12,801
Long-term debt	16,661	12,959
Asset retirement obligations and accrued environmental costs	879	727
Deferred income taxes	6,671	5,475
Employee benefit obligations	937	1,055
Other liabilities and deferred credits	1,299	940
Total Liabilities	42,336	33,957
Equity		
Common stock (2,500,000,000 shares authorized at \$0.01 par value)		
Issued (2022—652,373,645 shares; 2021—650,026,318 shares)		
Par value	7	7
Capital in excess of par	19,791	20,504
Treasury stock (at cost: 2022—186,529,667 shares; 2021—211,771,827 shares)	(15,276)	(17,116)
Retained earnings	25,432	16,216
Accumulated other comprehensive loss	(460)	(445)
Total Stockholders' Equity	29,494	19,166
Noncontrolling interests	4,612	2,471
Total Equity	34,106	21,637
Total Liabilities and Equity	\$ 76,442	55,594

See Notes to Consolidated Financial Statements.

Consolidated Statement of Cash Flows

Phillips 66

Years Ended December 31	Millions of Dollars		
	2022	2021	2020
Cash Flows From Operating Activities			
Net income (loss)	\$ 11,391	1,594	(3,714)
Adjustments to reconcile net income (loss) to net cash provided by operating activities			
Depreciation and amortization	1,629	1,605	1,395
Impairments	60	1,498	4,252
Accretion on discounted liabilities	23	24	22
Deferred income taxes	1,320	(272)	126
Undistributed equity earnings	(1,308)	(128)	334
Net gain on dispositions	(7)	(7)	(108)
Gain related to merger of businesses	(3,013)	—	—
Unrealized investment (gain) loss	433	(365)	—
Other	217	(51)	130
Working capital adjustments			
Accounts and notes receivable	(2,073)	(922)	2,023
Inventories	74	511	(71)
Prepaid expenses and other current assets	(249)	(339)	92
Accounts payable	1,736	2,925	(2,887)
Taxes and other accruals	580	(56)	517
Net Cash Provided by Operating Activities	10,813	6,017	2,111
Cash Flows From Investing Activities			
Capital expenditures and investments	(2,194)	(1,860)	(2,920)
Return of investments in equity affiliates	125	267	192
Proceeds from asset dispositions	4	27	51
Advances/loans—related parties	(75)	(310)	(316)
Collection of advances/loans—related parties	662	2	44
Other	(10)	2	(130)
Net Cash Used in Investing Activities	(1,488)	(1,872)	(3,079)
Cash Flows From Financing Activities			
Issuance of debt	453	1,443	5,178
Repayment of debt	(2,883)	(2,954)	(1,051)
Issuance of common stock	103	26	8
Repurchase of common stock	(1,513)	—	(443)
Dividends paid on common stock	(1,793)	(1,585)	(1,575)
Distributions to noncontrolling interests	(185)	(324)	(289)
Repurchase of noncontrolling interests	(500)	(24)	—
Net proceeds from issuance of Phillips 66 Partners LP common and preferred units	—	—	2
Other	(70)	(52)	(39)
Net Cash Provided by (Used in) Financing Activities	(6,388)	(3,470)	1,791
Effect of Exchange Rate Changes on Cash and Cash Equivalents	49	(42)	77
Net Change in Cash and Cash Equivalents	2,986	633	900
Cash and cash equivalents at beginning of year	3,147	2,514	1,614
Cash and Cash Equivalents at End of Year	\$ 6,133	3,147	2,514

See Notes to Consolidated Financial Statements.

Consolidated Statement of Changes in Equity

Phillips 66

Millions of Dollars							
Attributable to Phillips 66							
	Common Stock			Retained Earnings	Accum. Other Comprehensive Loss	Noncontrolling Interests	Total
	Par Value	Capital in Excess of Par	Treasury Stock				
December 31, 2019	\$ 6	20,301	(16,673)	22,064	(788)	2,259	27,169
Net income (loss)	—	—	—	(3,975)	—	261	(3,714)
Other comprehensive loss	—	—	—	—	(6)	—	(6)
Dividends paid on common stock	—	—	—	(1,575)	—	—	(1,575)
Repurchase of common stock	—	—	(443)	—	—	—	(443)
Benefit plan activity	—	80	—	(12)	—	—	68
Transfer of equity interest	—	2	—	—	—	305	307
Net distributions to noncontrolling interests	—	—	—	—	—	(285)	(285)
Other	—	—	—	(2)	5	(1)	2
December 31, 2020	6	20,383	(17,116)	16,500	(789)	2,539	21,523
Net income	—	—	—	1,317	—	277	1,594
Other comprehensive income	—	—	—	—	344	—	344
Dividends paid on common stock	—	—	—	(1,585)	—	—	(1,585)
Benefit plan activity	1	121	—	(14)	—	—	108
Distributions to noncontrolling interests	—	—	—	—	—	(324)	(324)
Repurchase of noncontrolling interests	—	—	—	(2)	—	(21)	(23)
December 31, 2021	7	20,504	(17,116)	16,216	(445)	2,471	21,637
Net income	—	—	—	11,024	—	367	11,391
Other comprehensive loss	—	—	—	—	(15)	—	(15)
Dividends paid on common stock	—	—	—	(1,793)	—	—	(1,793)
Repurchase of common stock	—	—	(1,540)	—	—	—	(1,540)
Benefit plan activity	—	188	—	(15)	—	—	173
Distributions to noncontrolling interests	—	—	—	—	—	(185)	(185)
Acquisition of noncontrolling interest in Phillips 66 Partners LP	—	(901)	3,380	—	—	(2,163)	316
Merger of DCP Midstream, LLC and Gray Oak Holdings LLC	—	—	—	—	—	4,622	4,622
Acquisition of noncontrolling interest in DCP Midstream, LP	—	—	—	—	—	(500)	(500)
December 31, 2022	\$ 7	19,791	(15,276)	25,432	(460)	4,612	34,106

	Shares	
	Common Stock Issued	Treasury Stock
December 31, 2019	647,416,633	206,390,806
Repurchase of common stock	—	5,381,021
Shares issued—share-based compensation	1,226,590	—
December 31, 2020	648,643,223	211,771,827
Shares issued—share-based compensation	1,383,095	—
December 31, 2021	650,026,318	211,771,827
Repurchase of common stock	—	16,583,076
Shares issued—share-based compensation	2,347,327	—
Shares issued—acquisition of noncontrolling interest in Phillips 66 Partners LP	—	(41,825,236)
December 31, 2022	652,373,645	186,529,667

Years Ended December 31	Dollars	
	Dividends Paid Per Share of Common Stock	
2020	\$	3.60
2021		3.62
2022		3.83

See Notes to Consolidated Financial Statements.

Note 1—Summary of Significant Accounting Policies

Consolidation Principles and Investments

Our consolidated financial statements include the accounts of majority-owned, controlled subsidiaries and variable interest entities (VIEs) where we are the primary beneficiary. Undivided interests in pipelines, natural gas plants and terminals are consolidated on a proportionate basis. See Note 29—DCP Midstream Class A Segment for further discussion about a significant VIE that we began consolidating in August 2022, and Note 30—Phillips 66 Partners LP, for further discussion regarding our merger with Phillips 66 Partners LP (Phillips 66 Partners).

The equity method is used to account for investments in affiliates in which we have the ability to exert significant influence over the affiliates' operating and financial policies, including VIEs, of which we are not the primary beneficiary. Other securities and investments are generally carried at fair value, or cost less impairments, if any, adjusted up or down for price changes in similar financial instruments issued by the investee, when and if observed. See Note 8—Investments, Loans and Long-Term Receivables, for further discussion on our significant unconsolidated VIEs.

Recasted Financial Information

Certain prior period financial information has been recasted to reflect the current year's presentation.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles in the United States (GAAP) requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, and the disclosure of contingent assets and liabilities. Actual results could differ from these estimates.

Foreign Currency

Adjustments resulting from the process of translating financial statements with foreign functional currencies into U.S. dollars are included in accumulated other comprehensive income (loss) in stockholders' equity. Foreign currency transaction gains and losses result from remeasuring monetary assets and liabilities denominated in a foreign currency into the functional currency of our subsidiary holding the asset or liability. We include these transaction gains and losses in current earnings (loss). Most of our foreign operations use their local currency as the functional currency.

Cash Equivalents

Cash equivalents are highly liquid, short-term investments that are readily convertible to known amounts of cash and will mature within 90 days or less from the date of acquisition. We carry these investments at cost plus accrued interest.

Inventories

We have several valuation methods for our various types of inventories and consistently use the following methods for each type of inventory. Crude oil and petroleum products inventories are valued at the lower of cost or market in the aggregate, primarily on the last-in, first-out (LIFO) basis. Any necessary lower-of-cost-or-market write-downs at year end are recorded as permanent adjustments to the LIFO cost basis. LIFO is used to better match current inventory costs with current revenues and to meet tax-conformity requirements. Costs include both direct and indirect expenditures incurred in bringing an item or product to its existing condition and location. Materials and supplies inventories are valued using the weighted-average-cost method.

Fair Value Measurements

We categorize assets and liabilities measured at fair value into one of three different levels depending on the observability of the inputs employed in the measurement. Level 1 inputs are quoted prices in active markets for identical assets or liabilities. Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly, through market-corroborated inputs. Level 3 inputs are unobservable inputs for the asset or liability that are used to measure fair value to the extent that relevant observable inputs are not available, and that reflect the assumptions we believe market participants would use when pricing an asset or liability for which there is little, if any, market activity at the measurement date.

Derivative Instruments

Derivative instruments are recorded on the balance sheet at fair value. We have master netting agreements with most of our exchange-cleared instrument counterparties and certain of our counterparties to other commodity instrument contracts (e.g., physical commodity forward contracts). We have elected to net derivative assets and liabilities with the same counterparty on the balance sheet if the legal right of offset exists and certain other criteria are met. When applicable, we also net collateral payables and receivables against derivative assets and derivative liabilities, respectively.

Recognition and classification of the gain or loss that results from recording and adjusting a derivative to fair value depends on the purpose for issuing or holding the derivative. All realized and unrealized gains and losses from derivative instruments for which we do not apply hedge accounting are immediately recognized in our consolidated statement of operations. Unrealized gains or losses from derivative instruments that qualify for and are designated as cash flow hedges are recognized in other comprehensive income (loss) and appear on the balance sheet in accumulated other comprehensive income (loss) until the hedged transactions are recognized in earnings. However, to the extent the change in the fair value of a derivative instrument exceeds the change in the anticipated cash flows of the hedged transaction, the excess gain or loss is recognized immediately in earnings.

Loans and Long-Term Receivables

We enter into agreements with other parties to pursue business opportunities, which may require us to provide loans or advances to certain affiliated and nonaffiliated companies. Loans are recorded when cash is transferred or seller financing is provided to the affiliated or nonaffiliated company pursuant to a loan agreement. The loan balance will increase as interest is earned on the outstanding loan balance and will decrease as interest and principal payments are received. Interest is earned at the loan agreement's stated interest rate. Loans and long-term receivables are evaluated for impairment based on an expected credit loss assessment.

Impairment of Investments in Nonconsolidated Entities

Investments in nonconsolidated entities accounted for under the equity method are assessed for impairment whenever changes in the facts and circumstances indicate a loss in value has occurred. When indicators exist, the fair value is estimated and compared to the investment carrying value. If any impairment is judgmentally determined to be other than temporary, the carrying value of the investment is written down to fair value. The fair value of the impaired investment is determined based on quoted market prices, if available, or upon the present value of expected future cash flows using discount rates and other assumptions believed to be consistent with those used by principal market participants and observed market earnings multiples of comparable companies.

Depreciation and Amortization

Depreciation and amortization of properties, plants and equipment (PP&E) are determined by either the individual-unit-straight-line method or the group-straight-line method (for those individual units that are highly integrated with other units).

Capitalized Interest

A portion of interest from external borrowings is capitalized on major projects with an expected construction period of one year or longer. Capitalized interest is added to the cost of the related asset, and is amortized over the useful life of the related asset.

Impairment of Properties, Plants and Equipment

PP&E used in operations are assessed for impairment whenever changes in facts and circumstances indicate a possible significant deterioration in the future cash flows expected to be generated by an asset group. If indicators of potential impairment exist, an undiscounted cash flow test is performed. If the sum of the undiscounted expected future before-tax cash flows of an asset group is less than the carrying value of the asset group, including applicable liabilities, the carrying value of the PP&E included in the asset group is written down to estimated fair value and the write down is reported in the “Impairments” line item on our consolidated statement of operations in the period in which the impairment determination is made. Individual assets are grouped for impairment purposes at the lowest level for which identifiable cash flows are available. Because there is usually a lack of quoted market prices for long-lived assets, the fair value of impaired assets is typically determined using one or more of the following methods: the present values of expected future cash flows using discount rates and other assumptions believed to be consistent with those used by principal market participants; a market multiple of earnings for similar assets; historical market transactions including similar assets, adjusted using principal market participant assumptions when necessary; or replacement cost adjusted for physical deterioration and economic obsolescence. Long-lived assets held for sale are accounted for at the lower of amortized cost or fair value, less cost to sell, with fair value determined using a binding negotiated price, if available, estimated replacement cost, or present value of expected future cash flows as previously described.

The expected future cash flows used for impairment reviews and related fair value calculations are based on estimated future volumes, prices, costs, margins and capital project decisions, considering all available evidence at the date of review.

Property Dispositions

When complete units of depreciable property are sold, the asset cost and related accumulated depreciation are eliminated, with any gain or loss reflected in the “Net gain on dispositions” line item on our consolidated statement of operations. When less than complete units of depreciable property are disposed of or retired, the difference between asset cost and salvage value is charged or credited to accumulated depreciation.

Goodwill

Goodwill represents the excess of the purchase price over the estimated fair value of the net assets acquired in a business combination. Goodwill is not amortized, but is assessed for impairment annually and when events or changes in circumstance indicate that the fair value of a reporting unit with goodwill is below its carrying value. The impairment assessment requires allocating goodwill and other assets and liabilities to reporting units. The fair value of each reporting unit is determined and compared to the book value of the reporting unit. If the fair value of the reporting unit is less than the book value, an impairment is recognized for the amount by which the book value exceeds the reporting unit’s fair value. A goodwill impairment cannot exceed the total amount of goodwill allocated to that reporting unit. For purposes of assessing goodwill for impairment, we have two reporting units with goodwill balances at our 2022 testing date: Transportation and Marketing and Specialties (M&S).

Intangible Assets Other Than Goodwill

Intangible assets with finite useful lives are amortized using the straight-line method over their useful lives. Intangible assets with indefinite useful lives are not amortized, but are tested at least annually for impairment. Each reporting period, we evaluate intangible assets with indefinite useful lives to determine whether events and circumstances continue to support this classification. Indefinite-lived intangible assets are considered impaired if their fair value is lower than their net book value. The fair value of intangible assets is determined based on quoted market prices in active markets, if available. If quoted market prices are not available, the fair value of intangible assets is determined based upon the present values of expected future cash flows using discount rates and other assumptions believed to be consistent with those used by principal market participants, or upon estimated replacement cost, if expected future cash flows from the intangible asset are not determinable.

Asset Retirement Obligations

When we have a legal obligation to incur costs to retire an asset, we record a liability in the period in which the obligation was incurred provided that a reasonable estimate of fair value can be made. If a reasonable estimate of fair value cannot be made at the time the obligation arises, we record the liability when sufficient information is available to estimate its fair value. When a liability is initially recorded, we capitalize the costs by increasing the carrying amount of the related PP&E. Over time, the liability is increased for changes in present value, and the capitalized costs in PP&E are depreciated over the useful life of the related assets. If our estimate of the liability changes after initial recognition, we record an adjustment to the liability and PP&E.

Our practice is to keep our refining and other processing assets in good operating condition through routine repair and maintenance of component parts in the ordinary course of business and by continuing to make improvements based on technological advances. As a result, we believe that generally these assets have no expected retirement dates for purposes of estimating asset retirement obligations since the dates or ranges of dates upon which we would retire these assets cannot be reasonably estimated at this time. We will recognize liabilities for these obligations in the period when sufficient information becomes available to estimate a date or range of potential retirement dates.

Environmental Costs

Environmental expenditures are expensed or capitalized, depending upon their future economic benefit. Expenditures relating to an existing condition caused by past operations, and those having no future economic benefit, are expensed. When environmental assessments or cleanups are probable and the costs can be reasonably estimated, environmental expenditures are accrued on an undiscounted basis (unless acquired in a business combination). Recoveries of environmental remediation costs from other parties, such as state reimbursement funds, are recorded as a reduction to environmental expenditures.

Guarantees

The fair value of a guarantee is determined and recorded as a liability at the time the guarantee is given. The initial liability is subsequently reduced as we are released from exposure under the guarantee. We amortize the guarantee liability over the relevant time period, if one exists, based on the facts and circumstances surrounding each type of guarantee. We amortize the guarantee liability to the related statement of operations line item based on the nature of the guarantee. In cases where the guarantee term is indefinite, we reverse the liability when we have information to support the reversal. When the performance on the guarantee becomes probable and the liability can be reasonably estimated, we accrue a separate liability for the excess amount above the guarantee's book value based on the facts and circumstances at that time. We reverse the fair value liability only when there is no further exposure under the guarantee.

Treasury Stock

We record treasury stock purchases at cost, which includes incremental direct transaction costs. Amounts are recorded as reductions of stockholders' equity on the consolidated balance sheet. Common stock reissued from treasury stock is valued based on the average cost of historical repurchases.

Revenue Recognition

Our revenues are primarily associated with sales of refined petroleum products, crude oil, natural gas liquids (NGL) and natural gas. Each gallon, or other unit of measure of product, is separately identifiable and represents a distinct performance obligation to which a transaction price is allocated. The transaction prices of our contracts with customers are either fixed or variable, with variable pricing based upon various market indices. For our contracts that include variable consideration, we utilize the variable consideration allocation exception, whereby the variable consideration is only allocated to the performance obligations that are satisfied during the period. The related revenue is recognized at a point in time when control passes to the customer, which is when title and the risk of ownership passes to the customer and physical delivery of goods occurs, either immediately or within a fixed delivery schedule that is reasonable and customary in the industry. The payment terms with our customers vary based on the product or service provided, but usually are 30 days or less.

Revenues associated with pipeline transportation services are recognized at a point in time when the volumes are delivered based on contractual rates. Revenues associated with terminaling and storage services are recognized over time as the services are performed based on throughput volume or capacity utilization at contractual rates.

Revenues associated with transactions commonly called buy/sell contracts, in which the purchase and sale of inventory with the same counterparty are entered into in contemplation of one another, are combined and reported in the “Purchased crude oil and products” line item on our consolidated statement of operations (i.e., these transactions are recorded net).

Taxes Collected from Customers and Remitted to Governmental Authorities

Excise taxes on sales of refined petroleum products charged to our customers are presented net of taxes on sales of refined petroleum products payable to governmental authorities in the “Taxes other than income taxes” line item on our consolidated statement of operations. Other sales and value-added taxes are recorded net in the “Taxes other than income taxes” line item on our consolidated statement of operations.

Shipping and Handling Costs

We have elected to account for shipping and handling costs as fulfillment activities and include these activities in the “Purchased crude oil and products” line item on our consolidated statement of operations. Freight costs billed to customers are recorded in “Sales and other operating revenues.”

Maintenance and Repairs

Costs of maintenance and repairs, which are not significant improvements, are expensed when incurred. Major refinery maintenance turnarounds are expensed as incurred.

Share-Based Compensation

We recognize share-based compensation expense over the shorter of: (1) the service period (i.e., the stated period of time required to earn the award); or (2) the period beginning at the start of the service period and ending when an employee first becomes eligible for retirement, but not less than six months as this is the minimum period of time required for an award not to be subject to forfeiture. Our equity-classified programs generally provide accelerated vesting (i.e., a waiver of the remaining period of service required to earn an award) for awards held by employees at the time they become eligible for retirement (at age 55 with 5 years of service). We have elected to recognize expense on a straight-line basis over the service period for the entire award, irrespective of whether the award was granted with ratable or cliff vesting, and have elected to recognize forfeitures of awards when they occur.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income (loss) in the period that includes the enactment date. Income tax effects are released from accumulated other comprehensive loss to retained earnings, when applicable, on an individual item basis as those items are reclassified into income. Interest related to unrecognized income tax benefits is reflected in the “Interest and debt expense” line item, and penalties in the “Operating expenses” or “Selling, general and administrative expenses” line items on our consolidated statement of operations.

Note 2—Changes in Accounting Principles

Effective January 1, 2022, we early adopted ASU 2021-08, “Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers.” This pronouncement requires application of ASC 606 “Revenue from Contracts with Customers” (“Topic 606”) to recognize and measure contract assets and contract liabilities from contracts with customers acquired in a business combination. The adoption of this pronouncement did not have a material impact on our consolidated financial statements.

Effective October 1, 2021, we adopted ASU No. 2020-04, “Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting” and ASU 2021-01, “Reference Rate Reform (Topic 848): Scope.” These pronouncements provide temporary optional expedients and exceptions to the current guidance on contracts, hedge relationships, and other transactions that reference the London Interbank Offered Rate (LIBOR) or another reference rate expected to be discontinued because of reference rate reform. Amendments in ASU 2021-01 further clarify that certain optional expedients and exceptions in Topic 848 for contract modifications and hedge accounting apply to derivatives that are affected by the discounting transition. These pronouncements were effective upon issuance and applicable to contract modifications through December 31, 2022. On December 21, 2022, the FASB issued ASU 2022-06, “Reference Rate Reform (Topic 848): Deferral of the Sunset Date of Topic 848.” The ASU defers the sunset date of Topic 848 from December 31, 2022, to December 31, 2024, after which entities will no longer be permitted to apply the relief in Topic 848. This pronouncement was also effective upon issuance. The adoption of these pronouncements did not impact our consolidated financial statements.

Note 3—DCP Midstream, LLC and Gray Oak Holdings LLC Merger

On August 17, 2022, we and our co-venturer, Enbridge Inc. (Enbridge), agreed to merge DCP Midstream, LLC (DCP Midstream) and Gray Oak Holdings LLC (Gray Oak Holdings), with DCP Midstream as the surviving entity.

Prior to the merger, we and Enbridge each held a 50% interest and jointly governed DCP Midstream, whose primary assets are its general partner and limited partner interests in DCP Midstream, LP (DCP LP), and we each held indirect economic interests in DCP LP of 28.26%. DCP LP is a VIE because its limited partners do not have the ability to remove its general partner with a simple majority vote, nor do its limited partners have substantive participating rights in the significant decisions made in the ordinary course of business. DCP Midstream ultimately consolidates DCP LP because one of its wholly owned subsidiaries is the primary beneficiary of DCP LP.

We and Enbridge also held 65% and 35% interests, respectively, in Gray Oak Holdings, whose primary asset was a 65% noncontrolling interest in Gray Oak Pipeline, LLC (Gray Oak Pipeline). Our and Enbridge's indirect economic interests in Gray Oak Pipeline were 42.25% and 22.75%, respectively. We had voting control over and consolidated Gray Oak Holdings and reported Gray Oak Holdings' 65% interest in Gray Oak Pipeline as an equity investment and Enbridge's interest in Gray Oak Holdings as a noncontrolling interest.

In connection with the merger, we and Enbridge entered into a Third Amended and Restated Limited Liability Company Agreement of DCP Midstream (Amended and Restated LLC Agreement), which realigned the members' economic interests and governance responsibilities. Under the Amended and Restated LLC Agreement, two classes of membership interests in DCP Midstream were created, Class A and Class B, that are intended to track the assets, liabilities, revenues and expenses of the following operating segments of DCP Midstream:

- Class A Segment comprised of the businesses, activities, assets and liabilities of DCP LP and its subsidiaries and its general partner entities (DCP Midstream Class A Segment).
- Class B Segment comprised of the business, activities, assets and liabilities of Gray Oak Pipeline (DCP Midstream Class B Segment).

We hold a 76.64% Class A membership interest, which represents an indirect economic interest in DCP LP of 43.31%, and a 10% Class B membership interest, which represents an indirect economic interest in Gray Oak Pipeline of 6.5%. Enbridge holds the remaining Class A and Class B membership interests. We have been designated as the managing member of DCP Midstream Class A Segment and are responsible for conducting, directing and managing all activities associated with this segment, except as limited in certain instances. Enbridge has been designated as the managing member of DCP Midstream Class B Segment. Earnings and distributions from each segment are allocated to the members based on their membership interest in each membership class, except as otherwise provided.

DCP Midstream Class A Segment and DCP Midstream Class B Segment were determined to be silos under the variable interest consolidation model. As a result, DCP Midstream was also determined to be a VIE. We determined that we are the primary beneficiary of DCP Midstream Class A Segment because of the governance rights granted to us under the Amended and Restated LLC Agreement as managing member of the segment.

We hold a 33.33% direct ownership interest in DCP Sand Hills Pipeline, LLC (DCP Sand Hills) and DCP Southern Hills Pipeline, LLC (DCP Southern Hills). DCP LP holds the remaining 66.67% ownership interest in these entities. As a result of the governance rights granted to us over DCP Midstream Class A Segment and the governance rights we hold through our direct ownership interests, we obtained controlling financial interests in these entities in connection with the merger. As a result, our aggregate direct and indirect economic interests in DCP Sand Hills and DCP Southern Hills increased to 62.21% from 52.17%.

Starting on August 18, 2022, we began consolidating the financial results of DCP Midstream Class A Segment, DCP Sand Hills and DCP Southern Hills. We also began reporting the direct and indirect economic interests held by Enbridge, DCP LP's public common unitholders and DCP LP's preferred unitholders as noncontrolling interests on our financial statements.

We continue to account for our remaining indirect economic interest in Gray Oak Pipeline, now held through DCP Midstream Class B Segment, using the equity method of accounting. As a result of the merger, we derecognized Enbridge's noncontrolling interest in Gray Oak Holdings.

We accounted for our consolidation of DCP Midstream Class A Segment, DCP Sand Hills and DCP Southern Hills as a business combination using the acquisition method of accounting. See Note 4—Business Combination, for additional information on our accounting for this transaction. See Note 29—DCP Midstream Class A Segment, for additional information regarding our variable interest in DCP Midstream Class A Segment and the definitive agreement we executed on January 5, 2023, to acquire an incremental interest in DCP LP.

Note 4—Business Combination

On August 17, 2022, we realigned our economic interest in, and governance rights over, DCP Midstream and Gray Oak Holdings through the merger of these existing entities with DCP Midstream as the surviving entity. As part of the merger, we transferred a 35.75% indirect economic interest in Gray Oak Pipeline and contributed \$404 million of cash to DCP Midstream, which was then paid to Enbridge, in return for a 15.05% incremental indirect economic ownership interest in DCP LP. As noted above, the additional governance rights we were granted as part of this transaction resulted in us consolidating the Class A Segment of DCP Midstream, as well as DCP Sand Hills and DCP Southern Hills. Given the nature of this transaction, we have accounted for the consolidation of these entities using the acquisition method of accounting. See Note 3—DCP Midstream, LLC and Gray Oak Holdings LLC Merger, for additional information on the merger and our consolidation of DCP Midstream Class A Segment, DCP Sand Hills and DCP Southern Hills.

The components of the fair value of the merger consideration are:

	Millions of Dollars	
Cash contributed	\$	404
Fair value of transferred equity interest		634
Fair value of previously held equity interests		3,853
Total merger consideration	\$	4,891

The aggregate purchase consideration noted above was allocated to the assets acquired and liabilities assumed of the entities consolidated based upon a preliminary estimate of their fair values as of the August 17, 2022, merger date. Due to the level of effort required to develop fair value measurements, the valuation information necessary to determine the fair values of assets acquired and liabilities assumed is preliminary, including the underlying cash flows, appraisals and other information used to estimate the fair values of the net assets acquired and noncontrolling interests in those net assets. We continue to evaluate the factors used in establishing the fair values of assets and liabilities as of the acquisition date, including, but not limited to, those factors that could affect the estimated fair values of PP&E, investments in unconsolidated affiliates accounted for under the equity method, identifiable intangible assets, leases, financial instruments, asset retirement and environmental obligations, legal contingencies, debt and noncontrolling interests. We will complete a final determination of the fair values of assets acquired and liabilities assumed within the one-year measurement period from the date of the merger. Any adjustments made in subsequent periods could be material to the preliminary values. Adjustments made in the fourth quarter of 2022 were immaterial.

The following table summarizes, based on our preliminary purchase price allocation described above, the fair values of the assets acquired and liabilities assumed of DCP Midstream Class A Segment, DCP Sand Hills and DCP Southern Hills as of August 17, 2022:

	Millions of Dollars
Fair value of assets acquired:	
Cash and cash equivalents	\$ 98
Accounts and notes receivable	1,003
Inventories	74
Prepaid expenses and other current assets	439
Investments and long-term receivables	2,198
Properties, plants and equipment	12,838
Intangibles	36
Other assets	343
Total assets acquired	17,029
Fair value of liabilities assumed:	
Accounts payable	912
Short-term debt	623
Accrued income and other taxes	96
Employee benefit obligation—current	50
Other accruals	497
Long-term debt	4,553
Asset retirement obligations and accrued environmental costs	168
Deferred income taxes	59
Employee benefit obligations	54
Other liabilities and deferred credits	227
Total liabilities assumed	7,239
Fair value of net assets	9,790
Less: Fair value of noncontrolling interests	4,899
Total merger consideration	\$ 4,891

As of August 17, 2022, the preliminary fair value of our previously held equity investments in DCP Midstream, DCP Sand Hills, and DCP Southern Hills totaled \$3,853 million, and the preliminary fair value of the equity interest in Gray Oak Pipeline we transferred to our co-venturer was \$634 million. In connection with the merger, we recognized gains totaling \$2,831 million from remeasuring our previously held equity investments to their fair values and a gain of \$182 million related to the transfer of a 35.75% indirect economic interest in Gray Oak Pipeline to our co-venturer. These gains are included in the “Other income” line item in our consolidated statement of operations for the year ended December 31, 2022, and are reported in the Midstream segment. See Note 18—Fair Value Measurements, for additional information on the determination of the fair value of DCP Midstream Class A Segment, DCP Sand Hills and DCP Southern Hills.

The following “Sales and other operating revenues” and “Net Income Attributable to Phillips 66” of DCP Midstream Class A Segment, DCP Sand Hills and DCP Southern Hills were included in our consolidated statement of operations from August 18, 2022, forward.

	Millions of Dollars	
Sales and other operating revenues	\$	4,531
Net Income Attributable to Phillips 66		216

Unaudited Pro Forma Financial Information

The following unaudited pro forma financial information presents our consolidated results assuming the acquisition of DCP Midstream Class A Segment, DCP Sand Hills and DCP Southern Hills occurred on January 1, 2021. The unaudited pro forma information includes adjustments based on currently available information and we believe the estimates and assumptions are reasonable, and the significant effects of the transactions are properly reflected in the unaudited pro forma information. An aggregate before-tax gain of \$2,831 million was included in the pro forma financial information for the year ended December 31, 2021, which is related to the remeasurement of the previously held equity investments in DCP Midstream, DCP Sand Hills and DCP Southern Hills to their fair values in connection with the merger. Adjustments related to the economic interest change in our equity investment in Gray Oak Pipeline were excluded from the pro forma financial information.

The unaudited pro forma information does not give effect to any potential synergies that could be achieved and is not necessarily indicative of the results of future operations.

	Year Ended December 31	
	2022	2021
Sales and other operating revenues (<i>millions</i>)	\$ 177,127	119,027
Net Income Attributable to Phillips 66 (<i>millions</i>)	8,847	3,360
Net Income Attributable to Phillips 66 per share—basic (<i>dollars</i>)	18.74	7.61
Net Income Attributable to Phillips 66 per share—diluted (<i>dollars</i>)	18.68	7.60

Note 5—Sales and Other Operating Revenues

Disaggregated Revenues

The following tables present our disaggregated sales and other operating revenues:

	Millions of Dollars		
	2022	2021	2020
Product Line and Services			
Refined petroleum products	\$ 131,798	89,020	49,768
Crude oil resales	20,574	12,801	9,114
NGL and natural gas	16,174	9,074	4,084
Services and other*	1,444	581	1,163
Consolidated sales and other operating revenues	\$ 169,990	111,476	64,129
Geographic Location**			
United States	\$ 136,995	87,973	48,711
United Kingdom	16,741	11,132	7,031
Germany	6,392	4,290	3,034
Other foreign countries	9,862	8,081	5,353
Consolidated sales and other operating revenues	\$ 169,990	111,476	64,129

* Includes derivatives-related activities. See Note 17—Derivatives and Financial Instruments, for additional information.

** Sales and other operating revenues are attributable to countries based on the location of the operations generating the revenues.

Contract-Related Assets and Liabilities

At December 31, 2022 and 2021, receivables from contracts with customers were \$8,749 million and \$6,140 million, respectively. Significant noncustomer balances, such as buy/sell receivables and excise tax receivables, were excluded from these amounts.

Our contract-related assets also include payments we make to our marketing customers related to incentive programs. An incentive payment is initially recognized as an asset and subsequently amortized as a reduction to revenue over the contract term, which generally ranges from 5 to 15 years. At December 31, 2022 and 2021, our asset balances related to such payments were \$505 million and \$466 million, respectively.

Our contract liabilities primarily represent advances from our customers prior to product or service delivery. At December 31, 2022 and 2021, contract liabilities were \$156 million and \$90 million, respectively.

Remaining Performance Obligations

Most of our contracts with customers are spot contracts or term contracts with only variable consideration. We do not disclose remaining performance obligations for these contracts as the expected duration is one year or less or because the variable consideration has been allocated entirely to an unsatisfied performance obligation. We also have certain contracts in our Midstream segment that include minimum volume commitments with fixed pricing. At December 31, 2022, the remaining performance obligations related to these minimum volume commitment contracts amounted to \$445 million. This amount excludes variable consideration and estimates of variable rate escalation clauses in our contracts with customers, and is expected to be recognized through 2031 with a weighted average remaining life of three years as of December 31, 2022.

Note 6—Credit Losses

We are exposed to credit losses primarily through our sales of refined petroleum products, crude oil, NGL and natural gas. We assess each counterparty's ability to pay for the products we sell by conducting a credit review. The credit review considers our expected billing exposure and timing for payment and the counterparty's established credit rating or our assessment of the counterparty's creditworthiness based on our analysis of their financial statements when a credit rating is not available. We also consider contract terms and conditions, country and political risk, and business strategy in our evaluation. A credit limit is established for each counterparty based on the outcome of this review. We may require collateralized asset support or a prepayment to mitigate credit risk.

We monitor our ongoing credit exposure through active review of counterparty balances against contract terms and due dates. Our activities include timely account reconciliations, dispute resolution and payment confirmations. We may employ collection agencies and legal counsel to pursue recovery of defaulted receivables. In addition, when events and circumstances arise that may affect certain counterparties' abilities to fulfill their obligations, we enhance our credit monitoring, and we may seek collateral to support some transactions or require prepayments from higher-risk counterparties.

At December 31, 2022 and 2021, we reported \$10,985 million and \$7,470 million of accounts and notes receivable, net of allowances of \$67 million and \$44 million, respectively. Based on an aging analysis at December 31, 2022, more than 95% of our accounts receivable were outstanding less than 60 days.

We are also exposed to credit losses from off-balance sheet exposures, such as guarantees of joint venture debt and standby letters of credit. See Note 15—Guarantees, and Note 16—Contingencies and Commitments, for more information on these off-balance sheet exposures.

Note 7—Inventories

Inventories at December 31 consisted of the following:

	Millions of Dollars	
	2022	2021
Crude oil and petroleum products	\$ 2,914	3,024
Materials and supplies	362	370
	\$ 3,276	3,394

Inventories valued on the LIFO basis totaled \$2,635 million and \$2,792 million at December 31, 2022 and 2021, respectively. The estimated excess of current replacement cost over LIFO cost of inventories amounted to approximately \$6.3 billion and \$5.7 billion at December 31, 2022 and 2021, respectively.

During each of the three years ended December 31, 2022, certain volume reductions in inventory caused liquidations of LIFO inventory values. For the year ended December 31, 2022, LIFO inventory liquidations increased net income by \$75 million. For the year ended December 31, 2021, LIFO inventory liquidations decreased net income by \$101 million. These liquidations did not have a material impact on our results for the year ended December 31, 2020.

Note 8—Investments, Loans and Long-Term Receivables

Components of investments and long-term receivables at December 31 were:

	Millions of Dollars	
	2022	2021
Equity investments	\$ 14,414	12,832
Other investments	207	680
Loans and long-term receivables	329	959
	\$ 14,950	14,471

Equity Investments

Significant affiliated companies accounted for under the equity method, including nonconsolidated VIEs, at December 31, 2022 and 2021, included:

- Chevron Phillips Chemical Company LLC (CPChem)—50 percent-owned joint venture that manufactures and markets petrochemicals and plastics. We have multiple long-term supply and purchase agreements in place with CPChem with extension options. These agreements cover sales and purchases of refined petroleum products, solvents, fuel gas, natural gas, NGL, and other petrochemical feedstocks. All products are purchased and sold under specified pricing formulas based on various published pricing indices. At December 31, 2022 and 2021, the book value of our investment in CPChem was \$6,785 million and \$6,369 million, respectively.
- WRB Refining LP (WRB)—50 percent-owned joint venture that owns the Wood River and Borger refineries located in Roxana, Illinois, and Borger, Texas, respectively, for which we are the operator and managing partner. We have a basis difference for our investment in WRB because the carrying value of our investment is lower than our share of WRB's recorded net assets. This basis difference was primarily the result of our contribution of these refineries to WRB. On the contribution closing date, a basis difference was created because the fair value of the contributed assets recorded by WRB exceeded our historical book value. The contribution-related basis difference is primarily being amortized and recognized as a benefit to equity earnings over a period of 26 years, which was the estimated remaining useful life of the refineries' PP&E at the contribution closing date. At December 31, 2022, the aggregate remaining basis difference for this investment was \$1,878 million. Equity earnings for the years ended December 31, 2022, 2021 and 2020, were increased by \$184 million, \$186 million and \$180 million, respectively, due to the amortization of our aggregate basis difference. At December 31, 2022 and 2021, the book value of our investment in WRB was \$2,411 million and \$1,652 million, respectively.
- Gulf Coast Express LLC (Gulf Coast Express)—DCP LP 25 percent-owned joint venture that owns an intrastate pipeline that transports natural gas from the Waha area in West Texas to Agua Dulce, in Nueces County, Texas. The pipeline is operated by a co-venturer. This investment was acquired as part of our consolidation of the DCP Midstream Class A Segment starting on August 18, 2022, and was initially recorded at its estimated fair value on this date. The estimated fair value of this investment exceeds our share of Gulf Coast Express' recorded net assets, which results in a basis difference. At December 31, 2022, the preliminary aggregate remaining basis difference for this investment was \$437 million. The estimated fair value of the investment in Gulf Coast Express, the allocation of the basis difference to Gulf Coast Express' net assets and the basis difference amortization period are based on preliminary estimates and are subject to change until we finalize our acquisition accounting for the DCP Midstream Class A Segment. At December 31, 2022, the book value, including the preliminary fair value adjustment, of the investment in Gulf Coast Express was \$844 million. See Note 3—DCP Midstream, LLC and Gray Oak Holdings LLC Merger, Note 4—Business Combination and Note 18—Fair Value Measurements, for additional information on the DCP Midstream and Gray Oak Holdings merger and our accounting for this transaction as a business combination.

- Dakota Access, LLC (Dakota Access) and Energy Transfer Crude Oil Company, LLC (ETCO)—Two 25 percent-owned joint ventures. Dakota Access owns a pipeline system that transports crude oil from the Bakken/Three Forks production area in North Dakota to Patoka, Illinois, and ETCO owns a connecting crude oil pipeline system that extends from Patoka to Nederland, Texas. These two pipeline systems collectively form the Bakken Pipeline system, which is operated by a co-venturer.

In 2020, the trial court presiding over litigation brought by the Standing Rock Sioux Tribe (the Tribe) ordered the U.S. Army Corps of Engineers (USACE) to prepare an Environmental Impact Statement (EIS) addressing an easement under Lake Oahe in North Dakota. The court later vacated the easement. Although the easement is vacated, the USACE has no plans to stop pipeline operations while it proceeds with the EIS, and the Tribe's request for a shutdown was denied in May 2021. In June 2021, the trial court dismissed the litigation entirely. Once the EIS is completed, new litigation or challenges may be filed.

In February 2022, the U.S. Supreme Court (the Court) denied Dakota Access' writ of certiorari requesting the Court to review the lower court's decision to order the EIS and vacate the easement. Therefore, the requirement to prepare the EIS stands. Also in February 2022, the Tribe withdrew as a cooperating agency, causing the USACE to halt the EIS process while the USACE engaged with the Tribe on their reasons for withdrawing. The draft EIS process resumed in August 2022, and release is expected in Spring 2023.

Dakota Access and ETCO have guaranteed repayment of senior unsecured notes issued by a wholly owned subsidiary of Dakota Access in March 2019. On April 1, 2022, Dakota Access' wholly owned subsidiary repaid \$650 million aggregate principal amount of its outstanding senior notes upon maturity. We funded our 25% share, or \$163 million, with a capital contribution of \$89 million in March 2022 and \$74 million of distributions we elected not to receive from Dakota Access in the first quarter of 2022. At December 31, 2022, the aggregate principal amount outstanding of Dakota Access' senior unsecured notes was \$1.85 billion.

In conjunction with the notes offering, Phillips 66 Partners, now a wholly owned subsidiary of Phillips 66, and its co-venturers in Dakota Access also provided a Contingent Equity Contribution Undertaking (CECU). Under the CECU, the co-venturers may be severally required to make proportionate equity contributions to Dakota Access if there is an unfavorable final judgment in the above-mentioned ongoing litigation. At December 31, 2022, our 25% share of the maximum potential equity contributions under the CECU was approximately \$467 million.

If the pipeline is required to cease operations, and should Dakota Access and ETCO not have sufficient funds to pay ongoing expenses, we could be required to support our 25% share of the ongoing expenses, including scheduled interest payments on the notes of approximately \$20 million annually, in addition to the potential obligations under the CECU.

At December 31, 2022 and 2021, the aggregate book value of our investments in Dakota Access and ETCO was \$675 million and \$574 million, respectively.

- Front Range Pipeline LLC (Front Range)—DCP LP 33 percent-owned joint venture that owns an NGL pipeline that originates in the DJ Basin and extends to Skellytown, Texas. The pipeline is operated by a co-venturer. This investment was acquired as part of our consolidation of the DCP Midstream Class A Segment starting on August 18, 2022, and was initially recorded at its estimated fair value on this date. The estimated fair value of this investment exceeds our share of Front Range's recorded net assets, which results in a basis difference. At December 31, 2022, the preliminary aggregate remaining basis difference for this investment was \$308 million. The estimated fair value of the investment in Front Range, the allocation of the basis difference to Front Range's net assets and the basis difference amortization period are based on preliminary estimates and are subject to change until we finalize our acquisition accounting for the DCP Midstream Class A Segment. At December 31, 2022, the book value, including the fair value adjustment, of the investment in Front Range was \$499 million. See Note 3—DCP Midstream, LLC and Gray Oak Holdings LLC Merger, Note 4—Business Combination and Note 18—Fair Value Measurements, for additional information on the DCP Midstream and Gray Oak Holdings merger and our accounting for this transaction as a business combination.

- Rockies Express Pipeline LLC (REX)—25 percent-owned joint venture that owns a natural gas pipeline system that extends from Wyoming and Colorado to Ohio with a bidirectional section that extends from Ohio to Illinois. The REX Pipeline system is operated by our co-venturer. We have a basis difference for our investment in REX because the carrying value of our investment is lower than our share of REX's recorded net assets. This basis difference was created by historical impairment charges we recorded for this investment and is being amortized and recognized as a benefit to equity earnings over a period of 25 years, which was the estimated remaining useful life of REX's PP&E when the impairment charges were recorded. At December 31, 2022, the remaining basis difference for this investment was \$281 million. Equity earnings for each of the years ended December 31, 2022, 2021 and 2020, were increased by \$19 million due to the amortization of our basis difference. At December 31, 2022 and 2021, the book value of our investment in REX was \$483 million and \$510 million, respectively.
- CF United LLC (CF United)—A retail marketing joint venture with operations primarily on the U.S. West Coast. We own a 50% voting interest and a 47% economic interest in this joint venture. CF United is considered a VIE, because our co-venturer has an option to require us to purchase its interest based on a fixed multiple. The put option becomes effective July 1, 2023, and expires on March 31, 2024. The put option is viewed as a variable interest as the purchase price on the exercise date may not represent the then-current fair value of CF United. We have determined that we are not the primary beneficiary because we and our co-venturer jointly direct the activities of CF United that most significantly impact economic performance. At December 31, 2022, our maximum exposure to loss was comprised of our \$296 million investment in CF United, and any potential future loss resulting from the put option should the purchase price based on a fixed multiple exceed the then-current fair value of CF United. At December 31, 2021, the book value of our investment in CF United was \$277 million.
- OnCue Holdings, LLC (OnCue)—50 percent-owned joint venture that owns and operates retail convenience stores. We fully guaranteed various debt agreements of OnCue, and our co-venturer did not participate in the guarantees. This entity is considered a VIE because our debt guarantees resulted in OnCue not being exposed to all potential losses. We have determined we are not the primary beneficiary because we do not have the power to direct the activities that most significantly impact economic performance. At December 31, 2022, our maximum exposure to loss was \$209 million, which represented the book value of our investment in OnCue of \$138 million and guaranteed debt obligations of \$71 million. At December 31, 2021, the book value of our investment in OnCue was \$114 million.
- DCP Midstream, DCP Sand Hills, DCP Southern Hills, and Gray Oak Pipeline—Prior to the merger of DCP Midstream and Gray Oak Holdings on August 17, 2022, we held:
 - A 50% interest in DCP Midstream a joint venture that owns and operates NGL and gas pipelines, gas plants, gathering systems, storage facilities and fractionation plants, through its subsidiary DCP LP.
 - A 33.33% direct ownership interest in DCP Sand Hills a joint venture that owns a NGL pipeline system that extends from the Permian Basin and Eagle Ford to facilities on the Texas Gulf Coast and to the Mont Belvieu, Texas, market hub.
 - A 33.33% direct ownership interest in DCP Southern Hills a joint venture that owns a NGL pipeline system that extends from the Midcontinent region to the Mont Belvieu, Texas, market hub.
 - A 65% interest in Gray Oak Pipeline, which was held through a consolidated holding company, Gray Oak Holdings. Our indirect interest in Gray Oak Pipeline was 42.25%, after considering a co-venturer's 35% interest in Gray Oak Holdings. Gray Oak Pipeline is a crude oil pipeline that extends from the Permian and Eagle Ford to Texas Gulf Coast destinations that include Corpus Christi, Texas, and the Sweeny area, including our Sweeny Refinery.

As a result of the merger, effective August 18, 2022, we began consolidating the financial results of DCP Midstream Class A Segment, DCP Sand Hills and DCP Southern Hills and our indirect economic interest in Gray Oak Pipeline was reduced to 6.5%. After the merger, our indirect economic interest in Gray Oak Pipeline is held through our economic interest in DCP Midstream Class B Segment. See Note 3—DCP Midstream, LLC and Gray Oak Holdings LLC Merger and Note 4—Business Combination, for additional information regarding the merger and associated accounting treatment.

At December 31, 2021, the book values of our investments in DCP Midstream, DCP Sand Hills, DCP Southern Hills and Gray Oak Pipeline were \$391 million, \$577 million, \$217 million and \$812 million, respectively. At December 31, 2022, the book value of our investment in DCP Midstream Class B Segment was \$79 million.

- **Liberty Pipeline LLC (Liberty).**—In the first quarter of 2021, Phillips 66 Partners’ decided to exit the Liberty Pipeline project, which resulted in a \$198 million before-tax impairment. The impairment is included in the “Impairments” line item on our consolidated statement of operations for the year ended December 31, 2021. In April 2021, Phillips 66 Partners transferred its ownership interest in Liberty to its co-venturer for cash and certain pipeline assets with a value that approximated its book value of \$46 million at March 31, 2021. See Note 11—Impairments, and Note 18—Fair Value Measurements, for additional information regarding the impairment and the techniques used to determine the fair value of Phillips 66 Partners’ investment in Liberty.

Other Investments

In September 2021, we acquired 78 million ordinary shares representing a 16% ownership interest, in NOVONIX Limited (NOVONIX), which are traded on the Australian Securities Exchange. NOVONIX is a Brisbane, Australia-based company that develops technology and supplies materials for lithium-ion batteries. Since we do not have significant influence over the operating and financial policies of NOVONIX and the shares we own have a readily determinable fair value, our investment is recorded at fair value at the end of each reporting period. The fair value of our investment is recorded in the “Investments and long-term receivables” line item on our consolidated balance sheet. The change in the fair value of our investment due to fluctuations in NOVONIX’s stock price, or unrealized investment gain (losses), is recorded in the “Other income” line item of our consolidated statement of operations, while changes due to foreign currency fluctuations are recorded in the “Foreign currency transaction (gains) losses” line item on our consolidated statement of operations. At December 31, 2022 and 2021, the fair value of our investment in NOVONIX was \$78 million and \$520 million, respectively. The fair value of our investment in NOVONIX declined by \$442 million during the year ended December 31, 2022, reflecting unrealized investment losses of \$433 million and unrealized foreign currency losses of \$9 million. The fair value of our investment in NOVONIX increased by \$370 million during the year ended December 31, 2021, reflecting unrealized investment gains of \$365 million and unrealized foreign currency gains of \$5 million. See Note 18—Fair Value Measurements, for additional information regarding the recurring fair value measurement of our investment in NOVONIX.

Related Party Loans

We and our co-venturer have provided member loans to WRB. At December 31, 2022, our share of the outstanding member loan balance was repaid. At December 31, 2021, our 50% share of the outstanding member loan balance, including accrued interest, was \$595 million.

Total distributions received from affiliates were \$1,832 million, \$3,043 million, and \$1,717 million for the years ended December 31, 2022, 2021 and 2020, respectively. In addition, at December 31, 2022, retained earnings included approximately \$2.9 billion related to the undistributed earnings of affiliated companies.

Summarized 100% financial information for all affiliated companies accounted for under the equity method, on a combined basis, was:

	Millions of Dollars		
	2022	2021	2020
Revenues	\$ 60,981	49,339	30,531
Income before income taxes	7,616	6,346	2,104
Net income	7,414	6,125	1,990
Current assets	7,511	7,866	6,210
Noncurrent assets	46,527	56,040	55,806
Current liabilities	5,592	7,952	5,391
Noncurrent liabilities	11,412	16,906	16,887
Noncontrolling interests	2	3,003	2,997

See Note 3—DCP Midstream, LLC and Gray Oak Holdings LLC Merger and Note 4—Business Combination, for additional information on the DCP Midstream and Gray Oak Holdings merger and accounting treatment.

Note 9—Properties, Plants and Equipment

Our investment in PP&E is recorded at cost. Investments in refining and processing facilities are generally depreciated on a straight-line basis over a 25-year life, pipeline assets over a 45-year life and terminal assets over a 35-year life. The company's investment in PP&E, with the associated accumulated depreciation and amortization (Accum. D&A), at December 31 was:

Millions of Dollars						
	2022			2021		
	Gross PP&E	Accum. D&A	Net PP&E	Gross PP&E	Accum. D&A	Net PP&E
Midstream	\$ 25,422	3,524	21,898	12,075	3,000	9,075
Chemicals	—	—	—	—	—	—
Refining	24,200	12,523	11,677	24,327	12,581	11,746
Marketing and Specialties	1,800	1,058	742	1,819	1,035	784
Corporate and Other	1,568	722	846	1,576	746	830
	\$ 52,990	17,827	35,163	39,797	17,362	22,435

See Note 3—DCP Midstream, LLC and Gray Oak Holdings LLC Merger, Note 4—Business Combination and Note 18—Fair Value Measurements, for additional information on the DCP Midstream and Gray Oak Holdings merger, accounting treatment and the associated fair value measurements. See Note 11—Impairments, for information regarding PP&E impairments associated with our Alliance Refinery asset group. See Note 28—Segment Disclosures and Related Information, for information regarding the change in the composition of our operating segments.

Note 10—Goodwill and Intangibles

The carrying amount of goodwill by segment at December 31 was:

	Millions of Dollars		
	Midstream	Marketing and Specialties	Total
Balance at December 31, 2020	\$ 626	799	1,425
Goodwill assigned to acquisitions	—	59	59
Balance at December 31, 2021	626	858	1,484
Goodwill assigned to acquisitions	—	2	2
Balance at December 31, 2022	\$ 626	860	1,486

In December 2021, we acquired a commercial fleet fueling business on the West Coast in our M&S segment and recognized goodwill of \$59 million associated with this acquisition.

Intangible Assets

The gross carrying value of indefinite-lived intangible assets at December 31 consisted of the following:

	Millions of Dollars	
	2022	2021
Trade names and trademarks	\$ 503	503
Refinery air and operating permits	200	212
	\$ 703	715

The net book value of our amortized intangible assets was \$128 million and \$98 million at December 31, 2022 and 2021, respectively. Acquisitions of amortized intangible assets were not material in 2022 and 2021. For the years ended December 31, 2022, 2021 and 2020, amortization expense was \$27 million, \$26 million and \$27 million, respectively, and is expected to be less than \$35 million per year in future years.

Note 11—Impairments

	Millions of Dollars		
	2022	2021	2020
Midstream	\$ 1	209	1,464
Refining	13	1,288	2,763
Marketing and Specialties	—	1	—
Corporate and Other	46	—	25
Total impairments	\$ 60	1,498	4,252

Equity Investments

Liberty

In the first quarter of 2021, Phillips 66 Partners decided to exit the Liberty Pipeline project in our Midstream segment, which had previously been deferred due to the challenging business environment caused by the COVID-19 pandemic. As a result, Phillips 66 Partners recorded a \$198 million before-tax impairment to reduce the book value of its investment in Liberty at March 31, 2021, to estimated fair value.

Red Oak Pipeline LLC (Red Oak)

In the third quarter of 2020, the Red Oak Pipeline project was canceled. As a result, we recorded an \$84 million before-tax impairment to reduce the carrying value of our investment to our share of the estimated salvage value of the joint venture's assets at September 30, 2020.

Other

In the fourth quarter of 2020, Phillips 66 Partners assessed for impairment its equity method investments in two crude oil transportation and terminaling joint ventures, and concluded that the carrying values of these investments at December 31, 2020, were greater than their fair values. Phillips 66 Partners concluded these differences were not temporary, based on its projections of future crude oil production. As a result, Phillips 66 Partners recorded before-tax impairments totaling \$96 million.

DCP Midstream

In the first quarter of 2020, the market value of DCP LP common units declined by approximately 85%. As a result, at March 31, 2020, the fair value of our investment in DCP Midstream was significantly lower than its book value. We concluded this difference was not temporary primarily due to its magnitude, and we recorded a \$1,161 million before-tax impairment of our investment in the first quarter of 2020.

PP&E and Intangible Assets

Alliance Refinery

In the third quarter of 2021, we identified impairment indicators related to our Alliance Refinery as a result of damages sustained from Hurricane Ida and our reassessment of the role this refinery will play in our refining portfolio. Accordingly, we assessed the refinery asset group for impairment by performing an analysis that considered several usage scenarios, including selling or converting the asset group to an alternative use. Based on our analysis, we concluded that the carrying value of the asset group was not recoverable. As a result, we recorded a \$1,298 million before-tax impairment to reduce the carrying value of net PP&E in this asset group to its fair value of approximately \$200 million. \$1,288 million of the impairment charge was recorded in our Refining segment and \$10 million was recorded in our Midstream segment. In the fourth quarter of 2021, we shut down our Alliance Refinery.

San Francisco Refinery

In the third quarter of 2020, we announced a plan to reconfigure our San Francisco Refinery to produce renewable fuels at the Rodeo refining facility in Rodeo, California, starting in early 2024. Consequently, we plan to cease operation of the Santa Maria refining facility in Arroyo Grande, California, certain assets at the Rodeo refining facility, and associated Midstream assets in 2023. We assessed the San Francisco Refinery asset group for impairment and concluded that the carrying value of the asset group was not recoverable. As a result, we recorded a \$1,030 million before-tax impairment to reduce the carrying value of the net PP&E and intangible assets in this asset group to its fair value of \$940 million. The impairment resulted in a reduction of net PP&E totaling \$1,009 million and intangible assets of \$21 million. This impairment was primarily related to our Refining segment, with the exception of \$120 million that was related to PP&E in our Midstream segment.

Goodwill

Our stock price declined significantly in the first quarter of 2020, mainly due to the disruption in global commodity and equity markets related to the COVID-19 pandemic. We assessed our goodwill for impairment due to the decline in our market capitalization and concluded that the carrying value of our Refining reporting unit at March 31, 2020, was greater than its fair value by an amount in excess of its goodwill balance. Accordingly, we recorded a before-tax goodwill impairment charge of \$1,845 million in our Refining segment during the first quarter of 2020.

These impairment charges are included within the “Impairments” line item on our consolidated statement of operations. See Note 18—Fair Value Measurements, for additional information on the determination of fair value used to record these impairments.

Note 12—Asset Retirement Obligations and Accrued Environmental Costs

Asset retirement obligations and accrued environmental costs at December 31 were:

	Millions of Dollars	
	2022	2021
Asset retirement obligations	\$ 565	395
Accrued environmental costs	434	436
Total asset retirement obligations and accrued environmental costs	999	831
Asset retirement obligations and accrued environmental costs due within one year*	(120)	(104)
Long-term asset retirement obligations and accrued environmental costs	\$ 879	727

* Classified as a current liability on the consolidated balance sheet, under the caption "Other accruals."

Asset Retirement Obligations

We have asset retirement obligations that we are required to perform under law or contract once an asset is permanently taken out of service. Our recognized asset retirement obligations primarily involve asbestos abatement at our refineries; decommissioning, removal or dismantlement of certain assets at refineries that have or will be shut down; and dismantlement or removal of assets at certain leased international marketing sites. Most of our asset retirement obligations are not expected to be paid until many years in the future and are expected to be funded from general company resources at the time of removal.

During the years ended December 31, 2022 and 2021, our overall asset retirement obligation changed as follows:

	Millions of Dollars	
	2022	2021
Balance at January 1	\$ 395	309
Accretion of discount	15	14
New obligations	7	22
Acquisition of DCP Midstream Class A Segment, DCP Sand Hills and DCP Southern Hills	168	—
Changes in estimates of existing obligations	17	66
Spending on existing obligations	(32)	(12)
Foreign currency translation	(5)	(4)
Balance at December 31	\$ 565	395

During the year ended December 31, 2022, our asset retirement balance increased \$170 million. This increase was primarily due to consolidating DCP Midstream Class A Segment, DCP Sand Hills and DCP Southern Hills after the merger on August 17, 2022. See Note 3—DCP Midstream, LLC and Gray Oak Holdings LLC Merger for additional information on the DCP Midstream and Gray Oak Holdings merger.

Accrued Environmental Costs

Of our total accrued environmental costs at December 31, 2022, \$265 million was primarily related to cleanup at domestic refineries and underground storage tanks at U.S. service stations; \$119 million was associated with nonoperator sites; and \$50 million was related to sites at which we have been named a potentially responsible party under federal or state laws. A large portion of our expected environmental expenditures have been discounted as these obligations were acquired in various business combinations. Expected expenditures for acquired environmental obligations were discounted using a weighted-average discount rate of approximately 5%. At December 31, 2022, the accrued balance for acquired environmental liabilities was \$240 million. The expected future undiscounted payments related to the portion of the accrued environmental costs that have been discounted are: \$12 million in 2023, \$28 million in 2024, \$21 million in 2025, \$17 million in 2026, \$17 million in 2027, and \$204 million in the aggregate for all years after 2027.

Note 13—Earnings (Loss) Per Share

The numerator of basic earnings (loss) per share (EPS) is net income (loss) attributable to Phillips 66, adjusted for noncancelable dividends paid on unvested share-based employee awards during the vesting period (participating securities) and the premium paid for the repurchase of noncontrolling interests. The denominator of basic EPS is the sum of the daily weighted-average number of common shares outstanding during the periods presented and fully vested stock and unit awards that have not yet been issued as common stock. The numerator of diluted EPS is also based on net income (loss) attributable to Phillips 66, which is reduced by dividend equivalents paid on participating securities for which the dividends are more dilutive than the participation of the awards in the earnings (loss) of the periods presented, and the premium paid for the repurchase of noncontrolling interests. To the extent unvested stock, unit or option awards and vested unexercised stock options are dilutive, they are included with the weighted-average common shares outstanding in the denominator. Treasury stock is excluded from the denominator in both basic and diluted EPS.

	2022		2021		2020	
	Basic	Diluted	Basic	Diluted	Basic	Diluted
Amounts Attributed to Phillips 66 Common Stockholders (<i>millions</i>):						
Net income (loss) attributable to Phillips 66	\$ 11,024	11,024	1,317	1,317	(3,975)	(3,975)
Income allocated to participating securities	(10)	—	(9)	(9)	(8)	(8)
Premium paid for the repurchase of noncontrolling interests	—	—	(2)	(2)	—	—
Net income (loss) available to common stockholders	\$ 11,014	11,024	1,306	1,306	(3,983)	(3,983)
Weighted-average common shares outstanding (<i>thousands</i>):						
Weighted-average common shares outstanding	469,436	471,497	437,886	440,028	437,327	439,530
Effect of share-based compensation	2,061	2,234	2,142	336	2,203	—
Weighted-average common shares outstanding—EPS	471,497	473,731	440,028	440,364	439,530	439,530
Earnings (Loss) Per Share of Common Stock (<i>dollars</i>)	\$ 23.36	23.27	2.97	2.97	(9.06)	(9.06)

Note 14—Debt

Short-term and long-term debt at December 31 was:

	Millions of Dollars							
	December 31, 2022					December 31, 2021		
	Phillips 66	Phillips 66 Company	Phillips 66 Partners	DCP LP	Total	Phillips 66	Phillips 66 Partners	Total
4.300% Senior Notes due April 2022	\$ —	—	—	—	—	1,000	—	1,000
3.875% Senior Notes due March 2023	—	—	—	500	500	—	—	—
3.700% Senior Notes due April 2023	—	—	—	—	—	500	—	500
0.900% Senior Notes due February 2024	800	—	—	—	800	800	—	800
2.450% Senior Notes due December 2024	—	277	23	—	300	—	300	300
3.605% Senior Notes due February 2025	—	441	59	—	500	—	500	500
3.850% Senior Notes due April 2025	650	—	—	—	650	650	—	650
5.375% Senior Notes due July 2025	—	—	—	825	825	—	—	—
1.300% Senior Notes due February 2026	500	—	—	—	500	500	—	500
3.550% Senior Notes due October 2026	—	458	34	—	492	—	500	500
5.625% Senior Notes due July 2027	—	—	—	500	500	—	—	—
3.750% Senior Notes due March 2028	—	427	73	—	500	—	500	500
3.900% Senior Notes due March 2028	800	—	—	—	800	800	—	800
5.125% Senior Notes due May 2029	—	—	—	600	600	—	—	—
3.150% Senior Notes due December 2029	—	570	30	—	600	—	600	600
8.125% Senior Notes due August 2030	—	—	—	300	300	—	—	—
2.150% Senior Notes due December 2030	850	—	—	—	850	850	—	850
3.250% Senior Notes due February 2032	—	—	—	400	400	—	—	—
4.650% Senior Notes due November 2034	1,000	—	—	—	1,000	1,000	—	1,000
6.450% Senior Notes due November 2036	—	—	—	300	300	—	—	—
6.750% Senior Notes due September 2037	—	—	—	450	450	—	—	—
5.875% Senior Notes due May 2042	1,500	—	—	—	1,500	1,500	—	1,500
5.850% Junior Subordinated Notes due May 2043	—	—	—	550	550	—	—	—
5.600% Senior Notes due April 2044	—	—	—	400	400	—	—	—
4.875% Senior Notes due November 2044	1,700	—	—	—	1,700	1,700	—	1,700
4.680% Senior Notes due February 2045	—	442	8	—	450	—	450	450
4.900% Senior Notes due October 2046	—	605	20	—	625	—	625	625
3.300% Senior Notes due March 2052	1,000	—	—	—	1,000	1,000	—	1,000
Floating Rate Term Loan due April 2022 at 0.978% at year-end 2021	—	—	—	—	—	—	450	450
Securitization facility due August 2024	—	—	—	40	40	—	—	—
Floating Rate Advance Term Loan due December 2034 at 4.720% and 0.699% at year-end 2022 and 2021, respectively—related party	25	—	—	—	25	25	—	25
Other	1	—	—	—	1	1	—	1
Debt at face value	8,826	3,220	247	4,865	17,158	10,326	3,925	14,251
Finance leases					257			290
Software obligations					20			16
Net unamortized discounts, debt issuance costs and acquisition fair value adjustments					(245)			(109)
Total debt					17,190			14,448
Short-term debt					(529)			(1,489)
Long-term debt					\$ 16,661			12,959

Maturities of borrowings outstanding at December 31, 2022, inclusive of net unamortized discounts and debt issuance costs, for each of the years from 2023 through 2027 are \$529 million, \$1,163 million, \$1,991 million, \$1,004 million and \$505 million, respectively.

2022 Activities

Debt Repayments

In December 2022, Phillips 66 repaid its 3.700% senior notes due April 2023 with an aggregate principal amount of \$500 million.

In April 2022, upon maturity, Phillips 66 repaid its 4.300% senior notes with an aggregate principal amount of \$1.0 billion and Phillips 66 Partners repaid its \$450 million term loan.

DCP Midstream Class A Segment

As a result of the merger of DCP Midstream and Gray Oak Holdings, we recorded the fair value of DCP Midstream Class A Segment's debt to our consolidated balance sheet as of August 17, 2022. See Note 3—DCP Midstream, LLC and Gray Oak Holdings LLC Merger, Note 4—Business Combination, and Note 18—Fair Value Measurements, for additional information regarding the merger and the associated fair value measurements. All of DCP Midstream Class A Segment's debt is held by DCP LP. Interest on all of DCP LP's senior notes and junior subordinated notes is paid on a semi-annual basis.

Debt Exchange

On May 5, 2022, Phillips 66 Company, a wholly owned subsidiary of Phillips 66, completed offers to exchange (the Exchange Offers) all validly tendered notes of seven different series of notes issued by Phillips 66 Partners (collectively, the Old Notes), with an aggregate principal amount of approximately \$3.5 billion, for notes issued by Phillips 66 Company (collectively, the New Notes). The New Notes are fully and unconditionally guaranteed by Phillips 66 and rank equally with Phillips 66 Company's other unsecured and unsubordinated indebtedness, and the guarantees rank equally with Phillips 66's other unsecured and unsubordinated indebtedness.

Old Notes with an aggregate principal amount of approximately \$3.2 billion were tendered in the Exchange Offers. The New Notes have the same interest rates, interest payment dates and maturity dates as the Old Notes. Holders that validly tendered before the end of the early participation period on April 19, 2022 (the Early Participation Date), received New Notes with an aggregate principal amount equivalent to the Old Notes, while holders that validly tendered after the Early Participation Date, but before the Expiration Date, received New Notes with an aggregate principal amount 3% less than the Old Notes. Substantially all of the Old Notes exchanged were tendered during the Early Participation Period.

2021 Activities

In December 2021, Phillips 66 used cash on hand to repay the \$450 million outstanding principal balance of its Floating Rate Senior Notes due February 2024. The redemption price of the senior notes was equal to 100% of the principal amount of the senior notes outstanding, plus accrued and unpaid interest.

In November 2021, Phillips 66 closed its public offering of \$1 billion aggregate principal amount of 3.300% senior unsecured notes due 2052. Proceeds received from this public offering were \$982 million, net of underwriters' discounts, commissions and issuance costs. In December 2021, Phillips 66 used the proceeds from this offering, together with cash on hand, to repay \$1 billion in aggregate principal amount of its \$2 billion 4.300% Senior Notes due April 2022.

In September 2021, Phillips 66 repaid the \$500 million of outstanding borrowings under the delayed draw term loan facility due November 2023.

In April 2021, Phillips 66 Partners entered into a \$450 million term loan agreement with a one-year term and borrowed the full amount. The term loan agreement was repaid upon maturity in April 2022 without premium or penalty.

In April 2021, Phillips 66 Partners repaid \$50 million of its tax-exempt bonds upon maturity.

In February 2021, Phillips 66 repaid \$500 million outstanding principal balance of its floating-rate senior notes upon maturity.

Credit Facilities and Commercial Paper

Phillips 66 and Phillips 66 Company

On June 23, 2022, we entered into a new \$5 billion revolving credit facility (the Facility) with Phillips 66 Company as the borrower and Phillips 66 as the guarantor and a scheduled maturity date of June 22, 2027. The Facility replaced our previous \$5 billion revolving credit facility with Phillips 66 as the borrower and Phillips 66 Company as the guarantor. The Facility contains usual and customary covenants that are similar to the previous revolving credit facility, including a maximum consolidated net debt-to-capitalization ratio of 65% as of the last day of each fiscal quarter. We have the option to increase the overall capacity to \$6 billion, subject to certain conditions. We also have the option to extend the scheduled maturity of the Facility for up to two additional one-year terms, subject to, among other things, the consent of the lenders holding the majority of the commitments and of each lender extending its commitment. Outstanding borrowings under the Facility bear interest at either (a) the Adjusted Term Secured Overnight Financing Rate (SOFR) (as described in the Facility) in effect from time to time plus the applicable margin; or (b) the reference rate (as described in the Facility) plus the applicable margin. The Facility also provides for customary fees, including commitment fees. The pricing levels for the commitment fees and interest-rate margins are determined based on the ratings in effect for our senior unsecured long-term debt from time to time. We may at any time prepay outstanding borrowings, in whole or in part, without premium or penalty. At December 31, 2022 and 2021, no amount had been drawn under our revolving credit facilities.

Phillips 66 also has a \$5 billion uncommitted commercial paper program for short-term working capital needs that is supported by the Facility. Commercial paper maturities are contractually limited to 365 days. At December 31, 2022 and 2021, no borrowings were outstanding under the program.

Phillips 66 Partners

In connection with entering into the Facility, we terminated Phillips 66 Partners' \$750 million revolving credit facility. At December 31, 2021, there were no borrowings outstanding under its revolving credit facility and \$1 million in letters of credit had been issued that were supported by its revolving credit facility.

DCP Midstream Class A Segment

DCP LP has a credit facility under its amended credit agreement (the Credit Agreement), with a borrowing capacity of up to \$1.4 billion that matures on March 18, 2027. The Credit Agreement grants DCP LP the option to increase the revolving loan commitment by an aggregate principal amount of up to \$500 million and to extend the term for up to two additional one-year periods, subject to requisite lender approval. Indebtedness under the Credit Agreement bears interest at either: (a) an adjusted SOFR (as described in the Credit Agreement) plus the applicable margin; or (b) the base rate (as described in the Credit Agreement) plus the applicable margin. The Credit Agreement also provides for customary fees, including commitment fees. The cost of borrowing under the Credit Agreement is determined by a ratings-based pricing grid based on DCP LP's credit rating. At December 31, 2022, DCP LP had no borrowings outstanding under the Credit Agreement. At December 31, 2022, \$10 million in letters of credit had been issued that are supported by the Credit Agreement.

DCP LP has an accounts receivable securitization facility (the Securitization Facility) that provides for up to \$350 million of borrowing capacity through August 2024 at an adjusted SOFR and includes an uncommitted option to increase the total commitments under the Securitization Facility by up to an additional \$400 million. Under the Securitization Facility, certain of DCP LP's wholly owned subsidiaries sell or contribute receivables to another of DCP LP's consolidated subsidiaries, DCP Receivables LLC (DCP Receivables), a bankruptcy-remote special purpose entity created for the sole purpose of the Securitization Facility. At December 31, 2022, \$40 million of borrowings were outstanding under the Securitization Facility, which are secured by accounts receivable at DCP Receivables.

After our consolidation of DCP Midstream Class A Segment on August 17, 2022, DCP LP repaid \$470 million of borrowing under its accounts receivable securitization and revolving credit facilities that were outstanding on the acquisition date.

Total Committed Capacity Available

At December 31, 2022, we had approximately \$6.7 billion of total committed capacity available under the credit facilities described above. At December 31, 2021, we had approximately \$5.7 billion of total committed capacity available under our revolving credit facilities.

Note 15—Guarantees

At December 31, 2022, we were liable for certain contingent obligations under various contractual arrangements as described below. We recognize a liability for the fair value of our obligation as a guarantor for newly issued or modified guarantees. Unless the carrying amount of the liability is noted below, we have not recognized a liability either because the guarantees were issued prior to December 31, 2002, or because the fair value of the obligation is immaterial. In addition, unless otherwise stated, we are not currently performing with any significance under the guarantees and expect future performance to be either immaterial or have only a remote chance of occurrence.

Lease Residual Value Guarantees

Under the operating lease agreement for our headquarters facility in Houston, Texas, we have the option, at the end of the lease term in September 2025, to request to renew the lease, purchase the facility or assist the lessor in marketing it for resale. We have a residual value guarantee associated with the operating lease agreement with a maximum potential future exposure of \$514 million at December 31, 2022. We also have residual value guarantees associated with railcar and airplane leases with maximum potential future exposures totaling \$156 million. These leases have remaining terms of five to nine years.

Guarantees of Joint Venture Obligations

In March 2019, Phillips 66 Partners and its co-venturers in Dakota Access provided a CECU in conjunction with a senior unsecured notes offering. See Note 8—Investments, Loans and Long-Term Receivables, for additional information on Dakota Access and the CECU.

At December 31, 2022, we also had other guarantees outstanding primarily for our portion of certain joint venture debt, which have remaining terms of up to three years. The maximum potential future exposures under these guarantees were approximately \$170 million. Payment would be required if a joint venture defaults on its obligations.

Indemnifications

Over the years, we have entered into various agreements to sell ownership interests in certain corporations, joint ventures and assets that gave rise to indemnifications. Agreements associated with these sales include indemnifications for taxes, litigation, environmental liabilities, permits and licenses, employee claims, and real estate tenant defaults. The provisions of these indemnifications vary greatly. The majority of these indemnifications are related to environmental issues, which generally have indefinite terms and potentially unlimited exposure. At December 31, 2022 and 2021, the carrying amount of recorded indemnifications was \$137 million and \$144 million, respectively.

We amortize the indemnification liability over the relevant time period, if one exists, based on the facts and circumstances surrounding each type of indemnity. In cases where the indemnification term is indefinite, we will reverse the liability when we have information to support the reversal. Although it is reasonably possible future payments may exceed amounts recorded, due to the nature of the indemnifications, it is not possible to make a reasonable estimate of the maximum potential amount of future payments. At December 31, 2022 and 2021, environmental accruals for known contamination of \$108 million and \$106 million, respectively, were included in the carrying amount of the recorded indemnifications noted above. These environmental accruals were primarily included in the “Asset retirement obligations and accrued environmental costs” line item on our consolidated balance sheet. For additional information about environmental liabilities, see Note 12—Asset Retirement Obligations and Accrued Environmental Costs and Note 16—Contingencies and Commitments.

Indemnification and Release Agreement

In 2012, in connection with our separation from ConocoPhillips, we entered into an Indemnification and Release Agreement. This agreement governs the treatment between ConocoPhillips and us of matters relating to indemnification, insurance, litigation responsibility and management, and litigation document sharing and cooperation arising in connection with the separation. Generally, the agreement provides for cross indemnities principally designed to place financial responsibility for the obligations and liabilities of our business with us and financial responsibility for the obligations and liabilities of ConocoPhillips’ business with ConocoPhillips. The agreement also establishes procedures for handling claims subject to indemnification and related matters.

Note 16—Contingencies and Commitments

A number of lawsuits involving a variety of claims that arose in the ordinary course of business have been filed against us or are subject to indemnifications provided by us. We also may be required to remove or mitigate the effects on the environment of the placement, storage, disposal or release of certain chemical, mineral and petroleum substances at various active and inactive sites. We regularly assess the need for financial recognition or disclosure of these contingencies. In the case of all known contingencies (other than those related to income taxes), we accrue a liability when the loss is probable and the amount is reasonably estimable. If a range of amounts can be reasonably estimated and no amount within the range is a better estimate than any other amount, then the minimum of the range is accrued. We do not reduce these liabilities for potential insurance or third-party recoveries. If applicable, we accrue receivables for probable insurance or other third-party recoveries. In the case of income tax-related contingencies, we use a cumulative probability-weighted loss accrual in cases where sustaining a tax position is uncertain. See Note 23—Income Taxes, for additional information about income-tax-related contingencies.

Based on currently available information, we believe it is remote that future costs related to known contingent liability exposures will exceed current accruals by an amount that would have a material adverse impact on our consolidated financial statements. As we learn new facts concerning contingencies, we reassess our position both with respect to accrued liabilities and other potential exposures. Estimates particularly sensitive to future changes include contingent liabilities recorded for environmental remediation, tax and legal matters. Estimated future environmental remediation costs are subject to change due to such factors as the uncertain magnitude of cleanup costs, the unknown time and extent of such remedial actions that may be required, and the determination of our liability in proportion to that of other potentially responsible parties. Estimated future costs related to tax and legal matters are subject to change as events evolve and as additional information becomes available during the administrative and litigation processes.

Environmental

We are subject to international, federal, state and local environmental laws and regulations. When we prepare our consolidated financial statements, we record accruals for environmental liabilities based on management's best estimates, using information available at the time. We measure estimates and base contingent liabilities on currently available facts, existing technology and presently enacted laws and regulations, taking into account stakeholder and business considerations. When measuring contingent environmental liabilities, we also consider our prior experience in remediation of contaminated sites, other companies' cleanup experience, and data released by the EPA or other organizations. We consider unasserted claims in our determination of environmental liabilities, and we accrue them in the period they are both probable and reasonably estimable.

Although liability for environmental remediation costs is generally joint and several for federal sites and frequently so for state sites, we are usually only one of many companies alleged to have liability at a particular site. Due to such joint and several liabilities, we could be responsible for all cleanup costs related to any site at which we have been designated as a potentially responsible party. We have been successful to date in sharing cleanup costs with other financially sound companies. Many of the sites for which we are potentially responsible are still under investigation by the EPA or the state agencies concerned. Prior to actual cleanup, those potentially responsible normally assess the site conditions, apportion responsibility and determine the appropriate remediation. In some instances, we may have no liability or may attain a settlement of liability. Where it appears that other potentially responsible parties may be financially unable to bear their proportional share, we consider this inability in estimating our potential liability, and we adjust our accruals accordingly. As a result of various acquisitions in the past, we assumed certain environmental obligations. Some of these environmental obligations are mitigated by indemnifications made by others for our benefit, although some of the indemnifications are subject to dollar and time limits.

We are currently participating in environmental assessments and cleanups at numerous federal Superfund and comparable state sites. After an assessment of environmental exposures for cleanup and other costs, we make accruals on an undiscounted basis (except those pertaining to sites acquired in a business combination, which we record on a discounted basis) for planned investigation and remediation activities for sites where it is probable future costs will be incurred and these costs can be reasonably estimated. We have not reduced these accruals for possible insurance recoveries. In the future, we may be involved in additional environmental assessments, cleanups and proceedings. See Note 12—Asset Retirement Obligations and Accrued Environmental Costs, for a summary of our accrued environmental liabilities.

Legal Proceedings

Our legal organization applies its knowledge, experience and professional judgment to the specific characteristics of our cases, employing a litigation management process to manage and monitor the legal proceedings against us. Our process facilitates the early evaluation and quantification of potential exposures in individual cases and enables the tracking of those cases that have been scheduled for trial and/or mediation. Based on professional judgment and experience in using these litigation management tools and available information about current developments in all our cases, our legal organization regularly assesses the adequacy of current accruals and determines if adjustment of existing accruals, or establishment of new accruals, is required.

Other Contingencies

We have contingent liabilities resulting from throughput agreements with pipeline and processing companies not associated with financing arrangements. Under these agreements, we may be required to provide any such company with additional funds through advances and penalties for fees related to throughput capacity not utilized.

At December 31, 2022, we had performance obligations secured by letters of credit and bank guarantees of \$1,134 million related to various purchase and other commitments incident to the ordinary conduct of business.

Long-Term Throughput Agreements and Take-or-Pay Agreements

We have certain throughput agreements and take-or-pay agreements in support of third-party financing arrangements. The agreements typically provide for crude oil transportation to be used in the ordinary course of our business. At December 31, 2022, the estimated aggregate future payments under these agreements were \$319 million per year for each year from 2023 through 2027 and \$1,013 million in aggregate for all years after 2027. For the years ended December 31, 2022, 2021 and 2020, total payments under these agreements were \$323 million, \$327 million and \$320 million, respectively.

Note 17—Derivatives and Financial Instruments

Derivative Instruments

We use financial and commodity-based derivative contracts to manage exposures to fluctuations in commodity prices, interest rates and foreign currency exchange rates, or to capture market opportunities. Because we do not apply hedge accounting for commodity derivative contracts, all realized and unrealized gains and losses from commodity derivative contracts are recognized in our consolidated statement of operations. Gains and losses from derivative contracts held for trading not directly related to our physical business are reported net in the “Other income” line item on our consolidated statement of operations. Cash flows from all our derivative activity for the periods presented appear in the operating section on our consolidated statement of cash flows.

Purchase and sales contracts with firm minimum notional volumes for commodities that are readily convertible to cash are recorded on our consolidated balance sheet as derivatives unless the contracts are eligible for, and we elect, the normal purchases and normal sales exception, whereby the contracts are recorded on an accrual basis. We generally apply the normal purchases and normal sales exception to eligible crude oil, refined petroleum product, NGL, natural gas, renewable feedstock, and power commodity contracts to purchase or sell quantities we expect to use or sell in the normal course of business. All other derivative instruments are recorded at fair value on our consolidated balance sheet. For further information on the fair value of derivatives, see Note 18—Fair Value Measurements.

Commodity Derivative Contracts—We sell into or receive supply from the worldwide crude oil, refined petroleum product, NGL, natural gas, renewable feedstock, and electric power markets, exposing our revenues, purchases, cost of operating activities and cash flows to fluctuations in the prices for these commodities. Generally, our policy is to remain exposed to the market prices of commodities; however, we use futures, forwards, swaps and options in various markets to balance physical systems, meet customer needs, manage price exposures on specific transactions, and do a limited amount of trading not directly related to our physical business, all of which may reduce our exposure to fluctuations in market prices. We also use the market knowledge gained from these activities to capture market opportunities such as moving physical commodities to more profitable locations, storing commodities to capture seasonal or time premiums, and blending commodities to capture quality upgrades.

DCP Midstream Class A Segment

Through DCP LP’s operations, DCP Midstream Class A Segment is exposed to a variety of risks including but not limited to changes in the prices of commodities that DCP LP buys or sells. Effective from the date of the merger, we include DCP LP’s financial instruments in our financial statements. See Note 3—DCP Midstream, LLC and Gray Oak Holdings LLC Merger, for additional information regarding the merger and the associated accounting treatment.

The following table indicates the consolidated balance sheet line items that include the fair values of commodity derivative assets and liabilities. The balances in the following table are presented on a gross basis, before the effects of counterparty and collateral netting. However, we have elected to present our commodity derivative assets and liabilities with the same counterparty on a net basis on our consolidated balance sheet when the legal right of offset exists.

	Millions of Dollars							
	December 31, 2022				December 31, 2021			
	Commodity Derivatives		Effect of Collateral Netting	Net Carrying Value Presented on the Balance Sheet	Commodity Derivatives		Effect of Collateral Netting	Net Carrying Value Presented on the Balance Sheet
	Assets	Liabilities			Assets	Liabilities		
Assets								
Prepaid expenses and other current assets	\$ 1,331	(1,110)	—	221	99	(20)	—	79
Other assets	46	(1)	—	45	3	(1)	—	2
Liabilities								
Other accruals	471	(750)	90	(189)	758	(855)	49	(48)
Other liabilities and deferred credits	12	(35)	—	(23)	—	(1)	—	(1)
Total	\$ 1,860	(1,896)	90	54	860	(877)	49	32

At December 31, 2022, there was \$93 million of collateral paid that was not offset on our consolidated balance sheet. At December 31, 2021, there was no material cash collateral received or paid that was not offset on our consolidated balance sheet.

The realized and unrealized gains (losses) incurred from commodity derivatives, and the line items where they appear on our consolidated statement of operations, were:

	Millions of Dollars		
	2022	2021	2020
Sales and other operating revenues	\$ (128)	(468)	436
Other income	79	34	10
Purchased crude oil and products	(348)	(313)	174
Net gain (loss) from commodity derivative activity	\$ (397)	(747)	620

The following table summarizes our material net exposures resulting from outstanding commodity derivative contracts. These financial and physical derivative contracts are primarily used to manage price exposure on our underlying operations. The underlying exposures may be from nonderivative positions such as inventory volumes. Financial derivative contracts may also offset physical derivative contracts, such as forward purchase and sales contracts. The percentage of our derivative contract volumes expiring within the next 12 months was more than 90% at December 31, 2022 and 2021.

	Open Position Long / (Short)	
	2022	2021
Commodity		
Crude oil, refined petroleum products, NGL and renewable feedstocks (<i>millions of barrels</i>)	(25)	(18)
Natural gas (<i>billions of cubic feet</i>)	(77)	—

Credit Risk from Derivative and Financial Instruments

Financial instruments potentially exposed to concentrations of credit risk consist primarily of trade receivables and derivative contracts.

Our trade receivables result primarily from the sale of products from, or related to, our refinery operations and reflect a broad national and international customer base, which limits our exposure to concentrations of credit risk. The majority of these receivables have payment terms of 30 days or less. We continually monitor this exposure and the creditworthiness of the counterparties and recognize bad debt expense based on a probability assessment of credit loss. Generally, we do not require collateral to limit the exposure to loss; however, we will sometimes use letters of credit, prepayments or master netting arrangements to mitigate credit risk with counterparties that both buy from and sell to us, as these agreements permit the amounts owed by us to others to be offset against amounts owed to us.

The credit risk from our derivative contracts, such as forwards and swaps, derives from the counterparty to the transaction. Individual counterparty exposure is managed within predetermined credit limits and includes the use of cash-call margins when appropriate, thereby reducing the risk of significant nonperformance. We also use futures, swaps and option contracts that have a negligible credit risk because these trades are cleared with an exchange clearinghouse and subject to mandatory margin requirements, typically on a daily basis, until settled.

Certain of our derivative instruments contain provisions that require us to post collateral if the derivative exposure exceeds a threshold amount. We have contracts with fixed threshold amounts and other contracts with variable threshold amounts that are contingent on our credit ratings. The variable threshold amounts typically decline for lower credit ratings, while both the variable and fixed threshold amounts typically revert to zero if our credit ratings fall below investment grade. Cash is the primary collateral in all contracts; however, many contracts also permit us to post letters of credit as collateral.

The aggregate fair values of all derivative instruments with such credit-risk-related contingent features that were in a liability position were immaterial at December 31, 2022 and 2021.

Note 18—Fair Value Measurements

Recurring Fair Value Measurements

We carry certain assets and liabilities at fair value, which we measure at the reporting date using the price that would be received to sell an asset or paid to transfer a liability (i.e., an exit price), and disclose the quality of these fair values based on the valuation inputs used in these measurements under the following hierarchy:

- Level 1: Fair value measured with unadjusted quoted prices from an active market for identical assets or liabilities.
- Level 2: Fair value measured either with: (1) adjusted quoted prices from an active market for similar assets or liabilities; or (2) other valuation inputs that are directly or indirectly observable.
- Level 3: Fair value measured with unobservable inputs that are significant to the measurement.

We classify the fair value of an asset or liability based on the significance of its observable or unobservable inputs to the measurement. However, the fair value of an asset or liability initially reported as Level 3 will be subsequently reported as Level 2 if the unobservable inputs become inconsequential to its measurement or corroborating market data becomes available. Conversely, an asset or liability initially reported as Level 2 will be subsequently reported as Level 3 if corroborating market data becomes unavailable.

We used the following methods and assumptions to estimate the fair value of financial instruments:

- *Cash and cash equivalents*—The carrying amount reported on our consolidated balance sheet approximates fair value.
- *Accounts and notes receivable*—The carrying amount reported on our consolidated balance sheet approximates fair value.

- *Derivative instruments*—The fair value of our exchange-traded contracts is based on quoted market prices obtained from the New York Mercantile Exchange, the Intercontinental Exchange or other exchanges, and is reported as Level 1 in the fair value hierarchy. When exchange-cleared contracts lack sufficient liquidity, or are valued using either adjusted exchange-provided prices or nonexchange quotes, we classify those contracts as Level 2 or Level 3 based on the degree to which inputs are observable.

Physical commodity forward purchase and sales contracts and over-the-counter (OTC) financial swaps are generally valued using forward quotes provided by brokers and price index developers, such as Platts and Oil Price Information Service. We corroborate these quotes with market data and classify the resulting fair values as Level 2. When forward market prices are not available, we estimate fair value using the forward price of a similar commodity, adjusted for the difference in quality or location. In certain less liquid markets or for longer-term contracts, forward prices are not as readily available. In these circumstances, physical commodity purchase and sales contracts and OTC swaps are valued using internally developed methodologies that consider historical relationships among various commodities that result in management's best estimate of fair value. We classify these contracts as Level 3. Physical and OTC commodity options are valued using industry-standard models that consider various assumptions, including quoted forward prices for commodities, time value, volatility factors and contractual prices for the underlying instruments, as well as other relevant economic measures. The degree to which these inputs are observable in the forward markets determines whether the options are classified as Level 2 or 3. We use a midmarket pricing convention (the midpoint between bid and ask prices). When appropriate, valuations are adjusted to reflect credit considerations, generally based on available market evidence.

We determine the fair value of interest rate swaps based on observable market valuations for interest rate swaps that have notional amounts, terms and pay and reset frequencies similar to ours.

- *Rabbi trust assets*—These deferred compensation investments are measured at fair value using unadjusted quoted prices available from national securities exchanges and are therefore categorized as Level 1 in the fair value hierarchy.
- *Investment in NOVONIX*—Our investment in NOVONIX is measured at fair value using unadjusted quoted prices available from the Australian Securities Exchange and is therefore categorized as Level 1 in the fair value hierarchy.
- *Other investments*—Includes other marketable securities with observable market prices.
- *Debt*—The carrying amount of our floating-rate debt approximates fair value. The fair value of our fixed-rate debt is estimated primarily based on observable market prices.

The following tables display the fair value hierarchy for our financial assets and liabilities either accounted for or disclosed at fair value on a recurring basis. These values are determined by treating each contract as the fundamental unit of account; therefore, derivative assets and liabilities with the same counterparty are shown on a gross basis in the hierarchy sections of these tables, before the effects of counterparty and collateral netting. The following tables also reflect the effect of netting derivative assets and liabilities with the same counterparty for which we have the legal right of offset and collateral netting.

The carrying values and fair values by hierarchy of our financial assets and liabilities, either carried or disclosed at fair value, including any effects of counterparty and collateral netting, were:

	Millions of Dollars								
	December 31, 2022								
	Fair Value Hierarchy			Total Fair Value of Gross Assets & Liabilities	Effect of Counterparty Netting	Effect of Collateral Netting	Difference in Carrying Value and Fair Value	Net Carrying Value Presented on the Balance Sheet	
	Level 1	Level 2	Level 3						
Commodity Derivative Assets									
Exchange-cleared instruments	\$	1,615	130	3	1,748	(1,582)	—	—	166
OTC instruments		—	7	16	23	—	—	—	23
Physical forward contracts		—	86	3	89	(12)	—	—	77
Rabbi trust assets		126	—	—	126	N/A	N/A	—	126
Investment in NOVONIX		78	—	—	78	N/A	N/A	—	78
Other investments		42	1	—	43	N/A	N/A	—	43
	\$	1,861	224	22	2,107	(1,594)	—	—	513
Commodity Derivative Liabilities									
Exchange-cleared instruments	\$	1,676	164	5	1,845	(1,582)	(90)	—	173
OTC instruments		—	9	—	9	—	—	—	9
Physical forward contracts		—	42	—	42	(12)	—	—	30
Floating-rate debt		—	65	—	65	N/A	N/A	—	65
Fixed-rate debt, excluding finance leases and software obligations		—	15,871	—	15,871	N/A	N/A	977	16,848
	\$	1,676	16,151	5	17,832	(1,594)	(90)	977	17,125

	Millions of Dollars							
	December 31, 2021							
	Fair Value Hierarchy			Total Fair Value of Gross Assets & Liabilities	Effect of Counterparty Netting	Effect of Collateral Netting	Difference in Carrying Value and Fair Value	Net Carrying Value Presented on the Balance Sheet
	Level 1	Level 2	Level 3					
Commodity Derivative Assets								
Exchange-cleared instruments	\$ 419	368	—	787	(779)	—	—	8
Physical forward contracts	—	73	—	73	—	—	—	73
Rabbi trust assets	158	—	—	158	N/A	N/A	—	158
Investment in NOVONIX	520	—	—	520	N/A	N/A	—	520
	\$ 1,097	441	—	1,538	(779)	—	—	759
Commodity Derivative Liabilities								
Exchange-cleared instruments	\$ 463	362	—	825	(779)	(49)	—	(3)
OTC instruments	—	1	—	1	—	—	—	1
Physical forward contracts	—	51	—	51	—	—	—	51
Floating-rate debt	—	475	—	475	N/A	N/A	—	475
Fixed-rate debt, excluding finance leases and software obligations	—	15,353	—	15,353	N/A	N/A	(1,686)	13,667
	\$ 463	16,242	—	16,705	(779)	(49)	(1,686)	14,191

The rabbi trust assets and investment in NOVONIX are recorded in the “Investments and long-term receivables” line item, and floating-rate and fixed-rate debt are recorded in the “Short-term debt” and “Long-term debt” line items on our consolidated balance sheet. See Note 17—Derivatives and Financial Instruments, for information regarding where the assets and liabilities related to our commodity derivatives are recorded on our consolidated balance sheet.

Nonrecurring Fair Value Measurements

Equity Investments

Liberty

In the first quarter of 2021, Phillips 66 Partners wrote down the book value of its investment in Liberty to estimated fair value using a Level 3 nonrecurring fair value measurement. This nonrecurring measurement was based on the estimated fair value of Phillips 66 Partners' share of the joint venture's pipeline assets and net working capital at March 31, 2021. See Note 8—Investments, Loans and Long-Term Receivables, for more information regarding Phillips 66 Partners' transfer of its ownership in Liberty to its co-venturer in April 2021.

Other

In the fourth quarter of 2020, the nonrecurring fair value measurements used by Phillips 66 Partners to impair its equity method investments in two crude oil transportation and terminaling joint ventures were calculated by weighting the results of different economic scenarios using the income approach. The income approach uses a discounted cash flow model that requires various observable and nonobservable inputs, including volumes, rates/tariffs, expenses and discount rates. These valuations resulted in a Level 3 nonrecurring fair value measurement.

DCP Midstream

In the first quarter of 2020, the nonrecurring fair value measurement used to record an impairment of our DCP Midstream investment was the fair value of our share of DCP Midstream's limited partner interest in DCP LP, which was estimated based on average market prices of DCP LP's common units for a multi-day trading period encompassing March 31, 2020. This valuation resulted in a Level 2 nonrecurring fair value measurement.

PP&E and Intangible Assets

Alliance Refinery

In the third quarter of 2021, we remeasured the carrying value of the net PP&E of our Alliance Refinery asset group to fair value. The fair value of PP&E was determined using a combination of the income, cost and sales comparison approaches. The income approach used a discounted cash flow model that requires various observable and non-observable inputs, such as commodity prices, margins, operating rates, sales volumes, operating expenses, capital expenditures, terminal-year values and a risk-adjusted discount rate. The cost approach used assumptions for the current replacement costs of similar plant and equipment assets adjusted for estimated physical deterioration, functional obsolescence and economic obsolescence. The sales comparison approach used the value of similar properties recently sold or currently offered for sale. This valuation resulted in a Level 3 nonrecurring fair value measurement.

San Francisco Refinery

In the third quarter of 2020, we remeasured the carrying value of the net PP&E and intangible assets of our San Francisco Refinery asset group to fair value. The estimated fair value of the plants, equipment and intangible assets was determined using a replacement cost approach adjusted, as applicable, for physical deterioration, functional obsolescence and economic obsolescence. The estimated fair value of the properties was determined using a sales comparison approach. This valuation resulted in a Level 3 nonrecurring fair value measurement.

Goodwill

The carrying value of the Refining reporting unit's goodwill was remeasured to fair value on a nonrecurring basis in the first quarter of 2020. The fair value of the Refining reporting unit was calculated by weighting the results from the income approach and the market approach. The income approach used a discounted cash flow model that included various observable and nonobservable inputs, such as prices, volumes, expenses, capital expenditures, discount rates and projected long-term growth rates and terminal values. The market approach used peer company enterprise values relative to current and future net income (loss) before net interest expense, income taxes, depreciation and amortization (EBITDA) projections to arrive at an average multiple. This multiple was applied to the reporting unit's current and projected EBITDA, with consideration for an estimated market participant acquisition premium. The resulting Level 3 fair value estimate was less than the Refining reporting unit's carrying value by an amount that exceeded the existing goodwill balance of the reporting unit. As a result, the Refining reporting unit's goodwill was impaired to zero. As part of our impairment analysis, the fair value of all reporting units was reconciled to the company's market capitalization.

DCP Midstream and Gray Oak Holdings Merger

In the third quarter of 2022, we and Enbridge agreed to merge DCP Midstream and Gray Oak Holdings with DCP Midstream as the surviving entity. As a result, we began consolidating the financial results of DCP Midstream Class A Segment, DCP Sand Hills and DCP Southern Hills, and accordingly, accounted for the business combination using the acquisition method of accounting, which requires DCP Midstream Class A Segment's, DCP Sand Hills' and DCP Southern Hills', assets and liabilities to be recorded at fair value as of the acquisition date on our consolidated balance sheet. See Note 4 —Business Combination, for additional information on the merger transaction.

Equity Investments

The preliminary fair value of the investments we acquired that are accounted for under the equity method was \$2,198 million. The preliminary fair value of these assets was determined using the income approach. The income approach used discounted cash flow models that require various observable and non-observable inputs, such as margins, tariffs and rates, utilization, volumes, product costs, operating expenses, capital expenditures, terminal-year values and risk-adjusted discount rates. These valuations resulted in Level 3 nonrecurring fair value measurements.

PP&E

The preliminary fair value of PP&E was \$12,838 million. The preliminary fair value of these assets was determined primarily using the cost approach. The cost approach used assumptions for the current replacement costs of similar plant and equipment assets adjusted for estimated physical deterioration, functional obsolescence and economic obsolescence. The estimated fair value of properties was determined using a sales comparison approach. These valuations resulted in Level 3 nonrecurring fair value measurements.

Debt

The preliminary fair value of DCP LP's senior and junior subordinated notes was measured using a market approach, based on the average of quotes for the acquired debt from major financial institutions. These valuations resulted in Level 2 nonrecurring fair value measurements.

Gain Related to Merger of Businesses

In connection with the merger, we recognized before-tax gains totaling \$2,831 million from remeasuring our previously held equity investments to their fair values and a before-tax gain of \$182 million related to the transfer of a 35.75% indirect economic interest in Gray Oak Pipeline to our co-venturer. The preliminary fair values of our previously held equity interest in DCP Midstream and the equity interest in Gray Oak Pipeline we transferred were primarily based on DCP LP's publicly traded common unit market price on the effective date of the merger, August 17, 2022, the cash consideration contributed and obligations that were deemed to be effectively settled. This valuation resulted in Level 1 nonrecurring fair value measurements. The preliminary fair values of our previously held equity interests in DCP Sand Hills and DCP Southern Hills were determined using the income approach. The income approach used discounted cash flow models that require various observable and non-observable inputs, such as tariffs, volumes, operating expenses, capital expenditures, terminal-year values and risk-adjusted discount rates. These valuations resulted in Level 3 nonrecurring fair value measurements.

Noncontrolling Interests

As a result of our consolidation of the DCP Midstream Class A Segment, the noncontrolling interests held in the DCP Midstream Class A Segment were recorded at their estimated fair values on the merger date. These noncontrolling interests primarily include Enbridge's indirect economic interest in DCP LP, the public holders of DCP LP's common units and the holders of DCP LP's preferred units. The fair value of the noncontrolling interests in DCP LP's common units was based on their unit market price as of the date of the merger, August 17, 2022. The fair value of the noncontrolling interests in DCP LP's publicly traded preferred units was based on their respective market price as of the date of the merger, August 17, 2022. These valuations resulted in Level 1 nonrecurring fair value measurements. The preliminary fair value of the noncontrolling interests in DCP LP's other preferred units was based on an income approach that used projected distributions that were discounted using an average implied yield of DCP LP's publicly traded preferred units and expected redemption dates. This valuation resulted in a Level 2 nonrecurring fair value measurement.

Note 19—Equity

Preferred Stock

Phillips 66 has 500 million shares of preferred stock authorized, with a par value of \$0.01 per share, none of which have been issued.

Treasury Stock

In March 2020, we announced that we had temporarily suspended our share repurchases to preserve liquidity in response to the global economic disruption caused by the COVID-19 pandemic. We resumed purchasing shares under our share repurchase program in the second quarter of 2022. On November 7, 2022, our Board of Directors approved a \$5 billion increase to our share repurchase program. Since July 2012, our Board of Directors has authorized an aggregate of \$20 billion of repurchases of our outstanding common stock. The authorizations do not have expiration dates. Future share repurchases are expected to be funded primarily through available cash. We are not obligated to repurchase any shares of common stock pursuant to these authorizations and may commence, suspend or terminate repurchases at any time. In 2022, we repurchased 16.6 million shares at an aggregate cost of \$1.5 billion. Since the inception of our share repurchase program in 2012, we have repurchased 175.9 million shares at an aggregate cost of \$14 billion. Shares of stock repurchased are held as treasury shares.

Our Board of Directors separately authorized two transactions in 2014 and 2018, which resulted in the repurchase of 52.4 million shares of Phillips 66 common stock with an aggregate value of \$4.6 billion.

In March 2022, in connection with the Phillips 66 Partners merger, we issued 41.8 million shares of common stock from our treasury stock with an aggregate cost of \$3.4 billion. See Note 30—Phillips 66 Partners LP, for information on the merger with Phillips 66 Partners.

Common Stock Dividends

On February 8, 2023, our Board of Directors declared a quarterly cash dividend of \$1.05 per common share, payable March 1, 2023, to holders of record at the close of business on February 21, 2023.

Noncontrolling Interests

In 2022, our noncontrolling interests primarily represented Enbridge's indirect economic interest in DCP LP, the public holders of DCP LP's common units and the holders of DCP LP's preferred units. In 2021, our noncontrolling interests primarily represented the public holders of Phillips 66 Partners' common units and the holders of Phillips 66 Partners' preferred units. See Note 30—Phillips 66 Partners LP, for information on the merger with Phillips 66 Partners.

Note 20—Leases

We lease marine vessels, pipelines, storage tanks, railcars, service station sites, office buildings, corporate aircraft, land and other facilities and equipment. In determining whether an agreement contains a lease, we consider our ability to control the asset and whether third-party participation or vendor substitution rights limit our control. Certain leases include escalation clauses for adjusting rental payments to reflect changes in price indices, as well as renewal options and/or options to purchase the leased property. Renewal options have been included only when reasonably certain of exercise. There are no significant restrictions imposed on us in our lease agreements with regards to dividend payments, asset dispositions or borrowing ability. Certain leases have residual value guarantees, which may require additional payments at the end of the lease term if future fair values decline below contractual lease balances.

In our implementation of ASU No. 2016-02, we elected to discount lease obligations using our incremental borrowing rate. Furthermore, we elected to separate costs for lease and service components for contracts involving marine vessels and consignment service stations. For these contracts, we allocate the consideration payable between the lease and service components using the relative standalone prices of each component. For contracts involving all other asset types, we elected the practical expedient to account for the lease and service components on a combined basis. Our right of way agreements in effect prior to January 1, 2019, were not accounted for as leases as they were not initially determined to be leases at their commencement dates. However, modifications to these agreements or new agreements are assessed and accounted for accordingly under ASU No. 2016-02. For short-term leases, which are leases that, at the commencement date, have a lease term of 12 months or less and do not include an option to purchase the underlying asset that is reasonably certain to be exercised, we elected to not recognize the ROU asset and corresponding lease liability on our consolidated balance sheet.

The following table indicates the consolidated balance sheet line items that include the ROU assets and lease liabilities for our finance and operating leases at December 31:

	Millions of Dollars			
	2022		2021	
	Finance Leases	Operating Leases	Finance Leases	Operating Leases
Right-of-Use Assets				
Net properties, plants and equipment	\$ 259	—	259	—
Other assets	—	995	—	1,050
Total right-of-use assets	\$ 259	995	259	1,050
Lease Liabilities				
Short-term debt	\$ 23	—	33	—
Other accruals	—	282	—	343
Long-term debt	234	—	257	—
Other liabilities and deferred credits	—	745	—	725
Total lease liabilities	\$ 257	1,027	290	1,068

Future minimum lease payments at December 31, 2022, for finance and operating lease liabilities were:

	Millions of Dollars	
	Finance Leases	Operating Leases
2023	\$ 32	317
2024	32	234
2025	26	177
2026	28	120
2027	22	89
Remaining years	182	221
Future minimum lease payments	322	1,158
Amount representing interest or discounts	(65)	(131)
Total lease liabilities	\$ 257	1,027

Our finance lease liabilities relate primarily to service station consignment agreements with a marketing joint venture and a crude oil terminal in the United Kingdom. The lease liability for the terminal finance lease is subject to foreign currency translation adjustments each reporting period.

Components of net lease cost for the years ended December 31, 2022, 2021 and 2020, were:

	Millions of Dollars		
	2022	2021	2020
Finance lease cost			
Amortization of right-of-use assets	\$ 24	23	21
Interest on lease liabilities	9	9	10
Total finance lease cost	33	32	31
Operating lease cost	387	461	527
Short-term lease cost	63	104	108
Variable lease cost	19	3	39
Sublease income	(13)	(15)	(22)
Total net lease cost	\$ 489	585	683

Cash paid for amounts included in the measurement of our lease liabilities for the years ended December 31, 2022, 2021 and 2020, was:

	Millions of Dollars		
	2022	2021	2020
Operating cash outflows—finance leases	\$ 11	9	10
Operating cash outflows—operating leases	392	438	521
Financing cash outflows—finance leases	32	21	17

During the years ended December 31, 2022, 2021 and 2020, we recorded additional noncash ROU assets and corresponding operating lease liabilities totaling \$269 million, \$260 million and \$363 million, respectively, related to new and modified lease agreements.

At December 31, 2022 and 2021, the weighted-average remaining lease terms and discount rates for our lease liabilities were:

	2022	2021
Weighted-average remaining lease term—finance leases (years)	12.5	13.0
Weighted-average remaining lease term—operating leases (years)	5.8	5.7
Weighted-average discount rate—finance leases	3.3 %	3.3
Weighted-average discount rate—operating leases	3.8 %	3.2

Note 21—Pension and Postretirement Plans

The following table provides a reconciliation of the projected benefit obligations and plan assets for our pension plans and accumulated benefit obligations for our other postretirement benefit plans:

Millions of Dollars						
	Pension Benefits				Other Benefits	
	2022		2021		2022	2021
	U.S.	Int'l.	U.S.	Int'l.		
Change in Benefit Obligations						
Benefit obligations at January 1	\$ 3,033	1,409	3,405	1,480	197	213
Service cost	123	28	146	36	4	5
Interest cost	100	21	81	19	5	5
Plan participant contributions	—	2	—	2	6	6
Net actuarial gain	(528)	(502)	(82)	(37)	(37)	(13)
Benefits paid	(519)	(44)	(517)	(44)	(19)	(19)
Settlements	—	(101)	—	—	—	—
Foreign currency exchange rate change	—	(138)	—	(47)	—	—
Benefit obligations at December 31	\$ 2,209	675	3,033	1,409	156	197
Change in Fair Value of Plan Assets						
Fair value of plan assets at January 1	\$ 2,547	1,280	2,738	1,212	—	—
Actual return on plan assets	(375)	(329)	289	114	—	—
Company contributions	125	23	37	27	13	13
Plan participant contributions	—	2	—	2	6	6
Benefits paid	(519)	(44)	(517)	(44)	(19)	(19)
Settlements	—	(101)	—	—	—	—
Foreign currency exchange rate change	—	(124)	—	(31)	—	—
Fair value of plan assets at December 31	\$ 1,778	707	2,547	1,280	—	—
Funded Status at December 31	\$ (431)	32	(486)	(129)	(156)	(197)

Amounts recognized in the consolidated balance sheet for our pension and other postretirement benefit plans at December 31 include:

Millions of Dollars						
	Pension Benefits				Other Benefits	
	2022		2021		2022	2021
	U.S.	Int'l.	U.S.	Int'l.		
Amounts Recognized in the Consolidated Balance Sheet						
Noncurrent assets	\$	—	140	—	51	—
Current liabilities		(50)	—	(25)	—	(15)
Noncurrent liabilities		(381)	(108)	(461)	(180)	(182)
Total recognized	\$	(431)	32	(486)	(129)	(197)

Included in accumulated other comprehensive loss at December 31 were the following before-tax amounts that had not been recognized in net periodic benefit cost:

Millions of Dollars						
	Pension Benefits				Other Benefits	
	2022		2021		2022	2021
	U.S.	Int'l.	U.S.	Int'l.		
Unrecognized net actuarial loss (gain)	\$	159	(27)	251	130	(59)
Unrecognized prior service credit		—	—	—	(1)	(2)

Other changes in plan assets and benefit obligations recognized in other comprehensive income (loss):

Millions of Dollars						
	Pension Benefits				Other Benefits	
	2022		2021		2022	2021
	U.S.	Int'l.	U.S.	Int'l.		
Sources of Change in Other Comprehensive Income						
Net actuarial gain arising during the period	\$	18	136	211	92	37
Amortization of net actuarial loss (gain) and settlements		74	21	101	25	(2)
Amortization of prior service credit		—	(1)	—	(1)	(2)
Total recognized in other comprehensive income	\$	92	156	312	116	33

The accumulated benefit obligations for all U.S. and international pension plans were \$2,055 million and \$593 million, respectively, at December 31, 2022, and \$2,770 million and \$1,236 million, respectively, at December 31, 2021.

Information for U.S. and international pension plans with an accumulated benefit obligation in excess of plan assets at December 31 was:

	Millions of Dollars			
	Pension Benefits			
	2022		2021	
	U.S.	Int'l.	U.S.	Int'l.
Accumulated benefit obligations	\$ 2,055	114	2,770	410
Fair value of plan assets	1,778	13	2,547	248

Information for U.S. and international pension plans with a projected benefit obligation in excess of plan assets at December 31 was:

	Millions of Dollars			
	Pension Benefits			
	2022		2021	
	U.S.	Int'l.	U.S.	Int'l.
Projected benefit obligations	\$ 2,209	121	3,033	428
Fair value of plan assets	1,778	13	2,547	248

Components of net periodic benefit cost for all defined benefit plans are presented in the table below:

	Millions of Dollars								
	Pension Benefits						Other Benefits		
	2022		2021		2020		2022	2021	2020
	U.S.	Int'l.	U.S.	Int'l.	U.S.	Int'l.			
Components of Net Periodic Benefit Cost									
Service cost	\$ 123	28	146	36	138	28	4	5	5
Interest cost	100	21	81	19	91	22	5	5	7
Expected return on plan assets	(135)	(56)	(160)	(59)	(159)	(50)	—	—	—
Amortization of prior service credit	—	(1)	—	(1)	—	(1)	(2)	(2)	(2)
Amortization of net actuarial loss (gain)	21	12	46	25	70	16	(2)	(1)	—
Settlements	53	9	55	—	61	—	—	—	—
Net periodic benefit cost*	\$ 162	13	168	20	201	15	5	7	10

* Included in the "Operating expenses" and "Selling, general and administrative expenses" line items on our consolidated statement of operations.

In determining net periodic benefit cost, we amortize prior service costs on a straight-line basis over the average remaining service period of employees expected to receive benefits under the plan. For net actuarial gains and losses, we amortize 10% of the unamortized balance each year. The amount subject to amortization is determined on a plan-by-plan basis.

The following weighted-average assumptions were used to determine benefit obligations and net periodic benefit costs for years ended December 31:

	Pension Benefits				Other Benefits	
	2022		2021		2022	2021
	U.S.	Int'l.	U.S.	Int'l.		
Assumptions Used to Determine Benefit Obligations:						
Discount rate	5.70 %	4.64	2.95	1.60	5.70	2.90
Rate of compensation increase	4.30	3.32	4.30	3.05	—	—
Interest crediting rate on cash balance plan	3.88	—	2.05	—	—	—
Assumptions Used to Determine Net Periodic Benefit Cost:						
Discount rate	3.94 %	1.65	2.70	1.27	2.90	2.30
Expected return on plan assets	6.50	4.90	6.50	4.86	—	—
Rate of compensation increase	4.30	3.05	4.27	3.01	—	—
Interest crediting rate on cash balance plan	2.59	—	2.05	—	—	—

For both U.S. and international pension plans, the overall expected long-term rate of return is developed from the expected future return of each asset class, weighted by the expected allocation of pension assets to that asset class. We rely on a variety of independent market forecasts in developing the expected rate of return for each class of assets.

For the year ended December 31, 2022, actuarial gains resulted in decreases in our U.S. and international pension benefit obligations of \$528 million and \$502 million, respectively. For the year ended December 31, 2021, actuarial gains resulted in decreases in our U.S. and international pension benefit obligations of \$82 million and \$37 million, respectively. The primary driver for the actuarial gains in 2022 and 2021 was increases in the discount rates.

For the year ended December 31, 2022, the weighted-average actual return on plan assets was negative 20%, which resulted in a decrease in our U.S. and international plan assets of \$375 million and \$329 million, respectively. For the year ended December 31, 2021, the weighted-average actual return on plan assets was 10%, which resulted in an increase in our U.S. and international plan assets of \$289 million and \$114 million, respectively. The primary driver of the return on plan assets in 2022 and 2021 was fluctuations in the equity and fixed income markets.

Our other postretirement benefit plans for health insurance are contributory. Effective December 31, 2012, we terminated the subsidy for retiree medical plans. Since January 1, 2013, eligible employees have been able to utilize notional amounts credited to an account during their period of service with the company to pay all, or a portion, of their cost to participate in postretirement health insurance. In general, employees hired after December 31, 2012, will not receive credits to an account, but will have unsubsidized access to health insurance through the plan. The cost of health insurance will be adjusted annually by the company's actuary to reflect actual experience and expected health care cost trends. The measurement of the accumulated benefit obligation assumes a health care cost trend rate of 6.50% in 2023 that declines to 5.00% by 2029.

Plan Assets

The investment strategy for managing pension plan assets is to seek a reasonable rate of return relative to an appropriate level of risk and provide adequate liquidity for benefit payments and portfolio management. We follow a policy of diversifying pension plan assets across asset classes, investment managers, and individual holdings. As a result, our plan assets have no significant concentrations of credit risk. Asset classes that are considered appropriate include equities, fixed income, cash, real estate and infrastructure investments and insurance contracts. Plan fiduciaries may consider and add other asset classes to the investment program from time to time. The target allocations for plan assets are approximately 47% equity securities, 37% debt securities, 8% real estate investments and 8% in all other types of investments as of December 31, 2022. Generally, the investments in the plans are publicly traded, therefore minimizing the liquidity risk in the portfolio.

The following is a description of the valuation methodologies used for the pension plan assets.

- Fair values of equity securities and government debt securities are based on quoted market prices.
- Fair values of corporate debt securities are estimated using recently executed transactions and market price quotations. If there have been no market transactions in a particular fixed income security, its fair value is calculated by pricing models that benchmark the security against other securities with actual market prices.
- Fair values of cash and cash equivalents approximate their carrying amounts.
- Fair values of insurance contracts are valued at the present value of the future benefit payments owed by the insurance company to the plans' participants.
- Fair values of investments in common/collective trusts and real estate and infrastructure investments are valued at the net asset value (NAV) as a practical expedient. The NAV is based on the underlying net assets owned by the fund and the relative interest of each participating investor in the fair value of the underlying assets. These investments valued at NAV are not classified within the fair value hierarchy, but are presented in the fair value table to permit reconciliation of total plan assets to the amounts presented in the fair value table.

The fair values of our pension plan assets at December 31, by asset class, were:

	Millions of Dollars							
	U.S.				International			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
2022								
Equity securities	\$ 239	—	—	239	—	—	—	—
Government debt securities	268	—	—	268	—	—	—	—
Corporate debt securities	—	89	—	89	—	—	—	—
Cash and cash equivalents	19	—	—	19	64	—	—	64
Insurance contracts	—	—	—	—	—	—	13	13
Total assets in the fair value hierarchy	526	89	—	615	64	—	13	77
Common/collective trusts measured at NAV				841				567
Real estate and infrastructure investments measured at NAV				322				63
Total	\$ 526	89	—	1,778	64	—	13	707

Millions of Dollars								
	U.S.				International			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
2021								
Equity securities	\$ 385	—	—	385	—	—	—	—
Government debt securities	427	—	—	427	—	—	—	—
Corporate debt securities	—	131	—	131	—	—	—	—
Cash and cash equivalents	20	—	—	20	6	—	—	6
Insurance contracts	—	—	—	—	—	—	13	13
Total assets in the fair value hierarchy	832	131	—	963	6	—	13	19
Common/collective trusts measured at NAV				1,266				1,158
Real estate and infrastructure investments measured at NAV				318				103
Total	\$ 832	131	—	2,547	6	—	13	1,280

Our funding policy for U.S. plans is to contribute at least the minimum required by the Employee Retirement Income Security Act of 1974 and the Internal Revenue Code of 1986, as amended. Contributions to international plans are subject to local laws and tax regulations. Actual contribution amounts are dependent upon plan asset returns, changes in pension obligations, regulatory environments, and other economic factors. In 2023, we expect to contribute approximately \$70 million to our U.S. pension plans and other postretirement benefit plans and \$20 million to our international pension plans.

The following benefit payments, which reflect expected future service, as appropriate, are expected to be paid to plan participants in the years indicated:

	Millions of Dollars		
	Pension Benefits		Other Benefits
	U.S.	Int'l.	
2023	\$ 266	21	17
2024	218	23	17
2025	217	25	17
2026	220	27	17
2027	231	28	17
2028-2032	1,087	170	78

Defined Contribution Plans

Most U.S. employees are eligible to participate in the Phillips 66 Savings Plan (Savings Plan). Employees can contribute up to 75% of their eligible pay, subject to certain statutory limits, in the Savings Plan to a choice of investment funds. For the year ended December 31, 2022, Phillips 66 provided a company match of participant contributions up to 8% of eligible pay, with an additional Success Share contribution ranging from 0% to 4% of eligible pay based on management discretion. For the years ended December 31, 2021 and 2020, Phillips 66 provided a company match of participant contributions up to 6% of eligible pay, with an additional Success Share contribution ranging from 0% to 6% of eligible pay based on management discretion.

For the years ended December 31, 2022, 2021 and 2020, we recorded expense of \$210 million, \$142 million and \$145 million, respectively, related to our contributions to the Savings Plan.

Note 22—Share-Based Compensation Plans

Share-based payment awards, including stock options, stock appreciation rights, stock awards (including restricted stock and RSU awards), cash awards, and performance awards, are granted to our employees, nonemployee directors and other plan participants by the Human Resources and Compensation Committee (HRCC) of our Board of Directors under the applicable Omnibus Stock and Performance Incentive Plan of Phillips 66. Prior to May 11, 2022, share-based awards were granted under the 2013 Omnibus Stock and Performance Incentive Plan of Phillips 66 (the 2013 P66 Omnibus Plan). On May 11, 2022, Phillips 66's shareholders approved the 2022 Omnibus Stock and Performance Incentive Plan of Phillips 66 (the 2022 P66 Omnibus Plan), which replaced the 2013 P66 Omnibus Plan. No future awards will be made under the 2013 P66 Omnibus Plan. As of December 31, 2022, approximately 15 million shares of Phillips 66's common stock remained available to be issued to settle share-based awards under the 2022 P66 Omnibus Plan.

We recognize share-based compensation expense over the shorter of: (1) the service period (i.e., the stated period of time required to earn the award); or (2) the period beginning at the start of the service period and ending when an employee first becomes eligible for retirement, but not less than six months as this is the minimum period of time required for an award not to be subject to forfeiture. Our equity-classified programs generally provide accelerated vesting (i.e., a waiver of the remaining period of service required to earn an award) for awards held by employees at the time they become eligible for retirement (at age 55 with 5 years of service). We have elected to recognize expense on a straight-line basis over the service period for the entire award, irrespective of whether the award was granted with ratable or cliff vesting, and have elected to recognize forfeitures of awards when they occur.

Total share-based compensation expense recognized in income and the associated income tax benefit for the years ended December 31 were:

	Millions of Dollars		
	2022	2021	2020
Restricted stock units	\$ 101	100	91
Performance share units	68	23	17
Stock options	17	19	17
Other	24	2	2
Total share-based compensation expense	\$ 210	144	127
Income tax benefit	\$ (55)	(33)	(35)

Restricted Stock Units

Generally, RSUs are granted annually under the provisions of the applicable Phillips 66 incentive plan and cliff vest at the end of three years. The grant date fair value is equal to the average of the high and low market price of our stock on the grant date. The recipients receive a quarterly dividend equivalent cash payment until the RSU is settled by issuing one share of our common stock for each RSU at the end of the service period. RSUs granted to retirement-eligible employees are not subject to forfeiture six months after the grant date. Special RSUs are granted to attract or retain key personnel and the terms and conditions may vary by award.

The following table summarizes our RSU activity from January 1, 2022, to December 31, 2022:

	Stock Units	Weighted-Average Grant-Date Fair Value	Millions of Dollars	
			Total Fair Value	
Outstanding at January 1, 2022	3,310,590	\$ 83.20		
Granted	1,303,336	88.16		
Forfeited	(184,733)	83.16		
Issued	(1,162,718)	90.00	\$	102
Outstanding at December 31, 2022	3,266,475	\$ 82.76		
Not Vested at December 31, 2022	2,250,626	\$ 82.49		

At December 31, 2022, the remaining unrecognized compensation cost from unvested RSU awards was \$75 million, which will be recognized over a weighted-average period of 21 months, the longest period being 35 months.

During 2021 and 2020, we granted RSUs with a weighted-average grant-date fair value of \$75.91 and \$83.48, respectively. During 2021 and 2020, we issued shares with an aggregate fair value of \$61 million and \$69 million, respectively, to settle RSUs.

Performance Share Units

Under the applicable Phillips 66 incentive plan, senior management is annually awarded restricted performance share units (PSUs) with three-year performance periods. These awards vest when the HRCC approves the three-year performance results, which represents the grant date. PSUs granted under Phillips 66's incentive plans are classified as liability awards and compensation expense is recognized beginning on the authorization date and ending on the vesting date.

PSUs granted under the applicable Phillips 66 incentive plan are settled by cash payments equal to the fair value of the awards, which is based on the market prices of our stock near the end of the performance periods. The HRCC must approve the three-year performance results prior to payout. Dividend equivalents are not paid on these awards.

PSUs granted under prior incentive compensation plans were classified as equity awards. These equity awards are settled upon an employee's retirement by issuing one share of our common stock for each PSU held. Dividend equivalents are paid on these awards.

The following table summarizes our PSU activity from January 1, 2022, to December 31, 2022:

				Millions of Dollars
	Performance Share Units		Weighted-Average Grant-Date Fair Value	Total Fair Value
Outstanding at January 1, 2022	811,786	\$	37.90	
Granted	245,957		71.82	
Forfeited	—		—	
Issued	(108,617)		33.81	\$ 9
Cash settled	(245,957)		71.82	18
Outstanding at December 31, 2022	703,169	\$	38.54	
Not Vested at December 31, 2022	—	\$	—	

At December 31, 2022, there was no remaining unrecognized compensation cost from unvested PSU awards.

During 2021 and 2020, we granted PSUs with a weighted-average grant-date fair value of \$68.18 and \$112.73, respectively. During 2021 and 2020, we issued shares with an aggregate fair value of \$12 million and \$41 million, respectively, to settle PSUs. During 2021 and 2020, we cash settled PSUs with an aggregate fair value of \$27 million and \$63 million, respectively.

Stock Options

Stock options granted under the provisions of the applicable Phillips 66 incentive plan and earlier plans permit purchases of our common stock at exercise prices equivalent to the average of the high and low market price of our stock on the date the options were granted. The options have terms of 10 years and vest ratably, with one-third of the options becoming exercisable on each anniversary date for the three years following the date of grant. Options awarded to employees eligible for retirement are not subject to forfeiture six months after the grant date.

The following table summarizes our stock option activity from January 1, 2022, to December 31, 2022:

				Millions of Dollars
	Options	Weighted-Average Exercise Price	Weighted-Average Grant-Date Fair Value	Aggregate Intrinsic Value
Outstanding at January 1, 2022	6,264,206	\$ 81.25		
Granted	1,043,300	88.89	\$ 17.02	
Forfeited	(28,123)	86.19		
Exercised	(1,436,468)	71.57		\$ 42
Outstanding at December 31, 2022	5,842,915	\$ 84.97		
Vested at December 31, 2022	5,291,211	\$ 85.09		\$ 101
Exercisable at December 31, 2022	3,534,630	\$ 86.08		\$ 64

The weighted-average remaining contractual terms of vested options and exercisable options at December 31, 2022, were 6.47 years and 5.5 years, respectively. During 2022, we received \$103 million in cash and realized an income tax benefit of \$8 million from the exercise of options. At December 31, 2022, the remaining unrecognized compensation expense from unvested options was \$5 million, which will be recognized over a weighted-average period of 22 months, the longest period being 30 months.

During 2021 and 2020, we granted options with a weighted-average grant-date fair value of \$12.06 and \$15.80, respectively. During 2021 and 2020, employees exercised options with an aggregate intrinsic value of \$24 million and \$21 million, respectively.

The following table provides the significant assumptions used to calculate the grant-date fair values of options granted over the years shown below, as calculated using the Black-Scholes-Merton option-pricing model:

	2022	2021	2020
Risk-free interest rate	1.97 %	0.93	1.58
Dividend yield	5.10 %	5.30	3.20
Volatility factor	33.67 %	32.11	25.23
Expected life (years)	6.61	6.76	6.96

We calculate the volatility factor using historical Phillips 66 end-of-week closing stock prices. We periodically calculate the average period of time elapsed between grant dates and exercise dates of past grants to estimate the expected life of new option grants.

Other

Other share-based compensation expense is primarily associated with the consolidation of DCP Midstream Class A Segment following the August 18, 2022, merger of DCP Midstream and Gray Oak Holdings. Under DCP Midstream Class A Segment's Long-Term Incentive Plan, phantom units, performance units and distribution equivalent rights are rewarded to key employees. Equity-based compensation expense was \$23 million for the period from August 18, 2022, through December 31, 2022. At December 31, 2022, the remaining unrecognized compensation cost was \$15 million, which will be recognized over a weighted-average period of 19 months, with the longest period being 33 months.

See Note 3—DCP Midstream, LLC and Gray Oak Holdings LLC Merger and Note 4—Business Combination for additional information regarding the merger and associated accounting treatment.

Note 23—Income Taxes

Components of income tax expense (benefit) were:

	Millions of Dollars		
	2022	2021	2020
Income Tax Expense (Benefit)			
Federal			
Current	\$ 1,263	363	(1,324)
Deferred	1,171	(85)	171
Foreign			
Current	492	50	9
Deferred	(109)	(39)	67
State and local			
Current	173	5	(61)
Deferred	258	(148)	(112)
	\$ 3,248	146	(1,250)

During the year ended December 31, 2020, in accordance with the Coronavirus Aid, Relief, and Economic Security (CARES) Act, we recorded a tax benefit reflecting the carryback of a significant portion of our 2020 net operating loss to a year that had a 35% federal statutory income tax rate.

On August 16, 2022, the U.S. government enacted the Inflation Reduction Act of 2022 (IRA) that includes, among other provisions, changes to the U.S. corporate income tax system, including a 15% minimum tax based on adjusted financial statement income as defined in the IRA, which is effective after December 31, 2022. We are continuing to evaluate the IRA and its requirements, as well as the application to our business.

Deferred income taxes reflect the net tax effect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for tax purposes. Major components of deferred tax liabilities and assets at December 31 were:

	Millions of Dollars	
	2022	2021
Deferred Tax Liabilities		
Properties, plants and equipment, and intangibles	\$ 3,309	3,135
Investment in joint ventures	1,854	2,065
Investment in subsidiaries	1,974	969
Other	238	267
Total deferred tax liabilities	7,375	6,436
Deferred Tax Assets		
Benefit plan accruals	307	431
Loss and credit carryforwards	113	173
Asset retirement obligations and accrued environmental costs	137	120
Other financial accruals and deferrals	51	82
Inventory	62	—
Other	220	262
Total deferred tax assets	890	1,068
Less: valuation allowance	97	74
Net deferred tax assets	793	994
Net deferred tax liabilities	\$ 6,582	5,442

At December 31, 2022, the loss and credit carryforward deferred tax assets were primarily related to a foreign tax credit carryforward in the United States of \$90 million; a state tax net operating loss carryforward of \$16 million; and a capital loss and net operating loss carryforwards in the United Kingdom of \$6 million. State net operating loss carryforwards begin to expire in 2040. Foreign tax credit carryforwards, which have a full valuation allowance against them, begin to expire in 2029. The other loss and credit carryforwards, all of which relate to foreign operations, and have a full valuation allowance against them, have indefinite lives.

Valuation allowances have been established to reduce deferred tax assets to an amount that will, more likely than not, be realized. During the year ended December 31, 2022, our total valuation allowance balance increased by \$23 million. Based on our historical taxable income, expectations for the future and available tax planning strategies, management expects the remaining net deferred tax assets will be realized as offsets to reversing deferred tax liabilities and the tax consequences of future taxable income.

Earnings of our foreign subsidiaries and foreign joint ventures after December 31, 2017, are generally not subject to incremental income taxes in the United States or withholding taxes in foreign countries upon repatriation. As such, we only assert that the earnings of one of our foreign subsidiaries are permanently reinvested. At December 31, 2022 and 2021, the unrecorded deferred tax liability related to the undistributed earnings of this foreign subsidiary was not material.

We file tax returns in the U.S. federal jurisdiction and in many foreign and state jurisdictions. Unrecognized tax benefits reflect the difference between positions taken on income tax returns and the amounts recognized in the financial statements. The following table is a reconciliation of the changes in our unrecognized income tax benefits balance:

	Millions of Dollars		
	2022	2021	2020
Balance at January 1	\$ 54	56	40
Additions for tax positions of current year	1	—	—
Additions for tax positions of prior years	2	—	44
Reductions for tax positions of prior years	(3)	(2)	(28)
Balance at December 31	\$ 54	54	56

Included in the balance of unrecognized income tax benefits at December 31, 2022, 2021 and 2020, were \$37 million, \$35 million and \$37 million, respectively, which, if recognized, would affect our effective income tax rate. With respect to various unrecognized income tax benefits and the related accrued liabilities, we do not expect any to be recognized or paid within the next twelve months.

At December 31, 2022, 2021 and 2020, accrued liabilities for interest and penalties, net of accrued income taxes, totaled \$7 million, \$6 million and \$5 million, respectively. These accruals decreased our results by \$3 million for each of the years ended December 31, 2022, 2021 and 2020.

Audits in significant jurisdictions are generally complete as follows: United Kingdom (2020), Germany (2017) and United States (2013). Certain issues remain in dispute for audited years, and unrecognized income tax benefits for years still subject to or currently undergoing an audit are subject to change. As a consequence, the balance in unrecognized income tax benefits can be expected to fluctuate from period to period. Although it is reasonably possible such changes could be significant when compared with our total unrecognized income tax benefits, the amount of change is not estimable.

The amounts of U.S. and foreign income (loss) before income taxes, with a reconciliation of income tax at the federal statutory rate to the recorded income tax expense (benefit), were:

	Millions of Dollars			Percentage of Income (Loss) Before Income Taxes		
	2022	2021	2020	2022	2021	2020
Income (loss) before income taxes						
United States	\$ 12,628	1,737	(5,292)	86.3 %	99.8	106.6
Foreign	2,011	3	328	13.7	0.2	(6.6)
	\$ 14,639	1,740	(4,964)	100.0 %	100.0	100.0
Federal statutory income tax	\$ 3,074	365	(1,043)	21.0 %	21.0	21.0
State income tax, net of federal income tax benefit	341	(65)	(139)	2.3	(3.7)	2.8
Net operating loss carryback	—	—	(398)	—	—	8.0
Goodwill impairment	—	—	387	—	—	(7.8)
Noncontrolling interests	(74)	(57)	(54)	(0.5)	(3.3)	1.1
Non-taxable equity earnings	(33)	(53)	(18)	(0.2)	(3.0)	0.4
Tax law changes	(25)	(26)	—	(0.2)	(1.5)	—
Other*	(35)	(18)	15	(0.2)	(1.1)	(0.3)
	\$ 3,248	146	(1,250)	22.2 %	8.4	25.2

* Other includes individually immaterial items but is primarily attributable to foreign operations and change in valuation allowance.

For the year ended December 31, 2021, state income tax, net of federal income tax benefit, includes a \$58 million benefit, primarily to reflect the impact of updated apportionment factors.

There is \$323 million income tax benefit reflected for the year ended December 31, 2022 in “Capital in Excess of Par” in the consolidated statement of changes in equity. There is no income tax reflected in “Capital in Excess of Par” for the year ended December 31, 2021, and income tax benefit of \$1 million for the year ended December 31, 2020, is reflected in “Capital in Excess of Par.”

Note 24—Accumulated Other Comprehensive Loss

Changes in the balances of each component of accumulated other comprehensive loss were as follows:

	Millions of Dollars			
	Defined Benefit Plans	Foreign Currency Translation	Hedging	Accumulated Other Comprehensive Loss
December 31, 2019	\$ (656)	(131)	(1)	(788)
Other comprehensive income (loss) before reclassifications	(262)	151	1	(110)
Amounts reclassified from accumulated other comprehensive loss				
Defined benefit plans*				
Amortization of net actuarial loss, prior service credit and settlements	109	—	—	109
Foreign currency translation	—	—	—	—
Hedging	—	—	(5)	(5)
Net current period other comprehensive income (loss)	(153)	151	(4)	(6)
Other	—	5	—	5
December 31, 2020	(809)	25	(5)	(789)
Other comprehensive income (loss) before reclassifications	318	(70)	2	250
Amounts reclassified from accumulated other comprehensive loss				
Defined benefit plans*				
Amortization of net actuarial loss, prior service credit and settlements	93	—	—	93
Foreign currency translation	—	—	—	—
Hedging	—	—	1	1
Net current period other comprehensive income (loss)	411	(70)	3	344
December 31, 2021	(398)	(45)	(2)	(445)
Other comprehensive income (loss) before reclassifications	204	(291)	—	(87)
Amounts reclassified from accumulated other comprehensive loss				
Defined benefit plans*				
Amortization of net actuarial loss, prior service credit and settlements	72	—	—	72
Foreign currency translation	—	—	—	—
Hedging	—	—	—	—
Net current period other comprehensive income (loss)	276	(291)	—	(15)
December 31, 2022	\$ (122)	(336)	(2)	(460)

* Included in the computation of net periodic benefit cost. See Note 21—Pension and Postretirement Plans, for additional information.

Note 25—Cash Flow Information

Supplemental Cash Flow Information

	Millions of Dollars		
	2022	2021	2020
Cash Payments (Receipts)			
Interest	\$ 572	549	478
Income taxes*	2,071	(1,065)	103

* 2021 reflects a net cash refund position. Cash payments for income taxes were \$110 million in 2021.

Note 26—Other Financial Information

	Millions of Dollars		
	2022	2021	2020
Interest and Debt Expense			
Incurred			
Debt	\$ 611	567	550
Other	41	41	24
	652	608	574
Capitalized	(33)	(27)	(75)
Expensed	\$ 619	581	499

Other Income

Interest income	\$ 82	11	14
Unrealized investment gain (loss)—NOVONIX	(433)	365	—
Gain related to merger of businesses	3,013	—	—
Other, net*	75	78	52
	\$ 2,737	454	66

* Includes derivatives-related activities. See Note 17—Derivatives and Financial Instruments, for additional information.

Research and Development Expenses	\$ 42	47	48
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Advertising Expenses	\$ 56	52	51
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Foreign Currency Transaction (Gains) Losses

Midstream	\$ 9	(5)	—
Chemicals	—	—	—
Refining	(7)	4	4
Marketing and Specialties	(10)	—	—
Corporate and Other	(1)	2	8
	\$ (9)	1	12

Note 27—Related Party Transactions

Significant transactions with related parties were:

	Millions of Dollars		
	2022	2021	2020
Operating revenues and other income (a)(d)	\$ 6,111	3,759	1,932
Purchases (b)(d)	21,244	14,645	6,536
Operating expenses and selling, general and administrative expenses (c)	281	284	247

- (a) We sold NGL, other petrochemical feedstocks and solvents to CPChem, NGL and certain feedstocks to DCP Midstream, gas oil and hydrogen feedstocks to Excel Paralubes LLC (Excel Paralubes), and refined petroleum products to several of our equity affiliates in the M&S segment, including OnCue and CF United. We also sold certain feedstocks and intermediate products to WRB and acted as an agent for WRB in supplying crude oil and other feedstocks for a fee. In addition, we charged several of our equity affiliates, including CPChem, for the use of common facilities, such as steam generators, waste and water treaters and warehouse facilities.
- (b) We purchased crude oil, refined petroleum products, NGL and solvents from WRB. We also purchased natural gas and NGL from DCP Midstream and CPChem, as well as other feedstocks from various equity affiliates, for use in our refinery and fractionation processes. In addition, we purchased base oils and fuel products from Excel Paralubes for use in our specialty and refining businesses. We paid NGL fractionation fees to CPChem. We also paid fees to various pipeline equity affiliates for transporting crude oil, refined petroleum products and NGL.
- (c) We paid consignment fees to CF United, and utility and processing fees to various equity affiliates.
- (d) As a result of the DCP Midstream and Gray Oak Holdings merger, we began consolidating DCP Midstream Class A Segment, DCP Sand Hills and DCP Southern Hills. As a result, transactions with these parties after August 17, 2022, are not presented in the table above.

Note 28—Segment Disclosures and Related Information

Effective October 1, 2022, we changed the organizational structure of the internal financial information reviewed by our President and Chief Executive Officer, and determined this resulted in a change in the composition of our operating segments. As part of the realignment, we moved the results and net assets of our Merey Sweeny vacuum distillation and delayed coker units at our Sweeny Refinery and the isomerization unit at our Lake Charles Refinery from our Midstream segment to our Refining segment. Additionally, commissions charged to the Refining segment by the M&S segment related to sales of specialty products were eliminated and the costs of the sales organization were reclassified from the M&S segment to the Refining segment.

The segment realignment is presented for the year ended December 31, 2022, with prior periods recast for comparability.

Our operating segments are:

- 1) **Midstream**—Provides crude oil and refined petroleum product transportation, terminaling and processing services, as well as natural gas and NGL transportation, storage, fractionation, gathering, processing and marketing services, mainly in the United States. As a result of the merger on August 17, 2022, we began consolidating DCP Midstream Class A Segment; DCP Sand Hills and DCP Southern Hills. On March 9, 2022, we also completed a merger between us and Phillips 66 Partners. See Note 3—DCP Midstream, LLC and Gray Oak Holdings LLC Merger and Note 30—Phillips 66 Partners LP for additional information on these transactions. This segment also includes our 16% investment in NOVONIX.
- 2) **Chemicals**—Consists of our 50% equity investment in CPChem, which manufactures and markets petrochemicals and plastics on a worldwide basis.
- 3) **Refining**—Refines crude oil and other feedstocks into petroleum products, such as gasoline, distillates and aviation fuels, as well as renewable fuels, at 12 refineries in the United States and Europe.
- 4) **Marketing and Specialties**—Purchases for resale and markets refined petroleum products and renewable fuels, mainly in the United States and Europe. In addition, this segment includes the manufacturing and marketing of base oils and lubricants.

Corporate and Other includes general corporate overhead, interest expense, our investment in research of new technologies and various other corporate activities. Corporate assets include all cash, cash equivalents and income tax-related assets. Corporate and Other also includes restructuring costs related to our business transformation. See Note 31—Restructuring for additional information regarding restructuring costs.

Intersegment sales are at prices that we believe approximate market.

Analysis of Results by Operating Segment

	Millions of Dollars		
	2022	2021	2020
Sales and Other Operating Revenues*			
Midstream			
Total sales	\$ 19,121	11,714	5,855
Intersegment eliminations	(2,932)	(2,901)	(1,681)
Total Midstream	16,189	8,813	4,174
Chemicals	—	3	3
Refining			
Total sales	112,725	75,096	42,181
Intersegment eliminations	(71,127)	(46,122)	(24,151)
Total Refining	41,598	28,974	18,030
Marketing and Specialties			
Total sales	115,622	75,583	43,130
Intersegment eliminations	(3,453)	(1,929)	(1,238)
Total Marketing and Specialties	112,169	73,654	41,892
Corporate and Other	34	32	30
Consolidated sales and other operating revenues	\$ 169,990	111,476	64,129

* See Note 5—Sales and Other Operating Revenues, for further details on our disaggregated sales and other operating revenues.

Equity in Earnings (Losses) of Affiliates

Midstream	\$ 916	877	761
Chemicals	842	1,832	625
Refining	747	(184)	(376)
Marketing and Specialties	463	379	181
Corporate and Other	—	—	—
Consolidated equity in earnings of affiliates	\$ 2,968	2,904	1,191

Depreciation, Amortization and Impairments*

Midstream	\$ 569	634	1,778
Chemicals	—	—	—
Refining	879	2,272	3,659
Marketing and Specialties	110	114	103
Corporate and Other	131	83	107
Consolidated depreciation, amortization and impairments	\$ 1,689	3,103	5,647

* See Note 11—Impairments, for further details on impairments by segment.

Millions of Dollars			
	2022	2021	2020
Interest Income and Expense			
Interest income			
Corporate and Other	\$ 82	11	14
Interest and debt expense			
Corporate and Other	\$ 619	581	499
Income (Loss) Before Income Taxes			
Midstream	\$ 4,734	1,500	(116)
Chemicals	856	1,844	635
Refining	7,816	(2,353)	(6,023)
Marketing and Specialties	2,402	1,723	1,421
Corporate and Other	(1,169)	(974)	(881)
Consolidated income (loss) before income taxes	\$ 14,639	1,740	(4,964)
Investments In and Advances To Affiliates			
Midstream	\$ 4,271	3,978	4,255
Chemicals	6,785	6,369	6,126
Refining	2,484	2,340	2,202
Marketing and Specialties	883	750	744
Corporate and Other	2	2	—
Consolidated investments in and advances to affiliates	\$ 14,425	13,439	13,327
Total Assets			
Midstream	\$ 30,273	15,546	15,196
Chemicals	6,785	6,453	6,183
Refining	21,581	20,338	20,804
Marketing and Specialties	9,939	8,505	7,180
Corporate and Other	7,864	4,752	5,358
Consolidated total assets	\$ 76,442	55,594	54,721

	Millions of Dollars		
	2022	2021	2020
Capital Expenditures and Investments			
Midstream	\$ 1,043	733	1,735
Chemicals	—	—	—
Refining	928	784	828
Marketing and Specialties	89	202	173
Corporate and Other	134	141	184
Consolidated capital expenditures and investments	\$ 2,194	1,860	2,920

Geographic Information

Long-lived assets, defined as net PP&E plus investments and long-term receivables, by geographic location at December 31 were:

	Millions of Dollars		
	2022	2021	2020
United States	\$ 48,286	34,882	35,273
United Kingdom	1,349	1,323	1,313
Germany	391	605	653
Other foreign countries	87	96	101
Worldwide consolidated	\$ 50,113	36,906	37,340

Note 29—DCP Midstream Class A Segment

DCP Midstream Class A Segment is a VIE and we are the primary beneficiary. DCP Midstream Class A Segment is comprised of the businesses, activities, assets and liabilities of DCP LP and its subsidiaries and its general partner entities. Refer to Note 3—DCP Midstream, LLC and Gray Oak Holdings LLC Merger and Note 4—Business Combination, for more details on the DCP Midstream and Gray Oak Holdings merger transaction and related accounting.

DCP LP, headquartered in Denver, Colorado, is a publicly traded MLP whose operations currently include producing and fractionating NGL, gathering, compressing, treating and processing natural gas; recovering condensate; and transporting, trading, marketing and storing natural gas and NGL.

As a result of our consolidation of DCP Midstream Class A Segment, the public common and preferred unitholders' ownership interests and Enbridge's indirect economic interest in DCP LP are reflected as noncontrolling interests in our consolidated financial statements. At December 31, 2022, we held a 43.31% indirect economic interest in DCP LP.

The most significant assets of DCP Midstream Class A Segment that are available to settle only its obligations, along with its most significant liabilities for which its creditors do not have recourse to Phillips 66's general credit, were:

	Millions of Dollars	
	December 31, 2022	
Accounts receivable, trade*	\$	988
Net properties, plants and equipment		9,297
Investments in unconsolidated affiliates**		2,161
Accounts payable		1,239
Short-term debt		504
Long-term debt		4,248

* Included in the "Accounts and notes receivable" line item on the Phillips 66 consolidated balance sheet.

** Included in the "Investments and long-term receivables" line item on the Phillips 66 consolidated balance sheet.

Preferred Units

DCP LP's preferred units rank senior to its common units with respect to distribution rights and rights upon liquidations. Holders of DCP LP's preferred units have no voting rights except for certain limited protective voting rights. Distributions on the preferred units are payable out of DCP LP's available cash, are accretive and are cumulative from the date of original issuance of the preferred units.

DCP LP redeemed its Series A preferred units with an aggregate liquidation preference of \$500 million in December 2022.

Distributions on the Series B preferred units are payable quarterly in arrears in March, June, September and December of each year. Distributions on the Series C preferred units are payable quarterly in arrears in January, April, July and October of each year. Since August 18, 2022, DCP LP made cash distributions of \$19 million to Series A preferred unitholders, \$6 million to Series B preferred unitholders and \$2 million to Series C preferred unitholders.

As of December 31, 2022, DCP LP had 6,450,000 Series B preferred units outstanding with an aggregate liquidation preference of approximately \$161 million and 4,400,000 Series C preferred units outstanding with an aggregate liquidation preference of \$110 million. The Series B and C preferred units are publicly traded.

Common Units

As of December 31, 2022, DCP LP had approximately 208 million of common units outstanding, of which approximately 90 million were publicly held. In addition, Enbridge holds a 23.36% economic interest in the approximately 118 million common units held by DCP Midstream Class A Segment. Since August 18, 2022, DCP LP made cash distributions of \$51 million to common unit holders other than Phillips 66.

DCP LP Public Common Unit Acquisition Agreement

On January 5, 2023, we entered into a definitive agreement with DCP LP, its subsidiaries and its general partner entities, pursuant to which one of our wholly owned subsidiaries will merge with and into DCP LP, with DCP LP surviving as a Delaware limited partnership. Under the terms of the agreement, at the effective time of the merger, each publicly held common unit representing a limited partner interest in DCP LP (other than the common units owned by DCP LP and DCP Midstream GP, LP) issued and outstanding as of immediately prior to the effective time will be converted into the right to receive \$41.75 per common unit in cash, without interest. The merger will increase our economic interest in DCP LP from 43.31% to 86.8%. The transaction is expected to close in the second quarter of 2023, subject to customary closing conditions.

If the merger is successfully completed, we will pay approximately \$3.8 billion in cash consideration, which we expect to fund through a combination of cash generated from operating activities and debt.

The transaction was unanimously approved by the board of the general partner of DCP LP, based on the unanimous approval and recommendation of its special committee comprised entirely of independent directors after evaluation of the transaction by the special committee in consultation with independent financial and legal advisors. Concurrently with the execution of the agreement, affiliates of Phillips 66, which together own greater than a majority of the outstanding DCP LP common units, delivered their consent to approve the transaction. As a result, DCP LP has not solicited and is not soliciting approval of the transaction by any other holders of DCP LP common units.

Note 30—Phillips 66 Partners LP

On March 9, 2022, we completed a merger between us and Phillips 66 Partners. The merger resulted in the acquisition of all limited partnership interests in Phillips 66 Partners not already owned by us in exchange for 41.8 million shares of Phillips 66 common stock issued from treasury stock. Phillips 66 Partners common unitholders received 0.50 shares of Phillips 66 common stock for each outstanding Phillips 66 Partners common unit. Phillips 66 Partners' perpetual convertible preferred units were converted into common units at a premium to the original issuance price prior to being exchanged for Phillips 66 common stock. Upon closing, Phillips 66 Partners became a wholly owned subsidiary of Phillips 66 and its common units are no longer publicly traded.

The merger was accounted for as an equity transaction and resulted in decreases to "Treasury stock" of \$3,380 million, "Noncontrolling interests" of \$2,163 million, "Capital in excess of par" of \$901 million, "Deferred income taxes" of \$323 million, and "Cash and cash equivalents" of \$2 million, and an increase to "Other accruals" of \$5 million on our consolidated balance sheet.

Gray Oak Pipeline was formed to develop and construct a pipeline, which transports crude oil from the Permian and Eagle Ford to Texas Gulf Coast destinations that include Corpus Christi, Texas, and the Sweeny area, including our Sweeny Refinery. Phillips 66 Partners had a consolidated holding company that owned 65% of Gray Oak Pipeline. In December 2018, a third party acquired a 35% interest in the holding company. Because the holding company's sole asset was its ownership interest in Gray Oak Pipeline, which was considered a financial asset, and because certain restrictions were placed on the third party's ability to transfer or sell its interest in the holding company during construction of the pipeline, the legal sale of the 35% interest did not qualify as a sale under GAAP at that time. The pipeline commenced full operations in the second quarter of 2020, and the restrictions placed on the co-venturer were lifted on June 30, 2020, resulting in the recognition of the sale under GAAP. Accordingly, at June 30, 2020, the co-venturer's 35% interest in the holding company was recharacterized from a long-term obligation to a noncontrolling interest on our consolidated balance sheet, and the premium of \$84 million previously paid by the co-venturer in 2019 was recharacterized from a long-term obligation to a gain in our consolidated statement of operations.

Note 31—Restructuring

In April 2022, we announced that we are progressing a multi-year business transformation focused on enterprise-wide opportunities to improve our cost structure. For the year ended December 31, 2022, we recorded restructuring costs totaling \$160 million, primarily related to consulting fees, severance and an impairment related to assets held for sale. These costs are primarily recorded in the "Selling, general and administrative expenses" and "Impairments" line items on our consolidated statement of operations and are reported in our Corporate segment.

In addition, in the fourth quarter of 2022, we recorded severance-related restructuring costs of \$18 million associated with the integration of DCP Midstream Class A Segment. These costs are primarily recorded in the "Selling, general and administrative expenses" line item on our consolidated statement of operations and are reported in our Midstream segment.

Note 32—New Accounting Standards

In September 2022, the FASB issued ASU 2022-04, "Liabilities—Supplier Finance Programs (Subtopic 405-50): Disclosure of Supplier Finance Program Obligations." This ASU requires the buyer in a supplier finance program to disclose qualitative and quantitative information about the program. This ASU is effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years, except for the amendment on rollforward information, which is effective for fiscal years beginning after December 15, 2023. We do not anticipate the adoption of this ASU having a material impact on our consolidated financial statements.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

Item 9A. CONTROLS AND PROCEDURES

We maintain disclosure controls and procedures designed to ensure that information required to be disclosed in reports we file or submit under the Securities Exchange Act of 1934, as amended (the Act), is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and that such information is accumulated and communicated to management, including our principal executive and principal financial officers, as appropriate, to allow timely decisions regarding required disclosure. As of December 31, 2022, with the participation of management, our President and Chief Executive Officer and our Executive Vice President and Chief Financial Officer carried out an evaluation, pursuant to Rule 13a-15(b) of the Act, of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) of the Act). Based upon that evaluation, our President and Chief Executive Officer and our Executive Vice President and Chief Financial Officer concluded that our disclosure controls and procedures were operating effectively as of December 31, 2022.

On August 17, 2022, the company and a co-venturer completed the merger of DCP Midstream, LLC and Gray Oak Holdings LLC. As a result of the merger and the governance rights delegated to the company over DCP Midstream, LLC's Class A Segment, the company began consolidating the financial results of DCP Midstream, LLC's Class A Segment, DCP Sand Hills Pipeline, LLC and DCP Southern Hills Pipeline, LLC. The company has accounted for the consolidation of these entities as a business combination. Accordingly, the acquired assets and assumed liabilities of these entities are included in our consolidated balance sheet as of December 31, 2022, and the results of operations and cash flows of these entities are reported in our consolidated statements of operations and cash flows from August 18, 2022 through December 31, 2022. We are currently in the process of integrating DCP Midstream, LLC Class A Segment, DCP Sand Hills Pipeline, LLC and DCP Southern Hills Pipeline, LLC into our operations and internal control processes. Management's assessment and conclusions on the effectiveness of our disclosure controls and procedures as of December 31, 2022, excludes an assessment of the internal control over financial reporting of these entities as permitted by the Securities and Exchange Commission for acquisitions completed during the reporting year.

There have been no changes in our internal control over financial reporting, as defined in Rule 13a-15(f) of the Act, in the quarterly period ended December 31, 2022, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's Annual Report on Internal Control Over Financial Reporting

This report is included in Item 8 and is incorporated herein by reference.

Report of Independent Registered Public Accounting Firm on Internal Control Over Financial Reporting

This report is included in Item 8 and is incorporated herein by reference.

Item 9B. OTHER INFORMATION

None.

Item 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information regarding our executive officers appears in Part I of this report.

We have adopted a Code of Ethics for the Principal Executive Officer and Senior Financial Officers (the “Code of Ethics”) that applies to our Principal Executive Officer, Chief Financial Officer and Controller. The Code of Ethics is posted on our website located at <http://www.phillips66.com> and is available in print upon request. We intend to disclose future amendments to certain provisions of the Code of Ethics, and waivers of the Code of Ethics, on our website.

The remaining information required by Item 10 of Part III is incorporated herein by reference from our Proxy Statement for the Annual Meeting of Stockholders to be held on May 10, 2023, which will be filed within 120 days after December 31, 2022 (2023 Definitive Proxy Statement).*

Item 11. EXECUTIVE COMPENSATION

The information required by Item 11 of Part III is incorporated herein by reference from our 2023 Definitive Proxy Statement.*

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by Item 12 of Part III is incorporated herein by reference from our 2023 Definitive Proxy Statement.*

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by Item 13 of Part III is incorporated herein by reference from our 2023 Definitive Proxy Statement.*

Item 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by Item 14 of Part III is incorporated herein by reference from our 2023 Definitive Proxy Statement.*

** Except for information or data specifically incorporated herein by reference under Items 10 through 14, other information and data appearing in our 2023 Definitive Proxy Statement are not deemed to be a part of this Annual Report on Form 10-K or deemed to be filed with the Commission as a part of this report.*

PART IV

Item 15. EXHIBIT AND FINANCIAL STATEMENT SCHEDULES

- (a) 1. Financial Statements and Supplementary Data
The financial statements and supplementary information listed in the Index to Financial Statements, which appears on page 85, are filed as part of this Annual Report on Form 10-K.
2. Financial Statement Schedules
All financial statement schedules are omitted because they are not required, not significant, not applicable, or the information is shown in the financial statements or notes thereto.
3. Exhibits
The exhibits listed in the Index to Exhibits, which appears on pages 165 to 171, are filed as part of this Annual Report on Form 10-K.

Item 16. FORM 10-K SUMMARY

None.

PHILLIPS 66

INDEX TO EXHIBITS

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	Exhibit Number	Filing Date	SEC File No.
2.1	Separation and Distribution Agreement between ConocoPhillips and Phillips 66, dated April 26, 2012.	8-K	2.1	05/01/2012	001-35349
2.2	Agreement and Plan of Merger, dated as of October 26, 2021, by and among Phillips 66, Phillips 66 Company, Phillips 66 Project Development Inc., Phoenix Sub LLC, Phillips 66 Partners LP, and Phillips 66 Partners GP LLC.	8-K	2.1	10/27/2021	001-35349
2.3	Agreement and Plan of Merger, dated January 5, 2023, by and among Phillips 66, Phillips 66 Project Development Inc., Dynamo Merger Sub LLC, DCP Midstream, LP, DCP Midstream GP, LP and DCP Midstream GP, LLC.	8-K	2.1	01/06/2023	001-35349
3.1	Amended and Restated Certificate of Incorporation of Phillips 66.	8-K	3.1	05/01/2012	001-35349
3.2	Amended and Restated By-Laws of Phillips 66.	8-K	3.1	12/09/2022	001-35349
4.1	Description of Phillips 66's Securities.	10-K	4.1	02/21/2020	001-35349
4.2	Indenture, dated as of March 12, 2012, among Phillips 66, as issuer, Phillips 66 Company, as guarantor, and The Bank of New York Mellon Trust Company, N.A., as trustee, in respect of senior debt securities of Phillips 66.	10-12B/A	4.3	04/05/2012	001-35349
4.3	Form of the terms of 5.875% Senior Notes due 2042.	10-12B/A	4.4	04/05/2012	001-35349
4.4	Form of the terms of 4.650% Senior Notes due November 2034.	8-K	4.2	11/17/2014	001-35349
4.5	Form of the terms of 4.875% Senior Notes due November 2044.	8-K	4.2	11/17/2014	001-35349
4.6	Form of the terms of 3.900% Senior Notes due March 2028.	8-K	4.3	03/01/2018	001-35349
4.7	Indenture, dated as of April 9, 2020, among Phillips 66, as issuer, Phillips 66 Company, as guarantor, and U.S. Bank National Association, as trustee, in respect of senior debt securities of Phillips 66.	8-K	4.1	04/09/2020	001-35349
4.8	Form of the terms of 3.850% Senior Notes due 2025.	8-K	4.3	04/09/2020	001-35349
4.9	Form of the terms of 2.150% Senior Notes due 2030.	8-K	4.3	06/10/2020	001-35349
4.10	Form of the terms of 0.900% Senior Notes due 2024.	8-K	4.3	11/18/2020	001-35349
4.11	Form of the terms of 1.300% Senior Notes due 2026.	8-K	4.4	11/18/2020	001-35349
4.12	Form of the terms of 3.300% Senior Notes due 2052.	8-K	4.2	11/15/2021	001-35349

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	Exhibit Number	Filing Date	SEC File No.
4.13	Indenture, dated as of May 5, 2022, among Phillips 66 Company, as issuer, Phillips 66, as guarantor, and U.S. Bank Trust Company, National Association, as trustee, in respect of senior debt securities of Phillips 66 Company.	8-K	4.1	05/05/2022	001-35349
4.14	Form of the terms of the 2024 Notes, including the form of the 2024 Note.	8-K	4.2	05/05/2022	001-35349
4.15	Form of the terms of the 2025 Notes, including the form of the 2025 Note.	8-K	4.3	05/05/2022	001-35349
4.16	Form of the terms of the 2026 Notes, including the form of the 2026 Note.	8-K	4.4	05/05/2022	001-35349
4.17	Form of the terms of the 2028 Notes, including the form of the 2028 Note.	8-K	4.5	05/05/2022	001-35349
4.18	Form of the terms of the 2029 Notes, including the form of the 2029 Note.	8-K	4.6	05/05/2022	001-35349
4.19	Form of the terms of the 2045 Notes, including the form of the 2045 Note.	8-K	4.7	05/05/2022	001-35349
4.20	Form of the terms of the 2046 Notes, including the form of the 2046 Note.	8-K	4.8	05/05/2022	001-35349
4.21	Registration Rights Agreement, dated as of May 5, 2022, among Phillips 66 Company, as issuer, Phillips 66, as guarantor, and Barclays Capital Inc., J.P. Morgan Securities LLC and RBC Capital Markets, LLC, as dealer managers.	8-K	4.9	05/05/2022	001-35349
4.22	Indenture dated as of September 30, 2010 for the issuance of debt securities between DCP Midstream Operating, LP, as issuer, any Guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee.	8-K	4.1	09/30/2010	001-32678
4.23	Third Supplemental Indenture dated as of June 14, 2012 to Indenture dated as of September 30, 2010 between DCP Midstream Operating, LP, as issuer, DCP Midstream Partners, LP, as guarantor, and the Bank of New York Mellon Trust Company, N.A., as trustee.	8-K	4.1	06/14/2012	001-32678
4.24	Fifth Supplemental Indenture dated as of March 14, 2013 to Indenture dated as of September 30, 2010 between DCP Midstream Operating, LP, as issuer, DCP Midstream Partners, LP, as guarantor, and the Bank of New York Mellon Trust Company, N.A., as trustee.	8-K	4.3	03/14/2013	001-32678
4.25	Sixth Supplemental Indenture dated as of March 13, 2014 to Indenture dated as of September 30, 2010 between DCP Midstream Operating, LP, as issuer, DCP Midstream Partners, LP, as guarantor, and the Bank of New York Mellon Trust Company, N.A., as trustee.	8-K	4.3	03/14/2014	001-32678

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	Exhibit Number	Filing Date	SEC File No.
4.26	Seventh Supplemental Indenture dated as of July 17, 2018 to Indenture dated as of September 30, 2010 between DCP Midstream Operating, LP, as issuer, DCP Midstream, LP, as guarantor, and the Bank of New York Mellon Trust Company, N.A., as trustee.	8-K	4.3	07/17/2018	001-32678
4.27	Eighth Supplemental Indenture dated as of May 10, 2019 to Indenture dated as of September 30, 2010 between DCP Midstream Operating, LP, as issuer, DCP Midstream, LP, as guarantor, and the Bank of New York Mellon Trust Company, N.A., as trustee.	8-K	4.3	05/10/2019	001-32678
4.28	Ninth Supplemental Indenture dated as of June 24, 2020 to Indenture dated as of September 30, 2010 between DCP Midstream Operating, LP, as issuer, DCP Midstream, LP, as guarantor, and the Bank of New York Mellon Trust Company, N.A., as trustee.	8-K	4.3	06/24/2020	001-32678
4.29	Tenth Supplemental Indenture dated as of November 19, 2021 to Indenture dated as of September 20, 2010 between DCP Midstream Operating, LP, as issuer, DCP Midstream, LP, as guarantor, and the Bank of New York Mellon Trust Company, N.A., as trustee.	8-K	4.3	11/19/2021	001-32678
4.30	Indenture, dated as of August 16, 2000, by and between Duke Energy Field Services, LLC and The Chase Manhattan Bank.	8-K	4.1	01/06/2017	001-32678
4.31	First Supplemental Indenture, dated August 16, 2000, by and between Duke Energy Field Services, LLC and The Chase Manhattan Bank.	8-K	4.1	08/16/2000	000-31095
4.32	Fifth Supplemental Indenture, dated as of October 27, 2006, by and between Duke Energy Field Services, LLC and The Bank of New York (as successor to JPMorgan Chase Bank, N.A., formerly known as The Chase Manhattan Bank).	8-K	4.3	01/06/2017	001-32678
4.33	Sixth Supplemental Indenture, dated September 17, 2007, by and between DCP Midstream, LLC (formerly known as Duke Energy Field Services, LLC) and The Bank of New York (as successor to JPMorgan Chase Bank, N.A., formerly known as The Chase Manhattan Bank).	8-K	4.4	01/06/2017	001-32678
4.34	Eleventh Supplemental Indenture, dated January 1, 2017, by and between DCP Midstream Operating, LP, DCP Midstream, LLC and The Bank of New York Mellon Trust Company, N.A. (as successor to The Bank of New York Mellon, as successor to JPMorgan Chase Bank, N.A., formerly known as The Chase Manhattan Bank).	8-K	4.8	01/06/2017	001-32678
4.35	Twelfth Supplemental Indenture, dated January 1, 2017, by and among DCP Midstream Operating, LP (as successor to DCP Midstream, LLC (formerly known as Duke Energy Field Services, LLC)), DCP Midstream Partners, LP and The Bank of New York Mellon Trust Company, N.A. (as successor to The Bank of New York Mellon, as successor to JPMorgan Chase Bank, N.A., formerly known as The Chase Manhattan Bank).	8-K	4.9	01/06/2017	001-32678

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	Exhibit Number	Filing Date	SEC File No.
4.36	Indenture, dated as of May 21, 2013, by and between DCP Midstream Operating, LP (as issuer and successor to DCP Midstream, LLC) and the Bank of New York Mellon Trust Company, N.A.	8-K	4.10	01/06/2017	001-32678
4.37	First Supplemental Indenture, dated May 21, 2013, by and between DCP Midstream, LLC and the Bank of New York Mellon Trust Company, N.A.	8-K	4.11	01/06/2017	001-32678
4.38	Second Supplemental Indenture, dated January 1, 2017, by and between DCP Midstream Operating, LP, DCP Midstream, LLC and The Bank of New York Mellon Trust Company, N.A.	8-K	4.12	01/06/2017	001-32678
4.39	Form of Unit Certificate for 7.375% Series A Fixed-to-Floating Rate Cumulative Redeemable Perpetual Preferred Units.	8-K	4.1	11/20/2017	001-32678
4.40	Form of Unit Certificate for 7.875% Series B Fixed-to-Floating Rate Cumulative Redeemable Perpetual Preferred Units.	8-K	4.1	05/11/2018	001-32678
4.41	Form of Unit Certificate for 7.95% Series C Fixed-to-Floating Rate Cumulative Redeemable Perpetual Preferred Units.	8-K	4.1	10/04/2018	001-32678
10.1	Credit Agreement dated as of June 23, 2022, among Phillips 66 Company, Phillips 66, as guarantor, the lenders party thereto, and Mizuho Bank, Ltd., as administrative agent.	8-K	10.1	06/24/2022	001-35349
10.2	Third Amended and Restated Limited Liability Company Agreement of Chevron Phillips Chemical Company LLC, effective as of May 1, 2012.	10-Q	10.14	08/03/2012	001-35349
10.3	First Amendment to Third Amended and Restated Limited Liability Company Agreement of Chevron Phillips Chemical Company LLC, effective as of December 31, 2017.	10-K	10.6	02/23/2018	001-35349
10.4	Second Amendment to Third Amended and Restated Limited Liability Company Agreement of Chevron Phillips Chemical Company LLC, effective as of June 1, 2018.	10-Q	10.1	07/27/2018	001-35349
10.5	Third Amendment to the Third Amended and Restated Limited Liability Company Agreement of Chevron Phillips Chemical Company LLC.	10-Q	10.1	04/30/2021	001-35349
10.6	Indemnification and Release Agreement between ConocoPhillips and Phillips 66, dated April 26, 2012.	8-K	10.1	05/01/2012	001-35349

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	Exhibit Number	Filing Date	SEC File No.
10.7	Intellectual Property Assignment and License Agreement between ConocoPhillips and Phillips 66, dated April 26, 2012.	8-K	10.2	05/01/2012	001-35349
10.8	Employee Matters Agreement between ConocoPhillips and Phillips 66, dated April 26, 2012.	8-K	10.4	05/01/2012	001-35349
10.9	Amendment to the Employee Matters Agreement by and between ConocoPhillips and Phillips 66, dated April 26, 2012.	10-Q	10.1	05/02/2013	001-35349
10.10	Transition Services Agreement between ConocoPhillips and Phillips 66, dated April 26, 2012.	8-K	10.5	05/01/2012	001-35349
10.11	2013 Omnibus Stock and Performance Incentive Plan of Phillips 66.**	DEF14A	App. A	03/27/2013	001-35349
10.12	2022 Omnibus Stock and Performance Incentive Plan of Phillips 66.**	DEF14A	App. A	03/31/2022	001-35349
10.13	Phillips 66 Key Employee Supplemental Retirement Plan.**	10-Q	10.15	08/03/2012	001-35349
10.14	First Amendment to the Phillips 66 Key Employee Supplemental Retirement Plan.**	10-K	10.18	02/22/2013	001-35349
10.15	Phillips 66 Amended and Restated Executive Severance Plan.**	10-Q	10.1	07/29/2016	001-35349
10.16	Phillips 66 Deferred Compensation Plan for Non-Employee Directors.**	10-Q	10.17	08/03/2012	001-35349
10.17	Phillips 66 Key Employee Deferred Compensation Plan-Title I.**	10-Q	10.18	08/03/2012	001-35349
10.18	Phillips 66 Key Employee Deferred Compensation Plan-Title II.**	10-Q	10.19	08/03/2012	001-35349
10.19	First Amendment to the Phillips 66 Key Employee Deferred Compensation Plan Title II.**	10-K	10.24	02/22/2013	001-35349
10.20	Phillips 66 Defined Contribution Make-Up Plan Title I.**	10-Q	10.20	08/03/2012	001-35349
10.21	Phillips 66 Defined Contribution Make-Up Plan Title II.**	10-K	10.26	02/22/2013	001-35349
10.22	First Amendment to the Phillips 66 Defined Contribution Make-Up Plan Title II.**	10-Q	10.1	04/30/2019	001-35349
10.23	Phillips 66 Key Employee Change in Control Severance Plan.**	10-K	10.27	02/22/2013	001-35349
10.24	First Amendment to Phillips 66 Key Employee Change in Control Severance Plan, Effective October 2, 2015.**	8-K	10.1	11/08/2013	001-35349

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	Exhibit Number	Filing Date	SEC File No.
10.25	Annex to the Phillips 66 Nonqualified Deferred Compensation Arrangements .**	10-Q	10.23	08/03/2012	001-35349
10.26	Form of Stock Option Award Agreement under the 2013 Omnibus Stock and Performance Incentive Plan of Phillips 66 .**	10-K	10.31	02/21/2020	001-35349
10.27	Form of Restricted Stock or Restricted Stock Unit Award Agreement under the 2013 Omnibus Stock and Performance Incentive Plan of Phillips 66 .**	10-K	10.32	02/21/2020	001-35349
10.28	Form of Performance Share Unit Award Agreement under the 2013 Omnibus Stock and Performance Incentive Plan of Phillips 66 .**	10-K	10.33	02/21/2020	001-35349
10.29	Fifth Amendment to Receivables Financing Agreement, dated July 29, 2022, among DCP Receivables LLC, as borrower, DCP Midstream, LP, as initial servicer, the lenders, LC participants and group agents that are parties thereto from time to time, PNC Bank, National Association, as Administrative Agent and LC Bank, and PNC Capital Markets LLC, as Structuring Agent.	10-Q	10.1	11/03/2022	001-32678
21 *	List of Subsidiaries of Phillips 66.				
22 *	List of Guarantor Subsidiaries.				
23.1 *	Consent of Ernst & Young LLP, independent registered public accounting firm.				
23.2 *	Consent of Deloitte & Touche LLP, independent registered public accounting firm.				
31.1 *	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934.				
31.2 *	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934.				
32 *	Certifications pursuant to 18 U.S.C. Section 1350.				
101.INS*	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.				
101.SCH*	Inline XBRL Schema Document.				
101.CAL*	Inline XBRL Calculation Linkbase Document.				
101.LAB*	Inline XBRL Labels Linkbase Document.				
101.PRE*	Inline XBRL Presentation Linkbase Document.				

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	Exhibit Number	Filing Date	SEC File No.
101.DEF*	Inline XBRL Definition Linkbase Document.				
104*	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).				

* Filed herewith.
 ** Management contracts and compensatory plans or arrangements.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

PHILLIPS 66

Date: February 22, 2023

/s/ Mark E. Lashier
Mark E. Lashier
President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below, as of February 22, 2023, by the following persons on behalf of the registrant and in the capacities indicated.

<u>Signature</u>	<u>Title</u>
<u>/s/ Mark E. Lashier</u> <i>Mark E. Lashier</i>	President and Chief Executive Officer and Director (Principal executive officer)
<u>/s/ Kevin J. Mitchell</u> <i>Kevin J. Mitchell</i>	Executive Vice President and Chief Financial Officer (Principal financial officer)
<u>/s/ J. Scott Pruitt</u> <i>J. Scott Pruitt</i>	Vice President and Controller (Principal accounting officer)

/s/ Greg C. Garland Greg C. Garland	Executive Chairman of the Board of Directors
/s/ Gary K. Adams Gary K. Adams	Director
/s/ Julie L. Bushman Julie L. Bushman	Director
/s/ Lisa A. Davis Lisa A. Davis	Director
/s/ Gregory J. Hayes Gregory J. Hayes	Director
/s/ Charles M. Holley Charles M. Holley	Director
/s/ John E. Lowe John E. Lowe	Director
/s/ Denise L. Ramos Denise L. Ramos	Director
/s/ Denise R. Singleton Denise R. Singleton	Director
/s/ Douglas T. Terreson Douglas T. Terreson	Director
/s/ Glenn F. Tilton Glenn F. Tilton	Director
/s/ Marna C. Whittington Marna C. Whittington	Director

SUBSIDIARY LISTING OF PHILLIPS 66

At December 31, 2022

Company Name	Incorporation Location
Asamera Oil (US) Inc.	US, Montana
C.S. Land, Inc.	US, California
Centana Intrastate Pipeline, LLC	US, Delaware
Central Retail Holdings LLC	US, Delaware
Cimarron River Pipeline, LLC	US, Delaware
Collbran Valley Gas Gathering, LLC	US, Colorado
Dauphin Island Gathering Partners	US, Texas
DCP Assets Holding GP, LLC	US, Delaware
DCP Assets Holding LP	US, Delaware
DCP Black Lake Holdings, LP	US, Delaware
DCP Chesapeake LLC	US, Texas
DCP Cheyenne Connector, LLC	US, Delaware
DCP Dauphin Island, LLC	US, Delaware
DCP East Texas Gathering, LLC	US, Delaware
DCP GCX Pipeline LLC	US, Delaware
DCP Grands Lacs LLC	US, Michigan
DCP Guadalupe Pipeline, LLC	US, Delaware
DCP Hinshaw Pipeline, LLC	US, Delaware
DCP Intrastate Network, LLC	US, Delaware
DCP James Lake Holding LLC	US, Delaware
DCP Litchfield LLC	US, Michigan
DCP LP Holdings, LLC	US, Delaware
DCP Lucerne 2 Plant LLC	US, Delaware
DCP Michigan Holdings LLC	US, Delaware
DCP Michigan Pipeline & Processing LLC	US, Michigan
DCP Midstream GP, LLC	US, Delaware
DCP Midstream GP, LP	US, Delaware
DCP Midstream Holding, LLC	US, Delaware
DCP Midstream LLC	US, Delaware
DCP Midstream Marketing, LLC	US, Delaware
DCP Midstream Operating, LLC	US, Delaware
DCP Midstream Operating, LP	US, Delaware
DCP Midstream, LP	US, Delaware
DCP Mobile Bay Processing, LLC	US, Delaware
DCP New Mexico Development, LLC	US, Delaware
DCP NGL Operating, LLC	US, Delaware
DCP NGL Services, LLC	US, Delaware
DCP Operating Company, LP	US, Delaware
DCP Partners Colorado LLC	US, Delaware
DCP Partners Logistics, LLC	US, Delaware

DCP Partners MB I LLC	US, Delaware
DCP Partners MB II LLC	US, Delaware
DCP Pipeline Holding LLC	US, Delaware
DCP Raptor Pipeline, LLC	US, Delaware
DCP Receivables LLC	US, Delaware
DCP Saginaw Bay Lateral LLC	US, Delaware
DCP Sand Hills Interstate Pipeline, LLC	US, Delaware
DCP Sand Hills Pipeline, LLC	US, Delaware
DCP Services LLC	US, Delaware
DCP South Central Texas LLC	US, Delaware
DCP Southern Hills Interstate Pipeline, LLC	US, Delaware
DCP Southern Hills Pipeline, LLC	US, Delaware
DCP Sweeny LLC	US, Delaware
DCP Technology Ventures LLC	US, Delaware
DCP Tolar Holdings LLC	US, Delaware
DCP Wattenberg Pipeline LLC	US, Delaware
DCP Wyoming Assets LLC	US, Delaware
DCP Zia Plant LLC	US, Delaware
Douglas Oil Company of California	US, California
EasTrans, LLC	US, Delaware
eFuel, LLC	US, California
Fuels Cotton Valley Gathering, LLC	US Delaware
Jackson Pipeline Company	US, Michigan
James Lake Gathering, LLC	US, Delaware
James Lake Gathering II, LLC	US, Delaware
James Lake Midstream, LLC	US, Delaware
JET Energy Trading GmbH	Germany
JET Petrol Limited	Northern Ireland
JET Petroleum Limited	England
JET Retail UK Limited	England
JET Tankstellen Austria GmbH	Austria
JET Tankstellen Deutschland GmbH	Germany
Kansas City Retail and Convenience LLC	US, Delaware
Kayo Oil Company	US, Delaware
KHQ LLC	US, Delaware
Linden Urban Renewal Limited Partnership	US, New Jersey
Marysville Hydrocarbons Holdings, LLC	US, Delaware
Marysville Hydrocarbons LLC	US, Delaware
Merey Sweeny LLC	US, Delaware
National Helium, LLC	US, Delaware
OK CNG 5, LLC	US, Oklahoma
Phillips 66 Alliance Dock LLC	US, Delaware
Phillips 66 Alliance H2PL LLC	US, Delaware
Phillips 66 Aviation LLC	US, Delaware
Phillips 66 Canada Ltd.	Canada, Alberta
Phillips 66 Capital Holdings LLC	US, Delaware
Phillips 66 Carrier LLC	US, Delaware

Phillips 66 Central Europe Inc.	US, Delaware
Phillips 66 Communications Inc.	US, Delaware
Phillips 66 Company	US, Delaware
Phillips 66 Continental Holding GmbH	Germany
Phillips 66 CS Limited	England
Phillips 66 DAPL Holdings LLC	US, Delaware
Phillips 66 Energy Trading LLC	US, Delaware
Phillips 66 ETCO Holdings LLC	US, Delaware
Phillips 66 European Power Limited	England
Phillips 66 Export Terminal LLC	US, Delaware
Phillips 66 GmbH	Switzerland
Phillips 66 Gulf Coast Pipeline LLC	US, Delaware
Phillips 66 Gulf Coast Properties LLC	US, Delaware
Phillips 66 International Holdings Company	US, Delaware
Phillips 66 International Investments Ltd.	Cayman
Phillips 66 International Trading Pte. Ltd.	Singapore
Phillips 66 Investment Holdings LLC	US, Delaware
Phillips 66 Ireland Pension Trust Limited	Ireland
Phillips 66 LCR Isomerization LLC	US, Delaware
Phillips 66 Limited	England
Phillips 66 Partners GP LLC	US, Delaware
Phillips 66 Partners Holdings LLC	US, Delaware
Phillips 66 Partners LP	US, Delaware
Phillips 66 Pension Plan Trustee Limited	England
Phillips 66 Pipeline LLC	US, Delaware
Phillips 66 Project Development Inc.	US, Delaware
Phillips 66 Project Shareholder Inc.	US, Delaware
Phillips 66 Sand Hills LLC	US, Delaware
Phillips 66 Southern Hills LLC	US, Delaware
Phillips 66 Spectrum Corporation	US, Delaware
Phillips 66 Stillwater Retail Corporation	US, Delaware
Phillips 66 Stillwater Retail One LLC	US, Delaware
Phillips 66 Stillwater Retail Two LLC	US, Delaware
Phillips 66 Sweeny Crude Export LLC	US, Delaware
Phillips 66 Sweeny Frac 2 LLC	US, Delaware
Phillips 66 Sweeny Frac LLC	US, Delaware
Phillips 66 Sweeny-Freeport 2 Pipeline LLC	US, Delaware
Phillips 66 Sweeny-Freeport LLC	US, Delaware
Phillips 66 Treasury Limited	England
Phillips 66 TS Limited	England
Phillips 66 UK Development Limited	England
Phillips 66 UK Funding Limited	England
Phillips 66 UK Holdings Limited	England
Phillips 66 WRB Partner LLC	US, Delaware

Phillips Chemical Holdings LLC	US, Delaware
Phillips Gas Company LLC	US, Delaware
Phillips Utility Gas Corporation	US, Delaware
Pioneer Investments Corp.	US, Delaware
Pioneer Pipe Line Company	US, Delaware
Qingdao Phillips 66 Energy Co. Ltd.	China
Radius Insurance Company	Cayman
Saginaw Bay Lateral Michigan Limited Partnership	US, Michigan
Salt Lake Terminal Company	US, Delaware
Sentinel Transportation, LLC	US, Delaware
SHC Insurance Company	US, Texas
Spirit Insurance Company	US, Vermont
Sweeny Cogeneration LLC	US, Delaware
West Retail Holdings LLC	US, Delaware
WesTTex 66 Pipeline LLC	US, Delaware
Wilbreeze Pipeline, LLC	US, Delaware

Certain subsidiaries are not listed since, considered in the aggregate as a single subsidiary, they would not constitute a significant subsidiary at December 31, 2022.

LIST OF GUARANTOR SUBSIDIARIES

As of December 31, 2022, Phillips 66 Company, a corporation incorporated under the laws of the State of Delaware (the “Guarantor Subsidiary”), has guaranteed each of the senior unsecured debt securities issued by Phillips 66 listed below. Phillips 66 directly owns 100% of the Guarantor Subsidiary. The guarantees (1) are unsecured obligations of the Guarantor Subsidiary, (2) rank equally with all of its other unsecured and unsubordinated indebtedness, and (3) are full and unconditional and joint and several.

Senior Unsecured Debt Securities of Phillips 66 Guaranteed by the Guarantor Subsidiary

- 0.900% Senior Notes due February 2024
- 3.850% Senior Notes due April 2025
- 1.300% Senior Notes due February 2026
- 3.900% Senior Notes due March 2028
- 2.150% Senior Notes due December 2030
- 4.650% Senior Notes due November 2034
- 5.875% Senior Notes due May 2042
- 4.875% Senior Notes due November 2044
- 3.300% Senior Notes due March 2052

As of December 31, 2022, Phillips 66 has guaranteed each of the senior unsecured debt securities issued by Phillips 66 Company listed below. The guarantees (1) are unsecured obligations of Phillips 66, (2) rank equally with all of its other unsecured and unsubordinated indebtedness, and (3) are full and unconditional and joint and several.

Senior Unsecured Debt Securities of Phillips 66 Company Guaranteed by Phillips 66

- 2.450% Senior Notes due December 2024
- 3.605% Senior Notes due February 2025
- 3.550% Senior Notes due October 2026
- 3.750% Senior Notes due March 2028
- 3.150% Senior Notes due December 2029
- 4.680% Senior Notes due February 2045
- 4.900% Senior Notes due October 2046

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements:

- (1) Registration Statement (Form S-8 No. 333-181080), as amended, pertaining to the Phillips 66 Savings Plan,
- (2) Registration Statement (Form S-8 No. 333-188564) pertaining to the 2013 Omnibus Stock and Performance Incentive Plan of Phillips 66, and the Phillips 66 U.K. Share Incentive Plan,
- (3) Registration Statement (Form S-3 No. 333-266428) of Phillips 66 Company and Phillips 66, and
- (4) Registration Statement (Form S-8 No. 333-264891) pertaining to the 2022 Omnibus Stock and Performance Incentive Plan of Phillips 66;

of our reports dated February 22, 2023, with respect to the consolidated financial statements of Phillips 66 and the effectiveness of internal control over financial reporting of Phillips 66 included in this Annual Report (Form 10-K) of Phillips 66 for the year ended December 31, 2022.

/s/ Ernst & Young LLP

Houston, Texas
February 22, 2023

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-181080, 333-188564, and 333-264891 on Form S-8, and Registration Statement No. 333-266428 on Form S-3 of our report dated February 17, 2023, relating to the financial statements of DCP Midstream, LP in this Annual Report on Form 10-K for the year ended December 31, 2022.

/s/ Deloitte & Touche LLP

Denver, Colorado
February 22, 2023

CERTIFICATION

I, Mark E. Lashier, certify that:

1. I have reviewed this Annual Report on Form 10-K of Phillips 66;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 22, 2023

/s/ Mark E. Lashier

Mark E. Lashier

President and Chief Executive Officer

CERTIFICATION

I, Kevin J. Mitchell, certify that:

1. I have reviewed this Annual Report on Form 10-K of Phillips 66;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 22, 2023

/s/ Kevin J. Mitchell

Kevin J. Mitchell

Executive Vice President and
Chief Financial Officer

CERTIFICATIONS PURSUANT TO 18 U.S.C. SECTION 1350

In connection with the Annual Report of Phillips 66 (the Company) on Form 10-K for the year ended December 31, 2022, as filed with the U.S. Securities and Exchange Commission on the date hereof (the Report), each of the undersigned hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to their knowledge:

- (1) The Report fully complies with the requirements of Sections 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 22, 2023

/s/ Mark E. Lashier

Mark E. Lashier
President and Chief Executive Officer

/s/ Kevin J. Mitchell

Kevin J. Mitchell
Executive Vice President and
Chief Financial Officer