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, 2023

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: 001-35764

PBF HOLDING COMPANY LLC
PBF FINANCE CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	**27-2198168**
Delaware	**45-2685067**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

One Sylvan Way, Second Floor

Parsippany New Jersey 07054

(Address of principal executive offices) (Zip Code)

(973) 455-7500

(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol	Name of each exchange on which registered
N/A	N/A	N/A

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.

PBF Holding Company LLC ☐ Yes ☒ No
PBF Finance Corporation ☐ 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.

PBF Holding Company LLC ☒ Yes ☐ No
PBF Finance Corporation ☒ 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.

PBF Holding Company LLC ☐ Yes ☒ No
PBF Finance Corporation ☐ Yes ☒ No

(Note: The registrant is a voluntary filer of reports under Section 13 or 15(d) of the Securities Exchange Act of 1934 and has filed during the preceding 12 months all reports it would have been required to file by Section 13 or 15(d) of the Securities Exchange Act of 1934 if the registrant had been subject to one of such Sections.)

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 (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

PBF Holding Company LLC ☒ Yes ☐ No
PBF Finance Corporation ☒ 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.

PBF Holding Company LLC	Large accelerated filer	☐	Accelerated filer	☐	Non-accelerated filer	☒	Smaller reporting company	☐	Emerging growth company	☐
PBF Finance Corporation	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.

PBF Holding Company LLC ☐
PBF Finance Corporation ☐

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.

PBF Holding Company LLC ☐
PBF Finance Corporation ☐

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.

PBF Holding Company LLC ☐
PBF Finance Corporation ☐

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).

PBF Holding Company LLC ☐
PBF Finance Corporation ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

PBF Holding Company LLC ☐ Yes ☒ No
PBF Finance Corporation ☐ Yes ☒ No

There is no trading in the membership interests of PBF Holding LLC or the common stock of PBF Finance Corporation and therefore an aggregate market value based on such is not determinable.

PBF Holding Company LLC has no common stock outstanding. As of February 23, 2024, 100% of the membership interests of PBF Holding Company LLC were owned by PBF Energy Company LLC, and PBF Finance Corporation had 100 shares of common stock outstanding, all of which were held by PBF Holding Company LLC.

PBF Finance Corporation meets the conditions set forth in General Instruction (I)(1)(a) and (b) of Form 10-K and is therefore filing this Form with the reduced disclosure format.

DOCUMENTS INCORPORATED BY REFERENCE

PBF Energy Inc., the managing member of our direct parent PBF Energy Company LLC, will file with the Securities and Exchange Commission a definitive Proxy Statement for its 2024 Annual Meeting of Stockholders within 120 days after December 31, 2023. Portions of the Proxy Statement of PBF Energy Inc. are incorporated by reference in Part III of this Form 10-K to the extent stated herein.

PBF HOLDING COMPANY LLC

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SIGNATURES

GLOSSARY OF SELECTED TERMS

Unless otherwise noted or indicated by context, the following terms used in this Annual Report on Form 10-K have the following meanings:

"AB 32" refers to the greenhouse gas emission control regulations in the state of California to comply with Assembly Bill 32.

"ANS" refers to Alaskan North Slope crude oil reflective of West Coast economics, characterized by API gravity between 28° and 35°.

"ASCI" refers to the Argus Sour Crude Index, a pricing index used to approximate market prices for sour, heavy crude oil.

"Bakken" refers to both a crude oil production region generally covering North Dakota, Montana and Western Canada, and the crude oil that is produced in that region.

"barrel" refers to a common unit of measure in the oil industry, which equates to 42 gallons.

"blendstocks" refers to various compounds that are combined with gasoline or diesel from the crude oil refining process to make finished gasoline and diesel; these may include natural gasoline, FCC unit gasoline, ethanol, reformate or butane, among others.

"bpd" is an abbreviation for barrels per day.

"CAM Pipeline" or **"CAM Connection Pipeline"** refers to the Clovelly-Alliance-Meraux pipeline in Louisiana.

"CARB" refers to the California Air Resources Board; gasoline and diesel fuel sold in the state of California are regulated by CARB and require stricter quality and emissions reduction performance than required by other states.

"catalyst" refers to a substance that alters, accelerates, or instigates chemical changes, but is not produced as a product of the refining process.

"coke" refers to a coal-like substance that is produced from heavier crude oil fractions during the refining process.

"complexity" refers to the number, type and capacity of processing units at a refinery, measured by the Nelson Complexity Index, which is often used as a measure of a refinery's ability to process lower quality crude in an economic manner.

"crack spread" refers to a simplified calculation that measures the difference between the price for light products and crude oil. For example, we reference (a) the 2-1-1 crack spread, which is a general industry standard utilized by our Delaware City, Paulsboro and Chalmette refineries that approximates the per barrel refining margin resulting from processing two barrels of crude oil to produce one barrel of gasoline and one barrel of heating oil or ULSD, (b) the 4-3-1 crack spread, which is a benchmark utilized by our Toledo and Torrance refineries that approximates the per barrel refining margin resulting from processing four barrels of crude oil to produce three barrels of gasoline and one-half barrel of jet fuel and one-half barrel of ULSD and (c) the 3-2-1 crack spread, which is a benchmark utilized by our Martinez refinery that approximates the per barrel refining margin resulting from processing three barrels of crude oil to produce two barrels of gasoline and three-quarters of a barrel jet fuel and one-quarter of a barrel ULSD.

"Dated Brent" refers to Brent blend oil, a light, sweet North Sea crude oil, characterized by an American Petroleum Institute ("API") gravity of 38° and a sulfur content of approximately 0.4 weight percent, that is used as a benchmark for other crude oils.

"distillates" refers primarily to diesel, heating oil, kerosene and jet fuel.

"downstream" refers to the downstream sector of the energy industry generally describing oil refineries, marketing and distribution companies that refine crude oil and sell and distribute refined products. The opposite of the downstream sector is the upstream sector, which refers to exploration and production companies that search for and/or produce crude oil and natural gas underground or through drilling or exploratory wells.

"EPA" refers to the United States Environmental Protection Agency.

"ESG" refers to environmental, social, and governance matters.

"ethanol" refers to a clear, colorless, flammable oxygenated liquid. Ethanol is typically produced chemically from ethylene, or biologically from fermentation of various sugars from carbohydrates found in agricultural crops. It is used in the United States as a gasoline octane enhancer and oxygenate.

"ExxonMobil" refers to Exxon Mobil Corporation.

"FCC" refers to fluid catalytic cracking.

"feedstocks" refers to crude oil and partially refined products that are processed and blended into refined products.

"GAAP" refers to U.S. generally accepted accounting principles developed by the Financial Accounting Standards Board for nongovernmental entities.

"GHG" refers to greenhouse gas.

"Group I base oils or lubricants" refers to conventionally refined products characterized by sulfur content less than 0.03% with a viscosity index between 80 and 120. Typically, these products are used in a variety of automotive and industrial applications.

"heavy crude oil" refers to a relatively inexpensive crude oil with a low API gravity characterized by high relative density and viscosity. Heavy crude oils require greater levels of processing to produce high value products such as gasoline and diesel.

"IPO" refers to the initial public offering of PBF Energy Class A common stock which closed on December 18, 2012.

"IRA" refers to the Inflation Reduction Act; a U.S. federal law enacted on August 16, 2022 that resulted in significant law changes related to tax, climate change, energy, and health care. The tax provision includes, but is not limited to, a corporate alternative minimum tax of 15%, excise tax of 1% on certain corporate stock buy-backs, energy-related tax credits and incentives, and additional Internal Revenue Service ("IRS") funding.

"J. Aron" refers to J. Aron & Company, a subsidiary of The Goldman Sachs Group, Inc.

"KV" refers to Kilovolts.

"LCM" refers to a GAAP requirement for inventory to be valued at the lower of cost or market.

"light crude oil" refers to a relatively expensive crude oil with a high API gravity characterized by low relative density and viscosity. Light crude oils require lower levels of processing to produce high value products such as gasoline and diesel.

"light products" refers to the group of refined products with lower boiling temperatures, including gasoline and distillates.

"LLS" refers to Light Louisiana Sweet benchmark for crude oil reflective of Gulf coast economics for light sweet domestic and foreign crudes. It is characterized by an API gravity of between 35° and 40° and a sulfur content of approximately .35 weight percent.

"LPG" refers to liquefied petroleum gas.

"Maya" refers to Maya crude oil, a heavy, sour crude oil characterized by an API gravity of approximately 22° and a sulfur content of approximately 3.3 weight percent that is used as a benchmark for other heavy crude oils.

"MLP" refers to the master limited partnership.

"MMBTU" refers to million British thermal units.

"MOEM Pipeline" refers to a pipeline that originates at a terminal in Empire, Louisiana approximately 30 miles north of the mouth of the Mississippi River. The MOEM Pipeline is 14 inches in diameter, 54 miles long and transports crude from South Louisiana to the Chalmette refinery and transports Heavy Louisiana Sweet ("HLS") and South Louisiana Intermediate ("SLI") crude.

"MW" refers to Megawatt.

"Nelson Complexity Index" refers to the complexity of an oil refinery as measured by the Nelson Complexity Index, which is calculated on an annual basis by the Oil and Gas Journal. The Nelson Complexity Index assigns a complexity factor to each major piece of refinery equipment based on its complexity and cost in comparison to crude distillation, which is assigned a complexity factor of 1.0. The complexity of each piece of refinery equipment is then calculated by multiplying its complexity factor by its throughput ratio as a percentage of crude distillation capacity. Adding up the complexity values assigned to each piece of equipment, including crude distillation, determines a refinery's complexity on the Nelson Complexity Index. A refinery with a complexity of 10.0 on the Nelson Complexity Index is considered ten times more complex than crude distillation for the same amount of throughput.

"NYH" refers to the New York Harbor market value of petroleum products.

"OSHA" refers to the Occupational Safety and Health Administration of the U.S. Department of Labor.

"refined products" refers to petroleum products, such as gasoline, diesel and jet fuel, that are produced by a refinery.

"Renewable Fuel Standard" or **"RFS"** refers to the Renewable Fuel Standard issued pursuant to the Energy Independence and Security Act of 2007 implementing mandates to blend renewable fuels into petroleum fuels produced and sold in the United States.

"RINs" refers to renewable fuel credits required for compliance with the RFS.

"Saudi Aramco" refers to Saudi Arabian Oil Company.

"SEC" refers to the United States Securities and Exchange Commission.

"sour crude oil" refers to a crude oil that is relatively high in sulfur content, requiring additional processing to remove the sulfur. Sour crude oil is typically less expensive than sweet crude oil.

"Sunoco" refers to Sunoco, LLC.

"sweet crude oil" refers to a crude oil that is relatively low in sulfur content, requiring less processing to remove the sulfur than sour crude oil. Sweet crude oil is typically more expensive than sour crude oil.

"Syncrude" refers to a blend of Canadian synthetic oil, a light, sweet crude oil, typically characterized by API gravity between 30° and 32° and a sulfur content of approximately 0.1-0.2 weight percent.

“throughput” refers to the volume processed through a unit or refinery.

“turnaround” refers to a periodically required shutdown and comprehensive maintenance event to refurbish and maintain a refinery unit or units that involves the cleaning, repair, and inspection of such units and occurs generally on a periodic cycle.

“ULSD” refers to ultra-low-sulfur diesel.

“WCS” refers to Western Canadian Select, a heavy, sour crude oil blend typically characterized by API gravity between 20° and 22° and a sulfur content of approximately 3.5 weight percent that is used as a benchmark for heavy Western Canadian crude oil.

“WTI” refers to West Texas Intermediate crude oil, a light, sweet crude oil, typically characterized by API gravity between 38° and 40° and a sulfur content of approximately 0.3 weight percent that is used as a benchmark for other crude oils.

“WTS” refers to West Texas Sour crude oil, a sour crude oil characterized by API gravity between 30° and 33° and a sulfur content of approximately 1.28 weight percent that is used as a benchmark for other sour crude oils.

“yield” refers to the percentage of refined products that is produced from crude oil and other feedstocks.

Explanatory Note

This Annual Report on Form 10-K is filed by PBF Holding Company LLC (“PBF Holding”) and PBF Finance Corporation (“PBF Finance”). PBF Holding is a wholly-owned subsidiary of PBF Energy Company LLC (“PBF LLC”) and is the parent company for PBF LLC's refinery operating subsidiaries. PBF Finance is a wholly-owned subsidiary of PBF Holding. PBF Holding is an indirect subsidiary of PBF Energy Inc. (“PBF Energy”), which is the sole managing member of, and owner of an equity interest representing approximately 99.3% of the outstanding economic interests in PBF LLC as of December 31, 2023. PBF Energy operates and controls all of the business and affairs and consolidates the financial results of PBF LLC and its subsidiaries. PBF Holding, together with its consolidated subsidiaries, owns and operates oil refineries and related facilities in North America.

PART I

In this Annual Report on Form 10-K, unless the context otherwise requires, references to the "Company," "we," "our" or "us" refer to PBF Holding, and, in each case, unless the context otherwise requires, its consolidated subsidiaries. References to "subsidiary guarantors" refer to PBF Services Company LLC ("PBF Services"), PBF Power Marketing LLC ("PBF Power"), Paulsboro Refining Company LLC ("PRC"), Toledo Refining Company LLC ("Toledo Refining"), Delaware City Refining Company LLC ("DCR"), PBF Investments LLC ("PBF Investments"), PBF International Inc., Chalmette Refining, L.L.C. ("Chalmette Refining"), PBF Energy Western Region LLC ("PBF Western Region"), Torrance Refining Company LLC ("Torrance Refining"), and Martinez Refining Company LLC ("MRC"), which are the subsidiaries of PBF Holding that guarantee PBF Holding's 7.875% senior unsecured notes due 2030 (the "2030 Senior Notes") and the 6.00% senior unsecured notes due 2028 (the "2028 Senior Notes") as of December 31, 2023.

In this Annual Report on Form 10-K, we make certain forward-looking statements, including statements regarding our plans, strategies, objectives, expectations, intentions, and resources. You should read our forward-looking statements together with our disclosures under the heading: "Cautionary Statement Regarding Forward-Looking Statements." When considering forward-looking statements, you should keep in mind the risk factors and other cautionary statements set forth in this Annual Report on Form 10-K under "Risk Factors" in Item 1A.

ITEM 1. BUSINESS

Overview and Corporate Structure

We are one of the largest independent petroleum refiners and suppliers of unbranded transportation fuels, heating oil, petrochemical feedstocks, lubricants and other petroleum products in the United States. We sell our products throughout the Northeast, Midwest, Gulf Coast and West Coast of the United States, as well as in other regions of the United States, Canada and Mexico and are able to ship products to other international destinations. We own and operate six domestic oil refineries and related assets. Our refineries have a combined processing capacity, known as throughput, of approximately 1,000,000 bpd, and a weighted-average Nelson Complexity Index of 12.7 based on current operating conditions. The complexity and throughput capacity of our refineries are subject to change dependent upon configuration changes we make to respond to market conditions, as well as a result of investments made to improve our facilities and maintain compliance with environmental and governmental regulations. The Company's six oil refineries represent one reportable segment.

Ownership Structure

We are a Delaware limited liability company and a holding company for our operating subsidiaries. PBF Finance is a wholly-owned subsidiary of PBF Holding. We are a wholly-owned subsidiary of PBF LLC, and PBF Energy is the sole managing member of, and owner of an equity interest as of December 31, 2023 representing approximately 99.3% of the outstanding economic interests in PBF LLC.

On December 18, 2012, our indirect parent, PBF Energy completed its IPO. As a result of PBF Energy's IPO and related organization transactions, PBF Energy became the sole managing member of PBF LLC and operates and controls all of its business and affairs and consolidates the financial results of PBF LLC and its subsidiaries, including PBF Holding and PBF Finance. As of December 31, 2023, PBF Energy held 120,461,851 PBF LLC Series C Units and its current and former executive officers and directors and certain employees and others held 862,780 PBF LLC Series A Units and the holders of PBF Energy's issued and outstanding shares of its Class A common stock have approximately 99.3% of the voting power in PBF Energy, and the members of PBF LLC other than PBF Energy through their holdings of Class B common stock have approximately 0.7% of the voting power in PBF Energy.

PBF Holding Refineries

Our six refineries are located in Delaware City, Delaware, Paulsboro, New Jersey, Toledo, Ohio, Chalmette, Louisiana, Torrance, California and Martinez, California. Each refinery is briefly described in the table below:

Refinery	Region	Nelson Complexity Index [1]	Throughput Capacity (in barrels per day) [1]	PADD	Crude Processed [2]	Source [2]
Delaware City	East Coast	13.6	180,000	1	light sweet through heavy sour	water, rail
Paulsboro	East Coast	8.8 [3]	155,000[3]	1	light sweet through heavy sour	water
Toledo	Mid-Continent	11.0	180,000	2	light sweet	pipeline, truck, rail
Chalmette	Gulf Coast	13.0	185,000	3	light sweet through heavy sour	water, pipeline
Torrance	West Coast	13.8	166,000	5	medium and heavy	pipeline, water, truck
Martinez	West Coast	16.1	157,000	5	medium and heavy	pipeline and water

[1] Reflects operating conditions at each refinery as of the date of this filing. Changes in complexity and throughput capacity reflect the result of current market conditions, in addition to investments made to improve our facilities and maintain compliance with environmental and governmental regulations. Configurations at each of our refineries are evaluated periodically and updated accordingly.

[2] Reflects the typical crude and feedstocks and related sources utilized under normal operating conditions and prevailing market environments.

[3] Under normal operating conditions and prevailing market environments, our Nelson Complexity Index and throughput capacity for the Paulsboro refinery would be 13.1 and 180,000, respectively. As a result of the reconfiguration of our East Coast refineries in 2020, and subsequent restart of several idled processing units at the Paulsboro refinery in 2022, our Nelson Complexity Index and throughput capacity were adjusted.

PBF Logistics LP Transactions

PBF Logistics LP ("PBFX") is an affiliate of ours. PBFX, an indirect wholly-owned subsidiary of PBF Energy and PBF LLC, owns or leases, operates, develops and acquires crude oil and refined products terminals, pipelines, storage facilities and similar logistics assets. PBFX engages in the receiving, handling, storage and transferring of crude oil, refined products, natural gas and intermediates from sources located throughout the United States and Canada for PBF Energy in support of its refineries, as well as for third-party customers. The majority of PBFX's revenues are derived from long-term, fee-based commercial agreements with us, which include minimum volume commitments, for receiving, handling, storing and transferring crude oil, refined products, and natural gas. PBF Energy also has agreements with PBFX that establish fees for certain general and administrative services and operational and maintenance services provided by us to PBFX.

See "Agreements with PBFX" below as well as "Note 9 - Related Party Transactions" of our Notes to Consolidated Financial Statements for additional information. See "Item 1A. Risk Factors" and "Item 13. Certain Relationships and Related Transactions, and Director Independence."

PBF Logistics GP LLC ("PBFX GP") serves as the general partner of PBFX. PBFX GP is wholly-owned by PBF LLC. On May 14, 2014, PBFX completed its initial public offering (the "PBFX Offering"). In connection with the PBFX Offering, we distributed to PBF LLC, which in turn contributed to PBFX, the assets and liabilities of certain crude oil terminaling assets. In a series of transactions subsequent to the PBFX Offering, we distributed certain additional assets to PBF LLC, which in turn contributed those assets to PBFX. On November 30, 2022, PBF Energy acquired all of the publicly held common units in PBFX representing limited partner interests in the MLP not already owned by certain wholly-owned subsidiaries of PBF Energy and its affiliates, and PBFX became an indirect wholly-owned subsidiary of PBF Energy.

St. Bernard Renewables LLC Transactions

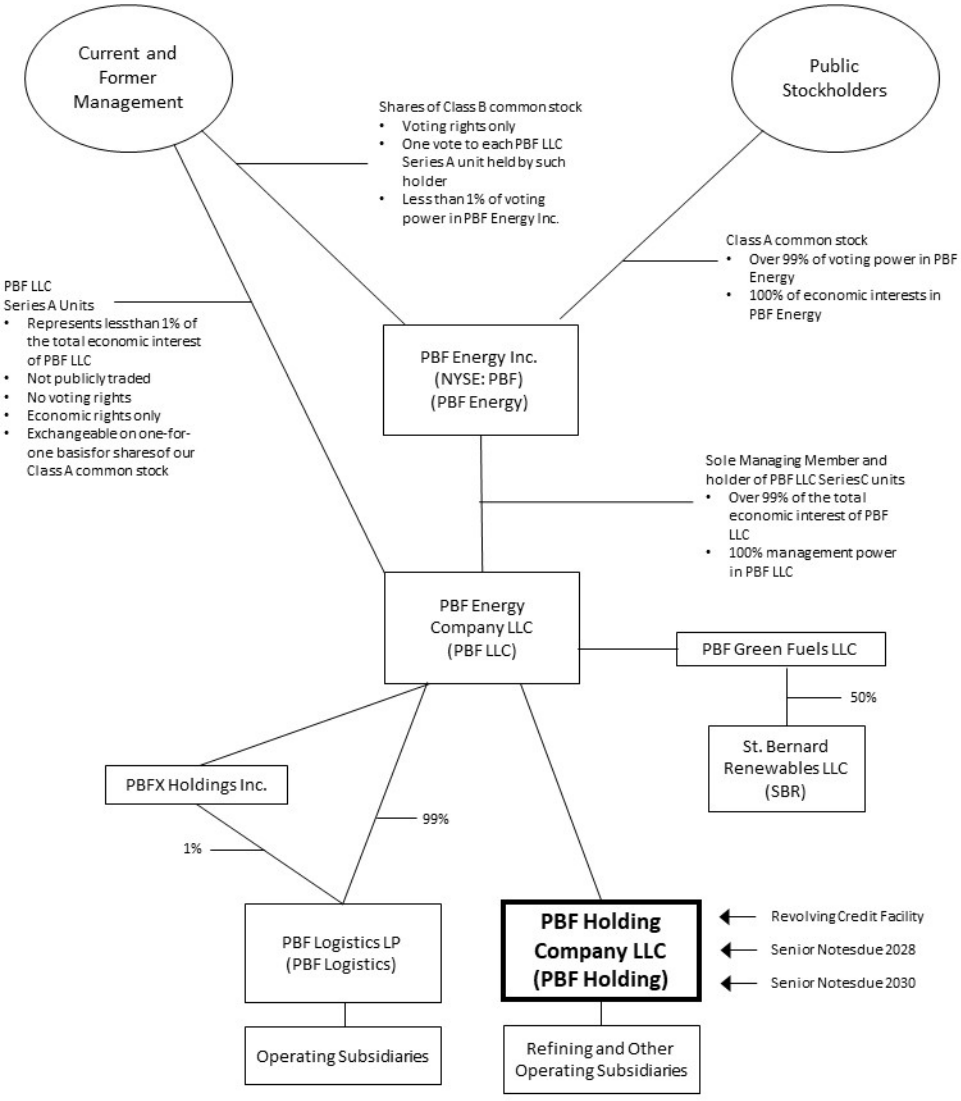
On June 27, 2023, PBF Energy and Eni Sustainable Mobility US Inc., a subsidiary of Eni SpA ("Eni"), consummated the closing of the equity method investment transaction and the capitalization of St. Bernard Renewables LLC ("SBR"), a jointly held investee designed to own, develop, and operate the renewable diesel facility co-located with our Chalmette refinery in Louisiana (the "Renewable Diesel Facility"). In connection with this transaction, we distributed to PBF LLC, which in turn contributed to SBR, certain assets. We have no interest in SBR.

See "Agreements with SBR" below as well as "Note 9 - Related Party Transactions" of our Notes to Consolidated Financial Statements for additional information. See "Item 1A. Risk Factors" and "Item 13. Certain Relationships and Related Transactions, and Director Independence."

Available Information

Our website address is www.pbfenergy.com. Information contained on our 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 other materials filed with (or furnished to) the SEC by us are available on our website (under "Investors") free of charge, soon after we file or furnish such material.

The diagram below depicts our organizational structure as of December 31, 2023:



Refining Operations

We own and operate six refineries (two of which are operated as a single unit) that provide us with geographic and market diversity. We produce a variety of products at each of our refineries, including gasoline, ULSD, heating oil, jet fuel, lubricants, petrochemicals and asphalt. We sell our products throughout the Northeast, Midwest, Gulf Coast and West Coast of the United States, as well as in other regions of the United States, Canada and Mexico, and are able to ship products to other international destinations.

Our refinery assets as of December 31, 2023 are described below.

East Coast Refining System (Delaware City Refinery and Paulsboro Refinery)

Overview. The Delaware City refinery is located on an approximately 5,000-acre site, with access to waterborne cargoes and an extensive distribution network of pipelines, barges and tankers, truck and rail. The Delaware City refinery is a fully integrated operation that receives crude via rail at our crude unloading facilities, or via ship or barge at the docks owned by the Delaware City refinery located on the Delaware River. The crude and other feedstocks are stored in an extensive tank farm prior to processing. In addition, there is a 15-lane, 76,000 bpd capacity truck loading rack located adjacent to the refinery and a 23-mile interstate pipeline that are used to distribute clean products. The Paulsboro refinery is located on approximately 950-acres on the Delaware River in Paulsboro, New Jersey, near Philadelphia and approximately 30 miles away from Delaware City. Paulsboro receives crude and feedstocks via its marine terminal on the Delaware River.

As a result of its configuration and process units, Delaware City has the capability of processing a slate of heavy crudes with a high concentration of high sulfur crudes, as well as other high sulfur feedstock when economically viable, and is one of the largest and most complex refineries on the East Coast. The Delaware City refinery is one of two heavy crude processing refineries, the other being our Paulsboro refinery, on the East Coast of the United States. The Delaware City coking capacity is equal to approximately 25% of crude capacity.

The Delaware City refinery primarily processes a variety of medium to heavy, sour crude oils, but can run light, sweet crude oils as well. The refinery has large conversion capacity with its 82,000 bpd FCC unit, 54,500 bpd fluid coking unit and 24,000 bpd hydrocracking unit.

The following table approximates the East Coast Refining System's current major process unit capacities. Unit capacities are shown in barrels per stream day.

Delaware City Refinery Units	Nameplate Capacity
Crude Distillation Unit	180,000
Vacuum Distillation Unit	105,000
Fluid Catalytic Cracking Unit	82,000
Hydrotreating Units	180,000
Hydrocracking Unit	24,000
Catalytic Reforming Unit	43,000
Benzene / Toluene Extraction Unit	15,000
Butane Isomerization Unit	6,000
Alkylation Unit	12,500
Polymerization Unit	16,000
Fluid Coking Unit	54,500

Paulsboro Refinery Units	Nameplate Capacity
Crude Distillation Units [(1)]	155,000
Vacuum Distillation Units [(1)]	50,000
Fluid Catalytic Cracking Unit [(1)]	Idled
Hydrotreating Units [(1)]	102,000
Catalytic Reforming Unit [(1)]	29,000
Alkylation Unit [(1)]	Idled
Lube Oil Processing Unit	12,000
Delayed Coking Unit [(1)]	Idled
Propane Deasphalting Unit	11,000

[(1)] Current nameplate capacity was fully or partially reduced as part of the 2020 reconfiguration of our Delaware City and Paulsboro refineries (the "East Coast Refining Reconfiguration").

Feedstocks and Supply Arrangements. We source our crude oil and feedstock needs for the East Coast Refining System through waterborne deliveries, primarily through short-term and spot market agreements. We also have a crude supply contract with Saudi Aramco, the term of which is currently year to year, for up to approximately 100,000 bpd that is processed at the Paulsboro refinery.

Refined Product Yield and Distribution. The Delaware City refinery predominantly produces gasoline, jet fuel, ULSD and ultra-low sulfur heating oil as well as certain other products. Products produced at the Delaware City refinery are transferred to customers through pipelines, barges or at its truck rack. We market and sell all of our refined products independently to a variety of customers on the spot market or through term agreements. The Paulsboro refinery predominantly manufactures Group I base oils or lubricants and asphalt, jet fuel and ULSD. Products produced at the Paulsboro refinery are transferred to customers primarily through pipelines, barges, or at its truck rack. We market and sell all of our refined products independently to a variety of customers on the spot market or through term agreements.

Inventory Intermediation Agreement. On July 31, 2023, we early terminated the third amended and restated inventory intermediation agreement (the "Third Inventory Intermediation Agreement"), previously entered into by and among PBF Holding and its subsidiaries, DCR, PRC and Chalmette Refining (collectively, the "PBF Entities") and J. Aron to support the operations of the PBF Entities.

Pursuant to the Third Inventory Intermediation Agreement, J. Aron had purchased and held title to certain inventory, including crude oil, intermediate and certain finished products (the "J. Aron Products"), purchased or produced by the Paulsboro and Delaware City refineries (and, at the election of the PBF Entities, the Chalmette refinery) (the "Refineries") and delivered into our storage tanks at the Refineries (the "Storage Tanks"). Following the early termination, we purchased, and now own all of the inventory previously held by J. Aron.

Tankage Capacity. The Delaware City refinery has total storage capacity of approximately 10.0 million barrels. Of the total, approximately 3.6 million barrels of storage capacity are dedicated to crude oil and other feedstock storage with the remaining 6.4 million barrels allocated to finished products, intermediates and other products. The Paulsboro refinery has total storage capacity of approximately 7.5 million barrels. Of the total, approximately 2.1 million barrels are dedicated to crude oil storage with the remaining 5.4 million barrels allocated to finished products, intermediates and other products.

Energy and Other Utilities. Under normal operating conditions, the Delaware City refinery consumes approximately 75,000 MMBTU per day of natural gas supplied via pipeline from third parties. The Delaware City refinery has a 280 MW power plant located on site that consists of two natural gas-fueled turbines with combined capacity of approximately 140 MW and four turbo generators with combined nameplate capacity of approximately 140 MW. Collectively, this power plant produces electricity in excess of Delaware City's refinery load of approximately 90 MW. Excess electricity is sold into the Pennsylvania-New Jersey-Maryland, or PJM, grid. Steam is primarily produced by a combination of three dedicated boilers, two heat recovery steam generators on the gas turbines, and is supplemented by secondary boilers at the FCC and Coker. Hydrogen is currently provided via the refinery's steam methane reformer and continuous catalytic reformer.

Under normal operating conditions, the Paulsboro refinery currently consumes approximately 40,000 MMBTU per day of natural gas supplied via pipeline from third parties. The Paulsboro refinery is mostly self-sufficient for electrical power through a mix of gas and steam turbine generators. The Paulsboro refinery generation supplies all of the 20MW total refinery load. There are circumstances where available generation is greater than the total refinery load, and the Paulsboro refinery can export up to about 40MW of power to the utility grid if warranted. If necessary, supplemental electrical power is available on a guaranteed basis from the local utility. The Paulsboro refinery is connected to the grid via three separate 69KV aerial feeders and has the ability to run entirely on imported power. Steam is produced in three boilers and a heat recovery steam generator fed by the exhaust from the gas turbine. In addition, there are a number of waste heat boilers and furnace stack economizers throughout the refinery that supplement the steam generation capacity. The Paulsboro refinery's hydrogen needs are met by the steam methane reformer and the catalytic reformer.

Toledo Refinery

Overview. The Toledo refinery primarily processes a slate of light, sweet crudes from Canada, the Mid-Continent, the Bakken region and the U.S. Gulf Coast. The Toledo refinery is located on a 282-acre site near Toledo, Ohio, approximately 60 miles from Detroit. Crude is delivered to the Toledo refinery through three primary pipelines: (1) Enbridge from the north, (2) Patoka from the west and (3) Mid-Valley from the south. Crude is also delivered to a nearby terminal by rail and from local sources by truck to a truck unloading facility within the refinery.

The following table approximates the Toledo refinery's current major process unit capacities. Unit capacities are shown in barrels per stream day.

Toledo Refinery Units	Nameplate Capacity
Crude Distillation Unit	180,000
Fluid Catalytic Cracking Unit	82,000
Hydrotreating Units	95,000
Hydrocracking Unit	52,000
Catalytic Reforming Units	52,000
Alkylation Unit	11,000
Polymerization Unit	7,000
UDEX Unit	16,300

Feedstocks and Supply Arrangements. We source our crude oil and feedstock needs for the Toledo refinery through connections to the Marysville Pipeline and Maumee Pipeline, and via truck rack, primarily through short-term and spot market agreements.

Refined Product Yield and Distribution. The Toledo refinery produces finished products, including gasoline, jet and ULSD, in addition to a variety of high-value petrochemicals including benzene, toluene, xylene, nonene and tetramer. The Toledo refinery is connected, via pipelines, to an extensive distribution network throughout Ohio, Illinois, Indiana, Kentucky, Michigan, Pennsylvania and West Virginia. The finished products are transported on pipelines owned by Sunoco Logistics Partners L.P. and Buckeye Partners L.P. In addition, we have proprietary connections to a variety of smaller pipelines and spurs that help us optimize our clean products distribution. A significant portion of the Toledo refinery's gasoline and ULSD are distributed through various terminals in this network.

We have an agreement with Sunoco whereby Sunoco purchases gasoline and distillate products representing approximately one-third of the Toledo refinery's gasoline and distillates production. The agreement expires in June 2025, subject to certain early termination rights. We sell the bulk of the petrochemicals produced at the Toledo refinery through short-term contracts or on the spot market and the majority of the petrochemical distribution is done via rail.

Tankage Capacity. The Toledo refinery has total storage capacity of approximately 4.5 million barrels. The Toledo refinery receives its crude through pipeline connections and a truck rack. Of the total, approximately 1.3 million barrels are dedicated to crude oil storage with the remaining 3.2 million barrels allocated to intermediates and products.

Energy and Other Utilities. Under normal operating conditions, the Toledo refinery consumes approximately 25,000 MMBTU per day of natural gas supplied via pipeline from third parties. The Toledo refinery purchases its electricity from the PJM grid and has a long-term contract to purchase hydrogen and steam from a local third-party supplier. In addition to the third-party steam supplier, the Toledo refinery consumes a portion of the steam that is generated by its various process units.

Chalmette Refinery

Overview. The Chalmette refinery is located on a 400-acre site near New Orleans, Louisiana. It is a dual-train coking refinery and is capable of processing both light and heavy crude oil through its 185,000 bpd crude units and downstream units. Chalmette Refining owns 100% of the MOEM Pipeline, providing access to the Empire Terminal, as well as the CAM Connection Pipeline, providing access to the Louisiana Offshore Oil Port facility through a third-party pipeline. Chalmette Refining also owns 80% of each of the Collins Pipeline Company ("Collins") and T&M Terminal Company ("T&M"), both located in Collins, Mississippi, which provide a clean products outlet for the refinery to the Plantation and Colonial Pipelines. In addition, there is also a marine terminal capable of importing waterborne feedstocks and loading or unloading finished products. There is also a clean products truck rack that provides access to local markets and crude storage. The Renewable Diesel Facility is also located at our Chalmette refinery. The facility incorporates a repurposed hydrocracker, along with a newly-constructed pre-treatment unit to establish a capacity to produce 20,000 bpd renewable diesel.

The following table approximates the Chalmette refinery's current major process unit capacities. Unit capacities are shown in barrels per stream day.

Chalmette Refinery Units	Nameplate Capacity
Crude Distillation Units	185,000
Vacuum Distillation Unit	114,000
Fluid Catalytic Cracking Unit	75,000
Hydrotreating Units	189,000
Delayed Coking Unit	42,000
Catalytic Reforming Unit	42,000
Alkylation Unit	17,000
Aromatics Extraction Unit	17,000

Feedstocks and Supply Arrangements. We source our crude oil and feedstock needs for the Chalmette refinery through connections to the CAM Pipeline and MOEM Pipeline, and via waterborne deliveries, primarily through short-term and spot market agreements.

Refined Product Yield and Distribution. The Chalmette refinery predominantly produces gasoline and diesel fuels and also manufactures high-value petrochemicals including benzene and xylene. Products produced at the Chalmette refinery are transferred to customers through pipelines, the marine terminal and truck rack. The majority of our clean products are delivered to customers via pipelines. Our ownership of the Collins pipeline and T&M terminal provides the Chalmette refinery with strategic access to Southeast and East Coast markets through third-party logistics.

Inventory Intermediation Agreement. On July 31, 2023, we early terminated the Third Inventory Intermediation Agreement. Refer to East Coast Refining System (Delaware City refinery and Paulsboro refinery), above, for further details.

Tankage Capacity. The Chalmette refinery has a total tankage capacity of approximately 8.1 million barrels. Of this total, approximately 2.6 million barrels are allocated to crude oil storage with the remaining 5.5 million barrels allocated to intermediates and products.

Energy and Other Utilities. Under normal operating conditions, the Chalmette refinery consumes approximately 25,000 MMBTU per day of natural gas supplied via pipeline from third parties. The Chalmette refinery purchases its electricity from a local utility and has a long-term contract to purchase hydrogen from a third-party supplier.

Torrance Refinery

Overview. The Torrance refinery is located on 750-acres in Torrance, California. It is a high-conversion crude, delayed-coking refinery capable of processing both heavy and medium crude oils through its crude unit and downstream units. In addition to refining assets, the Torrance refinery acquisition included a number of high-quality logistics assets including a sophisticated network of crude and products pipelines, product distribution terminals and refinery crude and product storage facilities. The most significant logistics asset is a crude gathering and transportation system which delivers San Joaquin Valley crude oils directly from the field to the refinery, which is now owned by PBFX. Additionally, there are several pipelines serving the refinery that provide access to sources of waterborne crude oils including the Ports of Long Beach and Los Angeles, as well as clean product outlets with a direct pipeline that supplies jet fuel to the Los Angeles airport that are held by affiliates of the refinery.

The following table approximates the Torrance refinery's current major process unit capacities. Unit capacities are shown in barrels per stream day.

Torrance Refinery Units	Nameplate Capacity
Crude Distillation Unit	166,000
Vacuum Distillation Unit	102,000
Fluid Catalytic Cracking Unit	90,000
Hydrotreating Units	155,500
Hydrocracking Unit	25,000
Alkylation Unit	25,500
Delayed Coking Unit	58,000

Feedstocks and Supply Arrangements. We source our crude oil and feedstock needs for the Torrance refinery mainly through connections to our own pipeline, and via waterborne deliveries and truck racks, primarily through short-term and spot market agreements.

Refined Product Yield and Distribution. The Torrance refinery predominantly produces gasoline, jet fuel and diesel fuels. Products produced at the Torrance refinery are transferred to customers through pipelines, the marine terminal and truck rack. The majority of clean products are delivered to customers via pipelines. We currently market and sell all of our refined products independently to a variety of customers either on the spot market or through term agreements.

Tankage Capacity. The Torrance refinery has a total tankage capacity of approximately 8.6 million barrels. Of this total, approximately 2.1 million barrels are allocated to crude oil storage with the remaining 6.5 million barrels allocated to intermediates and products.

Energy and Other Utilities. Under normal operating conditions, the Torrance refinery consumes approximately 47,000 MMBTU per day of natural gas supplied via pipeline from third parties. The Torrance refinery generates some power internally using a combination of steam and gas turbines and purchases any additional needed power from the local utility. The Torrance refinery has a long-term contract to purchase hydrogen from a third-party supplier.

Martinez Refinery

Overview. The Martinez refinery is located on an 860-acre site in the City of Martinez, 30 miles northeast of San Francisco, California. The refinery is a high-conversion, dual-coking facility and one of the most complex refineries in the United States. The facility is strategically positioned in Northern California and provides for operating and commercial synergies with the Torrance refinery located in Southern California. In addition to refining assets, the Martinez refinery includes a number of high-quality onsite logistics assets including a deep-water marine facility, product distribution terminals and refinery crude and product storage facilities with approximately 8.8 million barrels of shell capacity.

The following table approximates the Martinez refinery's current major process unit capacities. Unit capacities are shown in barrels per stream day.

Martinez Refinery Units	Nameplate Capacity
Crude Distillation Unit	157,000
Vacuum Distillation Unit	102,000
Fluid Catalytic Cracking Unit	72,000
Hydrotreating Units	268,000
Hydrocracking Unit	42,900
Alkylation Unit	12,500
Delayed Coking Unit	25,500
Flexi Coking Unit	22,500
Isomerization Unit	15,000

Feedstocks and Supply Arrangements. We source our crude oil and feedstock needs for the Martinez refinery through connections to the Crimson San Pablo Bay Pipeline, and via waterborne deliveries, primarily through short-term and spot market agreements. We also have crude supply agreements with Shell Trading (US) Company (primarily serving the Martinez refinery) for up to 95,000 bpd, which, upon expiration of one of the agreements in early 2024, will be reduced to up to approximately 65,000 bpd, through early 2025.

Refined Product Yield and Distribution. We entered into certain offtake agreements for our West Coast system with Shell Oil Products for clean products with varying terms up to 15 years. We currently market and sell all of our refined products independently to a variety of customers either on the spot market or through term agreements.

Tankage Capacity. Martinez has a total tankage capacity of approximately 8.8 million barrels. Of this total, approximately 2.5 million barrels are allocated to crude oil storage with the remaining 6.3 million barrels allocated to intermediates and products.

Energy and Other Utilities. Under normal operating conditions, the Martinez refinery consumes approximately 80,000 MMBTU per day of natural gas (including natural gas consumed in hydrogen production) supplied via pipeline from third parties. The Martinez refinery generates some power internally using a combination of steam and gas turbines and purchases any additional needed power from the local utility. The Martinez refinery has a long-term contract to purchase hydrogen from a third-party supplier.

Agreements with PBFX

Beginning with the completion of the PBFX Offering, we have entered into a series of agreements with PBFX, including commercial and operational agreements. Each of these agreements and their impact to our operations is outlined below.

Contribution Agreements

Immediately prior to the closing of certain contribution agreements, which PBF LLC entered into with PBFX (as defined in the table below, and collectively referred to as the "Contribution Agreements"), we contributed certain assets to PBF LLC. PBF LLC in turn contributed those assets to PBFX pursuant to the Contribution Agreements. Certain proceeds received by PBF LLC from PBFX in accordance with the Contribution Agreements were subsequently contributed by PBF LLC to us. The Contribution Agreements include the following:

Contribution Agreement	Effective Date	Assets Contributed	Total Consideration
Contribution Agreement I	5/8/2014	DCR Rail Terminal and the Toledo Truck Terminal	74,053 PBFX common units and 15,886,553 PBFX subordinated units
Contribution Agreement II	9/16/2014	DCR West Rack	$135.0 million in cash and $15.0 million through the issuance of 589,536 PBFX common units
Contribution Agreement III	12/2/2014	Toledo Storage Facility	$135.0 million in cash and $15.0 million through the issuance of 620,935 PBFX common units
Contribution Agreement IV	5/5/2015	DCR Products Pipeline and DCR Truck Rack	$112.5 million in cash and $30.5 million through the issuance of 1,288,420 PBFX common units
Contribution Agreement V	8/31/2016	Torrance Valley Pipeline (50% equity interest in TVPC)	$175.0 million in cash
Contribution Agreement VI	2/15/2017	Paulsboro Natural Gas Pipeline	$11.6 million affiliate promissory note
Contribution Agreements VII-X	7/16/2018	Development Assets	$31.6 million through the issuance of 1,494,134 PBFX common units
Contribution Agreement XI	4/24/2019	Remaining 50% equity interest in TVPC	$200.0 million in cash

Commercial Agreements

PBFX currently derives the majority of its revenue from long-term, fee-based agreements with us, which generally include a minimum volume commitment, as applicable, and are supported by contractual fee escalations for inflation adjustments and certain increases in operating costs. We believe the terms and conditions under these agreements, as well as the Omnibus Agreement and the Services Agreement (each as defined below), each with PBFX, are generally no less favorable to either party than those that could have been negotiated with unaffiliated parties with respect to similar services.

Omnibus Agreement

In addition to the commercial agreements described above, PBFX entered into an omnibus agreement, which has been amended and restated in connection with the closing of certain of the Contribution Agreements with PBFX GP, PBF LLC and us (as amended, the "Omnibus Agreement"). The Omnibus Agreement addresses the payment of an annual fee for the provision of various general and administrative services and reimbursement of salary and benefit costs for certain PBF Energy employees.

The annual fee under the Omnibus Agreement for the year ended December 31, 2023 was $7.9 million, inclusive of obligations under the Omnibus Agreement to reimburse us for certain compensation and benefit costs of employees who devoted more than 50% of their time to PBFX during the year ended December 31, 2023. We currently estimate to receive $6.0 million, inclusive of estimated obligations under the Omnibus Agreement as a reimbursement for certain compensation and benefit costs of employees who devote more than 50% of their time to PBFX for the year ending December 31, 2024.

Services Agreement

Additionally, PBFX entered into an operation and management services and secondment agreement with us and certain of our subsidiaries (as amended, the "Services Agreement"), pursuant to which we provide PBFX with the personnel necessary for PBFX to perform its obligations under its commercial agreements. PBFX reimburses us for the use of such employees and the provision of certain infrastructure-related services to the extent applicable to its operations, including storm water discharge and waste water treatment, steam, potable water, access to certain roads and grounds, sanitary sewer access, electrical power, emergency response, filter press, fuel gas, API solids treatment, fire water and compressed air. For the year ended December 31, 2023, PBFX paid us an annual fee of $8.7 million pursuant to the Services Agreement and we currently estimate to receive the same annual reimbursement pursuant to the Services Agreement for the year ending December 31, 2024.

The Services Agreement will terminate upon the termination of the Omnibus Agreement, provided that PBFX may terminate any service on 30-days' notice.

Agreements with SBR

The Company has entered into agreements with SBR for the sale of RINs and Low Carbon Fuel Standard ("LCFS") credits.

Refer to "Note 9 - Related Party Transactions" of our Notes to Consolidated Financial Statements for further discussion regarding the above agreements with PBFX and SBR.

Principal Products

Our refineries make various grades of gasoline, distillates (including diesel fuel, jet fuel, and ULSD) and other products from crude oil, other feedstocks, and blending components. We sell these products through our commercial accounts, and sales with major oil companies. For the years ended December 31, 2023, 2022 and 2021, gasoline and distillates accounted for 88.8%, 88.6% and 86.4% of our revenues, respectively.

Customers

We sell a variety of refined products to a diverse customer base. The majority of our refined products are primarily sold through short-term contracts or on the spot market. In addition, we have product offtake arrangements for a portion of our clean products. For the years ended December 31, 2023 and December 31, 2022 only one customer, Shell plc ("Shell"), accounted for 10% or more of our revenues (approximately 14% and 14%, respectively). As of December 31, 2023 and December 31, 2022, only one customer, Shell, accounted for 10% or more of our total trade accounts receivable (approximately 19% and 19%, respectively).

Seasonality

Traditionally, demand for gasoline and diesel is generally higher during the summer months than during the winter months due to seasonal increases in highway traffic and construction work. Decreased demand during the winter months can lower gasoline and diesel prices. However, due to global supply disruptions, the effects of seasonality on our operating results have been less impactful in recent years.

Competition

The refining business is very competitive. We compete directly with various other refining companies on the East, Gulf and West Coasts and in the Mid-Continent, with integrated oil companies, with foreign refiners that import products into the United States and with producers and marketers in other industries supplying alternative forms of energy and fuels to satisfy the requirements of industrial, commercial and individual consumers. Some of our competitors have expanded the capacity of their refineries and internationally new refineries are coming on line which could also affect our competitive position.

Profitability in the refining industry depends largely on refined product margins, which can fluctuate significantly, as well as crude oil prices and differentials between the prices of different grades of crude oil, operating efficiency and reliability, product mix and costs of product distribution and transportation. Certain of our competitors that have larger and more complex refineries may be able to realize lower per-barrel costs or higher margins per barrel of throughput. Several of our principal competitors are integrated national or international oil companies that are larger and have substantially greater resources. Because of their integrated operations and larger capitalization, these companies may be more flexible in responding to volatile industry or market conditions, such as shortages of feedstocks or intense price fluctuations. Refining margins are frequently impacted by sharp changes in crude oil costs, which may not be immediately reflected in product prices.

The refining industry is also highly competitive with respect to feedstock supply. Unlike certain of our competitors that have access to proprietary controlled sources of crude oil production available for use at their own refineries, we obtain all of our crude oil and substantially all other feedstocks from unaffiliated sources. The availability and cost of crude oil and feedstock are affected by global supply and demand. We have no crude oil reserves and are not engaged in the exploration or production of crude oil. We believe, however, that we will be able to obtain adequate crude oil and other feedstocks at generally competitive prices for the foreseeable future.

Pursuant to its RFS, EPA has implemented mandates to blend renewable fuels into the petroleum fuels produced and sold in the United States. Because we do not directly produce renewable fuels, increasing the volume of renewable fuels that must be blended into our products could displace an increasing volume of our refineries' product pool, potentially resulting in lower earnings and profitability. In addition, in order to meet certain of these and future EPA requirements, we may be required to continue to purchase RINs, which historically had, and we expect to have, fluctuating costs based on market conditions.

Corporate Offices

We currently lease approximately 63,000 square feet for our principal corporate offices in Parsippany, New Jersey. The lease for our principal corporate offices expires in 2026. Functions performed in the Parsippany office include overall corporate management, refinery and health, safety and environmental management, planning and strategy, corporate finance, commercial operations, logistics, contract administration, marketing, investor relations, governmental affairs, accounting, tax, treasury, information technology, legal and human resources support functions.

We lease approximately 8,800 square feet for our regional corporate office in Long Beach, California. The lease for our Long Beach office expires in 2026. Functions performed in the Long Beach office include overall regional corporate management, planning and strategy, commercial operations, logistics, contract administration, marketing and governmental affairs.

Employees and Human Capital

Safety

We believe our responsibility to our employees, neighbors, members, other stakeholders and the environment is only fulfilled through our commitment to safety and reliability. Through rigorous training, sharing of expertise across our sites, continuous monitoring and through promoting a culture of excellence in operations, we continuously strive to keep our people, the communities in which we operate in and the environment safe.

We are subject to the requirements of OSHA and comparable state statutes that regulate the protection of the health and safety of workers. In addition, the OSHA Hazard Communication Standard requires that information be maintained about hazardous materials used or produced in operations and that this information be provided to employees, state and local government authorities and citizens. We believe that our operations are in compliance with OSHA requirements, including general industry standards, record keeping requirements and monitoring of occupational exposure to regulated substances.

Development and Retention

The development, attraction and retention of employees is a critical success factor for our Company. To support the advancement of our employees, we offer rigorous training and development programs and encourage the sharing of expertise across our sites. We actively promote inclusion and diversity in our workforce at each of our locations and provide our employees with opportunities to give back through engagement in our local communities through supportive educational programs, philanthropic and volunteer activities.

We believe that a combination of competitive compensation and career growth and development opportunities help increase employee morale and reduce voluntary turnover. Our comprehensive benefit packages are competitive in the marketplace and we believe in recognizing and rewarding talent through our various cash and equity compensation programs.

Headcount

As of December 31, 2023, we had approximately 3,686 employees, of which 1,917 are covered by collective bargaining agreements. Our hourly employees are covered by collective bargaining agreements through the United Steel Workers ("USW"), the Independent Oil Workers ("IOW") and the International Brotherhood of Electrical Workers ("IBEW"). We consider our relations with the represented employees to be satisfactory.

Location	Number of employees	Employees covered by collective bargaining agreements	Collective bargaining agreements	Expiration date
Headquarters	470	—	N/A	N/A
Delaware City refinery	535	374	USW	January 2026
Paulsboro refinery	301	189	IOW	March 2026
Toledo refinery	524	327	USW	February 2026
Chalmette refinery	587	335	USW	January 2026
Torrance refinery	592	304 15	USW IBEW	January 2026 January 2026
Torrance logistics	97	10 28 13	USW USW USW	April 2024 January 2026 March 2028
Martinez refinery	580	307 15	USW IBEW	February 2026 February 2026
Total employees	3,686	1,917		

Environmental, Health and Safety Matters

Our refineries, pipelines and related operations are subject to extensive and frequently changing federal, state and local laws and regulations, including, but not limited to, those relating to the discharge of materials into the environment or that otherwise relate to the protection of the environment, waste management and the characteristics and the compositions of fuels. Compliance with existing and anticipated laws and regulations can increase the overall cost of operating the refineries, including remediation, operating costs and capital costs to construct, maintain and upgrade equipment and facilities. Permits are also required under these laws for the operation of our refineries, pipelines and related operations and these permits are subject to revocation, modification and renewal. Compliance with applicable environmental laws, regulations and permits will continue to have an impact on our operations, results of operations and capital requirements. We believe that our current operations are in substantial compliance with existing environmental laws, regulations and permits.

We incorporate by reference into this Item the environmental disclosures contained in the following sections of this report:

- Item 1A. “Risk Factors”
  - *Our results of operations continue to be impacted by significant costs to comply with renewable fuels mandates. The market prices for RINs have been volatile and may harm our profitability;*
  - *We may have capital needs for which our internally generated cash flows and other sources of liquidity may not be adequate;*
  - *We may incur significant liability under, or costs and capital expenditures to comply with, environmental and health and safety regulations, which are complex and change frequently*;
  - *Potential further laws and regulations related to climate change could have a material adverse impact on our operations and adversely affect our facilities;*
  - *Regulation of emissions of greenhouse gases could force us to incur increased capital expenditures and operating costs that could have a material adverse effect on our results of operations and financial condition;*
  - *Environmental clean-up and remediation costs of our sites and environmental litigation could decrease our net cash flow, reduce our results of operations and impair our financial condition;*
  - *Our pipelines are subject to federal and/or state regulations, which could reduce profitability and the amount of cash we generate;*
  - *We could incur substantial costs or disruptions in our business if we cannot obtain or maintain necessary permits and authorizations or otherwise comply with health, safety, environmental and other laws and regulations;*
  - *Enhanced scrutiny on ESG matters and developments related to climate change may negatively impact our business and our access to capital markets;*
  - *We are subject to strict laws and regulations regarding employee and process safety, and failure to comply with these laws and regulations could have a material adverse effect on our results of operations, financial condition and profitability.*
- Item 3. “Legal Proceedings”
- Item 8. “Financial Statements and Supplementary Data”
  - Note 7 - Accrued Expenses,
  - Note 10 - Commitments and Contingencies

Applicable Federal and State Regulatory Requirements

As is the case with all companies engaged in industries similar to ours, we face potential exposure to future claims and lawsuits involving environmental and safety matters. These matters include soil and water contamination, air pollution, personal injury and property damage allegedly caused by substances which we manufactured, handled, used, released or disposed of.

Current and future environmental regulations are expected to require additional expenditures, including expenditures for investigation and remediation, which may be significant, at our refineries and at our other facilities. To the extent that future expenditures for these purposes are material and can be reasonably determined, these costs are disclosed and accrued.

Our operations are also subject to various laws and regulations relating to occupational health and safety. We maintain safety training and maintenance programs as part of our ongoing efforts to ensure compliance with applicable laws and regulations. Compliance with applicable health and safety laws and regulations has required and continues to require substantial expenditures.

We cannot predict what additional health, safety and environmental legislation or regulations will be enacted or become effective in the future or how existing or future laws or regulations will be administered or interpreted with respect to our operations. Compliance with more stringent laws or regulations or adverse changes in the interpretation of existing requirements or discovery of new information such as unknown contamination could have an adverse effect on the financial position and the results of our operations and could require substantial expenditures for the installation and operation of systems and equipment that we do not currently possess.

We incorporate by reference into this Item the federal and state regulatory requirements disclosures contained in the following sections of this report:

- Item 8. “Financial Statements and Supplementary Data”
  - Note 10 - Commitments and Contingencies

ITEM 1A. RISK FACTORS

Summary of Risk Factors

Operating in our industry involves a degree of risk. These risks are discussed more fully below and include, but are not limited to, the following, any of which could have a material adverse effect on our financial condition, results of operations and cash flows:

Risks Relating to Our Business and Industry

- The price volatility of crude oil, other feedstocks, blendstocks, refined products and fuel and utility services;
- Volatility in commodity prices and refined product demand;
- Crude oil differentials and related factors, which fluctuate substantially;
- Significant interruptions or casualty losses at any of our refineries and related assets;
- Interruptions of supply and distribution at our refineries;
- Renewable fuels mandates and the cost of RINs;
- Existence of capital needs for which our internally generated cash flows and other sources of liquidity may not be adequate;
- Regulation related to climate change and emissions of greenhouse gases and other regulatory environmental and health and safety regulations;
- Enhanced scrutiny on ESG matters;
- Rate of inflation and its impacts on supply and demand, pricing, and supply chain disruption;
- Actions taken by our competitors, including adjustments to refining capacity or renewable fuels production in response to regulations and market conditions;
- Volatility and uncertainty in the credit and capital markets, including as a result of higher interest rates;
- Any political instability, including as a result of Russia's military action in Ukraine, the outbreak of armed hostilities in the middle east, disruption in international shipping resulting from recent attacks by armed groups on cargo ships in the Red Sea, military strikes, sustained military campaigns, terrorist activity, changes in foreign policy, or other catastrophic events;
- A cyber-attack on, or other failure of, our technology infrastructure;
- Competition from other companies in the refining industry;
- Delays or cost increases related to capital spending programs;
- Product liability claims, operational liability claims and other material litigation;
- Acquisition or integration of new assets into our business;
- Labor disruptions that would interfere with our operations;
- Discontinuation of employment of any of our senior executives or other key employees;
- Our activity in commodity derivatives markets.

Risks Related to Our Indebtedness

- Our levels of indebtedness;
- Our ability to secure necessary financing on acceptable terms;
- Changes in our credit ratings;
- Limitations on our operations or ability to make distributions arising out of restrictive covenants in our debt instruments;
- Anti-takeover provisions in our indentures.

Risk Factors

You should carefully read the risks and uncertainties described below. The risks and uncertainties described below are not the only ones facing our Company. Additional risks and uncertainties may also impair our business operations. If any of the following risks actually occur, our business, financial condition, results of operations or cash flows would likely suffer.

Risks Relating to Our Business and Industry

Demand for our refined products can significantly decline due to changes in global and regional economic conditions.

Business closings and layoffs in the markets we operate may adversely affect demand for our refined products. Deterioration of general economic conditions or weak demand levels could require additional actions on our part to lower our operating costs, including temporarily or permanently ceasing to operate units at our facilities. There may be significant incremental costs associated with such actions. Deterioration of global and regional economic conditions may harm our liquidity and ability to repay our outstanding debt.

The price volatility of crude oil, other feedstocks, blendstocks, refined products and fuel and utility services may have a material adverse effect on our revenues, profitability, cash flows and liquidity.

Our profitability, cash flows and liquidity from operations depend primarily on the margin above operating expenses (including the cost of refinery feedstocks, such as crude oil, intermediate partially refined products, and natural gas liquids that are processed and blended into refined products) at which we are able to sell refined products. Refining is primarily a margin-based business and, to increase profitability, it is important to maximize the yields of high value finished products while minimizing the costs of feedstock and operating expenses. When the margin between refined product prices and crude oil and other feedstock costs contracts, our earnings, profitability and cash flows are negatively affected. Historically, refining margins have been volatile, and are likely to continue to be volatile, as a result of a variety of factors, including fluctuations in the prices of crude oil, other feedstocks, refined products and fuel and utility services. An increase or decrease in the price of crude oil will likely result in a similar increase or decrease in prices for refined products; however, there may be a time lag in the realization, or no such realization, of the similar increase or decrease in prices for refined products. The effect of changes in crude oil prices on our refining margins therefore depends in part on how quickly and how fully refined product prices adjust to reflect these changes.

The nature of our business has required us to maintain substantial crude oil, feedstock and refined product inventories. Because crude oil, feedstock and refined products are commodities, we have no control over the changing market value of these inventories. Our crude oil, feedstock and refined product inventories are valued at the LCM value under the last-in-first-out ("LIFO") inventory valuation methodology. At December 31, 2023 and December 31, 2022, the replacement value of inventories exceeded the LIFO carrying value, therefore no LCM inventory reserve was recorded. If the market value of our crude oil, feedstock and refined product inventory declines to an amount less than our LIFO cost, we would record a write-down of inventory and a non-cash impact to cost of products and other.

Prices of crude oil, other feedstocks, blendstocks, and refined products depend on numerous factors beyond our control, including the supply of and demand for crude oil, other feedstocks, gasoline, diesel, ethanol, asphalt and other refined products. Such supply and demand are affected by a variety of economic, market, environmental and political conditions.

Our direct operating expense structure also impacts our profitability. Our major direct operating expenses include employee and contract labor, maintenance and energy. Our predominant variable direct operating cost is energy, which is comprised primarily of fuel and other utility services. The volatility in costs of fuel, principally natural gas, and other utility services, principally electricity, used by our refineries and other operations affect our operating costs. Fuel and utility prices have been, and will continue to be, affected by factors outside our control, such as supply and demand for fuel and utility services in both local and regional markets. Natural gas prices have historically been volatile and, typically, electricity prices fluctuate with natural gas prices. Future increases in fuel and utility prices may have a negative effect on our refining margins, profitability and cash flows.

Our working capital, cash flows and liquidity can be significantly impacted by volatility in commodity prices and refined product demand.

Payment terms for our crude oil purchases are typically longer than those terms we extend to our customers for sales of refined products. Additionally, reductions in crude oil purchases tend to lag demand decreases for our refined products. As a result of this timing differential, the payables for our crude oil purchases are generally proportionally larger than the receivables for our refined product sales. As we are normally in a net payables position, a decrease in commodity prices generally results in a use of working capital. Given we process a significant volume of crude oil, the impact can materially affect our working capital, cash flows and liquidity.

Our profitability is affected by crude oil differentials and related factors, which fluctuate substantially.

A significant portion of our profitability is derived from the ability to purchase and process crude oil feedstocks that historically have been less expensive than benchmark crude oils, such as the heavy, sour crude oils processed at our Delaware City, Paulsboro, Chalmette, Torrance and Martinez refineries. For our Toledo refinery, aside from recent crude differential volatility, purchased crude prices have historically been above the WTI benchmark, however, such crude slate typically results in favorable refinery production yield. For all locations, these crude oil differentials can vary significantly from quarter to quarter depending on overall economic conditions and trends and conditions within the markets for crude oil and refined products. Any change in these crude oil differentials may have an impact on our earnings. Our rail investment and strategy to acquire cost advantaged Mid-Continent and Canadian crude, which are priced based on WTI, could be adversely affected when the WTI/Dated Brent or related differentials narrow. A narrowing of the WTI/Dated Brent differential may result in our Toledo refinery losing a portion of its crude oil price advantage over certain of our competitors, which negatively impacts our profitability. In addition, imbalances between the production and capacity to export crude in Canada may continue to result in price volatility and the narrowing of the WTI/WCS differential, which is a proxy for the difference between light U.S. and heavy Canadian crude oil, and may reduce our refining margins and adversely affect our profitability and earnings. Divergent views have been expressed as to the expected magnitude of changes to these crude differentials in future periods. Any continued or further narrowing of these differentials could have a material adverse effect on our business and profitability.

Additionally, governmental and regulatory actions, including continued resolutions by the Organization of the Petroleum Exporting Countries to restrict crude oil production levels and executive actions by the current U.S. presidential administration to restrict the advancement of certain energy infrastructure projects such as the Keystone XL pipeline or Enbridge's Line 5 pipeline, may continue to impact crude oil prices and crude oil differentials. Any increase in crude oil prices or unfavorable movements in crude oil differentials due to such actions or changing regulatory environment may negatively impact our ability to acquire crude oil at economical prices and could have a material adverse effect on our business and profitability.

A significant interruption or casualty loss at any of our refineries and related assets could reduce our production, particularly if not fully covered by our insurance. Failure by one or more insurers to honor its coverage commitments for an insured event could materially and adversely affect our future cash flows, operating results and financial condition.

Our business currently consists of owning and operating six refineries and related assets. As a result, our operations could be subject to significant interruption if any of our refineries were to experience a major accident, be damaged by severe weather or other natural disaster, or otherwise be forced to shut down or curtail production due to unforeseen events, such as acts of God, nature, orders of governmental authorities, supply chain disruptions impacting our crude rail facilities or other logistics assets, power outages, acts of terrorism, fires, toxic emissions and maritime hazards. Any such shutdown or disruption would reduce the production from that refinery. There is also risk of mechanical failure and equipment shutdowns both in general and following unforeseen events. Further, in such situations, undamaged refinery processing units may be dependent on or interact with damaged sections of our refineries and, accordingly, are also subject to being shut down. In the event any of our refineries is forced to shut down for a significant period of time, it would have a material adverse effect on our earnings, our other results of operations and our financial condition as a whole.

As protection against these hazards, we maintain insurance coverage for our refineries against some, but not all, such potential losses and liabilities, including claims against us by third parties relating to our operations and products. We may not be able to maintain or obtain insurance of the type and amount desired at reasonable rates. As a result of market conditions, premiums and deductibles for certain of our insurance policies may increase substantially. In some instances, certain insurance could become unavailable or available only for reduced amounts of coverage. For example, coverage for hurricane damage can be limited, and coverage for terrorism risks can include broad exclusions. If we were to incur a significant liability that was not fully insured, it could have a material adverse effect on our financial position.

Our insurance program includes a number of insurance carriers. Significant disruptions in financial markets could lead to a deterioration in the financial condition of many financial institutions, including insurance companies and, therefore, we may not be able to obtain the full amount of our insurance coverage for insured events. Even where we have insurance in place, there can be no assurance that the carriers will honor their obligations under the policies.

Our refineries are subject to interruptions of supply and distribution, including due to severe weather events, as a result of our reliance on pipelines and railroads for transportation of crude oil and refined products.

Our Toledo, Chalmette, Torrance and Martinez refineries receive a significant portion of their crude oil through our owned, as well as third party, pipelines. These pipelines include the Enbridge system, Capline and Mid-Valley pipelines for supplying crude to our Toledo refinery, the MOEM Pipeline (which is owned by PBFX) and CAM Pipeline for supplying crude to our Chalmette refinery and the San Joaquin Pipeline, San Pablo Bay Pipeline, San Ardo and Coastal Pipeline systems for supplying crude to our Torrance and Martinez refineries. Additionally, our Toledo, Chalmette, Torrance and Martinez refineries deliver a significant portion of the refined products through pipelines. These pipelines include pipelines such as the Sunoco Logistics Partners L.P. and Buckeye Partners L.P. pipelines at the Toledo refinery, the Collins pipeline (which is owned by PBFX) at our Chalmette refinery, the Jet Pipeline to the Los Angeles International Airport, the Product Pipeline to Vernon and the Product Pipeline to Atwood at our Torrance refinery and the KinderMorgan SFPP North Pipeline at our Martinez refinery. We could experience an interruption of supply or delivery, or an increased cost of receiving crude oil and delivering refined products to market, if the ability of these pipelines to transport crude oil or refined products is disrupted because of accidents, weather interruptions, governmental regulation, terrorism, other third-party action or casualty or other events.

The Delaware City rail unloading facilities and the assets acquired in connection with the acquisition of CPI Operations LLC (the "East Coast Storage Assets"), allow our East Coast Refining System to source WTI-based crudes from Western Canada and the Mid-Continent, which may provide significant cost advantages versus traditional Brent-based international crudes in certain market environments. Any disruptions or restrictions to our supply of crude by rail due to problems with third-party logistics infrastructure or operations or as a result of increased regulations, could increase our crude costs and negatively impact our results of operations and cash flows.

Due to the common carrier regulatory obligation applicable to interstate oil pipelines, capacity allocation among shippers can become contentious in the event demand is in excess of capacity. Therefore, nominations by new shippers or increased nominations by existing shippers may reduce the capacity available to us. Any prolonged interruption in the operation or curtailment of available capacity of the pipelines that we rely upon for transportation of crude oil and refined products could have a further material adverse effect on our business, financial condition, results of operations and cash flows.

In addition, substantial weather-related conditions could impact our relationships and arrangements with our major customers and suppliers by materially affecting the normal flow of crude oil and refined products, especially seaborne transactions. For example, severe weather events could damage transportation infrastructures and lead to interruptions of our operations, including our ability to deliver our products, or increases in costs to receive crude oil.

Our results of operations continue to be impacted by significant costs to comply with renewable fuels mandates. The market prices for RINs have been volatile and may harm our profitability.

Pursuant to the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007, EPA has issued the RFS, implementing mandates to blend renewable fuels into the petroleum fuels produced and sold in the United States. Under the RFS, the volume of renewable fuels that obligated refineries must blend into their finished petroleum fuels historically has increased on an annual basis. In addition, certain states have passed legislation that requires minimum biodiesel blending in finished distillates. On October 13, 2010, EPA raised the maximum amount of ethanol allowed under federal law from 10% to 15% for cars and light trucks manufactured since 2007. The maximum amount allowed under federal law currently remains at 10% ethanol for all other vehicles. Existing laws and regulations could change, and the minimum volumes of renewable fuels that must be blended with refined petroleum fuels may increase. Because we do not directly produce renewable fuels, increasing the volume of renewable fuels that must be blended into our products could displace an increasing volume of our refinery's product pool, potentially resulting in lower earnings and profitability. In addition, in order to meet certain of these and future EPA requirements, we may be required to purchase RINs, which may have fluctuating costs based on market conditions. Our results continue to be impacted by significant costs to comply with the RFS. While we have entered into agreements with SBR that allow us to purchase RINs at our election, we incurred approximately $762.3 million in RINs costs during the year ended December 31, 2023 as compared to $1,225.5 million and $726.0 million during the years ended December 31, 2022 and 2021, respectively. The fluctuations in our RINs costs are due primarily to volatility in prices for ethanol-linked RINs and increases in our production of on-road transportation fuels since 2012. Our RINs purchase obligation is dependent on our actual shipment of on-road transportation fuels domestically and the amount of blending achieved which can cause variability in our profitability. On June 21, 2023, EPA finalized the volumes of renewable fuels that obligated refineries must blend into their final petroleum fuels for years 2023, 2024, and 2025, and finalized volume requirements and percentage standards under the RFS program for 2023, 2024, and 2025, as well as making a series of important modifications to strengthen and expand the RFS program. As a result, we could also experience fluctuating compliance costs in the future if the volumes finalized by EPA differ from what has been proposed.

We may have capital needs for which our internally generated cash flows and other sources of liquidity may not be adequate.

If we cannot generate sufficient cash flows or otherwise secure sufficient liquidity to support our short-term and long-term capital requirements, we may not be able to meet our payment obligations or our future debt obligations, comply with certain deadlines related to environmental regulations and standards, or pursue our business strategies, including acquisitions, in which case our operations may not perform as we currently expect. We have substantial short-term capital needs and may have substantial long-term capital needs. Our short-term working capital needs are primarily related to financing certain of our crude oil and refined products inventory.

If we cannot adequately handle our crude oil and feedstock requirements or if we are required to obtain our crude oil supply at our other refineries without the benefit of the existing supply arrangements or the applicable counterparty defaults in its obligations, our crude oil pricing costs may increase as the number of days between when we pay for the crude oil and when the crude oil is delivered to us increases. Following our early termination of the Third Inventory Intermediation Agreement, we will fund all future inventory purchases with existing working capital or other available sources of liquidity. Further, if we are not able to market and sell our finished products to credit worthy customers, we may be subject to delays in the collection of our accounts receivable and exposure to additional credit risk. Such increased exposure could negatively impact our liquidity due to our increased working capital needs as a result of the increase in the amount of crude oil inventory and accounts receivable we would have to carry on our balance sheet. Our long-term needs for cash include those to repay our indebtedness and other contractual obligations, support ongoing capital expenditures for equipment maintenance and upgrades, including during turnarounds at our refineries, and to complete our routine and normally scheduled maintenance, regulatory and security expenditures.

In addition, from time to time, we are required to spend significant amounts for repairs when one or more processing units experiences temporary shutdowns. We continue to utilize significant capital to upgrade equipment, improve facilities, and reduce operational, safety and environmental risks. In connection with the Paulsboro, Torrance and Martinez acquisitions, we assumed certain significant environmental obligations, and we have assumed a portion of certain environmental liabilities that may arise in connection with the Martinez acquisition and may similarly do so in future acquisitions. We will likely incur substantial compliance costs in connection with new or changing environmental, health and safety regulations. See “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations.” Our liquidity and financial condition will affect our ability to satisfy any and all of these needs or obligations.

We may incur significant liability under, or costs and capital expenditures to comply with, regulatory, environmental and health and safety regulations, which are complex and change frequently.

Our operations are subject to federal, state and local laws regulating, among other things, the use and/or handling of petroleum and other regulated materials, the emission and discharge of materials into the environment, waste management, and remediation of discharges of petroleum and petroleum products, characteristics and composition of gasoline and distillates and other matters otherwise relating to the protection of the environment and the health and safety of the surrounding community. Our operations are also subject to extensive laws and regulations relating to occupational health and safety.

We cannot predict what additional environmental, health and safety legislation or regulations may be adopted in the future, or how existing or future laws or regulations may be administered or interpreted with respect to our operations. Many of these laws and regulations have become increasingly stringent over time, and the cost of compliance with these requirements can be expected to increase over time. In addition, a failure to comply with these laws and regulations could adversely impact our ability to operate. For example, MRC is subject to amendments to "Regulation 6-5: Particulate Emissions from Refinery Fluidized Catalytic Cracking Units - 2021 Amendment" ("Rule 6-5 Amendment") requiring compliance with more stringent standards for particulate emissions from FCC units at refineries in the Bay Area that will be effective in 2026. Although MRC believes that it will achieve compliance through the alternative emissions monitoring system ("AEMS") approved by the Bay Area Air Quality Management District ("BAAQMD") and subject to validation as part of the settlement agreement entered into on February 12, 2024, there can be no assurance that the AEMS will be validated or achieve the required emissions reductions or that we will not incur significant additional costs to comply with the Rule 6-5 Amendment.

Certain environmental laws impose strict, and in certain circumstances, joint and several, liability for costs of investigation and cleanup of spills, discharges or releases on owners and operators of, as well as persons who arrange for treatment or disposal of regulated materials at, contaminated sites. Under these laws, we may incur liability or be required to pay penalties for past contamination, and third parties may assert claims against us for damages allegedly arising out of any past or future contamination. The potential penalties and clean-up costs for past or future spills, discharges or releases, the failure of prior owners of our facilities to complete their clean-up obligations, the liability to third parties for damage to their property, or the need to address newly-discovered information or conditions that may require a response could be significant, and the payment of these amounts could have a material adverse effect on our business, financial condition, cash flows and results of operations.

See also *"Recent record refining industry profits have raised the concern of public policy experts and federal and state policymakers, who have questioned whether these profits are justified, or whether they constituted a "windfall" to the industry and have enacted, or could enact legislation that could adversely affect our operations and our profitability"* risk factor below for additional regulatory risks that are not environmental, health or safety-related.

Potential further laws and regulations related to climate change could have a material adverse impact on our operations and adversely affect our facilities.

Some scientists have concluded that increasing concentrations of GHGs in the Earth's atmosphere may produce climate changes that have significant physical effects, such as increased frequency and severity of storms, droughts, floods and other climatic events. We believe the issue of climate change will likely continue to receive scientific and political attention, with the potential for further laws and regulations that could materially adversely affect our ongoing operations.

In addition, as many of our facilities are located near coastal areas, rising sea levels may disrupt our ability to operate those facilities or transport crude oil and refined products. Extended periods of such disruption could have an adverse effect on our results of operation. We could also incur substantial costs to protect or repair these facilities.

Regulation of emissions of greenhouse gases could force us to incur increased capital expenditures and operating costs and could have a material adverse effect on our results of operations and financial condition.

Both houses of Congress have actively considered legislation to reduce emissions of GHGs, such as carbon dioxide and methane, including proposals to: (i) establish a cap and trade system, (ii) create a federal renewable energy or "clean" energy standard requiring electric utilities to provide a certain percentage of power from such sources, and (iii) create enhanced incentives for use of renewable energy and increased efficiency in energy supply and use. In addition, EPA is taking steps to regulate GHGs under the existing federal Clean Air Act. EPA has adopted regulations limiting emissions of GHGs from motor vehicles, and is currently proposing new mobile source regulations further limiting GHG emissions for light- and medium- duty vehicles and heavy-duty highway vehicles. EPA has also adopted regulations addressing the permitting of GHG emissions from stationary sources, and requiring the reporting of GHG emissions from specified large GHG emission sources, including refineries. These and similar regulations could require us to incur costs to monitor and report GHG emissions or reduce emissions of GHGs associated with our operations. In addition, various states, individually as well as in some cases on a regional basis, have taken steps to control GHG emissions, including adoption of GHG reporting requirements, cap and trade systems and renewable portfolio standards (such as AB 32). On September 23, 2020 the Governor of California issued an executive order effectively banning the sale of new gasoline-powered passenger cars and trucks by 2035 and requiring zero-emission medium to heavy duty vehicles by 2045 everywhere feasible. The executive order requires state agencies to build out sufficient electric vehicle charging infrastructure. It is not possible at this time to predict the ultimate form, timing or extent of federal or state regulation. In the event we do incur increased costs as a result of increased efforts to control GHG emissions, we may not be able to pass on any of these costs to our customers. Regulatory requirements also could adversely affect demand for the refined products that we produce. Any increased costs or reduced demand could materially and adversely affect our business and results of operations.

Requirements to reduce emissions could result in increased costs to operate and maintain our facilities as well as implement and manage new emission controls and programs put in place. For example, in September 2016, the state of California enacted Senate Bill 32 which further reduces greenhouse gas emissions targets to 40 percent below 1990 levels by 2030. Two regulations implemented to achieve these goals are Cap-and-Trade and the LCFS. In 2012, CARB implemented Cap-and-Trade. This program currently places a cap on GHGs and we are required to acquire a sufficient number of credits to cover emissions from our refineries and our in-state sales of gasoline and diesel. In 2009, CARB adopted the LCFS, which required a 10% reduction in the carbon intensity of gasoline and diesel by 2020. In 2018, CARB amended the LCFS to require a 20% reduction by 2030. Compliance is achieved through blending lower carbon intensity biofuels into gasoline and diesel or by purchasing credits. Compliance with each of these programs is facilitated through a market-based credit system. If sufficient credits are unavailable for purchase or we are unable to pass through costs to our customers, we have to pay a higher price for credits or if we are otherwise unable to meet our compliance obligations, our financial condition and results of operations could be adversely affected.

As noted above, on September 23, 2020, the California Governor issued Executive Order N-79-20 ("N-79-20 Order") intended to further reduce GHGs within the state. The N-79-20 Order sets a 2035 goal of no sale of internal combustion engines for passenger cars and pickup trucks within California, and a 2045 goal of no sale of internal combustion engine medium- and heavy-duty trucks, and off-road vehicles and equipment. However, the N-79-20 Order would still allow used internal combustion engine vehicles to be used and sold after these dates. In an effort to accomplish the 2035 goal, on August 25, 2022, CARB voted unanimously to adopt the Advanced Clean Cars II ("ACCII") regulations. According to CARB, the ACCII regulations will rapidly scale down light-duty passenger car, truck, and SUV emissions starting with the 2026 model year through 2035. The regulations are two-pronged. First, they amend the California Zero-emission Vehicle Regulation to require an increasing number of zero-emission vehicles, and rely on advanced vehicle technologies, including battery-electric, hydrogen fuel cell electric, and plug-in hybrid electric vehicles, to meet air quality and climate change emissions standards. Second, the regulations amend the California Low-emission Vehicle Regulations to include increasingly stringent standards for gasoline cars and heavier passenger trucks to continue to reduce smog-forming emissions while the sector transitions toward 100% electrification by 2035. Similar to the ACCII, on April 28, 2023, CARB voted unanimously to adopt the Advanced Clean Fleet ("ACF") regulations with the goal of achieving a zero-emission truck and bus fleet by 2045 everywhere feasible, and significantly earlier for certain market segments such as last mile delivery and drayage applications. The initial focus of ACF is on high-priority fleets with vehicles that are suitable for early electrification, their subhaulers, and entities that hire them. As to the 2045 goal, it is currently uncertain how the N-79-20 Order may be ultimately implemented by various California regulatory agencies. In the event we do incur increased costs as a result of increased efforts to control GHG emissions through future adopted regulatory requirements, we may not be able to pass these costs to our customers. These future regulatory requirements also could adversely affect demand for the refined products that we produce. Any increased costs or reduced demand could materially and adversely affect our business and results of operations.

Environmental clean-up and remediation costs of our sites and environmental litigation, including related to climate change, could decrease our net cash flow, reduce our results of operations and impair our financial condition.

We may be subject to liability for the investigation and clean-up of environmental contamination at each of the properties that we own, lease, occupy or operate and at off-site locations where we arrange for the treatment or disposal of regulated materials. We may become involved in litigation or other proceedings related to the foregoing. If we were to be held responsible for damages in any such litigation or proceedings, such costs may not be covered by insurance and may be material. Historical soil and groundwater contamination has been identified at our refineries. Currently, remediation projects for such contamination are underway in accordance with regulatory requirements at our refineries. In connection with the acquisitions of certain of our refineries and logistics assets, the prior owners have retained certain liabilities or indemnified us for certain liabilities, including those relating to pre-acquisition soil and groundwater conditions, and in some instances, we have assumed certain liabilities and environmental obligations, including certain existing and potential remediation obligations. If the prior owners fail to satisfy their obligations for any reason, or if significant liabilities arise in the areas in which we assumed liability, we may become responsible for remediation expenses and other environmental liabilities, which could have a material adverse effect on our business, financial condition, results of operations and cash flow. As a result, in addition to making capital expenditures or incurring other costs to comply with environmental laws, we also may be liable for significant environmental litigation or for investigation and remediation costs and other liabilities arising from the ownership or operation of these assets by prior owners, which could materially adversely affect our business, financial condition, results of operations and cash flow. See "Item 1. Business—Environmental, Health and Safety Matters" and "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations—Material Cash Requirements".

We may also face liability arising from current or future claims alleging personal injury or property damage due to exposure to chemicals or other regulated materials, such as various perfluorinated compounds, including perfluorooctanoate, perfluorooctane sulfonate, perfluorohexane sulfonate, or other per-and polyfluoroalkyl substances (collectively, "PFAS"), asbestos, benzene, silica dust and petroleum hydrocarbons, at or from our facilities. We may also face liability for personal injury, property damage, natural resource damage or clean-up costs for the alleged migration of contamination from our properties. A significant increase in the number or success of these claims could materially adversely affect our business, financial condition, results of operations and cash flow. Recently, we have been voluntarily cooperating with various local, state and federal agencies in their review of the environmental and health effects of PFAS and additional PFAS-related laws may be developed at the local, state and federal level that could lead to our incurring liability for damages or other costs, civil or criminal proceedings, the imposition of fines and penalties, or other remedies or otherwise affect our business. Governmental inquiries or lawsuits involving PFAS could lead to our incurring liability for damages or other costs, civil or criminal proceedings, the imposition of fines and penalties, or other remedies, as well as restrictions on or added costs for our business operations going forward, including in the form of restrictions on discharges at our manufacturing facilities or otherwise. We may be subject to asserted or unasserted claims and governmental regulatory proceedings and inquiries related to the use of PFAS in a variety of jurisdictions.

Changes in law or interpretation of settled law and changes in policy, including with respect to climate change, other environmental regulations or regulations mandating efficiency standards or the use of alternative fuels or uncompetitive fuel components, could adversely affect our operations and results by increasing our cost of compliance, delaying or eliminating available business opportunities and/or preventing or limiting existing operations. Our operations also may give rise to federal, state or local government enforcement proceedings alleging non-compliance with applicable laws or regulations.

We operate in jurisdictions where very large and unpredictable punitive damage awards may occur in the context of litigation. Private plaintiffs may also initiate legal action against us for alleged environmental impacts. These parties may attempt to use the legal system to promote public policy agendas (including seeking to reduce the production and sale of hydrocarbon products through litigation targeting the company or other industry participants), gain political notoriety, or obtain monetary awards from the company. For example, in recent years, private litigation has been increasingly initiated against oil and gas companies by local and state agencies and private parties alleging climate change impacts arising from their operations and seeking damages and equitable relief. We have not had any climate change litigation initiated against us to date and we cannot reasonably predict whether any such litigation will be initiated against us or, if initiated, what the outcome would be. If any such litigation were to be initiated against us, at a minimum, we would incur legal and other expenses to defend such lawsuits, which amounts could be significant. If we failed to prevail in any such litigation and were required to pay significant damages and/or materially alter the manner in which we conduct our business, there could be a material adverse impact on our operations, financial condition or results of operations.

Our pipelines are subject to federal and/or state regulations, which could reduce profitability and the amount of cash we generate.

Our transportation activities are subject to regulation by multiple governmental agencies. The regulatory burden on the industry increases the cost of doing business and affects profitability. Additional proposals and proceedings that affect the oil industry are regularly considered by Congress, the states, the Federal Energy Regulatory Commission, the United States Department of Transportation, and the courts. We cannot predict when or whether any such proposals may become effective or what impact such proposals may have. Projected operating costs related to our pipelines reflect the recurring costs resulting from compliance with these regulations, and these costs may increase due to future acquisitions, changes in regulation, changes in use, or discovery of existing but unknown compliance issues.

Recent record refining industry profits have raised the concern of public policy experts and federal and state policymakers, who have questioned whether these profits are justified, or whether they constituted a "windfall" to the industry and have enacted or could enact legislation that could adversely affect our operations and our profitability.

Beginning in 2022, record refining industry profits raised the concern of many public policy experts and federal and state policymakers, who have questioned whether these profits were justified, or whether they constituted a "windfall" to the industry and have proposed legislation that if enacted could adversely affect our profitability. In September 2022, California adopted Senate Bill No. 1322 ("SB 1322"), which requires refineries in California to report monthly on the volume and cost of the crude oil they buy, the quantity and price of the wholesale gasoline they sell, and the gross gasoline margin per barrel, among other information. The provisions of SB 1322 were effective January 2023. In March 2023, California adopted Senate Bill No. 2 (such statute, together with any regulations contemplated or issued thereunder, "SBx 1-2"), which, among other things, (i) authorized the establishment of a maximum gross gasoline refining margin and the imposition of a financial penalty for profits above a maximum gross gasoline refining margin, (ii) significantly expanded the reporting obligations under SB 1322 and the Petroleum Industry Information Reporting Act of 1980, which include reporting requirements to the California Energy Commission ("CEC") for all participants in the petroleum industry supply chain in California (e.g., refiners, marketers, importers, transporters, terminals, producers, renewables producers, pipelines, and ports), (iii) created the Division of Petroleum Market Oversight within the CEC to analyze the data provided under SBx 1-2, and (iv) authorized the CEC to regulate the timing and other aspects of refinery turnaround and maintenance activities in certain instances. SBx 1-2 imposes increased and substantial reporting requirements, which include daily, weekly, monthly, and annual reporting of detailed operational and financial data on all aspects of our operations in California. The operational data includes any plans for turnaround and maintenance activities at our two California refineries and the way we expect to address the potential impacts on feedstock and product inventories in California as a result of such turnaround and maintenance activities. The provisions of SBx 1-2 became effective June 26, 2023.

In September 2023, the Governor of the State of California directed the CEC to begin the regulatory processes concerning (i) potential penalties for exceeding a maximum gross gasoline refining margin and (ii) the timing of refinery turnarounds and maintenance. Consequently, the CEC adopted an order requiring an informational proceeding on a maximum gross gasoline refining margin and penalty under SBx 1-2. It also adopted an order initiating rulemaking activity under SBx 1-2 that will be focused on refinery maintenance and turnarounds.

To the extent that the CEC establishes a maximum gross gasoline refining margin and imposes a financial penalty for profits above such maximum gross gasoline refining margin, our financial results and profitability could be adversely affected. Our results of operations and our financial performance could also be adversely impacted to the extent that restrictions on turnaround and maintenance activities are imposed by the CEC. We cannot reasonably predict the impact that the full implementation of SBx1-2 will have on our California operations or our Company nor can we predict the impact that similarly focused legislation or actions in other jurisdictions in which we operate our refineries may have. The recently adopted legislation in California, and the future enactment of similar legislation in any of the other jurisdictions could adversely impact our business, results of operations, profitability and cash.

We could incur substantial costs or disruptions in our business if we cannot obtain or maintain necessary permits and authorizations or otherwise comply with health, safety, environmental and other laws and regulations.

Our operations require numerous permits and authorizations under various laws and regulations. These authorizations and permits are subject to revocation, renewal or modification and can require operational changes to limit impacts or potential impacts on the environment and/or health and safety. A violation of authorization or permit conditions or other legal or regulatory requirements could result in substantial fines, criminal sanctions, permit revocations, injunctions, and/or facility shutdowns. In addition, major modifications of our operations could require modifications to our existing permits or upgrades to our existing pollution control equipment. Any or all of these matters could have a negative effect on our business, results of operations and cash flows.

We may incur significant liabilities under, or costs and capital expenditures to comply with, health, safety, environmental and other laws and regulations, which are complex and change frequently. Our operations are subject to federal, state and local laws regulating, among other things, the handling of petroleum and other regulated materials, the emission and discharge of materials into the environment, waste management, and remediation of discharges of petroleum and petroleum products, characteristics and composition of gasoline and distillates and other matters otherwise relating to the protection of the environment. Our operations are also subject to extensive laws and regulations relating to occupational health and safety, in addition to laws and regulations affecting the transportation of crude oil by rail in North America.

We cannot predict what additional environmental, health and safety legislation or regulations may be adopted in the future, or how existing or future laws or regulations may be administered or interpreted with respect to our operations. Many of these laws and regulations are becoming increasingly stringent, and the cost of compliance with these requirements can be expected to increase over time.

Certain environmental laws impose strict, and in certain circumstances joint and several liability for, costs of investigation and cleanup of such spills, discharges or releases on owners and operators of, as well as persons who arrange for treatment or disposal of regulated materials at contaminated sites. Under these laws, we may incur liability or be required to pay penalties for past contamination, and third parties may assert claims against us for damages allegedly arising out of any past or future contamination. The potential penalties and clean-up costs for past or future releases or spills, the failure of prior owners of our facilities to complete their clean-up obligations, the liability to third parties for damage to their property, or the need to address newly-discovered information or conditions that may require a response could be significant, and the payment of these amounts could have a material adverse effect on our business, financial condition and results of operations.

Enhanced scrutiny on ESG matters and developments related to climate change may negatively impact our business and our access to capital markets.

Enhanced scrutiny on ESG matters may impact our business as it relates to the use of refined products, climate change, increasing public expectations on companies to address climate change, and potential use of substitutes or replacements to our products may result in increased costs, reduced demand for our products, reduced profits, increased regulations and litigation, and adverse impacts on our access to capital markets. In addition, organizations that provide information to investors on corporate governance and related matters have developed ratings for evaluating companies on their approach to ESG matters. Such ratings are used by some investors to inform and advise their investment and voting decisions. Also, some stakeholders may advocate for divestment of fossil fuel investments and encourage lenders to limit funding to companies engaged in the manufacturing of refined products. Unfavorable ESG ratings and investment community divestment initiatives may lead to negative investor and public sentiment toward the Company and to the diversion of capital from our industry, which could have a negative impact on our access to, and costs of, capital. This scrutiny, coupled with changes in consumer behavior, attitudes and preferences with respect to the generation and consumption of energy and the use of fossil fuels, may continue to result in (a) the enactment of climate change related regulations, policies and initiatives, including alternative energy requirements, (b) further technological advances related to the generation, storage and consumption of energy through alternative methods such as wind and solar and (c) increased demand for and/or availability of non-fossil fuel energy sources and related consumer products such as electric and hybrid vehicles and renewable power supplies. These developments may also lead to reduced demand for our products, a reduction in our revenue, higher costs and an overall decrease in our profitability.

Additionally, increased attention and scrutiny regarding climate change has resulted in increased investor attention and an increased risk of public and private litigation, which could increase our costs and/or otherwise negatively affect our operations and overall profitability, and cause the market price of our Class A common stock to decline.

Some of our competitors may have a competitive advantage by providing alternative energy sources or by owning their own retail sites.

We compete with other companies and industries that may provide alternative means to satisfy fuel and energy requirements to their customers or own their own retail network. The refining industry is highly competitive with respect to petroleum product capacity and feedstock supply. We compete with many companies for available supplies of crude oil and other feedstocks, and for third-party retail outlets for our refined petroleum products. Such companies that produce alternative energy sources or own their own retail sites may be better positioned to deal with changes in refining capacity, depressed refining margins or feedstock shortages.

We may be negatively affected by the rate of inflation and its impact on the global economy.

Current inflation within the economy has resulted in increased interest rates and capital costs, contributed to supply shortages, increased the cost of living and labor, and other related items. As a result of inflation, which may continue, we expect to continue to encounter higher increases in the cost of feedstocks, labor, materials, and other inputs necessary in the refining of crude oil and other feedstocks. Although we may take actions to counteract the impacts of inflation, if these actions are not effective it could have a material adverse effect on our business, results of operations and financial condition. Additionally, higher future inflation or concerns of a recession could impact the demand for our products and services.

We may not be able to obtain funding on acceptable terms or at all, including because of volatility and uncertainty in the credit and capital markets. This may hinder or prevent us from meeting our future capital needs.

In the past, global financial markets and economic conditions have been, and may again be, subject to disruption and volatile due to a variety of factors, including uncertainty in the financial services sector, low consumer confidence, falling commodity prices, geopolitical issues and generally weak economic conditions. In addition, the fixed income and bank markets could experience periods of extreme volatility that may negatively impact market liquidity conditions. As a result, the cost of raising money in the debt and equity capital markets could increase substantially at times while the availability of funds from those markets diminishes significantly. In particular, as a result of concerns about the stability of financial markets generally, which may be subject to unforeseen disruptions, the cost of obtaining money from the credit markets may increase as many lenders and institutional investors increase interest rates, enact tighter lending standards, refuse to refinance existing debt on similar terms or at all and reduce or, in some cases, cease to provide funding to borrowers. Due to these factors, we cannot be certain that new debt or equity financing will be available on acceptable terms. If funding is not available when needed, or is available only on unfavorable terms, we may be unable to meet our obligations as they come due. Moreover, without adequate funding, we may be unable to execute our business strategy, complete future acquisitions or growth projects, take advantage of other business opportunities or respond to competitive pressures, any of which could have a material adverse effect on our revenues and results of operations.

Any political instability, military strikes, sustained military campaigns, terrorist activity, changes in foreign policy, or other catastrophic events could have a material adverse effect on our business, results of operations and financial condition.

U.S. and global markets are experiencing volatility and disruption following the escalation of geopolitical tensions and Russia's military action in Ukraine starting in February 2022, the outbreak of armed hostilities in the middle east and disruptions in international shipping resulting from recent attacks by armed groups on cargo ships in the Red Sea. Although the length and impact of these ongoing military conflicts is highly unpredictable, these wars have led to market disruptions, including significant volatility in the financial markets and the global macroeconomic and geopolitical environment. Furthermore, a protracted conflict between Ukraine and Russia, or any escalation of this conflict, may result in additional financial and economic sanctions and import and/or export controls imposed on Russia by the United States, the UK, the EU, Canada and others, such as the United States ban on import of Russian oil effective March 8, 2022 and the EU ban on oil products from Russia effective February 5, 2023, which may have adverse impacts on the wider global economy and market conditions and could, in turn, have a material adverse impact on our business, financial condition, cash flows and results of operations.

Any further political instability, military strikes, sustained military campaigns, terrorist activity, changes in foreign policy in areas or regions of the world where we acquire crude oil and other raw materials or sell our refined products may affect our business in unpredictable ways, including forcing us to increase security measures and causing disruptions of supplies and distribution markets. We may also be subject to United States trade and economic sanctions laws, which change frequently as a result of foreign policy developments, and which may necessitate changes to our crude oil acquisition activities. Further, like other industrial companies, our facilities may be the target of terrorist activities or subject to catastrophic events such as natural disasters and pandemic illness. Any act of war, terrorism, or other catastrophic events that resulted in damage to, or otherwise disrupts the operating activities of, any of our refineries or third-party facilities upon which we are dependent for our business operations could have a material adverse effect on our business, results of operations and financial condition.

A cyber-attack on, or other failure of, our technology infrastructure could affect our business and assets, and have a material adverse effect on our financial condition, results of operations and cash flows.

We are becoming increasingly dependent on our technology infrastructure and certain critical information systems which process, transmit and store electronic information, including information we use to safely and effectively operate our respective assets and businesses. These information systems include data network and telecommunications, internet access, our websites, and various computer hardware equipment and software applications, including those that are critical to the safe operation of our refineries and logistics assets. We have invested, and expect to continue to invest, significant time, manpower and capital in our technology infrastructure and information systems. These information systems are subject to damage or interruption from a number of potential sources including natural disasters, software viruses or other malware, power failures, cybersecurity threats to gain unauthorized access to sensitive information, cyber-attacks, which may render data systems unusable, and physical threats to the security of our facilities and infrastructure. Additionally, our business is highly dependent on financial, accounting and other data processing systems and other communications and information systems, including our enterprise resource planning tools. We process a large number of transactions on a daily basis and rely upon the proper functioning of computer systems. Furthermore, we rely on information systems across our respective operations, including the management of supply chain and various other processes and transactions. As a result, a disruption on any information systems at our refineries or logistics assets, may cause disruptions to our collective operations.

The potential for such security threats or system failures has subjected our operations to increased risks that could have a material adverse effect on our business. To the extent that these information systems are under our control, we have implemented measures such as virus protection software, emergency recovery processes and a formal disaster recovery plan to address the outlined risks. However, security measures for information systems cannot be guaranteed to be failsafe, and our formal disaster recovery plan and other implemented measures may not prevent delays or other complications that could arise from an information systems failure. If a key system were hacked or otherwise interfered with by an unauthorized user, or were to fail or experience unscheduled downtime for any reason, even if only for a short period, or any compromise of our data security or our inability to use or access these information systems at critical points in time, it could unfavorably impact the timely and efficient operation of our business, damage our reputation and subject us to additional costs and liabilities. The increase in companies and individuals working remotely has increased the frequency and scope of cyber-attacks and the risk of potential cybersecurity incidents, both deliberate attacks and unintentional events. While, to date, we have not had a significant cybersecurity breach or attack that had a material impact on our business or results of operations, if we were to be subject to a material successful cyber intrusion, it could result in remediation or service restoration costs, increased cyber protection costs, lost revenues, litigation or regulatory actions by governmental authorities, increased insurance premiums, reputational damage and damage to our competitiveness, financial condition, results of operations and cash flows.

Cyber-attacks against us or others in our industry could result in additional regulations, and U.S. government warnings have indicated that infrastructure assets, including pipelines, may be specifically targeted by certain groups. These attacks include, without limitation, malicious software, ransomware, attempts to gain unauthorized access to data, and other electronic security breaches. These attacks may be perpetrated by state-sponsored groups, “hacktivists”, criminal organizations or private individuals (including employee malfeasance). Current efforts by the federal government, including the Strengthening the Cybersecurity of Federal Networks and Critical Infrastructure executive order, the issuance of new cybersecurity requirements for critical pipeline owners and operators issued by the Department of Homeland Security’s Transportation Security Administration following a cyber-attack on a major petroleum pipeline in 2021, and any potential future regulations could lead to increased regulatory compliance costs, insurance coverage cost or capital expenditures. We cannot predict the potential impact to our business or the energy industry resulting from additional regulations.

Further, our business interruption insurance may not compensate us adequately for losses that may occur. We do not carry insurance specifically for cybersecurity events; however, certain of our insurance policies may allow for coverage for a cyber-event resulting in ensuing property damage from an otherwise insured peril. If we were to incur a significant liability for which we were not fully insured, it could have a material adverse effect on our financial position, results of operations and cash flows. In addition, the proceeds of any such insurance may not be paid in a timely manner and may be insufficient if such an event were to occur.

Competition from companies that produce their own supply of feedstocks, have extensive retail outlets, make alternative fuels or have greater financial and other resources than we do could materially and adversely affect our business and results of operations.

Our refining operations compete with domestic refiners and marketers in regions of the United States in which we operate, as well as with domestic refiners in other regions and foreign refiners that import products into the United States. In addition, we compete with other refiners, producers and marketers in other industries that provide means to satisfy the energy and fuel requirements of our industrial, commercial and individual consumers. Certain of our competitors have larger and more complex refineries, and may be able to realize lower per-barrel costs or higher margins per barrel of throughput. Several of our principal competitors are integrated national or international oil companies that are larger and have substantially greater resources than we do and access to proprietary sources of controlled crude oil production. Unlike these competitors, we obtain substantially all of our feedstocks from unaffiliated sources. We are not engaged in the petroleum exploration and production business and therefore do not produce any of our crude oil feedstocks. We do not have a retail business and therefore are dependent upon others for outlets for our refined products. Because of their integrated operations and larger capitalization, these companies may be more flexible in responding to volatile industry or market conditions, such as shortages of crude oil supply and other feedstocks or intense price fluctuations and they may also be able to obtain more favorable trade credit terms.

Newer or upgraded refineries will often be more efficient than our refineries, which may put us at a competitive disadvantage. We have taken significant measures to maintain our refineries including the installation of new equipment and redesigning older equipment to improve our operations. However, these actions involve significant uncertainties, since upgraded equipment may not perform at expected throughput levels, the yield and product quality of new equipment may differ from design specifications and modifications may be needed to correct equipment that does not perform as expected. Any of these risks associated with new equipment, redesigned older equipment or repaired equipment could lead to lower revenues or higher costs or otherwise have an adverse effect on future results of operations and financial condition. Over time, our refineries or certain refinery units may become obsolete, or be unable to compete, because of the construction of new, more efficient facilities by our competitors.

We must make substantial capital expenditures on our operating facilities to maintain their reliability and efficiency. If we are unable to complete capital projects at their expected costs and/or in a timely manner, or if the market conditions assumed in our project economics deteriorate, our financial condition, results of operations or cash flows could be materially and adversely affected.

Delays or cost increases related to capital spending programs involving engineering, procurement and construction of new facilities (or improvements and repairs to our existing facilities and equipment, including turnarounds) could adversely affect our ability to achieve targeted internal rates of return and operating results. Such delays or cost increases may arise as a result of unpredictable factors in the marketplace, many of which are beyond our control, including:

- denial or delay in obtaining regulatory approvals and/or permits;
- unplanned increases in the cost of construction materials or labor;
- disruptions in transportation of modular components and/or construction materials;
- severe adverse weather conditions, natural disasters or other events (such as equipment malfunctions, explosions, fires or spills) affecting our facilities, or those of vendors and suppliers;
- shortages of sufficiently skilled labor, or labor disagreements resulting in unplanned work stoppages;

- market-related increases in a project's debt or equity financing costs; and/or
- non-performance or force majeure by, or disputes with, vendors, suppliers, contractors or sub-contractors involved with a project.

Our refineries contain many processing units, a number of which have been in operation for many years. Equipment, even if properly maintained, may require significant capital expenditures and expenses to keep it operating at optimum efficiency. One or more of the units may require unscheduled downtime for unanticipated maintenance or repairs that are more frequent than our scheduled turnarounds for such units. Scheduled and unscheduled maintenance could reduce our revenues during the period of time that the units are not operating.

Our forecasted internal rates of return are also based upon our projections of future market fundamentals, which are not within our control, including changes in general economic conditions, inflation, slow growth, recession, impact of new regulations, available alternative supply and customer demand. Any one or more of these factors could have a significant impact on our business. If we were unable to make up the delays associated with such factors or to recover the related costs, or if market conditions change, it could materially and adversely affect our financial position, results of operations or cash flows.

We are subject to strict laws and regulations regarding employee and process safety, and failure to comply with these laws and regulations could have a material adverse effect on our results of operations, financial condition and profitability.

We are subject to the requirements of the OSHA, and comparable state statutes that regulate the protection of the health and safety of workers. In addition, OSHA requires that we maintain information about hazardous materials used or produced in our operations and that we provide this information to employees, state and local governmental authorities, and local residents. Failure to comply with OSHA requirements, including general industry standards, process safety standards and control of occupational exposure to regulated substances, could result in claims against us that could have a material adverse effect on our results of operations, financial condition and the cash flows of the business if we are subjected to significant fines or compliance costs.

Product liability and operational liability claims and litigation could adversely affect our business and results of operations.

Product liability and liability arising from our operations are significant risks. Substantial damage awards have been made in certain jurisdictions against manufacturers and resellers of petroleum products based upon claims for injuries and property damage caused by the use of or exposure to various products. Failure of our products to meet required specifications or claims that a product is inherently defective could result in product liability claims from third parties, including our shippers and customers, and also arise from contaminated or off-specification product in commingled pipelines and storage tanks and/or defective fuels. We may also be subject to personal injury claims arising from incidents that occur in connection with or relating to our operations. Product liability and personal injury claims against us could have a material adverse effect on our business, financial condition or results of operations.

Compliance with and changes in tax laws could adversely affect our performance.

We are subject to extensive tax liabilities, including federal, state, local and foreign taxes such as income, excise, sales/use, payroll, franchise, property, gross receipts, withholding and ad valorem taxes. New tax laws and regulations and changes in existing tax laws and regulations, such as the IRA, are continuously being enacted or proposed and could result in increased expenditures for tax liabilities in the future. These liabilities are subject to periodic audits by the respective taxing authorities, which could increase our tax liabilities. Subsequent changes to our tax liabilities as a result of these audits may also subject us to interest and penalties. There can be no certainty that our federal, state, local or foreign taxes could be passed on to our customers.

Acquisitions or other investments that we may undertake in the future involve a number of risks, any of which could cause us not to realize the anticipated benefits.

We may not be successful in acquiring additional assets or making investments in new business, and any acquisitions or other investments that we do consummate may not produce the anticipated benefits or may have adverse effects on our business and operating results. We may selectively consider strategic acquisitions and other investments in the future within the refining, mid-stream and renewable diesel or alternative energy sectors based on performance through the cycle, advantageous access to crude oil supplies, attractive refined products market fundamentals and access to distribution and logistics infrastructure. For example, we are part of Mid-Atlantic Clean Hydrogen Hub ("MACH2"), a broad consortium exploring the development of a clean energy and logistics hub on 2,500 acres adjacent to our Delaware City refinery, that was selected by the Department of Energy to receive up to $750.0 million to advance the development of a clean hydrogen production and distribution hub. In connection with MACH2, we are considering investments in renewable electricity, green hydrogen production, development of 10 million square feet of distribution warehouses and office space, and hydrogen fueling facilities for a large fleet of medium duty trucks. Our ability to acquire additional assets or invest in new businesses will be dependent upon a number of factors, including our ability to identify acceptable acquisition or investment opportunities, consummate acquisitions or other investments on acceptable terms, successfully integrate acquired assets and obtain financing to fund acquisitions and to support our growth and many other factors beyond our control. Risks associated with acquisitions and other investments include those relating to the diversion of management time and attention from our existing business, liability for known or unknown environmental conditions or other contingent liabilities and greater than anticipated expenditures required for compliance with environmental, safety or other regulatory standards or for investments to improve operating results, and the incurrence of additional indebtedness to finance acquisitions or capital expenditures relating to acquired assets. We may also enter into transition services agreements in the future with sellers of any additional refineries we acquire or otherwise invest in. Such services may not be performed timely and effectively, and any significant disruption in such transition services or unanticipated costs related to such services could adversely affect our business and results of operations. In addition, it is likely that, when we acquire or otherwise invest in refineries, we will not have access to the type of historical financial information that we will require regarding the prior operation of the refineries. As a result, it may be difficult for investors to evaluate the probable impact of significant acquisitions or other investments on our financial performance until we have operated the acquired refineries for a substantial period of time.

A portion of our workforce is unionized, and we may face labor disruptions that would interfere with our operations.

Most hourly employees at our refineries are covered by collective bargaining agreements through the USW, the IOW and the IBEW. These agreements are scheduled to expire on various dates in 2024 through 2028 (See "Item 1. Business" - Employees). Future negotiations prior to the expiration of our collective agreements may result in labor unrest for which a strike or work stoppage is possible. Strikes and/or work stoppages could negatively affect our operational and financial results and may increase operating expenses at the refineries.

Our business may suffer if any of our senior executives or other key employees discontinues employment with us. Furthermore, a shortage of skilled labor or disruptions in our labor force may make it difficult for us to maintain labor productivity.

Our future success depends to a large extent on the services of our senior executives and other key employees. Our business depends on our continuing ability to recruit, train and retain highly qualified employees in all areas of our operations, including engineering, accounting, business operations, finance and other key back-office and mid-office personnel. Furthermore, our operations require skilled and experienced employees with proficiency in multiple tasks. The competition for these employees is intense, and the loss of these executives or employees could harm our business. If any of these executives or other key personnel resigns or becomes unable to continue in his or her present role and is not adequately replaced, our business operations could be materially adversely affected.

Our hedging activities may limit our potential gains, exacerbate potential losses and involve other risks.

We may enter into commodity derivatives contracts to hedge our crude price risk or crack spread risk with respect to a portion of our expected gasoline and distillate production on a rolling basis or to hedge our exposure to the price of natural gas, which is a significant component of our refinery operating expenses. Consistent with that policy we may hedge some percentage of our future crude and natural gas supply. We may enter into hedging arrangements with the intent to secure a minimum fixed cash flow stream on the volume of products hedged during the hedge term and to protect against volatility in commodity prices. Our hedging arrangements may fail to fully achieve these objectives for a variety of reasons, including our failure to have adequate hedging arrangements, if any, in effect at any particular time and the failure of our hedging arrangements to produce the anticipated results. We may not be able to procure adequate hedging arrangements due to a variety of factors. Moreover, such transactions may limit our ability to benefit from favorable changes in crude oil, refined product and natural gas prices.

In addition, our hedging activities may expose us to the risk of financial loss in certain circumstances, including instances in which:

- the volumes of our actual use of crude oil or natural gas or production of the applicable refined products is less than the volumes subject to the hedging arrangement;
- accidents, interruptions in feedstock transportation, inclement weather or other events cause unscheduled shutdowns or otherwise adversely affect our refineries, or those of our suppliers or customers;
- changes in commodity prices have a material impact on collateral and margin requirements under our hedging arrangements, resulting in us being subject to margin calls;
- the counterparties to our derivative contracts fail to perform under the contracts; or
- a sudden, unexpected event materially impacts the commodity or crack spread subject to the hedging arrangement.

As a result, the effectiveness of our hedging strategy could have a material impact on our financial results. See “Item 7A. Quantitative and Qualitative Disclosures About Market Risk.”

In addition, these hedging activities involve basis risk. Basis risk in a hedging arrangement occurs when the price of the commodity we hedge is more or less variable than the index upon which the hedged commodity is based, thereby making the hedge less effective. For example, a New York Mercantile Exchange index used for hedging certain volumes of our crude oil or refined products may have more or less variability than the actual cost or price we realize for such crude oil or refined products. We may not hedge all the basis risk inherent in our hedging arrangements and derivative contracts.

Our commodity derivative activities could result in period-to-period earnings volatility.

We do not currently apply hedge accounting to any of our commodity derivative contracts and, as a result, unrealized gains and losses will be charged to our earnings based on the increase or decrease in the market value of such unsettled positions. These gains and losses may be reflected in our income statement in periods that differ from when the settlements of the underlying hedged items are reflected in our income statement. Such derivative gains or losses in earnings may produce significant period-to-period earnings volatility that is not necessarily reflective of our underlying operational performance.

Risks Related to Our Indebtedness

Our indebtedness could adversely affect our financial condition and prevent us from fulfilling our obligations under our indebtedness.

Our indebtedness may significantly affect our financial flexibility in the future. As of December 31, 2023, we have total debt of $1,298.4 million, excluding unamortized deferred debt issuance costs of $52.5 million, and we could incur additional borrowings under our asset-based revolving credit facility (the "Revolving Credit Facility"). We may incur additional indebtedness in the future including additional secured indebtedness, subject to the satisfaction of any debt incurrence and, if applicable, lien incurrence limitation covenants in our existing financing agreements.

The level of our indebtedness has several important consequences for our future operations, including that:

- a portion of our cash flow from operations will be dedicated to the payment of principal of, and interest on, our indebtedness and will not be available for other purposes;
- under certain circumstances, covenants contained in our existing debt arrangements limit our ability to borrow additional funds, dispose of assets and make certain investments;
- in certain circumstances these covenants also require us to meet or maintain certain financial tests, which may affect our flexibility in planning for, and reacting to, changes in our industry, such as being able to take advantage of acquisition opportunities when they arise;
- our ability to obtain additional financing for working capital, capital expenditures, acquisitions, general corporate and other purposes may be limited; and
- we may be at a competitive disadvantage to those of our competitors that are less leveraged; and we may be more vulnerable to adverse economic and industry conditions.

Our indebtedness increases the risk that we may default on our debt obligations, certain of which contain cross-default and/or cross-acceleration provisions. Our, and our subsidiaries', ability to meet future principal obligations will be dependent upon our future performance, which in turn will be subject to general economic conditions, industry cycles and financial, business and other factors affecting our operations, many of which are beyond our control. Our business may not continue to generate sufficient cash flow from operations to repay our indebtedness. If we are unable to generate sufficient cash flow from operations, we may be required to sell assets, to refinance all or a portion of our indebtedness or to obtain additional financing. Refinancing may not be possible and additional financing may not be available on commercially acceptable terms, or at all.

We may not be able to secure necessary financing on acceptable terms, or at all.

We currently have notes outstanding with maturity dates in 2028 and 2030. Additionally, our Revolving Credit Facility matures in 2028. We can make no assurance that we will be able to refinance these agreements on acceptable terms prior to their maturity dates. Market disruptions or other credit factors, such as rising inflation and higher interest rates, may increase our cost of borrowing or adversely affect our ability to refinance our obligations as they become due. Further, ESG concerns and other pressures on the oil and gas industry could lead to increased costs of financing or limit our access to the capital markets. If we are unable to refinance our indebtedness or access additional credit, or if short-term or long-term borrowing costs significantly increase, our ability to finance current operations and meet our short-term and long-term obligations could be adversely affected.

Despite our level of indebtedness, we and our subsidiaries may be able to incur substantially more debt, which could exacerbate the risks described above.

We and our subsidiaries are able to incur additional indebtedness in the future including additional secured or unsecured debt. Although our debt instruments and financing arrangements contain restrictions on the incurrence of additional indebtedness, these restrictions are subject to a number of qualifications and exceptions, and the indebtedness incurred in compliance with these restrictions could be substantial. To the extent new debt is added to our current debt levels, the leverage risks described above would increase. Also, these restrictions do not prevent us from incurring obligations that do not constitute indebtedness.

Our future credit ratings could adversely affect our business, the cost of our borrowing, and our ability to obtain credit in the future.

Changes in our credit profile could affect the way crude oil and other suppliers view our ability to make payments and induce them to shorten the payment terms for our purchases or require us to post security or letters of credit prior to payment. Due to the large dollar amounts and volume of our crude oil and other feedstock purchases, any imposition by these suppliers of more burdensome payment terms on us may have a material adverse effect on our liquidity and our ability to make payments to our suppliers. This, in turn, could reduce our access to supply and cause us to be unable to operate one or more of our refineries at full capacity.

Our 2028 Senior Notes and 2030 Senior Notes are rated Ba3 by Moody's, BB by S&P, and BB- by Fitch. Any adverse changes in our credit ratings may negatively impact the terms of credit we receive from our suppliers and require us to prepay or post collateral. Additionally, adverse actions taken by the rating agencies on our corporate credit rating or the rating of our notes may increase our cost of borrowings or hinder our ability to raise financing in the capital markets or have an unfavorable impact on the credit terms we have with our suppliers, which could impair our ability to grow our business, maintain adequate levels of liquidity and make cash distributions to our members.

Restrictive covenants in our debt instruments, including the indentures governing our notes, may limit our ability to undertake certain types of transactions, which could adversely affect our business, financial condition, results of operations and our ability to service our indebtedness.

Various covenants in our current and future debt instruments and other financing arrangements, including the indentures governing our notes, may restrict our and our subsidiaries' financial flexibility in a number of ways. Our current indebtedness and the indentures that govern our notes subject us to significant financial and other restrictive covenants, including restrictions on our ability to incur additional indebtedness, place liens upon assets, make distributions, or make certain other restricted payments and investments, consummate certain asset sales or asset swaps, conduct businesses other than our current businesses, or sell, assign, transfer, lease, convey or otherwise dispose of all or substantially all of our assets. Some of our debt instruments also require our subsidiaries to satisfy or maintain certain financial condition tests in certain circumstances. Our ability to meet these financial condition tests can be affected by events beyond our control and we may not meet such tests. In addition, a failure to comply with the provisions of our existing debt could result in an event of default that could enable our lenders, subject to the terms and conditions of such debt, to declare the outstanding principal, together with accrued interest, to be immediately due and payable. Events beyond our control may affect our ability to comply with our covenants. If we were unable to repay the accelerated amounts, our lenders could proceed against the collateral granted to them to secure such debt. If the payment of our debt is accelerated, defaults under our other debt instruments, if any, may be triggered, and our assets may be insufficient to repay such debt in full.

Provisions in our indentures and other agreements could discourage an acquisition of us by a third-party.

Certain provisions of our indentures could make it more difficult or more expensive for a third-party to acquire us. Upon the occurrence of certain transactions constituting a "change of control" as described in the indentures governing the 2028 Senior Notes and the 2030 Senior Notes, holders of our notes could require us to repurchase all outstanding notes at 101% of the principal amount thereof, plus accrued and unpaid interest, if any, at the date of repurchase. Certain other significant agreements of ours such as our agreement governing the Revolving Credit Facility (the "Revolving Credit Agreement") also contain provisions related to a change in control that could make it more difficult or expensive for a third-party to acquire us.

Risks Related to Our Organizational Structure

Under a tax receivable agreement, PBF Energy is required to pay the pre-IPO owners of PBF LLC for certain realized or assumed tax benefits it may claim arising in connection with its initial public offering and future exchanges of PBF LLC Series A Units, or other permitted assignees, for shares of its Class A common stock and related transactions (the "Tax Receivable Agreement"). The indentures governing the senior notes allow us, under certain circumstances, to make distributions sufficient for PBF Energy to pay its obligations arising from the Tax Receivable Agreement.

PBF Energy entered into a Tax Receivable Agreement that provides for the payment from time to time ("On-Going Payments") by PBF Energy to the holders of PBF LLC Series A Units and PBF LLC Series B Units, or other permitted assignees, for certain tax benefits it may claim arising in connection with its prior offerings and future exchanges of PBF LLC Series A Units for shares of its Class A common stock and related transactions, and the amounts it may pay could be significant.

PBF Energy's payment obligations under the Tax Receivable Agreement are PBF Energy's obligations and not obligations of PBF Holding, PBF Finance, or any of PBF Holding's other subsidiaries. However, because PBF Energy is primarily a holding company with limited operations of its own, its ability to make payments under the Tax Receivable Agreement is dependent on our ability to make future distributions to it. The indentures governing the senior notes allow us to make tax distributions (as defined in the applicable indentures), and it is expected that PBF Energy's share of these tax distributions will be in amounts sufficient to allow PBF Energy to make On-Going Payments. The indentures governing the senior notes also allow us to make a distribution sufficient to allow PBF Energy to make any payments required under the Tax Receivable Agreement upon a change in control, so long as we offer to purchase all of the senior notes outstanding at a price in cash equal to 101% of the aggregate principal amount thereof, plus accrued and unpaid interest thereon, if any. If PBF Energy's share of the distributions it receives under these specific provisions of the indentures is insufficient to satisfy its obligations under the Tax Receivable Agreement, PBF Energy may cause us to make distributions in accordance with other provisions of the indentures in order to satisfy such obligations.

Our existing indebtedness may limit our ability to make distributions to PBF LLC, and in turn for PBF Energy to pay these obligations. These provisions may deter a potential sale of us to a third-party and may otherwise make it less likely that a third-party would enter into a change of control transaction with PBF Energy or us.

PBF Energy has recognized, as of December 31, 2023, a total liability for the Tax Receivable Agreement of $336.6 million, of which $43.0 million was recorded as a current liability and was paid in January 2024 related to the 2022 tax year. As PBF Energy records future taxable income, increases in its Tax Receivable Agreement liability may be necessary. It is possible that future transactions or events could increase the actual tax benefits realized and the corresponding payments. Moreover, future payments under the Tax Receivable Agreement will be based on the tax reporting positions that PBF Energy determines in accordance with the Tax Receivable Agreement. Neither PBF Energy nor any of its subsidiaries will be reimbursed for any payments previously made under the Tax Receivable Agreement if the IRS subsequently disallows part or all of the tax benefits that gave rise to such prior payments.

Risks Related to Our Affiliation with PBFX

We depend upon PBFX for a substantial portion of our refineries' logistics needs and have obligations for minimum volume commitments in our commercial agreements with PBFX.

We depend on PBFX to receive, handle, store and transfer crude oil, petroleum products and natural gas for us from our operations and sources located throughout the United States and Canada in support of certain of our refineries under long-term, fee-based commercial agreements with us. These commercial agreements have an initial term ranging from one to fifteen years and generally include minimum quarterly commitments and inflation escalators. If we fail to meet the minimum commitments during any calendar quarter, we will be required to make a shortfall payment quarterly to PBFX equal to the volume of the shortfall multiplied by the applicable fee.

PBFX's operations are subject to all of the risks and operational hazards inherent in receiving, handling, storing and transferring crude oil, petroleum products and natural gas, including: damages to its facilities, related equipment and surrounding properties caused by floods, fires, severe weather, explosions and other natural disasters and acts of terrorism; mechanical or structural failures at PBFX's facilities or at third-party facilities on which its operations are dependent; curtailments of operations relative to severe seasonal weather; inadvertent damage to our facilities from construction, farm and utility equipment; and other hazards. Any of these events or factors could result in severe damage or destruction to PBFX's assets or the temporary or permanent shut-down of PBFX's facilities. If PBFX is unable to serve our logistics needs, our ability to operate our refineries and receive crude oil and distribute products could be adversely impacted, which could adversely affect our business, financial condition and results of operations.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 1C. CYBERSECURITY

Cybersecurity risk management and strategy

Our cybersecurity risk management program is managed by our Chief Information Officer ("CIO") who reports to our Chief Financial Officer and provides regular updates to the Board. Our CIO establishes our overall Information Technology ("IT") security strategy, oversees our information, cyber, and technology security and manages our IT department, which includes our Cybersecurity team. His responsibilities include developing, implementing, and enforcing security policies to protect critical data. The head of our Cybersecurity team, our Director of Information Security, who reports to our CIO, runs the day-to-day management of our cybersecurity risks. Our IT department overall assists in implementing cybersecurity strategies and policies under the direction of the Cybersecurity team, as applicable.

Our cybersecurity risk management program aligns with the National Institute of Standards and Technology Cyber Security Framework, which establishes five areas of focus: identify, protect, detect, respond and recover. Our cybersecurity risk management program is designed to manage industry-specific threats, as well as threats arising from the overall evolving cybersecurity landscape and consists of two principal areas of focus: (i) enterprise systems, which consists of all business systems used in our daily operations and (ii) operational technology, which consists of all process control, supervisory control and data acquisition systems. Key elements of our cybersecurity management program include:

- identifying, monitoring and mitigating the cybersecurity risks to our systems, assets, data and capabilities;
- a critical response process for cybersecurity incidents, including the process for detection, investigation, containment and remediation of any such incidents;
- establishment of disaster recovery plans;
- testing, at least bi-annually, of select critical systems for disaster recovery and periodic walk-throughs of procedures for disaster recovery;
- identity access policies that aim to identify and monitor for potential cyber intrusions;
- periodic security tests, including monthly internal vulnerability scans, weekly external vulnerability scans, monthly phishing campaigns and recurring penetration testing by third-party cybersecurity firms;
- table-top exercises, at least quarterly, for incident response preparedness for the Cybersecurity team and Information Technology department; and
- annual drills for potential threats on various aspects of our technology assets based on the then-existing IT threat landscape for our industry.

Pursuant to our incident response plan, the Cybersecurity team has defined roles in responding to all cybersecurity incidents to provide an efficient and organized approach to handling cybersecurity threats, with the CIO receiving all reports and status updates regarding cybersecurity threats. The incident response plan provides a documented framework for when and how the CIO informs and updates our Board, the executive officers and other internal parties and when external parties are notified or consulted about a cybersecurity threat and the status thereof.

We also utilize third-party cybersecurity vendors to assist us with various aspects of our cybersecurity risk management program. For example, in order to support our cybersecurity incident response procedures, we have retained several third-party cybersecurity firms to monitor the IT threat landscape for our industry. As part of our efforts to manage the risk of cybersecurity threats associated with the use of third parties, we monitor and evaluate the cybersecurity risk profiles of third-party technology providers and consider such risk profiles when selecting third-party technology providers. Any third-party service provider that is granted access to our network is required to comply with our policies regarding information technology and cybersecurity. We also engage several third-party cybersecurity firms to perform independent assessments of the effectiveness of our cybersecurity risk management program and assist us in the continued review of our cybersecurity risk management program in order to reflect the evolving landscape of cybersecurity.

To date, there have been no significant risks from cybersecurity threats, including as a result of any significant cybersecurity breaches or attacks that have materially affected our business, results of operations or financial condition. However, if we were to be subject to a material successful cyber intrusion, it could result in remediation or service restoration costs, increased cybersecurity protection costs, lost revenues, litigation or regulatory actions by governmental authorities, increased insurance premiums, reputational damage and damage to our competitiveness, financial condition, results of operations and cash flows. See "Item 1A. Risk Factors−Risks Relating to Our Business and Industry−A cyber-attack on, or other failure of, our technology infrastructure could affect our business and assets, and have a material adverse effect on our financial condition, results of operations and cash flows."

Cybersecurity governance

Our CIO has 30 years of experience in highly regulated industries managing information security in complex, matrixed environments, seven of which are in his current role with the Company. He has created and maintained enterprise-level information security programs for our Company and other US and international companies in the refining industry.

The CIO, along with the head of our Cybersecurity team, periodically reports, no less than quarterly, to our Board and our executive officers regarding the state of our cybersecurity risk management program, including information on the status of ongoing efforts to manage and mitigate cybersecurity risks, as well as recent cybersecurity trends and events and any updates to cybersecurity matters.

The Audit Committee reviews our disclosures with respect to cybersecurity and information technology risks. The Audit Committee also reviews with management guidelines and policies to govern the process by which risk assessment and risk management is undertaken, including but not limited to cybersecurity and information technology risks. As part of the Company's enterprise-wide risk management program, our Internal Audit team also reports to our Audit Committee regarding assessments of our cybersecurity and information technology risks, at least annually, based on regular updates by our CIO regarding such risks. Our Internal Audit team periodically reports to our executive officers and the Audit Committee regarding such risks.

ITEM 2. PROPERTIES

See "Item 1. Business".

ITEM 3. LEGAL PROCEEDINGS

In connection with the acquisition of the Torrance refinery and related logistics assets, we assumed certain pre-existing environmental liabilities related to certain environmental remediation obligations to address existing soil and groundwater contamination and monitoring activities, which reflect the estimated cost of the remediation obligations. In addition, in connection with the acquisition of the Torrance refinery and related logistics assets, we purchased a ten-year, $100.0 million environmental insurance policy to insure against unknown environmental liabilities.

We currently have multiple outstanding notices of violation ("NOVs") issued by regulatory authorities for various alleged regulation and permit violations at our refineries. It is not possible to predict the outcome of any of these NOVs or the amount of the penalties that will be assessed in connection with any NOV. If any one or more of them were decided against us, we believe that there would be no material effect on our financial position, results of operations, or liquidity. SEC regulations require us to disclose certain information about proceedings arising under federal, state, or local provisions regulating the discharge of materials into the environment or protecting the environment if we reasonably believe that such proceedings will result in monetary sanctions of $300,000 or more. On November 24, 2022, the Martinez refinery experienced a spent catalyst release that is currently being investigated by the BAAQMD, Contra Costa County ("CCC"), the Department of Justice and EPA, and the California Department of Fish and Game ("DFG"). On July 11, 2023 and October 6, 2023, the Martinez refinery experienced unintentional releases of petroleum coke dust and has received inquiries or notices of investigation from the BAAQMD, the California Department of Industrial Relations, Division of Occupational Safety and Health, the CCC, and the EPA. The BAAQMD has issued 35 NOVs relating to the spent catalyst incident to date. The CCC has issued two NOVs related to the spent catalyst incident. The BAAQMD also issued an NOV relating to the July 11, 2023 coke dust incident and an NOV relating to the October 6, 2023 coke dust incident. For the spent catalyst incident, the DFG, CCC, and the BAAQMD have referred their findings and/or NOVs issued to date to the CCC District Attorney. On November 16, 2023, the CCC District Attorney and BAAQMD announced a joint civil enforcement action against us that will include enforcement of claims from the November 24, 2022 spent catalyst release, as well as additional enforcement claims. On December 15, 2023, the BAAQMD issued a NOV related to odors from flaring that occurred on the same date. On December 18, 2023, the BAAQMD issued four NOVs related to a fire incident that occurred on December 17, 2023. For both the spent catalyst, coke dust, flaring and fire incidents, no penalties have been assessed but it is reasonable to expect that, individually or in the aggregate, the amount of such penalties may exceed $300,000.

On September 27, 2023, MRC received from the San Francisco Bay Regional Water Quality Control Board ("RWQCB") an Administrative Civil Liability ("ACL") assessment in the amount of $13.8 million for allegedly: (1) exceeding its effluent limitations and discharging to the Carquinez Strait without authorization in October 2022, January 2023, and June 2023; and (2) failing to submit Climate Change Adaptation information. On January 12, 2024, MRC met with the RWQCB to discuss its response to their ACL assessment. Based on the discussions and the information provided by MRC, the RWQCB proposed reducing the ACL assessment to approximately $4.5 million and noted that for any settlement 50% of the penalty could be in the form of an Enhanced Compliance Actions ("ECA") settlement, Supplemental Environmental Project ("SEP"), or a combination of the two. On January 19, 2024, MRC agreed to accept the reduced ACL, with 50% of the approximately $4.5 million dedicated to an ECA and SEP. Once the parties finalize the settlement agreement and stipulation for entry of administrative civil liability order, it will be presented to the RWQCB's Board for final approval.

On February 17, 2017, in *Arnold Goldstein, et al. v. Exxon Mobil Corporation, et al.*, we and PBF LLC, and our subsidiaries, PBF Western Region and Torrance Refining and the manager of our Torrance refinery along with ExxonMobil were named as defendants in a class action and representative action complaint. The complaint was filed in the Superior Court of the State of California, County of Los Angeles and alleges negligence, strict liability, ultra-hazardous activity, a continuing private nuisance, a permanent private nuisance, a continuing public nuisance, a permanent public nuisance and trespass resulting from the February 18, 2015 electrostatic precipitator ("ESP") explosion at the Torrance refinery, which was then owned and operated by ExxonMobil. The operation of the Torrance refinery by the PBF entities subsequent to our acquisition in July 2016 is also referenced in the complaint. To the extent that plaintiffs' claims relate to the ESP explosion, ExxonMobil retained responsibility for any liabilities that would arise from the lawsuit pursuant to the agreement relating to the acquisition of the Torrance refinery. On July 2, 2018, the Court granted leave to plaintiffs to file a Second Amended Complaint alleging groundwater contamination. With the filing of the Second Amended Complaint, plaintiffs added an additional plaintiff, Hany Youssef. On October 15, 2019, the judge granted certification to two limited classes of property owners with Youssef as the sole class representative and named plaintiff, rejecting two other proposed subclasses based on negligence and on strict liability for ultrahazardous activities. The certified subclasses relate to trespass claims for ground contamination and nuisance for air emissions. On May 5, 2021, the Court granted plaintiffs leave to amend their complaint for the third time to substitute Navarro for Youssef. On July 5, 2022, the Court issued a final order ruling that Plaintiffs' Motion to Substitute Navarro as Class Representative was denied and decertifying both of Plaintiffs' proposed Air and Ground Subclasses. The order provided that the case will proceed with Navarro as the sole plaintiff. On September 22, 2022, the Ninth Circuit Court of Appeals affirmed. On February 27, 2023, the Court issued an order granting our motion for judgment on the pleadings and dismissed Plaintiff's trespass claim with prejudice and granted Plaintiff leave to amend his nuisance claims in conformity with the order if he can do so consistent with Rule 11 of the Federal Rules of Civil Procedures. On March 27, 2023, Plaintiff filed a Fourth Amended Complaint relating to the remaining nuisance claims. On May 23, 2023, the Court denied our motion to dismiss on the pleadings for Plaintiff's failure to establish standing to bring the nuisance claims. After completing further discovery, on August 28, 2023, we filed a Motion for Summary Judgment. On October 18, 2023, the Court issued an order granting our motion, adjudged that Plaintiff take nothing, and that the action be dismissed with prejudice. The order also allows us to recover the costs of suit pursuant to a bill of costs. On October 30, 2023, Plaintiff filed a notice of appeal to the Ninth Circuit regarding the Court's order granting summary judgment. Plaintiff's opening brief is due March 22, 2024 and our answering brief is due April 22, 2024. We presently believe the outcome of this litigation will not have a material impact on our financial position, results of operations, or cash flows.

On September 7, 2021, MRC filed a Verified Petition for Writ of Mandate and Complaint for Declaratory and Injunctive Relief against the BAAQMD requesting the Court to declare as invalid, unenforceable, and ultra vires the BAAMQD's July 21, 2021, adoption of amendments to Rule 6-5 Amendment. MRC is also seeking a writ of mandate ordering the BAAQMD to vacate and rescind the adoption of the Rule 6-5 Amendment, as well as appropriate declaratory relief, injunctive relief, and reasonable costs incurred by MRC to bring this Petition/Complaint. In the Petition/Complaint MRC alleges that: its feasible alternative Particulate Matter ("PM") reduction proposal, which would achieve significant PM reductions while avoiding the significant costs and environmental impacts of the BAAQMD's adopted PM limit, was improperly removed from consideration and not presented to the BAAQMD Board when the Rule 6-5 Amendment was adopted with the current PM standard; when adopting the Rule 6-5 Amendment, the BAAQMD flagrantly ignored numerous mandatory requirements of the California Environmental Quality Act ("CEQA") and the California Health and Safety Code; the BAAQMD's adoption of the Rule 6-5 Amendment also violated California common law; and these failings render the Rule 6-5 Amendment ultra vires, illegal, and unenforceable. We held mandatory settlement conferences with the BAAQMD on October 27, 2021 and December 15, 2021. On December 9, 2022, MRC filed a Motion to Augment/Correct the Administrative Record regarding various documents that the BAAQMD is currently withholding and does not plan to include in the administrative record. On February 2, 2023, although the Court partially denied our motion concerning documents where the BAAQMD asserted the attorney client privilege, the Court held that CEQA places a heavy burden on the BAAQMD in justifying withholding documents based on the deliberative privilege. At the Court's request, the parties agreed to a process whereby they jointly identified approximately 50 of the withheld/redacted documents for the Court to review. The Court ruled on those documents on February 22, 2023, ordering full disclosure of two types of documents related to the BAAQMD's cost-estimates for the rule. In compliance with the Court's order, in March 2023, the BAAQMD produced additional or less-redacted versions of previously produced documents. On May 26, 2023, MRC filed its opening brief. The BAAQMD's opposition brief was filed on July 21, 2023. MRC filed its reply brief on August 18, 2023. The bench trial scheduled for December 21, 2023, was rescheduled to February 29, 2024. On February 12, 2024, the parties entered a settlement agreement pursuant to which MRC is dismissing its Petition/Complaint and the BAAQMD has approved MRC's AEMS, to be validated within the first year after the effective date of the rule. We presently believe the settlement will not have a material impact on our financial position, results of operations, or cash flows.

On August 16, 2023, in *Joseph Piscitelli and Lara Zanzucchi v. Martinez Refining Company LLC*, our subsidiary MRC was named as a defendant in a class action and representative action complaint which contains allegations of public and private nuisance, trespass, and negligence arising from MRC's operations. MRC filed its answer to the complaint on October 31,2023. The initial Court hearing to discuss discovery issues was held on January 2, 2024. At the hearing, the Court raised the issue of mediation and directed the parties to meet and confer and agree to stipulate to a mediation deadline. On January 9, 2024, the parties filed a stipulation agreeing to consider private mediation by September 20, 2024. On January 17, 2024, the Court issued a scheduling order setting the class certification hearing for April 10, 2025. The parties are currently engaged in discovery. We presently believe the outcome will not have a material impact on our financial position, results of operations, or cash flows.

On December 15, 2023, in *Alena Cruz and Shannon Payne vs. PBF Energy Inc., et. al*, we and our subsidiaries PBF Energy Western Region and MRC were named as defendants in a class action and representative action complaint filed by Alena Cruz and Shannon Payne, and on behalf of all others similarly situated. The complaint contains allegations of Clean Air Act violations, claims for medical and environmental monitoring, liability for ultrahazardous activities, negligence, and public and private nuisance from MRC's operations. The proposed class is all individuals who reside and/or work in the City of Martinez, including the surrounding communities of Alhambra Valley and Franklin Canyon, as well as El Sobrante, Hercules, Benicia, and Richmond, who have allegedly been exposed to elevated levels of spent catalyst discharged from MRC's operations during the period November 24, 2022 to the present. On December 21, 2023, Plaintiffs granted an extension until February 5, 2024 for MRC to respond to the initial complaint. On February 5, 2024, MRC filed a motion to dismiss on the pleadings. In response, on February 16, 2024, Plaintiffs' filed a First Amendment Complaint ("FAC"). On February 29, 2024, MRC filed a motion to dismiss the FAC on the pleadings. Plaintiff's opposition to the motion is due March 14, 2024. MRC's reply to Plaintiffs' opposition is due March 21, 2024. The motion hearing date is currently scheduled for April 4, 2024. We presently believe the outcome will not have a material impact on our financial position, results of operations, or cash flows.

The federal Comprehensive Environmental Response, Compensation and Liability Act of 1980 ("CERCLA"), also known as "Superfund," imposes liability, without regard to fault or the legality of the original conduct, on certain classes of persons who are considered to be responsible for the release of a "hazardous substance" into the environment. These persons include the current or former owner or operator of the disposal site or sites where the release occurred and companies that disposed of or arranged for the disposal of the hazardous substances. Under CERCLA, such persons may be subject to joint and several liability for investigation and the costs of cleaning up the hazardous substances that have been released into the environment, for damages to natural resources and for the costs of certain health studies. As discussed more fully above, certain of our sites are subject to these laws and we may be held liable for investigation and remediation costs or claims for natural resource damages. It is not uncommon for neighboring landowners and other third parties to file claims for personal injury and property damage allegedly caused by hazardous substances or other pollutants released into the environment. Analogous state laws impose similar responsibilities and liabilities on responsible parties. In our current normal operations, we have generated waste, some of which falls within the statutory definition of a "hazardous substance" and some of which may have been disposed of at sites that may require cleanup under Superfund.

As the ultimate outcomes of the pending matters discussed above are uncertain, we cannot currently estimate the final amount or timing of their resolution, but any such amount is not expected to have a material impact on our financial position, results of operations, or cash flows, individually or in the aggregate.

ITEM 4. MINE SAFETY DISCLOSURES

None.

PART II

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

Market Information

We are a privately-owned company with no established public trading market for our membership units.

Holders

At February 23, 2024, 100% of our outstanding membership interests were held by PBF LLC. PBF Finance had 100 shares of common stock outstanding, all of which were held by us. None of the membership interests are publicly-traded, and none were issued or sold in 2023.

Dividend and Distribution Policy

In cases when there is sufficient cash and cash equivalents and borrowing capacity, we are permitted under our debt agreements to make distributions; however, our ability to make distributions to PBF LLC is, and in the future may be, limited by covenants in our Revolving Credit Facility, the 2028 Senior Notes, the 2030 Senior Notes and other debt instruments. Subject to certain exceptions, the Revolving Credit Facility and the indentures governing the senior notes prohibit us from making distributions to PBF LLC if certain defaults exist. Our ability to continue to comply with our debt covenants is, to a significant degree, subject to our operating results, which are dependent on a number of factors outside of our control.

We are a holding company and all of our operations are conducted through our subsidiaries. We have no independent means of generating revenue other than through assets owned by our subsidiaries. In order for us to make any distributions, we will need to cause our subsidiaries to make distributions to us. We and our subsidiaries are generally prohibited under Delaware law from making a distribution to a member to the extent that, at the time of the distribution, after giving effect to the distribution, liabilities of the limited liability company (with certain exceptions) exceed the fair value of its assets. As a result, we may be unable to obtain cash from our subsidiaries to satisfy our obligations and make distributions to PBF LLC, when necessary.

We make, from time to time, cash distributions in amounts sufficient for PBF LLC to make tax distributions to its members and may make additional distributions to the extent necessary for PBF Energy to declare and pay any quarterly cash dividends. The declaration, amount and payment of this and any other future distributions by us will be at the sole discretion of our board of directors and the board of directors of PBF Energy, which is the sole managing member of our sole member (PBF LLC), and we are not obligated under any applicable laws, governing documents or any contractual agreements with PBF LLC's existing owners or otherwise to declare or pay any dividends or other distributions (other than the obligations of PBF LLC to make tax distributions to its members).

We made $1,582.8 million in distributions to PBF LLC during the year ended December 31, 2023. In addition, during the year ended December 31, 2023 PBF LLC used $106.6 million to make non-tax distributions to its members, of which $105.8 million was distributed to PBF Energy and the balance was distributed to PBF LLC's other members. PBF Energy used this $105.8 million to pay cash dividends of $0.20 per share of its Class A common stock on March 16, 2023, May 31, 2023 and August 31, 2023, and cash dividends of $0.25 per share on November 30, 2023.

ITEM 6. [RESERVED]

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

The following review of our results of operations and financial condition should be read in conjunction with "Item 1. Business", "Item 1A. Risk Factors", "Item 2. Properties", and "Item 8. Financial Statements and Supplementary Data", respectively, included in this Annual Report on Form 10-K.

In this Item 7, we discuss results for the years ended December 31, 2023 and 2022 and comparisons of the results for the years ended December 31, 2023 and 2022. Discussions of results for the year ended December 31, 2021 and comparisons of the results for the years ended December 31, 2022 and 2021 can be found in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7 of the Company's annual report on Form 10-K for the year ended December 31, 2022.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains certain "forward-looking statements" of expected future developments that involve risks and uncertainties. You can identify forward-looking statements because they contain words such as "believes," "expects," "may," "should," "seeks," "approximately," "intends," "plans," "estimates," "anticipates" or similar expressions that relate to our strategy, plans or intentions. All statements we make relating to our estimated and projected earnings, margins, costs, expenditures, cash flows, growth rates and financial results or to our strategies, objectives, intentions, resources and expectations regarding future industry trends are forward-looking statements. In addition, we, through our senior management, from time to time make forward-looking public statements concerning our expected future operations and performance and other developments. These forward-looking statements are subject to risks and uncertainties that may change at any time, and, therefore, our actual results may differ materially from those that we expected. We derive many of our forward-looking statements from our operating budgets and forecasts, which are based on many detailed assumptions. While we believe that our assumptions are reasonable, we caution that it is very difficult to predict the impact of known factors, and, of course, it is impossible for us to anticipate all factors that could affect our actual results.

Important factors that could cause actual results to differ materially from our expectations, which we refer to as "cautionary statements," are disclosed under "Item 1A. Risk Factors," and "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" and elsewhere in this Annual Report on Form 10-K. All forward-looking information in this Annual Report on Form 10-K and subsequent written and oral forward-looking statements attributable to us, or persons acting on our behalf, are expressly qualified in their entirety by the cautionary statements. Some of the factors that we believe could affect our results include:

- supply, demand, prices and other market conditions for our products, or crude oil, including volatility in commodity prices or constraints arising from federal, state or local governmental actions or environmental and/or social activists that reduce crude oil production or availability in the regions in which we operate our pipelines and facilities;
- rate of inflation and its impacts on supply and demand, pricing, and supply chain disruption;
- the effects related to, or resulting from, geopolitical conflict around the world, including Russia's military action in Ukraine, the outbreak of armed hostilities in the middle east and disruptions in international shipping resulting from recent attacks by armed groups on cargo ships in the Red Sea, including the imposition of additional sanctions and export controls, the potential expansion of such conflicts to other nations or regions, as well as the broader impacts to financial markets and the global macroeconomic and geopolitical environment;
- the effectiveness of our crude oil sourcing strategies, including our crude by rail strategy and related commitments;

- our obligation to buy RINs and market risks related to the volatility in the price of RINs required to comply with the RFS and GHG emission credits required to comply with various GHG emission programs, such as AB 32;
- our ability to operate our businesses efficiently, manage capital expenditures and costs (including general and administrative expenses) and generate earnings and cash flow;
- our expectations with respect to our capital spending and turnaround projects;
- the impact of current and future laws, rulings and governmental regulations, including restrictions on the exploration and/or production of crude oil in the state of California, the implementation of rules and regulations regarding transportation of crude oil by rail or in response to the potential impacts of climate change, decarbonization and future energy transition and public policy in opposition to recent refining industry profits;
- adverse impacts related to legislation by the federal government lifting the restrictions on exporting U.S. crude oil or subjecting us to trade and sanctions laws, which change frequently as a result of foreign policy developments, and which may necessitate changes to our crude oil acquisition activities;
- our ability to manage our costs and expenses;
- political pressure and influence of environmental groups and other stakeholders on decisions and policies related to the refining and processing of crude oil and refined products, and the related adverse impacts from changes in our regulatory environment, such as the effects of compliance with AB 32, or from actions taken by environmental interest groups;
- the risk of cyber-attacks;
- our increased dependence on technology;
- the effects of competition in our markets;
- our ability to make acquisitions or investments, including in renewable diesel production, and to realize the benefits from such acquisitions or investments;
- liabilities arising from recent acquisitions or investments, that are unforeseen or exceed our expectations;
- our expectations and timing with respect to our acquisition and investment activity;
- adverse developments in our relationship with both our key employees and unionized employees;
- our indebtedness, including the impact of potential downgrades to our corporate credit rating and/or unsecured notes;
- changes in currency exchange rates, interest rates and capital costs;
- restrictive covenants in our indebtedness that may adversely affect our operational flexibility or ability to make distributions;
- counterparty credit and performance risk exposure related to our supply and inventory intermediation arrangements, if any;
- our assumptions regarding payments arising under PBF Energy's Tax Receivable Agreement and other arrangements relating to PBF Energy;
- the impact of disruptions to crude or feedstock supply to any of our refineries, including disruptions related to PBFX, SBR, or with third-party logistics infrastructure or operations, including pipeline, marine and rail transportation; and
- any decisions we continue to make with respect to our energy-related logistics assets that may be transferred to PBFX.

We caution you that the foregoing list of important factors may not contain all of the material factors that are important to you. In addition, in light of these risks and uncertainties, the matters referred to in the forward-looking statements contained in this Annual Report on Form 10-K may not in fact occur. Accordingly, investors should not place undue reliance on those statements.

Our forward-looking statements speak only as of the date of this Annual Report on Form 10-K. Except as required by applicable law, including the securities laws of the United States, we do not intend to update or revise any forward-looking statements. All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the foregoing.

Executive Summary

Our business operations are conducted by our subsidiaries. We own and operate six domestic oil refineries and related assets located in Delaware City, Delaware, Paulsboro, New Jersey, Toledo, Ohio, Chalmette, Louisiana, Torrance, California and Martinez, California. Our refineries have a combined processing capacity, known as throughput, of approximately 1,000,000 bpd, and a weighted-average Nelson Complexity Index of 12.7 based on current operating conditions. The complexity and throughput capacity of our refineries are subject to change dependent upon configuration changes we make to respond to market conditions as well as a result of investments made to improve our facilities and maintain compliance with environmental and governmental regulations. Our six refineries are all engaged in the refining of crude oil and other feedstocks into petroleum products, and represent one reportable segment.

Factors Affecting Comparability

Our results over the past three years have been affected by the following events, the understanding of which will aid in assessing the comparability of our period to period financial performance and financial condition.

Debt and Credit Facilities

Revolving Credit Facility

On August 23, 2023, we entered into the Revolving Credit Agreement. The Revolving Credit Agreement amended and restated the previously existing revolving credit agreement dated as of May 2, 2018 (as amended from time to time, the "Prior Credit Agreement"). Among other things, the Revolving Credit Agreement extended the Revolving Credit Facility through August 2028 and increased the maximum commitment amount under the facility to $3.5 billion from $2.85 billion. The commitment fees on the unused portion, the interest rate on advances and the fees for letters of credit are generally consistent with the Prior Credit Agreement.

There were no outstanding borrowings under the revolving credit facilities as of December 31, 2023 or December 31, 2022.

Senior Notes

On August 21, 2023, we issued $500.0 million in aggregate principal amount of the 2030 Senior Notes. The net proceeds from this offering were approximately $488.8 million after deducting the initial purchasers' discount and offering expenses. We used the net proceeds, together with cash on hand, to fully redeem the outstanding 7.25% senior unsecured notes due 2025 (the "2025 Senior Notes"), including accrued and unpaid interest, on September 13, 2023.

On September 13, 2023, we exercised our rights under the indenture governing the 2025 Senior Notes to redeem all of the outstanding 2025 Senior Notes at a price of 100% of the aggregate principal amount thereof, plus accrued and unpaid interest through the date of redemption. The aggregate redemption price for all 2025 Senior Notes approximated $664.5 million plus accrued and unpaid interest.

During the year ended December 31, 2022, we exercised our rights under the indenture governing the 9.25% senior secured notes due 2025 (the "2025 Senior Secured Notes") to redeem all of the outstanding 2025 Senior Secured Notes at a price of 104.625% of the aggregate principal amount thereof plus accrued and unpaid interest. The aggregate redemption price for all 2025 Senior Secured Notes approximated $1.3 billion plus accrued and unpaid interest. The difference between the carrying value of the 2025 Senior Secured Notes on the date they were redeemed and the amount for which they were redeemed was $69.9 million and was recorded as a Loss on extinguishment of debt in the Consolidated Statements of Operations.

During the year ended December 31, 2022, we made a number of open market repurchases of our 2028 Senior Notes and our 2025 Senior Notes that resulted in the extinguishment of $24.9 million in principal of the 2028 Senior Notes and $5.0 million in principal of the 2025 Senior Notes. Total cash consideration paid to repurchase the principal amount outstanding of the 2028 Senior Notes and the 2025 Senior Notes, excluding accrued interest, totaled $25.9 million and we recognized a $3.8 million gain on the extinguishment of this debt during the year ended December 31, 2022.

During the year ended December 31, 2021, we made a number of open market repurchases of our 2028 Senior Notes and our 2025 Senior Notes that resulted in the extinguishment of $173.5 million in principal of the 2028 Senior Notes and $55.5 million in principal of the 2025 Senior Notes. Total cash consideration paid to repurchase the principal amount outstanding of the 2028 Senior Notes and the 2025 Senior Notes, excluding accrued interest, totaled $146.8 million and we recognized a $79.9 million gain on the extinguishment of debt during the year ended December 31, 2021.

Catalyst Financing Obligations

During the year ended December 31, 2023, we settled our remaining outstanding precious metal financing arrangement, which represented a reduction of debt of approximately $3.1 million.

During the year ended December 31, 2022, we settled certain of our precious metals financing arrangements, resulting in reductions of debt of approximately $56.2 million.

Refer to "Note 8 - Credit Facilities and Debt" of our Notes to Consolidated Financial Statements, for further information.

Inventory Intermediation Agreement

Prior to 2023, PBF Holding and its subsidiaries, the PBF Entities, entered into the Third Inventory Intermediation Agreement with J. Aron. Pursuant to the Third Inventory Intermediation Agreement, J. Aron purchased and held title to the J. Aron Products purchased or produced by the Refineries and delivered into the Storage Tanks. The J. Aron Products were sold back to us as the J. Aron Products were discharged out of the Storage Tanks.

On June 28, 2023, the PBF Entities entered into a second amendment to the Third Inventory Intermediation Agreement to amend certain provisions in order to allow for the early termination of the Third Inventory Intermediation Agreement effective as of July 31, 2023. In conjunction with this early termination, we made a payment of $268.0 million for the inventory previously held by J. Aron, inclusive of $13.5 million of related costs associated with exiting the agreement.

Distribution of assets

On June 27, 2023, we distributed to PBF LLC, which in turn contributed to St. Bernard Renewables LLC ("SBR"), approximately $748.3 million in assets related to the renewable diesel facility co-located with the Company's Chalmette refinery in Louisiana (the "Renewable Diesel Facility"). We have no interest in SBR, which is jointly owned by a subsidiary of PBF LLC and its partner, Eni Sustainable Mobility US Inc., a subsidiary of Eni SpA. Additionally, we distributed to PBF LLC, which in turn contributed to one of its subsidiaries, Chalmette Refining Service Company LLC ("CRSC"), approximately $103.8 million in assets. The Company has no interest in CRSC, which is owned by PBF LLC.

Land Sales

During the year ended December 31, 2023, we closed on a third-party sale of a parcel of real property acquired as part of the Torrance Refinery, but not part of the refinery itself. The sale resulted in a gain of approximately $1.7 million, included within Gain on sale of assets in the Consolidated Statements of Operations.

East Coast Refining Reconfiguration

In 2022, we restarted several processing units at the Paulsboro refinery, that were temporarily idled in 2020 as part of the East Coast Refining Reconfiguration. Based on this reconfiguration and subsequent restart of several processing units, our East Coast throughput capacity currently approximates 335,000 barrels per day.

Renewable Fuel Standard

We are subject to obligations to purchase RINs required to comply with RFS. Our overall RINs obligation is based on a percentage of domestic shipments of on-road fuels as established by EPA. To the degree we are unable to blend the required amount of biofuels to satisfy our RINs obligation, RINs must be purchased on the open market to avoid penalties and fines. We record our RINs obligation on a net basis in Accrued expenses when our RINs liability is greater than the amount of RINs earned and purchased in a given period and in Prepaid and other current assets when the amount of RINs earned and purchased is greater than the RINs liability. We incurred approximately $762.3 million in RINs costs during the year ended December 31, 2023 as compared to $1,225.5 million and $726.0 million during the years ended December 31, 2022 and 2021, respectively. The fluctuations in RINs costs are due primarily to volatility in prices for ethanol-linked RINs and changes in our production of on-road transportation fuels. Our RINs purchase obligation is dependent on our actual shipment of on-road transportation fuels domestically and the amount of blending achieved.

Agreements with PBFX

PBFX, an indirect wholly-owned subsidiary of PBF Energy and PBF LLC, is a partnership that owns or leases, operates, develops and acquires crude oil, and refined petroleum products terminals, pipelines, storage facilities and similar logistics assets. PBFX engages in the receiving, handling, storage and transferring of crude oil, refined products, natural gas and intermediates from sources located throughout the United States and Canada for us in support of certain of our refineries, as well as for third-party customers.

We have entered into a series of agreements with PBFX, including contribution, commercial and operational agreements. Each of these agreements and their impact to our operations is described in "Item 1. Business" and "Note 9 - Related Party Transactions" of our Notes to Consolidated Financial Statements.

A summary of our affiliate transactions with PBFX is as follows (in millions):

	Year Ended December 31,		
	2023	2022	2021
Reimbursements under affiliate agreements:			
Services Agreement	$ 8.7	$ 8.7	$ 8.7
Omnibus Agreement	7.9	8.3	7.3
Total expenses under affiliate agreements	347.8	319.6	304.1

Factors Affecting Operating Results

Overview

Our earnings and cash flows from operations are primarily affected by the relationship between refined product prices and the prices for crude oil and other feedstocks. The cost to acquire crude oil and other feedstocks and the price of refined products ultimately sold depends on numerous factors beyond our control, including the supply of, and demand for, crude oil, gasoline, diesel and other refined products, which, in turn, depend on, among other factors, changes in global and regional economies, weather conditions, global and regional political affairs, production levels, the availability of imports, the marketing of competitive fuels, pipeline capacity, prevailing exchange rates and the extent of government regulation. Our revenue and income from operations fluctuate significantly with movements in industry refined product prices, our materials cost fluctuate significantly with movements in crude oil prices and our other operating expenses fluctuate with movements in the price of energy to meet the power needs of our refineries. In addition, the effect of changes in crude oil prices on our operating results is influenced by how the prices of refined products adjust to reflect such changes.

Crude oil and other feedstock costs and the prices of refined products have historically been subject to wide fluctuation. Expansion and upgrading of existing facilities and installation of additional refinery distillation or conversion capacity, price volatility, governmental regulations, international political and economic developments and other factors beyond our control are likely to continue to play an important role in refining industry economics. These factors can impact, among other things, the level of inventories in the market, resulting in price volatility and a reduction or increase in product margins. Moreover, the industry typically experiences seasonal fluctuations in demand for refined products, such as for gasoline and diesel, during the summer driving season and for home heating oil during the winter.

Benchmark Refining Margins

In assessing our operating performance, we compare the refining margins (revenue less materials cost) of each of our refineries against a specific benchmark industry refining margin based on crack spreads. Benchmark refining margins take into account both crude and refined product prices. When these prices are combined in a formula they provide a single value—a gross margin per barrel—that, when multiplied by throughput, provides an approximation of the gross margin generated by refining activities.

The performance of our East Coast refineries generally follows the Dated Brent (NYH) 2-1-1 benchmark refining margin. Our Toledo refinery generally follows the WTI (Chicago) 4-3-1 benchmark refining margin. Our Chalmette refinery generally follows the LLS (Gulf Coast) 2-1-1 benchmark refining margin. Our Torrance refinery generally follows the ANS (West Coast) 4-3-1 benchmark refining margin. Our Martinez refinery generally follows the ANS (West Coast) 3-2-1 benchmark refining margin.

While the benchmark refinery margins presented below under "Results of Operations—Market Indicators" are representative of the results of our refineries, each refinery's realized gross margin on a per barrel basis will differ from the benchmark due to a variety of factors affecting the performance of the relevant refinery to its corresponding benchmark. These factors include the refinery's actual type of crude oil throughput, product yield differentials and any other factors not reflected in the benchmark refining margins, such as transportation costs, storage costs, credit fees, fuel consumed during production and any product premiums or discounts, as well as inventory fluctuations, timing of crude oil and other feedstock purchases, a rising or declining crude and product pricing environment and commodity price management activities. As discussed in more detail below, each of our refineries, depending on market conditions, has certain feedstock-cost and product-value advantages and disadvantages as compared to the refinery's relevant benchmark.

Credit Risk Management

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to us. Our exposure to credit risk is reflected in the carrying amount of the receivables that are presented in our Consolidated Balance Sheets. To minimize credit risk, all customers are subject to extensive credit verification procedures and extensions of credit above defined thresholds are to be approved by the senior management. Our intention is to trade only with recognized creditworthy third parties. In addition, receivable balances are monitored on an ongoing basis. We also limit the risk of bad debts by obtaining security such as guarantees or letters of credit.

We continually monitor our market risk exposure for market developments that could introduce significant volatility in the financial markets.

Other Factors

We currently source our crude oil for our refineries on a global basis through a combination of market purchases and short-term purchase contracts, and through our crude oil supply agreements. We believe purchases based on market pricing has given us flexibility in obtaining crude oil at lower prices and on a more accurate "as needed" basis. Since our East Coast refineries access their crude slates from the Delaware River via ship or barge and through our rail facilities at Delaware City, these refineries have the flexibility to purchase crude oils from the Mid-Continent and Western Canada, as well as a number of different countries.

Currently, crude oil delivered by rail is consumed at our East Coast refineries. The PBFX Delaware City rail unloading facilities, and the East Coast Storage Assets, allow our East Coast refineries to source WTI-based crude oils from Western Canada and the Mid-Continent, which we believe, at times, may provide cost advantages versus traditional Brent-based international crude oils. In support of this rail strategy, we have at times entered into agreements to lease or purchase crude railcars. In subsequent periods, we have sold or returned railcars to optimize our railcar portfolio. Our railcar fleet provides transportation flexibility within our crude oil sourcing strategy that allows our East Coast refineries to process cost advantaged crude from Canada and the Mid-Continent.

Our operating cost structure is also important to our profitability. Major operating costs include costs relating to employees and contract labor, energy, maintenance and environmental compliance and emission control regulations, including the cost of RINs required for compliance with RFS. The predominant variable cost is energy, in particular, the price of utilities, natural gas and electricity.

Our operating results are also affected by the reliability of our refinery operations. Unplanned downtime of our refinery assets generally results in lost margin opportunity and increased maintenance expense. The financial impact of planned downtime, such as major turnaround maintenance, is managed through a planning process that considers such things as the margin environment, the availability of resources to perform the needed maintenance and feed logistics, whereas unplanned downtime does not afford us this opportunity.

Refinery-Specific Information

The following section includes refinery-specific information related to our operations, crude oil differentials, ancillary costs, and local premiums and discounts.

East Coast Refining System (Delaware City and Paulsboro Refineries). The benchmark refining margin for the East Coast Refining System is calculated by assuming that two barrels of Dated Brent crude oil are converted into one barrel of gasoline and one barrel of diesel. We calculate this benchmark using the NYH market value of reformulated blendstock for oxygenate blending ("RBOB") and ULSD against the market value of Dated Brent and refer to the benchmark as the Dated Brent (NYH) 2-1-1 benchmark refining margin. The East Coast Refining System has a product slate of approximately 39% gasoline, 35% distillate, 2% high-value Group I lubricants, 1% high-value petrochemicals, with the remaining portion of the product slate comprised of lower-value products (4% LPGs, 15% black oil and 4% other). For this reason, we believe the Dated Brent (NYH) 2-1-1 is an appropriate benchmark industry refining margin. The majority of East Coast refining revenues are generated off NYH-based market prices.

The East Coast Refining System's realized gross margin on a per barrel basis is projected to differ from the Dated Brent (NYH) 2-1-1 benchmark refining margin due to the following factors:

- the system processes a slate of primarily medium and heavy sour crude oils, which has constituted approximately 50% to 75% of total throughput. The remaining throughput consists of sweet crude oil and other feedstocks and blendstocks. In addition, we have the capability to process a significant volume of light, sweet crude oil depending on market conditions. Our total throughput costs have historically priced at a discount to Dated Brent; and

- as a result of the heavy, sour crude slate processed at our East Coast Refining System, we produce lower value products including sulfur, carbon dioxide and petroleum coke. These products are priced at a significant discount to RBOB and ULSD.

- the Paulsboro refinery produces Group I lubricants which carry a premium sales price to RBOB and ULSD, and the black oil is sold as asphalt, which may be sold at a premium or discount to Dated Brent based on the market.

Toledo Refinery. The benchmark refining margin for the Toledo refinery is calculated by assuming that four barrels of WTI crude oil are converted into three barrels of gasoline, one-half barrel of ULSD and one-half barrel of jet fuel. We calculate this refining margin using the Chicago market values of CBOB and ULSD and the United States Gulf Coast value of jet fuel against the market value of WTI and refer to this benchmark as the WTI (Chicago) 4-3-1 benchmark refining margin. Our Toledo refinery has a product slate of approximately 50% gasoline, 37% distillate, 4% high-value petrochemicals (including nonene, tetramer, benzene, xylene and toluene) with the remaining portion of the product slate comprised of lower-value products (4% LPGs and 5% black oil). For this reason, we believe the WTI (Chicago) 4-3-1 is an appropriate benchmark industry refining margin. The majority of Toledo revenues are generated off Chicago-based market prices.

The Toledo refinery's realized gross margin on a per barrel basis has historically differed from the WTI (Chicago) 4-3-1 benchmark refining margin due to the following factors:

- the Toledo refinery processes a slate of domestic sweet and Canadian synthetic crude oil. Historically, Toledo's blended average crude costs have differed from the market value of WTI crude oil;

- the Toledo refinery configuration enables it to produce more barrels of product than throughput which generates a pricing benefit; and

- the Toledo refinery generates a pricing benefit on some of its refined products, primarily its petrochemicals.

Chalmette Refinery. The benchmark refining margin for the Chalmette refinery is calculated by assuming two barrels of LLS crude oil are converted into one barrel of gasoline and one barrel of diesel. We calculate this benchmark using the US Gulf Coast market value of 87 conventional gasoline and ULSD against the market value of LLS and refer to this benchmark as the LLS (Gulf Coast) 2-1-1 benchmark refining margin. Our Chalmette refinery has a product slate of approximately 47% gasoline and 34% distillate, 1% high-value petrochemicals with the remaining portion of the product slate comprised of lower-value products (6% black oil, 5% LPGs, 2% petroleum coke, and 5% other). For this reason, we believe the LLS (Gulf Coast) 2-1-1 is an appropriate benchmark industry refining margin. The majority of Chalmette revenues are generated off Gulf Coast-based market prices.

The Chalmette refinery's realized gross margin on a per barrel basis has historically differed from the LLS (Gulf Coast) 2-1-1 benchmark refining margin due to the following factors:

- the Chalmette refinery has recently processed a slate of primarily light and medium crude oils, which represents approximately 60% to 75% of total throughput. The remaining throughput consists of heavy crude oils and other feedstocks and blendstocks; and

- as a result of the heavy, sour crude slate processed at Chalmette, we produce lower-value products including sulfur and petroleum coke. These products are priced at a significant discount to 87 conventional gasoline and ULSD.

Torrance Refinery. The benchmark refining margin for the Torrance refinery is calculated by assuming that four barrels of ANS crude oil are converted into three barrels of gasoline, one-half barrel of diesel and one-half barrel of jet fuel. We calculate this benchmark using the West Coast Los Angeles market value of California reformulated blendstock for oxygenate blending ("CARBOB"), CARB diesel and jet fuel and refer to the benchmark as the ANS (West Coast) 4-3-1 benchmark refining margin. Our Torrance refinery has a product slate of approximately 54% gasoline and 29% distillate with the remaining portion of the product slate comprised of lower-value products (5% black oil, 2% LPG and 10% other). For this reason, we believe the ANS (West Coast) 4-3-1 is an appropriate benchmark industry refining margin. The majority of Torrance revenues are generated off West Coast Los Angeles-based market prices.

The Torrance refinery's realized gross margin on a per barrel basis has historically differed from the ANS (West Coast) 4-3-1 benchmark refining margin due to the following factors:

- the Torrance refinery has generally processed a slate of primarily heavy sour crude oils, which has historically constituted approximately 65% to 80% of total throughput. The Torrance crude slate has the lowest API gravity (typically an API gravity of less than 20 degrees) of all of our refineries. The remaining throughput consists of other feedstocks and blendstocks; and

- as a result of the heavy, sour crude slate processed at Torrance, we produce lower-value products including petroleum coke and sulfur. These products are priced at a significant discount to gasoline and diesel.

Martinez Refinery. The benchmark refining margin for the Martinez refinery is calculated by assuming that three barrels of ANS crude oil are converted into two barrels of gasoline, one-quarter barrel of diesel and three-quarter barrel of jet fuel. We calculate this benchmark using the West Coast San Francisco market value of CARBOB, CARB diesel and jet fuel and refer to the benchmark as the ANS (West Coast) 3-2-1 benchmark refining margin. Our Martinez refinery has a product slate of approximately 57% gasoline and 31% distillate with the remaining portion of the product slate comprised of lower-value products (4% black oil petroleum coke, 4% LPG and 4% other). For this reason, we believe the ANS (West Coast) 3-2-1 is an appropriate benchmark industry refining margin. The majority of Martinez revenues are generated off West Coast San Francisco-based market prices.

The Martinez refinery's realized gross margin on a per barrel basis has historically differed from the ANS (West Coast) 4-3-1 benchmark refining margin due to the following factors:

- the Martinez refinery has generally processed a slate of primarily heavy sour crude oils, which has historically constituted approximately 45% to 70% of total throughput. The remaining throughput consists of other feedstocks and blendstocks; and

- as a result of the heavy, sour crude slate processed at Martinez, we produce lower-value products including petroleum coke and sulfur. These products are priced at a significant discount to gasoline and CARB diesel.

Results of Operations

The following tables reflect our consolidated financial and operating highlights for the years ended December 31, 2023, 2022 and 2021 (amounts in millions, unless otherwise noted).

	Year Ended December 31,		
	2023	**2022**	**2021**
Revenues	$ 38,288.5	$ 46,780.6	$ 27,202.0
Cost and expenses:			
Cost of products and other	33,000.8	39,350.7	24,114.3
Operating expenses (excluding depreciation and amortization expense as reflected below)	2,581.3	2,495.6	1,999.1
Depreciation and amortization expense	523.9	466.9	415.7
Cost of sales	36,106.0	42,313.2	26,529.1
General and administrative expenses (excluding depreciation and amortization expense as reflected below)	350.2	438.5	226.4
Depreciation and amortization expense	8.5	7.5	13.3
Change in fair value of contingent consideration, net	(45.8)	48.1	29.4
(Gain) loss on sale of assets	(1.3)	0.9	(0.2)
Total cost and expenses	36,417.6	42,808.2	26,798.0
Income from operations	1,870.9	3,972.4	404.0
Other income (expense):			
Interest expense, net	(61.3)	(206.9)	(275.1)
Change in fair value of catalyst obligations	1.1	(2.0)	8.5
(Loss) gain on extinguishment of debt	(5.7)	(66.1)	79.9
Other non-service components of net periodic benefit cost	0.7	8.8	7.8
Income before income taxes	1,805.7	3,706.2	225.1
Income tax expense (benefit)	1.9	(2.7)	(14.0)
Net income	1,803.8	3,708.9	239.1
Less: net income (loss) attributable to noncontrolling interests	0.9	(1.4)	2.3
Net income attributable to PBF Holding Company LLC	$ 1,802.9	$ 3,710.3	$ 236.8
Consolidated gross margin	$ 2,182.5	$ 4,467.4	$ 672.9
Gross refining margin [(1)]	$ 5,287.7	$ 7,429.9	$ 3,087.7

[(1)] See Non-GAAP Financial Measures.

Operating Highlights

	Year Ended December 31,		
	2023	2022	2021
Key Operating Information			
Production (bpd in thousands)	918.3	937.1	852.2
Crude oil and feedstocks throughput (bpd in thousands)	909.4	925.1	834.5
Total crude oil and feedstocks throughput (millions of barrels)	329.0	337.7	304.6
Consolidated gross margin per barrel of throughput	$ 6.63	$ 13.23	$ 2.22
Gross refining margin, excluding special items, per barrel of throughput [1]	$ 16.07	$ 22.00	$ 7.94
Refinery operating expense, per barrel of throughput	$ 7.85	$ 7.39	$ 6.56
Crude and feedstocks (% of total throughput) [2]			
Heavy	27 %	32 %	34 %
Medium	35 %	36 %	31 %
Light	20 %	18 %	18 %
Other feedstocks and blends	18 %	14 %	17 %
Total throughput	100 %	100 %	100 %
Yield (% of total throughput)			
Gasoline and gasoline blendstocks	47 %	47 %	53 %
Distillates and distillate blendstocks	34 %	35 %	30 %
Lubes	1 %	1 %	1 %
Chemicals	1 %	1 %	2 %
Other	18 %	17 %	16 %
Total yield	101 %	101 %	102 %

[1] See Non-GAAP Financial Measures.

[2] We define heavy crude oil as crude oil with an API gravity of less than 24 degrees. We define medium crude oil as crude oil with an API gravity between 24 and 35 degrees. We define light crude oil as crude oil with an API gravity higher than 35 degrees.

The table below summarizes certain market indicators relating to our operating results as reported by Platts, a division of The McGraw-Hill Companies. Effective RIN basket price is recalculated based on information as reported by Argus.

	Year Ended December 31,		
	2023	2022	2021
	(dollars per barrel, except as noted)		
Dated Brent crude oil	$ 82.64	$ 101.27	$ 70.89
West Texas Intermediate (WTI) crude oil	$ 77.67	$ 94.58	$ 68.10
Light Louisiana Sweet (LLS) crude oil	$ 80.14	$ 96.81	$ 69.59
Alaska North Slope (ANS) crude oil	$ 82.36	$ 98.76	$ 70.56
Crack Spreads			
Dated Brent (NYH) 2-1-1	$ 29.67	$ 40.26	$ 16.84
WTI (Chicago) 4-3-1	$ 23.71	$ 31.56	$ 16.34
LLS (Gulf Coast) 2-1-1	$ 29.13	$ 37.56	$ 16.03
ANS (West Coast-LA) 4-3-1	$ 36.88	$ 41.64	$ 20.10
ANS (West Coast-SF) 3-2-1	$ 36.89	$ 41.89	$ 20.55
Crude Oil Differentials			
Dated Brent (foreign) less WTI	$ 4.97	$ 6.68	$ 2.80
Dated Brent less Maya (heavy, sour)	$ 13.71	$ 13.95	$ 6.47
Dated Brent less WTS (sour)	$ 4.99	$ 6.98	$ 2.63
Dated Brent less ASCI (sour)	$ 5.73	$ 9.68	$ 3.90
WTI less WCS (heavy, sour)	$ 18.32	$ 21.30	$ 14.19
WTI less Bakken (light, sweet)	$ (1.28)	$ (4.05)	$ (0.14)
WTI less Syncrude (light, sweet)	$ (0.91)	$ (3.04)	$ 2.25
WTI less LLS (light, sweet)	$ (2.48)	$ (2.22)	$ (1.50)
WTI less ANS (light, sweet)	$ (4.70)	$ (4.17)	$ (2.46)
Effective RIN basket price	$ 7.02	$ 7.66	$ 6.75
Natural gas (dollars per MMBTU)	$ 2.66	$ 6.54	$ 3.73

2023 Compared to 2022

Overview— Our net income was $1,803.8 million for the year ended December 31, 2023 compared to net income of $3,708.9 million for the year ended December 31, 2022.

Our results for the year ended December 31, 2023 were positively impacted by special items consisting of a change in fair value of contingent consideration related to changes in our earn-out obligation associated with the acquisition of the Martinez refinery and logistic assets (the “Martinez Contingent Consideration”) of $45.8 million and a gain on the sale of a parcel of land at our Torrance refinery of $1.7 million, partially offset by a $5.7 million loss on extinguishment of debt related to the redemption of the 2025 Senior Notes and the amendment and restatement of the Revolving Credit Facility, and exit costs associated with the early termination of the Third Inventory Intermediation Agreement of $13.5 million. Our results for the year ended December 31, 2022 were negatively impacted by special items consisting of a net loss on the extinguishment of debt mainly associated with the redemption of our 2025 Senior Secured Notes of $66.1 million and a net change in the fair value of the Martinez Contingent Consideration of $48.1 million.

Excluding the impact of these special items, when comparing our results to the year ended December 31, 2022, we experienced an overall decrease in our refining margins due to unfavorable movements in crack spreads and crude oil differentials, as well as planned and unplanned maintenance, primarily at our West Coast refineries. These decreasing metrics combined with the timing of our maintenance activities have negatively impacted our revenues, gross margin, and operating income in comparison to the prior year. Refined product margins primarily benefited in 2022 from global supply disruptions, caused in large part by the conflict between Russia and Ukraine.

Revenues— Revenues totaled $38.3 billion for the year ended December 31, 2023 compared to $46.8 billion for the year ended December 31, 2022, a decrease of approximately $8.5 billion or 18.2%. Revenues per barrel sold were $100.75 and $123.12 for the years ended December 31, 2023 and 2022, respectively, a decrease of 18.2% directly related to lower hydrocarbon commodity prices. For the year ended December 31, 2023, the total throughput rates at our East Coast, Mid-Continent, Gulf Coast and West Coast refineries averaged approximately 327,600 bpd, 136,400 bpd, 174,200 bpd and 271,200 bpd, respectively. For the year ended December 31, 2022, the total throughput rates at our East Coast, Mid-Continent, Gulf Coast and West Coast refineries averaged approximately 300,300 bpd, 148,500 bpd, 180,700 bpd and 295,600 bpd, respectively. For the year ended December 31, 2023, the total barrels sold at our East Coast, Mid-Continent, Gulf Coast and West Coast refineries averaged approximately 373,700 bpd, 148,700 bpd, 187,300 bpd and 340,800 bpd, respectively. For the year ended December 31, 2022, the total barrels sold at our East Coast, Mid-Continent, Gulf Coast and West Coast refineries averaged approximately 353,800 bpd, 158,200 bpd, 190,600 bpd and 338,400 bpd, respectively.

Overall average throughput rates were lower in the year ended December 31, 2023 due to increased maintenance activity and lower demand compared to the same period in 2022. We plan to continue operating our refineries based on demand and current market conditions. Total refined product barrels sold were slightly higher than throughput rates, reflecting sales from inventory as well as sales and purchases of refined products outside our refineries.

Consolidated gross margin— Consolidated gross margin totaled $2,182.5 million for the year ended December 31, 2023, compared to $4,467.4 million for the year ended December 31, 2022, a decrease of $2,284.9 million. Gross refining margin (as described below in Non-GAAP Financial Measures) totaled $5,287.7 million, or $16.07 per barrel of throughput, for the year ended December 31, 2023 compared to $7,429.9 million, or $22.00 per barrel of throughput, for the year ended December 31, 2022, a decrease of approximately $2,142.2 million. Consolidated gross margin and gross refining margin decreased due to unfavorable movements in crack spreads and crude oil differentials at the majority of our refineries. During the years ended December 31, 2023 and 2022, our margin calculations were not impacted by special items.

Additionally, our results continue to be impacted by significant costs to comply with the RFS. Total RFS compliance costs were $762.3 million for the year ended December 31, 2023 compared to $1,225.5 million for the year ended December 31, 2022.

Average industry margins were unfavorable during the year ended December 31, 2023 compared to the prior year, primarily due to decreased refining margins as a result of unfavorable movements in crack spreads and crude oil differentials at the majority of our refineries.

Favorable movements in these benchmark crude differentials typically result in lower crude costs and positively impact our earnings, while reductions in these benchmark crude differentials typically result in higher crude costs and negatively impact our earnings.

On the East Coast, the Dated Brent (NYH) 2-1-1 industry crack spread was approximately $29.67 per barrel, or 26.3% lower, in the year ended December 31, 2023, as compared to $40.26 per barrel in the same period in 2022. Our margins were positively impacted from our refinery specific slate on the East Coast by strengthened WTI/Bakken differential, which increased by $2.77 per barrel, offset by weakened Dated Brent/Maya differential, which decreased by $0.24 per barrel compared to the same period in 2022. The WTI/WCS differential decreased to $18.32 per barrel in 2023 compared to $21.30 per barrel in 2022, which unfavorably impacted our cost of heavy Canadian crude.

Across the Mid-Continent, the WTI (Chicago) 4-3-1 industry crack spread was $23.71 per barrel, or 24.9% lower, in the year ended December 31, 2023, as compared to $31.56 per barrel in the prior year. Our margins were positively impacted from our refinery specific slate in the Mid-Continent by an increasing WTI/Bakken differential, which averaged a premium of $1.28 per barrel in the year ended December 31, 2023, as compared to a premium of $4.05 per barrel in the prior year. Additionally, the WTI/Syncrude differential averaged a premium of $0.91 per barrel for the year ended December 31, 2023 as compared to a premium of $3.04 per barrel in the prior year.

On the Gulf Coast, the LLS (Gulf Coast) 2-1-1 industry crack spread was $29.13 per barrel, or 22.4% lower, in the year ended December 31, 2023 as compared to $37.56 per barrel in the prior year. Margins on the Gulf Coast were negatively impacted from our refinery specific slate by a weakening WTI/LLS differential, which averaged a premium of $2.48 per barrel for the year ended December 31, 2023 as compared to a premium of $2.22 per barrel in the prior year.

On the West Coast, the ANS (West Coast) 4-3-1 industry crack spread was $36.88 per barrel, or 11.4% lower, in the year ended December 31, 2023 as compared to $41.64 per barrel in the prior year. Additionally, the ANS (West Coast) 3-2-1 industry crack spread was $36.89 per barrel, or 11.9% lower, in the year ended December 31, 2023 as compared to $41.89 per barrel in the prior year. Our margins on the West Coast were negatively impacted from our refinery specific slate by a weakening WTI/ANS differential, which averaged a premium of $4.70 per barrel for the year ended December 31, 2023 as compared to a premium of $4.17 per barrel in the prior year.

Operating expenses— Operating expenses totaled $2,581.3 million, or $7.85 per barrel of throughput, for the year ended December 31, 2023 compared to $2,495.6 million, or $7.39 per barrel of throughput, for the year ended December 31, 2022, an increase of $85.7 million, or 3.4%. The increase in operating expenses was mainly attributable to higher maintenance and operational costs primarily due to unplanned downtime, partially offset by lower energy expenses driven by lower natural gas prices.

General and administrative expenses— General and administrative expenses totaled $350.2 million for the year ended December 31, 2023, compared to $438.5 million for the year ended December 31, 2022, a decrease of $88.3 million or 20.1%. Our general and administrative expenses were lower in comparison to the prior year due to lower employee-related expenses, including lower incentive compensation. General and administrative costs are comprised of personnel, facilities and other infrastructure costs necessary to support our refineries and related logistics assets.

(Gain) loss on sale of assets— There was a net gain of $1.3 million for the year ended December 31, 2023 related primarily to the sale of a parcel of land at our Torrance refinery. There was a loss of $0.9 million for the year ended December 31, 2022 related primarily to the sale of non-operating refinery assets.

Depreciation and amortization expense— Depreciation and amortization expense totaled $532.4 million for the year ended December 31, 2023 (including $523.9 million recorded within Cost of sales) compared to $474.4 million for the year ended December 31, 2022 (including $466.9 million recorded within Cost of sales), an increase of $58.0 million. The increase was a result of a general increase in our fixed asset base due to capital projects and turnarounds completed since the end of the prior year.

Change in fair value of contingent consideration, net— Change in fair value of contingent consideration represented a gain of $45.8 million and a loss of $48.1 million for the years ended December 31, 2023 and December 31, 2022, respectively. These gains and losses were related to changes in the estimated fair value of the Martinez Contingent Consideration.

Change in fair value of catalyst obligations— Change in fair value of catalyst obligations represented a gain of $1.1 million for the year ended December 31, 2023, compared to a loss of $2.0 million for the year ended December 31, 2022. These gains and losses relate to the change in fair value of the precious metals underlying the sale and leaseback of our refineries' precious metal catalysts, which we were obligated to repurchase at fair market value upon lease termination.

(Loss) gain on extinguishment of debt— There was a loss on extinguishment of debt of $5.7 million in the year ended December 31, 2023, related to the redemption of the 2025 Senior Notes and the amendment and restatement of the Revolving Credit Agreement. There was a loss on extinguishment of debt of $66.1 million incurred in the year ended December 31, 2022 related to the redemption of all of the outstanding 2025 Senior Secured Notes, slightly offset by a gain related to the repurchase of a portion of each of the 2028 Senior Notes and 2025 Senior Notes.

Interest expense, net— Interest expense totaled $61.3 million for the year ended December 31, 2023, compared to $206.9 million for the year ended December 31, 2022, a decrease of $145.6 million. The net decrease is mainly attributable to the redemption of the 2025 Senior Secured Notes during the third quarter of 2022, and the redemption of the 2025 Senior Notes in the third quarter of 2023, and the offering of our 2030 Senior Notes during the third quarter of 2023 at a reduced principal amount, as well as no outstanding balance on our Revolving Credit Facility. Additionally, the early termination of the Third Inventory Intermediation Agreement in 2023 further reduced our interest expense. There was also a $51.8 million increase in interest income earned during the year ended December 31, 2023 driven by higher interest rates in comparison to the prior year. Interest expense includes interest on long-term debt, costs related to the sale and leaseback of our precious metal catalysts, financing costs and subsequent one-time exit costs of $13.5 million associated with the Third Inventory Intermediation Agreement with J. Aron, which was terminated effective as of July 31, 2023, letter of credit fees associated with the purchase of certain crude oils and the amortization of deferred financing costs.

Income tax expense (benefit)— As we are a limited liability company treated as a "flow-through" entity for income tax purposes, our consolidated financial statements generally do not include a benefit or expense for income taxes for the years ended December 31, 2023 and 2022, respectively, apart from the income tax attributable to two subsidiaries acquired in connection with the acquisition of our Chalmette refinery and our wholly-owned Canadian subsidiary, PBF Energy Limited ("PBF Ltd."). These subsidiaries are treated as C-Corporations for income tax purposes. Income tax expense of $1.9 million was recorded for the year ended December 31, 2023 in comparison to an income tax benefit of $2.7 million recorded for the year ended December 31, 2022, primarily attributable to the results of PBF Ltd.

Non-GAAP Financial Measures

Management uses certain financial measures to evaluate our operating performance that are calculated and presented on the basis of methodologies other than in accordance with GAAP ("Non-GAAP"). These measures should not be considered a substitute for, or superior to, measures of financial performance prepared in accordance with GAAP, and our calculations thereof may not be comparable to similarly entitled measures reported by other companies.

Special Items

The Non-GAAP measures presented include gross refining margin excluding special items, and EBITDA excluding special items. Special items for the periods presented relate to LCM inventory adjustment, net changes in fair value of contingent consideration, loss (gain) on extinguishment of debt, and gain on land sales. See "Notes to Non-GAAP Financial Measures" below for more details on all special items disclosed. Although we believe that Non-GAAP financial measures, excluding the impact of special items, provide useful supplemental information to investors regarding the results and performance of our business and allow for helpful period-over-period comparisons, such Non-GAAP measures should only be considered as a supplement to, and not as a substitute for, or superior to, the financial measures prepared in accordance with GAAP.

Gross Refining Margin and Gross Refining Margin Excluding Special Items

Gross refining margin is defined as consolidated gross margin excluding refinery depreciation and operating expense related to the refineries. We believe both gross refining margin and gross refining margin excluding special items are important measures of operating performance and provide useful information to investors because they are helpful metric comparisons to the industry refining margin benchmarks, as the refining margin benchmarks do not include a charge for refinery operating expenses and depreciation. In order to assess our operating performance, we compare our gross refining margin (revenues less cost of products and other) to industry refining margin benchmarks and crude oil prices as defined in the table below.

Neither gross refining margin nor gross refining margin excluding special items should be considered an alternative to consolidated gross margin, income from operations, net cash flows from operating activities or any other measure of financial performance or liquidity presented in accordance with GAAP. Gross refining margin and gross refining margin excluding special items presented by other companies may not be comparable to our presentation, since each company may define these terms differently.

The following table presents our GAAP calculation of gross margin and a reconciliation of gross refining margin to the most directly comparable GAAP financial measure, consolidated gross margin, on a historical basis, as applicable, for each of the periods indicated (in millions, except per barrel amounts):

	Year Ended December 31,					
	2023		2022		2021	
	$	per barrel of throughput	$	per barrel of throughput	$	per barrel of throughput
Calculation of consolidated gross margin:						
Revenues	$ 38,288.5	$ 116.37	$ 46,780.6	$ 138.55	$ 27,202.0	$ 89.30
Less: Cost of sales	36,106.0	109.74	42,313.2	125.32	26,529.1	87.08
Consolidated gross margin	$ 2,182.5	$ 6.63	$ 4,467.4	$ 13.23	$ 672.9	$ 2.22
Reconciliation of consolidated gross margin to gross refining margin:						
Consolidated gross margin	$ 2,182.5	$ 6.63	$ 4,467.4	$ 13.23	$ 672.9	$ 2.22
Add: Refinery operating expense	2,581.3	7.85	2,495.6	7.39	1,999.1	6.56
Add: Refinery depreciation expense	523.9	1.59	466.9	1.38	415.7	1.36
Gross refining margin	$ 5,287.7	$ 16.07	$ 7,429.9	$ 22.00	$ 3,087.7	$ 10.14
Special Items: [1]						
Add: LCM inventory adjustment	—	—	—	—	(669.6)	(2.20)
Gross refining margin excluding special items	$ 5,287.7	$ 16.07	$ 7,429.9	$ 22.00	$ 2,418.1	$ 7.94

See Notes to Non-GAAP Financial Measures.

EBITDA, EBITDA Excluding Special Items and Adjusted EBITDA

Our management uses earnings before interest, income taxes, depreciation and amortization ("EBITDA"), EBITDA excluding special items and Adjusted EBITDA as measures of operating performance to assist in comparing performance from period to period on a consistent basis and to readily view operating trends, as a measure for planning and forecasting overall expectations and for evaluating actual results against such expectations, and in communications with our Board of Directors, creditors, analysts and investors concerning our financial performance. Our outstanding indebtedness for borrowed money and other contractual obligations also include similar measures as a basis for certain covenants under those agreements which may differ from the Adjusted EBITDA definition described below.

EBITDA, EBITDA excluding special items and Adjusted EBITDA are not presentations made in accordance with GAAP and our computation of EBITDA, EBITDA excluding special items and Adjusted EBITDA may vary from others in our industry. In addition, Adjusted EBITDA contains some, but not all, adjustments that are taken into account in the calculation of the components of various covenants in the agreements governing our senior notes and other credit facilities. EBITDA, EBITDA excluding special items and Adjusted EBITDA should not be considered as alternatives to income from operations or net income as measures of operating performance. In addition, EBITDA, EBITDA excluding special items and Adjusted EBITDA are not presented as, and should not be considered, an alternative to cash flows from operations as a measure of liquidity. Adjusted EBITDA is defined as EBITDA before adjustments for items such as stock-based compensation expense, change in the fair value of catalyst obligations, the write down of inventory to the LCM, net change in the fair value of contingent consideration, gain on land sales, loss (gain) on extinguishment of debt and certain other non-cash items.

Other companies, including other companies in our industry, may calculate EBITDA, EBITDA excluding special items and Adjusted EBITDA differently than we do, limiting their usefulness as comparative measures. EBITDA, EBITDA excluding special items and Adjusted EBITDA also have limitations as analytical tools and should not be considered in isolation, or as a substitute for analysis of our results as reported under GAAP. Some of these limitations include that EBITDA, EBITDA excluding special items and Adjusted EBITDA:

- do not reflect depreciation expense or our cash expenditures, or future requirements, for capital expenditures or contractual commitments;
- do not reflect changes in, or cash requirements for, our working capital needs;
- do not reflect our interest expense, or the cash requirements necessary to service interest or principal payments, on our debt;
- do not reflect realized and unrealized gains and losses from certain hedging activities, which may have a substantial impact on our cash flow;
- do not reflect certain other non-cash income and expenses; and
- exclude income taxes that may represent a reduction in available cash.

The following tables reconcile net income as reflected in our results of operations to EBITDA, EBITDA excluding special items and Adjusted EBITDA for the periods presented (in millions):

	Year Ended December 31,		
	2023	2022	2021
Reconciliation of net income to EBITDA and EBITDA excluding special items:			
Net income	$ 1,803.8	$ 3,708.9	$ 239.1
Add: Depreciation and amortization expense	532.4	474.4	429.0
Add: Interest expense, net	61.3	206.9	275.1
Add: Income tax expense (benefit)	1.9	(2.7)	(14.0)
EBITDA	$ 2,399.4	$ 4,387.5	$ 929.2
Special Items: [1]			
Add: LCM inventory adjustment	—	—	(669.6)
Add: Change in fair value of contingent consideration, net	(45.8)	48.1	29.4
Add: Gain on land sales	(1.7)	—	—
Add: Loss (gain) on extinguishment of debt	5.7	66.1	(79.9)
EBITDA excluding special items	$ 2,357.6	$ 4,501.7	$ 209.1
Reconciliation of EBITDA to Adjusted EBITDA:			
EBITDA	$ 2,399.4	$ 4,387.5	$ 929.2
Add: Stock based compensation	51.5	44.1	30.3
Add: Change in fair value of catalyst obligations	(1.1)	2.0	(8.5)
Add: LCM inventory adjustment [1]	—	—	(669.6)
Add: Change in fair value of contingent consideration, net [1]	(45.8)	48.1	29.4
Add: Gain on land sales [1]	(1.7)	—	—
Add: Loss (gain) on extinguishment of debt [1]	5.7	66.1	(79.9)
Adjusted EBITDA	$ 2,408.0	$ 4,547.8	$ 230.9

See Notes to Non-GAAP Financial Measures.

Notes to Non-GAAP Financial Measures

The following notes are applicable to the Non-GAAP Financial Measures above:

(1) Special items:

LCM Inventory Adjustment - LCM is a GAAP requirement related to inventory valuation that mandates inventory to be stated at the lower of cost or market. Our inventories are stated at the lower of cost or market. Cost is determined using the LIFO inventory valuation methodology, in which the most recently incurred costs are charged to cost of sales and inventories are valued at base layer acquisition costs. Market is determined based on an assessment of the current estimated replacement cost and net realizable selling price of the inventory. In periods where the market price of our inventory declines substantially, cost values of inventory may exceed market values. In such instances, we record an adjustment to write down the value of inventory to market value in accordance with GAAP. In subsequent periods, the value of inventory is reassessed, and an LCM inventory adjustment is recorded to reflect the net change in the LCM inventory reserve between the prior period and the current period. The net impact of these LCM inventory adjustments is included in income from operations, but are excluded from the operating results presented, as applicable, in order to make such information comparable between periods.

The following table includes the LCM inventory reserve as of each date presented (in millions):

	2023	2022	2021
January 1,	$ —	$ —	$ 669.6
December 31,	—	—	—

The following table includes the corresponding impact of changes in the LCM inventory reserve on income from operations and net income for the periods presented (in millions):

	Year Ended December 31,		
	2023	2022	2021
Net LCM inventory adjustment benefit in both income from operations and net income	$ —	$ —	$ 669.6

Change in fair value of contingent consideration, net - During the year ended December 31, 2023, we recorded a net change in fair value of the Martinez Contingent Consideration, which increased income from operations and net income by $45.8 million. During the year ended December 31, 2022, we recorded a net change in fair value of the Martinez Contingent Consideration, offset by the recognition of contingent assets associated with the acquisition. These changes in estimate decreased income from operations and net income by $48.1 million. During the year ended December 31, 2021, we recorded a change in fair value of the Martinez Contingent Consideration, which decreased income from operations and net income by $29.4 million.

Loss (gain) on extinguishment of debt - During the year ended December 31, 2023, we recorded a loss on extinguishment of debt related to the redemption of our 2025 Senior Notes and the amendment and restatement of the Revolving Credit Facility, which decreased income before income taxes and net income by $5.7 million. During the year ended December 31, 2022, we recorded a loss on extinguishment of debt related to the redemption of the 2025 Senior Secured Notes, partially offset by the gain recognized on the repurchase of a portion of each of the 2028 Senior Notes and the 2025 Senior Notes, which decreased income before income taxes and net income by $66.1 million. During the year ended December 31, 2021, we recorded a gain on extinguishment of debt related to the repurchase of a portion of each of the 2028 Senior Notes and the 2025 Senior Notes, which increased net income by $79.9 million.

Gain on land sales - During the year ended December 31, 2023, we recorded a gain on the sale of a separate parcel of real property acquired as part of the Torrance refinery, but not part of the refinery itself, which increased income from operations and net income by $1.7 million. There were no such gains in the years ended December 31, 2022 and December 31, 2021.

Liquidity and Capital Resources

Overview

Our primary sources of liquidity are our cash flows from operations, cash and cash equivalents and borrowing availability under our credit facility, as described below. We believe that our cash flows from operations and available capital resources will be sufficient to meet our and our subsidiaries' capital expenditures, working capital needs, future distributions and debt service requirements for the next twelve months. However, our ability to generate sufficient cash flow from operations depends, in part, on petroleum oil market pricing and general economic, political and other factors beyond our control. As of December 31, 2023, we are in compliance with all covenants, including financial covenants, in all our debt agreements.

Cash Flow Analysis

Cash Flows from Operating Activities

Net cash provided by operating activities was $1,478.0 million for the year ended December 31, 2023 compared to net cash provided by operating activities of $4,696.2 million for the year ended December 31, 2022. Our operating cash flows for the year ended December 31, 2023 included our net income of $1,803.8 million, depreciation and amortization of $551.6 million, stock-based compensation of $51.5 million, pension and other post-retirement benefit costs of $47.9 million, loss on extinguishment of debt primarily related to the redemption of our 2025 Senior Notes and the amendment and restatement of the Revolving Credit Facility of $5.7 million, and deferred income tax benefit of $3.7 million, partially offset by net change in the fair value of contingent consideration of $45.8 million, gain on sale of assets of $1.3 million and a change in the fair value of our catalyst obligations of $1.1 million. In addition, net changes in operating assets and liabilities reflected uses of cash of $938.0 million, driven by inventory purchases and payments for accrued expenses. The change in accrued expenses was due primarily to a decrease in renewable energy and emissions obligations, as a result of a decrease in our unfunded RINs obligation.

Our operating cash flows for the year ended December 31, 2022 included our net income of $3,708.9 million and net changes in operating assets and liabilities reflecting cash proceeds of $291.5 million, primarily driven by timing of payments for accrued expenses. Change in accrued expenses was due primarily to an increase in renewable energy credit and emissions obligations, as a result of an increase in our unfunded RINs obligation as of December 31, 2022. Our overall increase in cash provided by operating activities also included depreciation and amortization of $495.6 million, loss on extinguishment of debt primarily related to the redemption of our 2025 Senior Secured Notes of $66.1 million, net change in the fair value of contingent consideration of $48.1 million, pension and other post-retirement benefit costs of $47.6 million, stock-based compensation of $44.1 million, change in the fair value of our catalyst obligations of $2.0 million, and loss on sale of assets of $0.9 million, partially offset by a non-cash charges related to the change in the fair value of our inventory repurchase obligations of $5.4 million and deferred income taxes of $3.2 million.

Net cash provided by operating activities was $4,696.2 million for the year ended December 31, 2022 compared to net cash provided by operating activities of $292.3 million for the year ended December 31, 2021. Our operating cash flows for the year ended December 31, 2021 included our net income of $239.1 million, depreciation and amortization of $444.3 million, net changes in operating assets and liabilities reflected cash proceeds of $279.5 million driven by accrued expenses due to an increase in renewable energy credit and emissions obligations, as a result of an increase in our unfunded RIN's obligations as of December 31, 2021, pension and other post-retirement benefits costs of $50.8 million, stock-based compensation of $30.3 million, and change in the fair value of contingent consideration of $29.4 million, partially offset by a non-cash benefit of $669.6 million related to an LCM inventory adjustment, gain on extinguishment of debt related to the repurchase of a portion of our 2028 Senior Notes and 2025 Senior Notes of $79.9 million, deferred income taxes of $14.5 million, change in the fair value of our catalyst obligations of $8.5 million, net non-cash charges related to the change in the fair value of our inventory repurchase obligations of $8.4 million, and gain on sale of assets of $0.2 million.

Cash Flows from Investing Activities

Net cash used in investing activities was $1,157.3 million for the year ended December 31, 2023 compared to $1,003.0 million for the year ended December 31, 2022. The net cash flows used in investing activities for the year ended December 31, 2023 was comprised of capital expenditures totaling $647.7 million, expenditures for refinery turnarounds of $473.5 million, and expenditures for other assets of $40.5 million, partially offset by proceeds from the sale of assets of $4.4 million. Net cash used in investing activities for the year ended December 31, 2022 was comprised of capital expenditures totaling $625.4 million, expenditures for refinery turnarounds of $311.6 million and expenditures for other assets of $66.0 million.

Net cash used in investing activities was $1,003.0 million for the year ended December 31, 2022 compared to $387.1 million for the year ended December 31, 2021. Net cash used in investing activities for the year ended December 31, 2021 was comprised of capital expenditures totaling $240.5 million, expenditures for refinery turnarounds of $117.7 million, and expenditures for other assets of $28.9 million.

Cash Flows from Financing Activities

Net cash used in financing activities was $713.8 million for the year ended December 31, 2023 compared to net cash used in financing activities of $2,845.0 million for the year ended December 31, 2022. For the year ended December 31, 2023, net cash used in financing activities consisted primarily of distributions to members of $1,583.7 million, redemption of our 2025 Senior Notes of $666.2 million, payments related to the Martinez Contingent Consideration of $80.1 million, deferred financing costs and other costs of $35.8 million, payments on finance leases of $14.1 million, and settlement of the final precious metal catalyst obligation of $3.1 million, partially offset by contributions from PBF LLC of $1,159.6 million, cash proceeds of $496.6 million from the issuance of the 2030 Senior Notes, and proceeds from insurance premium financing of $13.0 million. For the year ended December 31, 2022, net cash used in financing activities consisted of the redemption of the 2025 Senior Secured Notes of $1,307.4 million, net repayments on the Revolving Credit Facility of $900.0 million, distributions to members of $571.4 million, net settlements of precious metal catalyst obligations of $56.2 million, deferred financing costs and other costs of $31.3 million, $25.9 million related to the repurchase of the principal amount outstanding of the 2028 Senior Notes and the 2025 Senior Notes, excluding accrued interest, and payments on finance leases of $11.3 million, partially offset by proceeds from contributions from PBF LLC of $56.4 million, and proceeds from insurance premium financing of $2.1 million.

Net cash used in financing activities was $2,845.0 million for the year ended December 31, 2022 compared to net cash used in financing activities of $169.6 million for the year ended December 31, 2021. For the year ended December 31, 2021, net cash used in financing activities consisted of $146.8 million related to the repurchase of the principal amount outstanding of the 2028 Senior Notes and the 2025 Senior Notes, excluding accrued interest, net settlements of precious metal catalyst obligations of $31.7 million, payments on finance leases of $17.8 million, principal amortization payments of the PBF Rail Term Loan of $7.4 million, distributions to members of $3.4 million, partially offset by proceeds from contributions from PBF LLC of $37.0 million, and deferred financing costs and other of $0.5 million.

Capitalization

Our capital structure was comprised of the following as of December 31, 2023 (in millions):

	December 31, 2023
Debt: [1]	
2028 Senior Notes	$ 801.6
2030 Senior Notes	500.0
Total debt	1,301.6
Unamortized deferred financing costs	(52.5)
Unamortized discount	(3.2)
Total debt, net of unamortized deferred financing costs and discount	1,245.9
Total Equity	6,161.8
Total Capitalization [2]	$ 7,407.7

[1] Refer to "Note 8 - Credit Facilities and Debt" of our Notes to Consolidated Financial Statements for further disclosure related to debt.

[2] Total Capitalization refers to the sum of debt plus total equity.

2023 Debt Related Transactions

Senior Notes

On September 13, 2023, we exercised our rights under the indenture governing the 2025 Senior Notes to redeem all of the outstanding 2025 Senior Notes at a price of 100% of the aggregate principal amount thereof, plus accrued and unpaid interest through the date of redemption. The aggregate redemption price for all 2025 Senior Notes approximated $664.5 million plus accrued and unpaid interest.

On August 21, 2023, we issued $500.0 million in aggregate principal amount of the 2030 Senior Notes. The net proceeds from this offering were approximately $488.8 million after deducting the initial purchasers' discount and offering expenses. We used the net proceeds, together with cash on hand, to fully redeem the outstanding 2025 Senior Notes, as described above.

Revolving Credit Facility

On August 23, 2023, we entered into the Revolving Credit Agreement. The Revolving Credit Agreement amended and restated the Prior Credit Agreement. Among other things, the Revolving Credit Agreement extended the Revolving Credit Facility through August 2028 and increased the maximum commitment amount under the facility to $3.5 billion from $2.85 billion. The commitment fees on the unused portion, the interest rate on advances and the fees for letters of credit are generally consistent with the Prior Credit Agreement.

Precious metal catalyst obligations

During 2023, we also settled our remaining outstanding precious metals financing arrangement, resulting in a reduction of debt of approximately $3.1 million.

Refer to "Note 8 – Credit Facilities and Debt" of our Notes to Consolidated Financial Statements, for further information.

Revolving Credit Facility Overview

One of our primary sources of liquidity is available borrowings capacity under our Revolving Credit Facility, which had the following available capacity at December 31, 2023 (in millions):

	Total Commitment	Amount Borrowed as of December 31, 2023	Outstanding Letters of Credit	Borrowing Base Availability	Expiration Date
Revolving Credit Facility [(a)]	$ 3,500.0	$ —	$ 55.0	$ 3,445.0	August 2028

(a) The amount available for borrowings and letters of credit under the Revolving Credit Facility is calculated according to a "borrowing base" formula based on (i) 90% of the book value of Eligible Accounts with respect to investment grade obligors plus (ii) 85% of the book value of Eligible Accounts with respect to non-investment grade obligors plus (iii) 80% of the cost of Eligible Hydrocarbon Inventory plus (iv) 100% of Cash and Cash Equivalents in deposit accounts subject to a control agreement, in each case as defined in the Revolving Credit Agreement. The borrowing base is subject to customary reserves and eligibility criteria and in any event cannot exceed $3.5 billion.

Additional Information on Indebtedness

Our debt, including our Revolving Credit Facility and senior notes, include certain typical financial covenants and restrictions on our subsidiaries' ability to, among other things, incur or guarantee new debt, engage in certain business activities including transactions with affiliates and asset sales, make investments or distributions, engage in mergers or pay dividends in certain circumstances. These covenants are subject to a number of important exceptions and qualifications. We are in compliance as of December 31, 2023 with all covenants, including financial covenants, in all of our debt agreements. For further discussion of our indebtedness and these covenants and restrictions, see "Note 8 - Credit Facilities and Debt" of our Notes to Consolidated Financial Statements.

Liquidity

As of December 31, 2023, our operational liquidity was more than $4.6 billion (more than $4.9 billion as of December 31, 2022), which consists of $1.8 billion of cash and more than $2.8 billion of borrowing availability under our Revolving Credit Facility, which includes our cash on hand.

We may incur additional indebtedness in the future, including secured indebtedness, subject to the satisfaction of any debt incurrence and, if applicable, lien incurrence limitation covenants in our existing financing agreements. Although we were in compliance with incurrence covenants during the year ended December 31, 2023, there are no assurances in the future we will be able to meet these incurrence covenants at the time that we needed to. Failure to meet the incurrence covenants could impose certain incremental restrictions on, among other matters, our ability to incur new debt (including secured debt) and also may limit the extent to which we may make future distributions, make acquisitions or investments, repurchase our outstanding debt or incur new liens.

Working Capital

Our working capital at December 31, 2023 was approximately $2,184.0 million, consisting of $6,480.3 million in total current assets and $4,296.3 million in total current liabilities. Our working capital at December 31, 2022 was $1,715.3 million, consisting of $6,494.5 million in total current assets and $4,779.2 million in total current liabilities.

Crude and Feedstock Supply Agreements

We currently purchase all of our crude and feedstock needs from various suppliers, primarily through short-term and spot market agreements. We also have a crude supply agreement with Saudi Aramco, the term of which is currently year to year, for up to approximately 100,000 bpd that is processed at the Paulsboro refinery and crude supply agreements with Shell Trading (US) Company (primarily serving our Martinez refinery) for up to approximately 95,000 bpd, which, upon expiration of one of the agreements in early 2024, will be reduced to up to approximately 65,000 bpd, through early 2025.

Inventory Intermediation Agreement

On July 31, 2023, we early terminated the Third Inventory Intermediation Agreement with J. Aron. In conjunction with the early termination, we made an aggregate settlement payment of $268.0 million for the inventory previously held by J. Aron, inclusive of $13.5 million of related costs associated with exiting the agreement.

Capital Spending

Capital spending was $1,161.7 million for the year ended December 31, 2023 and was primarily comprised of annual maintenance and turnaround costs at our Delaware City, Toledo, Chalmette, Torrance and Martinez refineries and spending related to the construction of the Renewable Diesel Facility co-located with our Chalmette refinery of approximately $312.7 million. Capital spending also included costs associated with safety related enhancements and facility improvements at our refineries. We currently expect to spend an aggregate of approximately $800.0 million to $850.0 million in 2024 for facility improvements and refinery maintenance and turnarounds, as well as expenditures to meet environmental, regulatory and safety requirements.

Material Cash Requirements

Our material cash requirements include the following known contractual and other obligations as of December 31, 2023 that are expected to be paid within the next year and thereafter (in millions).

	Payments Due by Period		
	Short-Term	**Long-Term**	**Total**
Credit facilities and debt [(a)]	$ —	$ 1,301.6	$ 1,301.6
Interest payments on credit facilities and debt	91.8	409.8	501.6
Leases and other rental-related commitments [(b)]	515.4	2,212.4	2,727.8
Purchase obligations [(c)]	5,840.8	624.6	6,465.4
Minimum volume commitments with PBFX [(d)]	110.6	102.5	213.1
Construction obligations	143.5	—	143.5
Environmental obligations [(e)]	15.3	149.5	164.8
Pension and post-retirement obligations [(f)]	32.0	365.1	397.1
Total material cash requirements	$ 6,749.4	$ 5,165.5	$ 11,914.9

(a) Credit facilities and debt

Credit facilities and debt represent the repayment of indebtedness incurred in connection with the 2030 Senior Notes and 2028 Senior Notes; we have no debt maturing before 2025.

Refer to "Note 8 - Credit Facilities and Debt" of our Notes to Consolidated Financial Statements for further disclosure related to debt.

(b) Leases and other rental-related commitments

Third Party and affiliate operating and finance lease obligations include options to extend terms that are reasonably certain of being exercised. We have entered into certain agreements for the supply of hydrogen that contain both lease and non-lease components. The table above also includes such non-lease components of these agreements. See "Note 11 - Leases" of our Notes to Consolidated Financial Statements for further details and disclosures regarding our operating and finance lease obligations.

We also enter into contractual obligations with third parties for the right to use property for locating pipelines and accessing certain of our assets (also referred to as land easements) in the normal course of business. Our obligations regarding such land easements are included within Leases and other rental-related commitments in the table above.

(c) Purchase obligations

Purchase obligations include commitments to purchase crude oil from certain counterparties under supply agreements, contracts for the transportation of crude oil and supply of hydrogen, nitrogen, oxygen, chemicals, steam, or natural gas to certain of our refineries, contracts for the treatment of wastewater, contracts for pipeline capacity, and forward purchase commitments to acquire AB 32, RINs or LCFS credits from third parties.

(d) Minimum volume commitments with PBFX

We have minimum obligations under our commercial agreements entered into with PBFX. Refer to "Note 9 - Related Party Transactions" and "Note 10 - Commitments and Contingencies" of our Notes to the Consolidated Financial Statements for a detailed explanation of each of these agreements and quantification of minimum amounts due in subsequent periods, respectively.

Included in the table above are our obligations related to the minimum volume commitments required under these commercial agreements that were determined to not be leases under GAAP. Any incremental volumes above any minimum throughput under these agreements would increase our obligations. Our obligation with respect to certain crude oil and refined product storage agreements is based on the estimated shell capacity of the storage tanks to be utilized.

(e) Environmental obligations

In connection with certain of our refinery acquisitions, we have assumed certain environmental remediation obligations to address matters that were outstanding at the time of such acquisitions. In addition, in connection with most of these acquisitions, we have purchased environmental insurance policies to insure against unknown environmental liabilities at each site. The obligations in the table above reflect our undiscounted best estimate in cost and tenure to remediate our outstanding obligations and are further discussed in "Note 10 - Commitments and Contingencies" of our Notes to Consolidated Financial Statements.

(f) Pension and post-retirement obligations

Pension and post-retirement obligations include only those amounts we expect to pay out in benefit payments and are further explained in "Note 14 - Employee Benefit Plans" of our Notes to Consolidated Financial Statements.

Critical Accounting Policies

The following summary provides further information about our critical accounting policies that involve critical accounting estimates and should be read in conjunction with "Note 2 - Summary of Significant Accounting Policies" of our Notes to Consolidated Financial Statements. The following accounting policies involve estimates that are considered critical due to the level of subjectivity and judgment involved, as well as the impact on our financial position and results of operations. We believe that all of our estimates are reasonable. Unless otherwise noted, estimates of the sensitivity to earnings that would result from changes in the assumptions used in determining our estimates is not practicable due to the number of assumptions and contingencies involved, and the wide range of possible outcomes.

Inventory

Inventories are carried at the lower of cost or market. The cost of crude oil, feedstocks, blendstocks and refined products is determined under the LIFO method using the dollar value LIFO method with increments valued based on average cost during the year. The cost of supplies and other inventories is determined principally on the weighted average cost method. In addition, the use of the LIFO inventory method may result in increases or decreases to cost of sales in years that inventory volumes decline as the result of charging cost of sales with LIFO inventory costs generated in prior periods. At December 31, 2023 and December 31, 2022 the replacement value of inventories exceeded the LIFO carrying value. The LCM or market inventory valuation reserve, or a portion thereof, is subject to reversal as a reduction to cost of products sold in subsequent periods as inventories giving rise to the reserve are sold, and a new reserve is established. Such a reduction to cost of products sold could be significant if inventory values return to historical cost price levels. Additionally, further decreases in overall inventory values could result in additional charges to cost of products sold should the LCM or market inventory valuation reserve be increased.

Environmental Matters

Liabilities for future clean-up costs are recorded when environmental assessments and/or clean-up efforts are probable, and the costs can be reasonably estimated. Other than for periodic assessments, the timing and magnitude of these accruals generally are based on the completion of investigations or other studies or a commitment to a formal plan of action. Environmental liabilities are based on best estimates of probable future costs using currently available technology and applying current regulations, as well as our own internal environmental policies. The actual settlement of our liability for environmental matters could materially differ from our estimates due to a number of uncertainties such as the extent of contamination, changes in environmental laws and regulations, potential improvements in remediation technologies and the participation of other responsible parties. While we believe that our current estimates of the amounts and timing of the costs related to the remediation of these liabilities are reasonable, it is possible that our estimates of the costs and duration of the environmental remediation activities related to these liabilities could materially change.

Impairment of Long-Lived Assets

We evaluate long-lived assets for impairment on a continual basis and reassess the reasonableness of their related useful lives whenever events or changes in circumstances warrant assessment. Possible triggering events may include, among other things, significant adverse changes in the business climate, market conditions, environmental regulations or a determination that it is more likely than not that an asset or an asset group will be sold or retired before its estimated useful life. These possible triggering events of impairment may impact our assumptions related to future throughput levels, future operating revenues, expenses and gross margin, levels of anticipated capital expenditures and remaining useful life. Long-lived assets are tested for recoverability whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. A long-lived asset is not recoverable if its carrying amount exceeds the sum of the undiscounted cash flows expected to result from its use and eventual disposition. Cash flows for long-lived assets/asset groups are determined at the lowest level for which identifiable cash flows exist. The cash flows from the refinery asset groups are evaluated individually regardless of product mix or fuel type produced. If a long-lived asset is not recoverable, an impairment loss is recognized for the amount by which the carrying amount of the long-lived asset exceeds its fair value, with fair value determined based on discounted estimated net cash flows or other appropriate methods. Our assumptions incorporate inherent uncertainties that are at times difficult to predict and could result in impairment charges or accelerated depreciation in future periods if actual results materially differ from the estimated assumptions used.

Recent Accounting Pronouncements

Refer to “Note 2 - Summary of Significant Accounting Policies” of our Notes to Consolidated Financial Statements, for Recently Issued Accounting Pronouncements.

Supplemental Guarantor Financial Information

As of December 31, 2023, PBF Services, DCR, PBF Power, PRC, Toledo Refining, Chalmette Refining, PBF Western Region, Torrance Refining, MRC, PBF International Inc. and PBF Investments are 100% owned subsidiaries of PBF Holding and serve as guarantors of the obligations under the 2028 Senior Notes and 2030 Senior Notes. These guarantees are full and unconditional and joint and several. PBF Holding serves as the "Issuer". The indentures dated January 24, 2020 and August 21, 2023 among PBF Holding, PBF Finance, the guarantors party thereto, Wilmington Trust, National Association, as trustee and Deutsche Bank Trust Company Americas, as Paying Agent, Registrar, Transfer Agent and Authenticating Agent, govern subsidiaries designated as "Guarantor Subsidiaries". PBF Ltd., PBF Transportation Company LLC, PBF Rail Logistics Company LLC, MOEM Pipeline LLC, Collins, T&M, Torrance Basin Pipeline Company LLC, Torrance Logistics Company LLC, Torrance Pipeline Company LLC, Martinez Terminal Company LLC, Martinez Pipeline Company LLC and PBFWR Logistics Holdings LLC are consolidated subsidiaries of the Company that are not guarantors of the 2028 Senior Notes and 2030 Senior Notes. The 2028 Senior Notes and 2030 Senior Notes were co-issued by PBF Finance. For purposes of the following information, PBF Finance is referred to as "Co-Issuer." The Co-Issuer has no independent assets or operations.

The following tables present summarized information for the Issuer and the Guarantor Subsidiaries on a combined basis after elimination of (i) intercompany transactions and balances among the Issuer and the Guarantor Subsidiaries and (ii) equity in earnings from and investments in any subsidiary that is a non-guarantor.

Summarized Balance Sheets (in millions)	December 31, 2023	December 31, 2022
ASSETS		
Current Assets [(1)]	$ 6,263.0	$ 6,252.0
Non-Current Assets	6,074.0	6,283.0
Due from non-guarantor subsidiaries	21,756.8	19,487.0
LIABILITIES AND EQUITY		
Current liabilities [(1)]	$ 4,078.1	$ 4,569.0
Long-term liabilities	2,342.8	2,634.0
Due to non-guarantor subsidiaries	21,692.6	19,394.0

[(1)] Includes $27.3 million and $72.0 million of accounts receivables and accounts payables, respectively, related to transactions with PBFX as of December 31, 2023. Includes $6.3 million and $38.2 million of accounts receivables and accounts payables, respectively, related to transactions with PBFX as of December 31, 2022. Refer to "Note 9 - Related Party Transactions" of the Notes to Consolidated Financial Statements for further disclosures.

Summarized Statements of Operations (in millions)	December 31, 2023	December 31, 2022
Revenues	$ 37,921.1	$ 46,402.4
Cost of sales	33,590.3	38,788.0
Gross margin	4,330.8	7,614.4
Income from operations	4,015.9	7,118.7
Net income	3,952.4	6,832.0
Net income attributable to PBF Holding Company LLC	$ 3,951.5	$ 6,833.4
Non-guarantor intercompany sales with the Issuer and Guarantor subsidiaries	$ 2,189.1	$ 3,128.6
Non-guarantor intercompany cost of sales with the Issuer and Guarantor subsidiaries	40.7	95.7
Affiliate revenues related to transactions with PBFX [(1)]	16.6	17.0
Affiliate expenses related to transactions with PBFX [(1)]	347.8	319.6

[(1)] Refer to “Note 9 - Related Party Transactions” of our Notes to Condensed Consolidated Financial Statements for further information.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to market risks, including changes in commodity prices and interest rates. Our primary commodity price risk is associated with the difference between the prices we sell our refined products and the prices we pay for crude oil and other feedstocks. We may use derivative instruments to manage the risks from changes in the prices of crude oil and refined products, natural gas, interest rates, or to capture market opportunities.

Commodity Price Risk

Our earnings, cash flow and liquidity are significantly affected by a variety of factors beyond our control, including the supply of, and demand for, crude oil, other feedstocks, refined products and natural gas. The supply of and demand for these commodities depend on, among other factors, changes in domestic and foreign economies, weather conditions, domestic and foreign political affairs, planned and unplanned downtime in refineries, pipelines and production facilities, production levels, the availability of imports, the marketing of competitive and alternative fuels, and the extent of government regulation. As a result, the prices of these commodities can be volatile. Our revenues fluctuate significantly with movements in industry refined product prices, our cost of sales fluctuates significantly with movements in crude oil and feedstock prices and our operating expenses fluctuate with movements in the price of natural gas. We manage our exposure to these commodity price risks through our supply and offtake agreements as well as through the use of various commodity derivative instruments.

We may use non-trading derivative instruments to manage exposure to commodity price risks associated with the purchase or sale of crude oil and feedstocks, finished products and natural gas outside of our supply and offtake agreements. The derivative instruments we use include physical commodity contracts and exchange-traded and over-the-counter financial instruments. We mark-to-market our commodity derivative instruments and recognize the changes in their fair value in our statements of operations.

At December 31, 2023 and December 31, 2022, we had gross open commodity derivative contracts representing 29.1 million barrels and 30.1 million barrels, respectively, with an unrealized net gain of $33.2 million and $13.9 million, respectively. The open commodity derivative contracts as of December 31, 2023 expire at various times during 2024.

We carry inventories of crude oil, intermediates and refined products (“hydrocarbon inventories”) on our Consolidated Balance Sheets, the values of which are subject to fluctuations in market prices. Our hydrocarbon inventories totaled approximately 36.2 million barrels and 32.8 million barrels at December 31, 2023 and December 31, 2022, respectively. The average cost of our hydrocarbon inventories was approximately $83.64 and $80.04 per barrel on a LIFO basis at December 31, 2023 and December 31, 2022, respectively. At December 31, 2023 and December 31, 2022, the replacement value of inventory exceeded the LIFO carrying value. If market prices of our inventory decline to a level below our average cost, we may be required to write down the carrying value of our hydrocarbon inventories to market.

Our predominant variable operating cost is energy, which is comprised primarily of natural gas and electricity. We are therefore sensitive to movements in natural gas prices. Assuming normal operating conditions, we expect our annual consumption to range from 75 million to 95 million MMBTUs of natural gas amongst our six refineries. Accordingly, a $1.00 per MMBTU change in natural gas prices would increase or decrease our natural gas costs by approximately $75.0 million to $95.0 million.

Compliance Program Price Risk

We are exposed to market risks related to our obligations to buy and the volatility in the price of credits needed to comply with various governmental and regulatory compliance programs, which include RINs, required to comply with the RFS. Our overall RINs obligation is based on a percentage of our domestic shipments of on-road fuels as established by EPA. To the degree we are unable to blend the required amount of biofuels to satisfy our RINs obligation, we must purchase RINs on the open market. To mitigate the impact of the market risk relating to our obligations on our results of operations and cash flows, we may elect to purchase RINs or other environmental credits as part of our liability management strategy. We also have the ability to purchase RINs directly from SBR.

In addition, we are exposed to risks associated with complying with federal and state legislative and regulatory measures to address GHG and other emissions. Requirements to reduce emissions could result in increased costs to operate and maintain our facilities as well as implement and manage new emission controls and programs put in place. Compliance with such emission standards may require the purchase of emission credits or similar instruments.

Certain of these compliance contracts or instruments qualify as derivative instruments. For certain of these contracts, we elect the normal purchase normal sale exception under Accounting Standards Codification 815, *Derivatives and Hedging,* for such instruments, and therefore do not record these contracts at their fair value.

Interest Rate Risk

The maximum commitment under our Revolving Credit Facility is $3.5 billion. Borrowings under the Revolving Credit Facility bear interest either at the Alternative Base Rate plus the Applicable Margin or at the Term SOFR plus the Applicable Margin, all as defined in the Revolving Credit Agreement. At December 31, 2023, we had no outstanding balance in variable interest debt. If this facility was fully drawn, a 1.0% change in the interest rate would increase or decrease our interest expense by approximately $23.7 million annually.

Credit Risk

We are subject to risk of losses resulting from nonpayment or nonperformance by our counterparties. We continue to closely monitor the creditworthiness of customers to whom we grant credit and establish credit limits in accordance with our credit policy.

Concentration Risk

For the years ended December 31, 2023 and December 31, 2022, only one customer, Shell, accounted for 10% or more of our revenues (approximately 14% and 14%, respectively).

As of December 31, 2023 and December 31, 2022, only one customer, Shell, accounted for 10% or more of our total trade accounts receivable (approximately 19% and 19%, respectively).

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The information required by this item is set forth beginning on page F-1 of this Annual Report on Form 10-K.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

We conducted evaluations, under the supervision and with the participation of our management, including the principal executive officer and principal financial officer, of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934 as amended (the "Exchange Act")) as of the end of the period covered by this report. Based upon these evaluations as required by Exchange Act Rule 13a-15(b), the principal executive officer and principal financial officer concluded that the disclosure controls and procedures are effective.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) of the Exchange Act. Our internal control system is 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 in the United States of America. Due to its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. 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 our internal control over financial reporting as of December 31, 2023, using the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control — Integrated Framework (2013). Based on such assessment, management concluded that as of December 31, 2023, our internal control over financial reporting is effective.

This Annual Report on Form 10-K does not include an attestation report of our independent registered public accounting firm regarding internal control over financial reporting as permitted by Item 308(b) of Regulation S-K for non-accelerated filers.

Changes in Internal Control Over Financial Reporting

There has been no change in our internal control over financial reporting during the quarter ended December 31, 2023 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

ITEM 9C. DISCLOSURES REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

Explanatory Note:

We are a limited liability company wholly-owned and controlled by PBF LLC. PBF Energy is the sole managing member of PBF LLC. Our directors and executive officers are the executive officers of PBF Energy. The compensation paid to these executive officers is for services provided to both entities (i.e., they are not separately compensated for their services as an officer or director of PBF Holding). PBF Holding does not file a proxy statement. If the information were required it would be identical (other than as expressly set forth below) to the information contained in Items 10, 11, 12, 13 and 14 of the Annual Report on Form 10-K of PBF Energy that will appear in the Proxy Statement of PBF Energy furnished to its stockholders in connection with its 2024 Annual Meeting. Such information is incorporated by reference in this Annual Report on Form 10-K.

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information About Our Directors and Executive Officers

The following is a list of our directors and executive officers as of March 1, 2024:

Name	Age (as of December 31, 2023)	Position
Thomas Nimbley	72	Executive Chairman, Chairman of the Board
Matthew Lucey	50	President, Chief Executive Officer
Karen B. Davis	67	Senior Vice President, Chief Financial Officer
Paul Davis	61	Senior Vice President, Supply, Trading and Optimization
Thomas O'Connor	51	Senior Vice President, Commodity Risk and Strategy
Trecia Canty	54	Senior Vice President, General Counsel & Corporate Secretary
Steven Steach	67	Senior Vice President, Refining
Wendy Ho Tai	57	Senior Vice President, Human Resources
Jim Fedena	59	Senior Vice President, Logistics, Renewable Fuels, and Strategic Assets

Messrs. Nimbley and Lucey and Ms. Canty serve as the sole directors of PBF Holding and PBF Finance. We believe that each of their experience as executive officers of PBF Holding make them qualified to serve as its directors.

Thomas Nimbley has served as Chairman of the Board since June 30, 2016 and Executive Chairman since July 2023. He served as PBF Energy's Chief Executive Officer from June 2010 through June 2023 and was Executive Vice President, Chief Operating Officer from April 2010 through June 2010. Mr. Nimbley also serves as a director and the Executive Chairman of certain of our subsidiaries and our affiliates. Prior to joining us, Mr. Nimbley served as a Principal for Nimbley Consultants LLC from June 2005 to March 2010, where he provided consulting services and assisted on the acquisition of two refineries. He previously served as Senior Vice President and head of Refining for Phillips Petroleum Company ("Phillips") and, subsequently, Senior Vice President and head of Refining for ConocoPhillips' ("ConocoPhillips") domestic refining system (13 locations) following the merger of Phillips and Conoco Inc. Before joining Phillips at the time of its acquisition of Tosco Corporation ("Tosco") in September 2001, Mr. Nimbley served in various positions with Tosco and its subsidiaries starting in April 1993.

Matthew Lucey has served as our and PBF Energy's President since January 2015 and Chief Executive Officer since July 2023. Mr. Lucey is also a director and the Chief Executive Officer of certain of our subsidiaries. Mr. Lucey was our Executive Vice President from April 2014 to December 2014 and served as our Senior Vice President, Chief Financial Officer from April 2010 to March 2014. Mr. Lucey joined us as our Vice President, Finance in April 2008. Prior thereto, Mr. Lucey served as a Managing Director of M.E. Zukerman & Co., a New York-based private equity firm specializing in several sectors of the broader energy industry, from 2001 to 2008. Before joining M.E. Zukerman & Co., Mr. Lucey spent six years in the banking industry.

Karen B. Davis has served as our Senior Vice President, Chief Financial Officer since February 20, 2023 and has been serving as our Principal Accounting Officer since May 11, 2023. She served as interim Chief Financial Officer from January 1, 2023 to February 19, 2023. Ms. Davis is also a director of certain of our subsidiaries. Ms. Davis previously served as Executive Vice President and Chief Financial Officer of Western Refining, Inc. and its affiliated entities, Western Refining Logistics LP and Northern Tier Energy, LP through May 2017. During her career, she has served in various chief financial officer and financial reporting officer positions with various public and private companies throughout the United States. Ms. Davis served as an independent director of PBF Energy from January 1, 2020 to December 31, 2022 and the Chairperson of the Audit Committee from October 1, 2020 to December 31, 2022. From 2017 through 2019, she served as an independent director of PBFX GP, where she was a member of the Audit and the Conflicts Committees.

Paul Davis has served as our Senior Vice President, Supply, Trading and Optimization since April 2022. He previously served as PBF Energy's President, PBF Western Region from September 2017 to April 2022. Mr. Davis joined us in April 2012 and held various executive roles in our commercial operations, including Co-Head of Commercial, prior to serving as Senior Vice President, Western Region Commercial Operations from September 2015 to September 2017. Previously, Mr. Davis was responsible for managing the U.S. clean products commercial operations for Hess Energy Trading Company from 2006 to 2012. Prior to that, Mr. Davis was responsible for Premcor's U.S. Midwest clean products disposition group. Mr. Davis has over 29 years of experience in commercial operations in crude oil and refined products, including 16 years with the ExxonMobil in various operational and commercial positions, including sourcing refinery feedstocks and crude oil and the disposition of refined products, as well as optimization roles within refineries.

Thomas O'Connor has served as our and PBF Energy Senior Vice President, Commodity Risk and Strategy since April 2022. He previously served as PBF Energy Senior Vice President, Commercial from September 2015 to April 2022. Mr. O'Connor joined us and PBF Energy as Senior Vice President in September 2014 with responsibility for business development and growing the business of PBFX, and from January to September 2015, served as our Co-Head of commercial activities. Prior to joining us, Mr. O'Connor worked at Morgan Stanley since 2000 in various positions, most recently as a Managing Director and Global Head of Crude Oil Trading and Global Co-Head of Oil Flow Trading. Prior to joining Morgan Stanley, Mr. O'Connor worked for Tosco from 1995 to 2000 in the Atlantic Basin Fuel Oil and Feedstocks group.

Trecia Canty has served as our Senior Vice President, General Counsel and Corporate Secretary since September 2015. In her role, Ms. Canty is responsible for the legal department and outside counsel, which provide a broad range of support for the Company's business activities, including corporate governance, compliance, litigations and mergers and acquisitions. Previously, Ms. Canty was named Vice President, Senior Deputy General Counsel and Assistant Secretary in October 2014 and led our commercial and finance legal operations since joining us in November 2012. Ms. Canty is also a director of certain of PBF Energy's subsidiaries. Prior to joining us, Ms. Canty served as Associate General Counsel, Corporate and Assistant Secretary of Southwestern Energy Company, where her responsibilities included finance and mergers and acquisitions, securities and corporate compliance and corporate governance. She also provided legal support to the midstream marketing and logistics businesses. Prior to joining Southwestern Energy Company in 2004, she was an associate with Cleary, Gottlieb, Steen & Hamilton.

Steven Steach has served as our Senior Vice President, Refining since February 1, 2022 and has responsibility for our refining operations. He originally joined us in November 2015 in advance of the acquisition of the Torrance refinery and served as the Vice President and Refinery Manager of the Torrance refinery from its acquisition on July 1, 2016 until January 31, 2022. Before joining PBF, Mr. Steach was Refinery Manager for ConocoPhillips in Billings, MT, for four years. Prior to Billings, Mr. Steach was Operations Manager for ConocoPhillips at their Los Angeles refinery for a total of nine years, including Site Manager at the Carson plant.

Wendy Ho Tai has served as our Senior Vice President, Human Resources since April 2022. She previously served as Vice President, Human Resources from March 2015 to April 2022 and as Senior Director, Compensation and Benefits from October 2010 to February 2015. In her tenure, Ms. Ho Tai has established the PBF benefit plans, implemented the HR information system and assisted in the integration of the employees of all acquisitions. Previously, Ms. Ho Tai held human resources management positions with Petro, Inc. and MarketSmart Interactive.

Jim Fedena has served as our Senior Vice President, Logistics, Renewable Fuels, and Strategic Assets since April 2022. He previously served as a Senior Vice President of Health, Safety and Environment from June 2010 to January 2013. From June 2010 through February 2011, he also served as the Delaware City refinery Manager during the reactivation period and, from January 2013 to April 2022, he served as Senior Vice President – Logistics. Prior to joining PBF Energy he served as managing partner for PJF Associates providing consulting services for private equity firms on refining acquisitions in North America and Europe. Mr. Fedena has over 30 years of oil industry experience in refining, pipelines, and terminal operations. He also served in various positions with Premcor, ConocoPhillips, Phillips, Tosco and Coastal with responsibility for health, safety and environmental programs.

Corporate Governance Matters

PBF Energy, our indirect parent, has adopted a Code of Business Conduct and Ethics that applies to our principal executive officer, principal financial officer and principal accounting officer. The Code of Business Conduct and Ethics is available at www.pbfenergy.com under the heading “Investors”. Any amendments to the Code of Business Conduct and Ethics or any grant of a waiver from the provisions of the Code of Business Conduct and Ethics requiring disclosure under applicable Securities and Exchange Commission rules will be disclosed on such website.

Additional information required by this Item will be contained in PBF Energy’s 2024 Proxy Statement, incorporated herein by reference.

ITEM 11. EXECUTIVE COMPENSATION

Compensation of Directors of PBF Holding Company LLC

Directors of PBF Holding receive no separate compensation for service on the board of directors or committees thereof.

Additional information required under this Item will be contained in PBF Energy's 2024 Proxy Statement, incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

As of December 31, 2023, 100% of the membership interests of PBF Holding were owned by PBF LLC, and PBF Finance had 100 shares of common stock outstanding, all of which were held by PBF Holding. Refer to "Note 12 - Equity Structure" of our Notes to Consolidated Financial Statements.

The stockholders of PBF Energy may be deemed to beneficially own an interest in our membership interests by virtue of their beneficial ownership of shares of Class A common stock of PBF Energy. PBF Energy reports separately on the beneficial ownership of its officers, directors and significant stockholders. For additional information, we refer you to PBF Energy's 2024 Proxy Statement, which is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Refer to "Note 9 - Related Party Transactions" of our Notes to Consolidated Financial Statements.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Deloitte & Touche LLP (PCAOB ID No. 34) ("Deloitte") is our independent registered public accounting firm for the years ended December 31, 2023 and 2022. Our audit fees are determined as part of the overall audit fees for PBF Energy and are approved by the audit committee of the board of directors of PBF Energy. PBF Energy reports separately on the fees and services of its principal accountants. For additional information, we refer you to PBF Energy's 2024 Proxy Statement, which is incorporated herein by reference.

The following table presents fees incurred for the years ended December 31, 2023 and 2022 for professional services performed by Deloitte.

(in thousands)	2023	2022
Audit Fees [1]	$ 4,494.0	$ 4,122.0
Audit-related Fees [2]	155.0	115.0
Tax Fees [3]	307.1	110.4
Total Fees	$ 4,956.1	$ 4,347.4

[1] Represents the aggregate fees for professional services rendered by Deloitte in connection with its audits of PBF Holding and its indirect parent, PBF Energy's consolidated financial statements, including the audits of internal control over financial reporting of PBF Energy and related accounting consultation services provided to support the performance of such audits. Fees, and related expenses, are for services performed in connection with the audit of our fiscal years ended December 31, 2023 and 2022 financial statements regardless of when incurred.

[2] Represents fees for professional services rendered in connection with various filings for PBF Holding and its indirect parent, PBF Energy, including (i) services rendered in connection with the filing of registration statements with the SEC and (ii) attestation services performed in connection with certain regulatory filings.

[3] Represents fees associated with tax services rendered for income tax planning and sales, use and excise tax matters.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

1. Financial Statements. The consolidated financial statements of PBF Holding Company LLC and subsidiaries, required by Part II, Item 8, are included in Part IV of this report. See Index to Consolidated Financial Statements beginning on page F-1.

2. Financial Statement Schedules and Other Financial Information. No financial statement schedules are submitted because either they are not applicable or because the required information is included in the consolidated financial statements or notes thereto.

3. Exhibits. Filed as part of this Annual Report on Form 10-K are the following exhibits:

Number	Description
3.1	Certificate of Formation of PBF Holding Company LLC (Incorporated by reference to Exhibit 3.1 filed with PBF Holding Company LLC's Registration Statement on Form S-4 dated January 14, 2013 (Registration No. 333-186007)).
3.2	Limited Liability Company Agreement of PBF Holding Company LLC (Incorporated by reference to Exhibit 3.2 filed with PBF Holding Company LLC's Registration Statement on Form S-4 (Registration No. 333-186007)).
3.3	Certificate of Incorporation of PBF Finance Corporation (Incorporated by reference to Exhibit 3.3 filed with PBF Holding Company LLC's Registration Statement on Form S-4 (Registration No. 333-186007)).
3.4	Bylaws of PBF Finance Corporation (Incorporated by reference to Exhibit 3.4 filed with PBF Holding Company LLC's Registration Statement on Form S-4 (Registration No. 333-186007)).
4.1	Indenture dated as of January 24, 2020, among PBF Holding Company LLC, PBF Finance Corporation, the Guarantors named on the signature pages thereto, Wilmington Trust, National Association, as Trustee and Deutsche Bank Trust Company Americas, as Paying Agent, Registrar, Transfer Agent and Authenticating Agent and form of 6.00% Senior Notes due 2028 (included as Exhibit A) (incorporated by reference to Exhibit 4.1 filed with PBF Energy Inc.'s Current Report on Form 8-K dated January 24, 2020 (File No. 001-35764)).
4.2	Indenture dated as of August 21, 2023, among PBF Holding Company LLC, PBF Finance Corporation, the Guarantors named on the signature pages thereto, Wilmington Trust, National Association, as Trustee, and Deutsche Bank Trust Company Americas, as Paying Agent, Registrar, Transfer Agent and Authenticating Agent and form of 7.875% Senior Note due 2030 (included as Exhibit A) (incorporated by reference to Exhibit 4.1 filed with PBF Energy Inc.'s Current Report on Form 8-K dated August 21, 2023 (File No. 001-35764)).
4.3	First Supplemental Indenture dated February 3, 2020, among PBF Holding Company LLC, PBF Finance Corporation, Martinez Refining Company LLC, Martinez Terminal Company LLC, Wilmington Trust, National Association, as trustee, and Deutsche Bank Trust Company Americas, as paying agent, transfer agent, registrar and authenticating agent (6.00% Senior Notes due 2028) (incorporated by reference to Exhibit 4.3 filed with PBF Energy Inc.'s Quarterly Report on Form 10-Q dated May 15, 2020 (File No. 001-35764).
10.1**	Form of 2023-2025 Performance Share Unit Agreement (incorporated by reference to Exhibit 10.1 filed with PBF Energy Inc.'s Current Report on Form 8-K dated April 12, 2022 (File No. 001-35764)).
10.2**	Form of 2023-2025 Performance Unit Agreement (incorporated by reference to Exhibit 10.2 filed with PBF Energy Inc.'s Current Report on Form 8-K dated April 12, 2022 (File No. 001-35764)).

10.3**	Form of PBF Energy Inc. Performance Share Unit Award Agreement (2022-2024 performance period) under the Amended and Restated PBF Energy Inc. 2017 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 with PBF Energy Inc.'s Current Report on Form 8-K dated November 24, 2021 (File No. 001-35764)).
10.4**	Form of PBF Energy Inc. Performance Share Unit Award Agreement (2024-2026 performance period) under the Amended and Restated PBF Energy Inc. 2017 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 with PBF Energy Inc.'s Current Report on Form 8-K dated November 2, 2023 (File No. 001-35764)).
10.5**	Form of PBF Energy Inc. Performance Unit Award Agreement (2022-2024 performance period) under the Amended and Restated PBF Energy Inc. 2017 Equity Incentive Plan (incorporated by reference to Exhibit 10.2 with PBF Energy Inc.'s Current Report on Form 8-K dated November 24, 2021 (File No. 001-35764)).
10.6**	Form of PBF Energy Inc. Performance Unit Award Agreement (2024-2026 performance period) under the Amended and Restated PBF Energy Inc. 2017 Equity Incentive Plan (incorporated by reference to Exhibit 10.2 with PBF Energy Inc.'s Current Report on Form 8-K dated November 2, 2023 (File No. 001-35764)).
10.7**	PBF Energy Inc. Amended and Restated 2012 Equity Incentive Plan (incorporated by reference to Appendix A to PBF Energy Inc.'s Definitive Proxy Statement on Schedule 14A filed on March 22, 2016 (File No. 001-35764)).
10.8**	PBF Energy Inc. Amended and Restated 2017 Equity Incentive Plan (incorporated by reference to Appendix A to PBF Energy Inc.'s Definitive Proxy Statement on Schedule 14A filed on April 13, 2018 (File No. 001-35764)).
10.9**	Amendment No. 1 to PBF Energy Inc. Amended and Restated 2017 Equity Incentive Plan (incorporated by reference to Appendix A to PBF Energy Inc.'s Definitive Proxy Statement on Schedule 14A filed on April 13, 2022 (File No. 001-35764)).
10.10**	Form of PBF Energy Non-Qualified Stock Option Agreement (prior to 2020) under the Amended and Restated PBF Energy Inc. 2017 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 filed with PBF Energy Inc.'s Current Report on Form 8-K dated November 2, 2018 (File No. 001-35764)).
10.11**	Form of PBF Energy Non-Qualified Stock Option Agreement (2020 and thereafter) under the Amended and Restated PBF Energy Inc. 2017 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 filed with PBF Energy Inc.'s Current Report on Form 8-K dated November 13, 2020 (File No. 001-35764)).
10.12**	Form of Non-Qualified Stock Option Agreement under the PBF Energy Inc. 2012 Equity Incentive Plan (incorporated by reference to Exhibit 10.28 filed with PBF Energy Inc.'s Amendment No. 6 to Registration Statement on Form S-1 (Registration No. 333-177933)).
10.13**	Form of Amended and Restated Restricted Stock Agreement for non-employee Directors under the PBF Energy Inc. 2017 Equity Incentive Plan. (incorporated by reference to Exhibit 10.3 of PBF Energy Inc.'s Annual Report on Form 10-K (File No. 001-35764) filed on February 23, 2018).
10.14**	Form of Amended and Restated Restricted Stock Agreement for employees under PBF Energy Inc. 2017 Equity Incentive Plan (incorporated by reference to Exhibit 10.7 of PBF Energy Inc.'s Annual Report on Form 10-K (File No. 001-35764) filed on February 23, 2018).
10.15**	Form of Amended and Restated Restricted Stock Agreement for Employees, under PBF Energy Inc. 2017 Equity Incentive Plan (incorporated by reference to Exhibit 10.2 of PBF Energy Inc.'s Current Report on Form 8-K dated February 15, 2023 (File No. 001-35764)).
10.16**	Form of PBF Energy Amended and Restated 2017 Equity Incentive Plan, as Amended Restricted Stock Agreement for Employee (incorporated by reference to Exhibit 10.2 filed with PBF Energy Inc.'s Current Report on Form 8-K dated December 2, 2022 (File No. 001-35764)).

10.17**	Form of Amended and Restated 2017 Equity Incentive Plan Performance Share Unit Award Agreement for the 2023-2025 Performance Cycle (incorporated by reference to Exhibit 10.3 filed with PBF Energy Inc.'s Current Report on Form 8-K dated December 2, 2022 (File No. 001-35764)).
10.18**	Form of Amended and Restated 2017 Equity Incentive Plan Performance Unit Award Agreement for the 2023-2025 Performance Cycle (incorporated by reference to Exhibit 10.4 filed with PBF Energy Inc.'s Current Report on Form 8-K dated December 2, 2022 (File No. 001-35764)).
10.19	Amended and Restated Senior Secured Revolving Credit Agreement, dated August 23, 2023 (incorporated by reference to Exhibit 10.1 filed with PBF Energy Inc.'s Current Report on Form 8-K dated August 23, 2023 (File No. 001-35764)).
10.20**	Employment Agreement dated as of February 20, 2023 between PBF Investments LLC and Karen B. Davis (incorporated by reference to Exhibit 10.1 filed with PBF Energy Inc.'s Current Report on Form 8-K dated February 16, 2023 (File No. 001-35764)).
10.21*/**	Employment Agreement dated as of September 29, 2015 between PBF Investments LLC and Trecia M. Canty (incorporated by reference to Exhibit 10.36 filed with PBF Energy Inc.'s Annual Report on Form 10-K dated February 16, 2023 (File No. 001-35764)).
10.22**	Employment Agreement dated as of September 4, 2014 between PBF Investments LLC and Thomas O'Connor (incorporated by reference to Exhibit 10.9 filed with PBF Energy Inc.'s Annual Report on Form 10-K dated February 29, 2016 (File No. 001-35764)).
10.23**	Employment Agreement dated as of April 1, 2014 between PBF Investments LLC and Timothy Paul Davis (incorporated by reference to Exhibit 10.4 filed with PBF Energy Inc.'s Quarterly Report on Form 10-Q dated May 7, 2014 (File No. 001-35764)).
10.24**	Second Amended and Restated Employment Agreement dated as of May 3, 2023 between PBF Investments LLC and Thomas J. Nimbley (incorporated by reference to Exhibit 10.1 filed with PBF Energy Inc.'s Current Report on Form 8-K dated May 4, 2023 (File No. 001-35764)).
10.25**	Third Amended and Restated Employment Agreement, dated as of May 3, 2023, between PBF Investments LLC and Matthew C. Lucey (incorporated by reference to Exhibit 10.2 filed with PBF Energy Inc.'s Current Report on Form 8-K dated May 4, 2023 (File No. 001-35764)).
21.1*	Subsidiaries of PBF Holding Company LLC.
22.1*	List of Guarantor Subsidiaries.
24.1*	Power of Attorney (included on signature page).
31.1*	Certification by Chief Executive Officer of PBF Holding Company LLC pursuant to Rule 13a-14(a)/15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification by Chief Financial Officer of PBF Holding Company LLC pursuant to Rule 13a-14(a)/15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1*(1)	Certification by Chief Executive Officer of PBF Holding Company LLC pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*(1)	Certification by Chief Financial Officer of PBF Holding Company LLC pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	Inline XBRL Instance Document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document.
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.

104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in exhibit 101).

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* Filed herewith.

** Indicates management compensatory plan or arrangement.

(1) This exhibit should not be deemed to be "filed" for purposes of Section 18 of the Exchange Act.

PBF HOLDING COMPANY LLC

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To PBF Energy Company LLC, the Managing Member of PBF Holding Company LLC

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of PBF Holding Company LLC and subsidiaries (the "Company") as of December 31, 2023 and 2022, the related consolidated statements of operations, comprehensive income, changes in equity, and cash flows, for each of the three years in the period ended December 31, 2023, 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 Company as of December 31, 2023 and 2022, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2023, in conformity with accounting principles generally accepted in the United States of America.

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 Public Company Accounting Oversight Board (United States) (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 and in accordance with auditing standards generally accepted in the United States of America. 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. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

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 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.

Deferred Refinery Turnaround Costs – Amortization Period – Refer to Notes 2 and 6 to the Consolidated Financial Statements

Critical Audit Matter Description

The Company routinely performs turnaround activities at each of its refineries. Refinery turnaround costs, which are incurred in connection with planned major maintenance activities, are deferred when incurred and amortized on a straight-line basis over the period estimated until the next planned turnaround occurs, which is based on an engineering assessment.

Given the amounts deferred that are subject to amortization and the judgment and technical knowledge required to estimate the amortization period of the turnarounds, performing audit procedures to evaluate the reasonableness of these estimates and assumptions required a high degree of auditor judgment and an increased extent of effort.

How the Critical Audit Matter was Addressed in the Audit

- Tested the effectiveness of controls over the Company's approval of the amortization period and the recording of amortization.
- Inquired of refinery personnel regarding the in-service date, the amortization period assigned, and the scope and nature of turnaround projects.
- With the assistance of fair value specialists, we evaluated the reasonableness of the estimated amortization period by:
  - Testing the source information underlying the determination of the amortization period.
  - Developing a range of independent estimates and comparing those to the estimated amortization period selected by management.
- Performed a look-back analysis for turnarounds completed in the current year, to determine when a turnaround was last performed on the asset and if the amortization period assigned to it was appropriate.

/s/ Deloitte & Touche LLP

Morristown, New Jersey
March 1, 2024

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

PBF HOLDING COMPANY LLC
CONSOLIDATED BALANCE SHEETS
(in millions)

	December 31, 2023	December 31, 2022
ASSETS		
Current assets:		
Cash and cash equivalents	$ 1,760.8	$ 2,153.9
Accounts receivable	1,336.1	1,451.7
Accounts receivable - affiliate	27.3	6.3
Inventories	3,183.1	2,763.6
Prepaid and other current assets	173.0	119.0
Total current assets	6,480.3	6,494.5
Property, plant and equipment, net	4,145.5	4,601.8
Lease right of use assets - third party	788.2	678.3
Lease right of use assets - affiliate	380.8	421.6
Deferred charges and other assets, net	1,129.3	954.0
Total assets	$ 12,924.1	$ 13,150.2
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	$ 952.9	$ 847.5
Accounts payable - affiliate	72.0	38.2
Accrued expenses	2,968.0	3,691.0
Current operating lease liabilities - third party	131.1	60.5
Current operating lease liabilities - affiliate	108.7	104.5
Deferred revenue	63.6	37.5
Total current liabilities	4,296.3	4,779.2
Long-term debt	1,245.9	1,434.9
Deferred tax liabilities	24.8	21.0
Long-term operating lease liabilities - third party	607.9	551.8
Long-term operating lease liabilities - affiliate	272.1	317.2
Long-term financing lease liabilities - third party	46.1	57.9
Other long-term liabilities	269.2	371.1
Total liabilities	6,762.3	7,533.1
Commitments and contingencies (Note 10)		
Equity:		
PBF Holding Company LLC equity		
Member’s equity	3,298.7	2,959.7
Retained earnings	2,868.8	2,649.6
Accumulated other comprehensive income (loss)	(18.8)	(4.4)
Total PBF Holding Company LLC equity	6,148.7	5,604.9
Noncontrolling interest	13.1	12.2
Total equity	6,161.8	5,617.1
Total liabilities and equity	$ 12,924.1	$ 13,150.2

See notes to consolidated financial statements.

PBF HOLDING COMPANY LLC
CONSOLIDATED STATEMENTS OF OPERATIONS
(in millions)

	Year Ended December 31,		
	2023	**2022**	**2021**
Revenues	$ 38,288.5	$ 46,780.6	$ 27,202.0
Cost and expenses:			
Cost of products and other	33,000.8	39,350.7	24,114.3
Operating expenses (excluding depreciation and amortization expense as reflected below)	2,581.3	2,495.6	1,999.1
Depreciation and amortization expense	523.9	466.9	415.7
Cost of sales	36,106.0	42,313.2	26,529.1
General and administrative expenses (excluding depreciation and amortization expense as reflected below)	350.2	438.5	226.4
Depreciation and amortization expense	8.5	7.5	13.3
Change in fair value of contingent consideration, net	(45.8)	48.1	29.4
(Gain) loss on sale of assets	(1.3)	0.9	(0.2)
Total cost and expenses	36,417.6	42,808.2	26,798.0
Income from operations	1,870.9	3,972.4	404.0
Other income (expense):			
Interest expense, net	(61.3)	(206.9)	(275.1)
Change in fair value of catalyst obligations	1.1	(2.0)	8.5
(Loss) gain on extinguishment of debt	(5.7)	(66.1)	79.9
Other non-service components of net periodic benefit cost	0.7	8.8	7.8
Income before income taxes	1,805.7	3,706.2	225.1
Income tax expense (benefit)	1.9	(2.7)	(14.0)
Net income	1,803.8	3,708.9	239.1
Less: net income (loss) attributable to noncontrolling interests	0.9	(1.4)	2.3
Net income attributable to PBF Holding Company LLC	$ 1,802.9	$ 3,710.3	$ 236.8

See notes to consolidated financial statements.

PBF HOLDING COMPANY LLC
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in millions)

	Year Ended December 31,		
	2023	**2022**	**2021**
Net income	$ 1,803.8	$ 3,708.9	$ 239.1
Other comprehensive income (loss):			
Unrealized loss on available for sale securities	(0.4)	(2.5)	(0.7)
Net (loss) gain on pension and other post-retirement benefits	(14.0)	(22.2)	27.1
Total other comprehensive income (loss)	(14.4)	(24.7)	26.4
Comprehensive income	1,789.4	3,684.2	265.5
Less: comprehensive income (loss) attributable to noncontrolling interests	0.9	(1.4)	2.3
Comprehensive income attributable to PBF Holding Company LLC	$ 1,788.5	$ 3,685.6	$ 263.2

See notes to consolidated financial statements.

PBF HOLDING COMPANY LLC
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
(in millions)

	Member's Equity	Accumulated Other Comprehensive Income (Loss)	Retained Earnings (Accumulated Deficit)	Noncontrolling Interest	Total Equity
Balance, January 1, 2021	$ 2,809.7	$ (6.1)	$ (723.4)	$ 10.6	$ 2,090.8
Member distributions	—	—	(2.7)	—	(2.7)
Capital contributions from PBF LLC	37.0	—	—	—	37.0
Distribution of assets to PBF LLC	(0.4)	—	—	—	(0.4)
Stock based compensation	23.9	—	—	—	23.9
Comprehensive income	—	26.4	236.8	2.3	265.5
Other	—	—	—	(0.7)	(0.7)
Balance, December 31, 2021	2,870.2	20.3	(489.3)	12.2	2,413.4
Member distributions	—	—	(571.4)	—	(571.4)
Capital contributions from PBF LLC	56.4	—	—	—	56.4
Distribution of assets to PBF LLC	(0.1)	—	—	—	(0.1)
Stock based compensation	33.2	—	—	—	33.2
Comprehensive income (loss)	—	(24.7)	3,710.3	(1.4)	3,684.2
Other	—	—	—	1.4	1.4
Balance, December 31, 2022	2,959.7	(4.4)	2,649.6	12.2	5,617.1
Member distributions	—	—	(1,583.7)	—	(1,583.7)
Capital contributions from PBF LLC	1,159.7	—	—	—	1,159.7
Distribution of assets to PBF LLC	(853.4)	—	—	—	(853.4)
Stock based compensation	35.8	—	—	—	35.8
Comprehensive income (loss)	—	(14.4)	1,802.9	0.9	1,789.4
Other	(3.1)	—	—	—	(3.1)
Balance, December 31, 2023	$ 3,298.7	$ (18.8)	$ 2,868.8	$ 13.1	$ 6,161.8

See notes to consolidated financial statements.

PBF HOLDING COMPANY LLC
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in millions)

	Year Ended December 31,		
	2023	**2022**	**2021**
Cash flows from operating activities:			
Net income	$ 1,803.8	$ 3,708.9	$ 239.1
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	551.6	495.6	444.3
Stock-based compensation	51.5	44.1	30.3
Change in fair value of catalyst obligations	(1.1)	2.0	(8.5)
Deferred income taxes	3.7	(3.2)	(14.5)
Non-cash change in inventory repurchase obligations	—	(5.4)	(8.4)
Non-cash lower of cost or market inventory adjustment	—	—	(669.6)
Change in fair value of contingent consideration, net	(45.8)	48.1	29.4
Loss (gain) on extinguishment of debt	5.7	66.1	(79.9)
Pension and other post-retirement benefit costs	47.9	47.6	50.8
(Gain) loss on sale of assets	(1.3)	0.9	(0.2)
Changes in operating assets and liabilities:			
Accounts receivable	115.5	(179.6)	(770.5)
Due to/from affiliates	12.7	(25.7)	9.3
Inventories	(334.1)	(258.5)	(149.3)
Prepaid and other current assets	(11.2)	(5.0)	(15.3)
Accounts payable	125.9	(97.7)	480.1
Accrued expenses	(764.9)	860.8	806.9
Deferred revenue	26.1	(2.8)	(4.8)
Other assets and liabilities	(108.0)	—	(76.9)
Net cash provided by operating activities	$ 1,478.0	$ 4,696.2	$ 292.3
Cash flows from investing activities:			
Expenditures for property, plant and equipment	(647.7)	(625.4)	(240.5)
Expenditures for deferred turnaround costs	(473.5)	(311.6)	(117.7)
Expenditures for other assets	(40.5)	(66.0)	(28.9)
Proceeds from sale of assets	4.4	—	—
Net cash used in investing activities	$ (1,157.3)	$ (1,003.0)	$ (387.1)

See notes to consolidated financial statements.

PBF HOLDING COMPANY LLC
CONSOLIDATED STATEMENTS OF CASH FLOWS (Continued)
(in millions)

	Year Ended December 31,		
	2023	**2022**	**2021**
Cash flows from financing activities:			
Contributions from PBF LLC	$ 1,159.6	$ 56.4	$ 37.0
Distribution to T&M and Collins shareholders	—	—	(0.7)
Distributions to members	(1,583.7)	(571.4)	(2.7)
Proceeds from 2030 7.875% Senior Notes	496.6	—	—
Redemption of 2025 7.25% Senior Notes	(666.2)	—	—
Repurchase of 2028 6.00% Senior Notes	—	(21.1)	(109.3)
Repurchase of 2025 7.25% Senior Notes	—	(4.8)	(37.5)
Redemption of 2025 9.25% Senior Secured Notes	—	(1,307.4)	—
Proceeds from revolver borrowings	—	400.0	—
Repayments of revolver borrowings	—	(1,300.0)	—
Repayments of PBF Rail Term Loan	—	—	(7.4)
Settlements of precious metal catalyst obligations	(3.1)	(56.2)	(31.7)
Payments on financing leases	(14.1)	(11.3)	(17.8)
Proceeds from insurance premium financing	13.0	2.1	—
Payments of contingent consideration	(80.1)	—	—
Deferred financing costs and other	(35.8)	(31.3)	0.5
Net cash used in financing activities	$ (713.8)	$ (2,845.0)	$ (169.6)
Net change in cash and cash equivalents	(393.1)	848.2	(264.4)
Cash and cash equivalents, beginning of period	2,153.9	1,305.7	1,570.1
Cash and cash equivalents, end of period	$ 1,760.8	$ 2,153.9	$ 1,305.7
Supplemental cash flow disclosures			
Non-cash activities:			
Distribution of assets to PBF Energy Company LLC	$ (853.4)	$ —	$ —
Accrued and unpaid capital expenditures	143.5	165.2	103.2
Assets acquired or remeasured under operating and financing leases	335.4	82.8	(106.6)
Cash paid during the year for:			
Interest (net of capitalized interest of $38.0, $24.8 and $8.9 in 2023, 2022 and 2021, respectively)	$ 95.5	$ 211.5	$ 265.4
Income taxes	1.6	0.8	1.0

See notes to consolidated financial statements.

1. DESCRIPTION OF THE BUSINESS AND BASIS OF PRESENTATION

Description of the Business

PBF Holding Company LLC ("PBF Holding"), together with its consolidated subsidiaries, owns and operates oil refineries and related facilities in North America. PBF Holding is a wholly-owned subsidiary of PBF Energy Company LLC ("PBF LLC"). PBF Energy Inc. ("PBF Energy") is the sole managing member of, and owner of an equity interest representing approximately 99.3% of the outstanding economic interest in PBF LLC as of December 31, 2023. Collectively, PBF Holding and its consolidated subsidiaries are referred to hereinafter as the "Company".

Substantially all of the Company's operations are in the United States. As of December 31, 2023, the Company's oil refineries are all engaged in the refining of crude oil and other feedstocks into petroleum products, and have been aggregated to form one reportable segment.

PBF Logistics GP LLC ("PBFX GP") serves as the general partner of PBF Logistics LP ("PBFX"). PBFX GP is wholly-owned by PBF LLC. In a series of transactions subsequent to the PBFX initial public offering, the Company has distributed certain assets to PBF LLC, which in turn contributed those assets to PBFX (as described in "Note 9 - Related Party Transactions"). On November 27, 2022, PBF Energy and PBF LLC entered into the Merger Agreement with PBFX announcing the Merger Transaction, which was finalized on November 30, 2022 (all terms as defined in "Note 9 - Related Party Transactions").

On June 27, 2023, the Company distributed to PBF LLC, which in turn contributed to St. Bernard Renewables LLC ("SBR"), approximately $748.3 million in assets related to the renewable diesel facility co-located with the Company's Chalmette refinery in Louisiana. The Company has no interest in SBR, which is jointly owned by a subsidiary of PBF LLC and its partner, Eni Sustainable Mobility US Inc., a subsidiary of Eni SpA. Additionally, the Company distributed to PBF LLC, which in turn contributed to one of its subsidiaries, Chalmette Refining Service Company LLC ("CRSC"), approximately $103.8 million in assets. The Company has no interest in CRSC, which is owned by PBF LLC.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation and Presentation

These Consolidated Financial Statements include the accounts of PBF Holding and its consolidated subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

Cost Classifications

Cost of products and other consists of the cost of crude oil, other feedstocks, blendstocks and purchased refined products and the related in-bound freight and transportation costs.

Operating expenses (excluding depreciation and amortization) consists of direct costs of labor, maintenance and services, utilities, property taxes, environmental compliance costs and other direct operating costs incurred in connection with the Company's refining operations. Such expenses exclude depreciation related to refining and logistics assets that are integral to the refinery production process, which is presented separately as Depreciation and amortization expense as a component of Cost of sales on the Company's Consolidated Statements of Operations.

Use of Estimates

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

Impairment Assessment of Long-Lived Assets and Definite-Lived Intangibles

The Company evaluates long-lived assets for impairment on a continual basis and reassesses the reasonableness of their related useful lives whenever events or changes in circumstances warrant assessment. Possible triggering events may include, among other things, significant adverse changes in the business climate, market conditions, environmental regulations or a determination that it is more likely than not that an asset or an asset group will be sold or retired before its estimated useful life. These possible triggering events of impairment may impact the Company's assumptions related to future throughput levels, future operating revenues, expenses and gross margin, levels of anticipated capital expenditures and remaining useful life. Long-lived assets are tested for recoverability whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. A long-lived asset is not recoverable if its carrying amount exceeds the sum of the undiscounted cash flows expected to result from its use, early retirement or disposition. Cash flows for long-lived assets/asset groups are determined at the lowest level for which identifiable cash flows exist. The cash flows from the refinery asset groups are evaluated individually regardless of product mix or fuel type produced. If a long-lived asset is not recoverable, an impairment loss is recognized for the amount by which the carrying amount of the long-lived asset exceeds its fair value, with fair value determined based on discounted estimated net cash flows or other appropriate methods. The Company's assumptions incorporate inherent uncertainties that are at times difficult to predict and could result in impairment charges or accelerated depreciation in future periods if actual results materially differ from the estimated assumptions used.

Cash and Cash Equivalents

The Company considers all highly liquid investments with original maturities of three months or less to be cash equivalents. The carrying amount of the cash equivalents approximates fair value due to the short-term maturity of those instruments.

Concentrations of Credit Risk

For the years ended December 31, 2023 and December 31, 2022, only one customer, Shell plc ("Shell"), accounted for 10% or more of the Company's revenues (approximately 14% and 14%, respectively).

As of December 31, 2023 and December 31, 2022, only one customer, Shell, accounted for 10% or more of the Company's total trade accounts receivable (approximately 19% and 19%, respectively).

Revenue Recognition

The Company sells various refined products primarily through its refinery subsidiaries and recognizes revenue related to the sale of products when control of the promised goods or services is transferred to the customers, in an amount that reflects the consideration the Company expects to be entitled to in exchange for those goods or services. Refer to "Note 15 - Revenues" for further discussion of the Company's revenue recognition policy.

Accounts Receivable

Accounts receivable are carried at invoiced amounts. An allowance for doubtful accounts is established, if required, to report such amounts at their estimated net realizable value. In estimating probable losses, management reviews accounts that are past due and determines if there are any known disputes.

Excise taxes on sales of refined products that are collected from customers and remitted to various governmental agencies are reported on a net basis.

Inventory

Inventories are carried at the lower of cost or market ("LCM"). The cost of crude oil, feedstocks, blendstocks and refined products are determined under the last-in first-out ("LIFO") method using the dollar value LIFO method with increments valued based on average purchase prices during the year. The cost of supplies and other inventories is determined principally on the weighted average cost method.

RINs

The Company is subject to obligations to purchase Renewable Identification Numbers ("RINs") required to comply with the renewable fuel standard implemented by Environmental Protection Agency ("EPA"), which sets annual quotas for the quantity of renewable fuels (such as ethanol) that must be blended into motor fuels consumed in the United States (the "RFS"). The Company's overall RINs obligation is based on a percentage of domestic shipments of on-road fuels as established by EPA. To the degree the Company is unable to blend the required amount of biofuels to satisfy its RINs obligation, RINs must be purchased on the open market to avoid penalties and fines. The Company records its RINs obligation on a net basis in Accrued expenses when its RINs liability is greater than the amount of RINs earned and purchased in a given period and in Prepaid and other current assets when the amount of RINs earned and purchased is greater than the RINs liability.

Leases

The Company leases office space, office equipment, refinery facilities and equipment, railcars and other logistics assets primarily under non-cancelable operating leases, with terms typically ranging from one to twenty years, subject to certain renewal options as applicable. The Company considers those renewal or termination options that are reasonably certain to be exercised in the determination of the lease term and initial measurement of lease liabilities and right-of-use assets. Lease expense for operating lease payments is recognized on a straight-line basis over the lease term. Interest expense for finance leases is incurred based on the carrying value of the lease liability. Leases with an initial term of 12 months or less are not recorded on the Company's Consolidated Balance Sheets.

The Company determines whether a contract is or contains a lease at inception of the contract and whether that lease meets the classification criteria of a finance or operating lease. When available, the Company uses the rate implicit in the lease to discount lease payments to present value; however, most of the Company's leases do not provide a readily determinable implicit rate. Therefore, the Company must discount lease payments based on an estimate of its incremental borrowing rate.

For substantially all classes of underlying assets, the Company has elected the practical expedient not to separate lease and non-lease components, which allows for combining the components if certain criteria are met. For certain leases of refinery support facilities, the Company accounts for the non-lease service component separately.

Property, Plant and Equipment

Property, plant and equipment additions are recorded at cost. The Company capitalizes costs associated with the preliminary, pre-acquisition and development/construction stages of a major construction project. The Company capitalizes the interest cost associated with major construction projects based on the effective interest rate of total borrowings. The Company also capitalizes costs incurred in the acquisition and development of software for internal use, including the costs of software, materials, consultants and payroll-related costs for employees incurred in the application development stage.

Depreciation is computed using the straight-line method over the following estimated useful lives:

Computers, furniture and fixtures	3-7 years
Leasehold improvements	20 years
Processing units and equipment	5-25 years
Pipeline and equipment	5-25 years
Buildings	25 years
Railcars	50 years

Maintenance and repairs are charged to operating expenses as they are incurred. Improvements and betterments, which extend the lives of the assets, are capitalized.

Deferred Charges and Other Assets, Net

Deferred charges and other assets include refinery turnaround costs, catalyst, precious metal catalysts, linefill, deferred financing costs and intangible assets. Refinery turnaround costs, which are incurred in connection with planned major maintenance activities, are capitalized when incurred and amortized on a straight-line basis over the period of time estimated to lapse until the next turnaround occurs, which is based on an engineering assessment. The amortization period generally ranges from 3 to 6 years; however, based on the specific facts and circumstances, different periods of deferral may occur.

Precious metal catalysts, linefill and certain other intangibles are considered indefinite-lived assets as they are not expected to deteriorate in their prescribed functions. Such assets are assessed for impairment in connection with the Company's review of its long-lived assets.

Deferred financing costs are capitalized when incurred and amortized over the life of the loan.

Intangible assets with finite lives primarily consist of emission credits and permits and are amortized over their estimated useful lives (generally 1 to 10 years).

Asset Retirement Obligations

The Company records an asset retirement obligation at fair value for the estimated cost to retire a tangible long-lived asset at the time the Company incurs that liability, which is generally when the asset is purchased, constructed, or leased. The Company records the liability when it has a legal or contractual obligation to incur costs to retire the asset and when a reasonable estimate of the fair value of the liability can be made. If a reasonable estimate cannot be made at the time the liability is incurred, the Company will record the liability when sufficient information is available to estimate the liability's fair value. Certain of the Company's asset retirement obligations are based on its legal obligation to perform remedial activity at its refinery sites when it permanently ceases operations of the long-lived assets. The Company therefore considers the settlement date of these obligations to be indeterminable. Accordingly, the Company cannot calculate an associated asset retirement liability for these obligations at this time. The Company will measure and recognize the fair value of these asset retirement obligations when the settlement date is determinable.

Environmental Matters

Liabilities for future remediation costs are recorded when environmental assessments and/or remedial efforts are probable, and the costs can be reasonably estimated. Other than for assessments, the timing and magnitude of these accruals generally are based on the completion of investigations or other studies or a commitment to a formal plan of action. Environmental liabilities are based on best estimates of probable future costs using currently available technology and applying current regulations, as well as the Company's own internal environmental policies. The measurement of environmental remediation liabilities may be discounted to reflect the time value of money if the aggregate amount and timing of cash payments of the liabilities are fixed or reliably determinable. The actual settlement of the Company's liability for environmental matters could materially differ from its estimates due to a number of uncertainties such as the extent of contamination, changes in environmental laws and regulations, potential improvements in remediation technologies and the participation of other responsible parties.

Stock-Based Compensation

Stock-based compensation includes the accounting effect of options to purchase PBF Energy Class A common stock granted by PBF Energy to certain PBF Holding employees, Series A warrants issued or granted by PBF LLC to employees in connection with their acquisition of PBF LLC Series A units, options to acquire Series A units of PBF LLC granted by PBF LLC to certain employees, Series B units of PBF LLC that were granted to certain members of management and restricted PBF LLC Series A Units and restricted PBF Energy Class A common stock granted to certain directors and officers. The estimated fair value of the options to purchase PBF Energy Class A common stock and the PBF LLC Series A warrants and options, is based on the Black-Scholes option pricing model and the fair value of the PBF LLC Series B units is estimated based on a Monte Carlo simulation model. The estimated fair value is amortized as stock-based compensation expense on a straight-line method over the vesting period and included in General and administrative expense with forfeitures recognized in the period they occur.

PBF Energy grants performance share unit awards and performance unit awards to certain key employees. Performance awards granted to employees prior to November 1, 2020 are based on a three-year performance cycle with four measurement periods and performance awards granted to employees after November 1, 2020 are based on a three-year performance cycle having a single measurement period. The payout for each, which ranges from zero to 200%, is based on the relative ranking of the total shareholder return ("TSR") of PBF Energy's common stock as compared to the TSR of a selected group of industry peer companies over an average of four measurement periods. The performance share unit awards and performance unit awards are each measured at fair value based on Monte Carlo simulation models. The performance share unit awards will be settled in PBF Energy Class A common stock and are accounted for as equity awards and the performance unit awards will be settled in cash and are accounted for as liability awards.

Income Taxes

As PBF Holding is a limited liability company treated as a "flow-through" entity for income tax purposes, there is no benefit or expense for federal or state income tax in the accompanying financial statements apart from the income taxes attributable to two subsidiaries acquired in connection with the acquisition of Chalmette Refining, L.L.C. ("Chalmette Refining") and the Company's wholly-owned Canadian subsidiary, PBF Energy Limited ("PBF Ltd."). These subsidiaries are treated as C-corporations for tax purposes, with the tax provision calculated based on the effective tax rate for the periods presented.

The State tax returns for all years since 2019 are subject to examination by the respective tax authorities.

Pension and Other Post-Retirement Benefits

The Company recognizes an asset for the overfunded status or a liability for the underfunded status of its pension and post-retirement benefit plans. The funded status is recorded within Other long-term liabilities or Other non-current assets. Changes in the plans' funded status are recognized in other comprehensive income in the period the change occurs.

Fair Value Measurement

A fair value hierarchy (Level 1, Level 2, or Level 3) is used to categorize fair value amounts based on the quality of inputs used to measure fair value. Accordingly, fair values derived from Level 1 inputs utilize quoted prices in active markets for identical assets or liabilities. Fair values derived from Level 2 inputs are based on quoted prices for similar assets and liabilities in active markets, and inputs other than quoted prices that are either directly or indirectly observable for the asset or liability. Level 3 inputs are unobservable inputs for the asset or liability, and include situations where there is little, if any, market activity for the asset or liability.

The Company uses appropriate valuation techniques based on the available inputs to measure the fair values of its applicable assets and liabilities. When available, the Company measures fair value using Level 1 inputs because they generally provide the most reliable evidence of fair value. In some valuations, the inputs may fall into different levels in the hierarchy. In these cases, the asset or liability level within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurements.

Financial Instruments

The estimated fair value of financial instruments has been determined based on the Company's assessment of available market information and appropriate valuation methodologies. The Company's non-derivative financial instruments that are included in current assets and current liabilities are recorded at cost in the Consolidated Balance Sheets. The estimated fair value of these financial instruments approximates their carrying value due to their short-term nature. Derivative instruments are recorded at fair value in the Consolidated Balance Sheets.

The Company's commodity contracts are measured and recorded at fair value using Level 1 inputs based on quoted prices in an active market, Level 2 inputs based on quoted market prices for similar instruments, or Level 3 inputs based on third-party sources and other available market based data. The Company's catalyst obligations and derivatives related to the Company's crude oil and feedstocks and refined product purchase obligations are measured and recorded at fair value using Level 2 inputs on a recurring basis, based on observable market prices for similar instruments.

Derivative Instruments

The Company is exposed to market risk, primarily related to changes in commodity prices for the crude oil and feedstocks used in the refining process as well as the prices of the refined products sold, and the risk associated with the price of credits needed to comply with various governmental and regulatory environmental compliance programs. The accounting treatment for commodity and environmental compliance contracts depends on the intended use of the particular contract and on whether or not the contract meets the definition of a derivative.

All derivative instruments, not designated as normal purchases or sales, are recorded in the Consolidated Balance Sheets as either assets or liabilities measured at their fair values. Changes in the fair value of derivative instruments that either are not designated or do not qualify for hedge accounting treatment or normal purchase or normal sale accounting are recognized in earnings. Contracts qualifying for the normal purchase and sales exemption are accounted for upon settlement. Cash flows related to derivative instruments that are not designated or do not qualify for hedge accounting treatment are included in operating activities.

The Company designates certain derivative instruments as fair value hedges of a particular risk associated with a recognized asset or liability. At the inception of the hedge designation, the Company documents the relationship between the hedging instrument and the hedged item, as well as its risk management objective and strategy for undertaking various hedge transactions. Derivative gains and losses related to these fair value hedges, including hedge ineffectiveness, are recorded in cost of sales along with the change in fair value of the hedged asset or liability attributable to the hedged risk. Cash flows related to derivative instruments that are designated as fair value hedges are included in operating activities.

Economic hedges are hedges not designated as fair value or cash flow hedges for accounting purposes that are used to (i) manage price volatility in certain refinery feedstock and refined product inventories, and (ii) manage price volatility in certain forecasted refinery feedstock purchases and refined product sales. These instruments are recorded at fair value and changes in the fair value of the derivative instruments are recognized currently in cost of sales.

Derivative accounting is complex and requires management judgment in the following respects: identification of derivatives and embedded derivatives, determination of the fair value of derivatives, documentation of hedge relationships, assessment and measurement of hedge ineffectiveness and election and designation of the normal purchases and sales exemption. All of these judgments, depending upon their timing and effect, can have a significant impact on the Company's earnings.

3. CURRENT EXPECTED CREDIT LOSSES

Credit Losses

The Company has exposure to credit losses primarily through its sales of refined products. The Company evaluates creditworthiness on an individual customer basis. The Company utilizes a financial review model for purposes of evaluating creditworthiness which is based on information from financial statements and credit reports. The financial review model enables the Company to assess the customer's risk profile and determine credit limits on the basis of their financial strength, including but not limited to, their liquidity, leverage, debt serviceability, longevity and how they pay their bills. The Company may require security in the form of letters of credit or cash payments in advance of product delivery for certain customers that are deemed higher risk.

The Company's payment terms on its trade receivables are relatively short, generally 30 days or less for a substantial majority of its refined products. As a result, the Company's collection risk is mitigated to a certain extent by the fact that sales are collected in a relatively short period of time, allowing for the ability to reduce exposure on defaults if collection issues are identified. Notwithstanding, the Company reviews each customer's credit risk profile at least annually or more frequently if warranted.

The Company performs a quarterly allowance for doubtful accounts analysis to assess whether an allowance needs to be recorded for any outstanding trade receivables. In estimating credit losses, management reviews accounts that are past due, have known disputes or have experienced any negative credit events that may result in future collectability issues. There was no allowance for doubtful accounts recorded as of December 31, 2023 or December 31, 2022.

4. INVENTORIES

Inventories consisted of the following:

	December 31, 2023	
(in millions)		**Total**
Crude oil and feedstocks	$	1,495.4
Refined products and blendstocks		1,536.5
Warehouse stock and other		151.2
	$	3,183.1
Lower of cost or market adjustment		—
Total inventories	$	3,183.1

	December 31, 2022		
(in millions)	**Titled Inventory**	**Inventory Intermediation Agreement**	**Total**
Crude oil and feedstocks	$ 1,195.2	$ 140.9	$ 1,336.1
Refined products and blendstocks	1,244.7	40.9	1,285.6
Warehouse stock and other	141.9	—	141.9
	$ 2,581.8	$ 181.8	$ 2,763.6
Lower of cost or market adjustment	—	—	—
Total inventories	$ 2,581.8	$ 181.8	$ 2,763.6

As of December 31, 2023 and December 31, 2022, there was no LCM inventory adjustment recorded as the replacement value of inventories exceeded the LIFO carrying value. During the year ended December 31, 2021, the Company recorded an adjustment to value its inventories to the lower of cost or market which increased income from operations by $669.6 million, reflecting no LCM inventory reserve at December 31, 2021.

An actual valuation of inventories valued under the LIFO method is made at the end of each year based on inventory levels and costs at that time. There were no significant decrements recorded during the years ended December 31, 2023, December 31, 2022, or December 31, 2021.

On July 31, 2023, the Company terminated the third amended and restated inventory intermediation agreement (the "Third Inventory Intermediation Agreement") previously entered into by and among PBF Holding and its subsidiaries, Delaware City Refining Company LLC, Paulsboro Refining Company LLC and Chalmette Refining (collectively, the "PBF Entities"), and J. Aron & Company, a subsidiary of The Goldman Sachs Group, Inc. ("J. Aron"). The Company made a payment of $268.0 million for the inventory previously held by J. Aron, inclusive of $13.5 million of related costs associated with exiting the agreement. Pursuant to the Third Inventory Intermediation Agreement, J. Aron had purchased and held title to certain inventory, including crude oil, intermediate and certain finished products (the "J. Aron Products") purchased or produced by the Paulsboro and Delaware City refineries (and, at the election of the PBF Entities, the Chalmette refinery) (the "Refineries") and delivered into storage tanks at the Refineries (the "Storage Tanks"). Following the early termination, the Company purchased, and now owns, all of the inventory previously held by J. Aron.

5. PROPERTY, PLANT AND EQUIPMENT, NET

Property, plant and equipment, net consisted of the following:

(in millions)	December 31, 2023	December 31, 2022
Processing units, pipelines and equipment	$ 4,487.7	$ 4,508.8
Construction in progress	464.8	825.1
Land	416.1	418.8
Computers, furniture and fixtures	207.3	175.7
Buildings and leasehold improvements	178.7	107.8
	5,754.6	6,036.2
Less - Accumulated depreciation	(1,609.1)	(1,434.4)
Total property, plant and equipment, net	$ 4,145.5	$ 4,601.8

Depreciation expense for the years ended December 31, 2023, 2022 and 2021 was $205.0 million, $200.4 million and $192.3 million, respectively. The Company capitalized $38.0 million and $24.8 million in interest during 2023 and 2022, respectively, in connection with construction in progress.

6. DEFERRED CHARGES AND OTHER ASSETS, NET

Deferred charges and other assets, net consisted of the following:

(in millions)	December 31, 2023	December 31, 2022
Deferred turnaround costs, net	$ 855.7	$ 619.5
Catalyst, net [(a)]	180.1	199.7
Environmental credits	42.5	41.4
Linefill	27.4	27.4
Pension plan assets	18.8	18.6
Other	4.8	47.4
Total deferred charges and other assets, net	$ 1,129.3	$ 954.0

[(a)] Catalyst, net includes $114.2 million and $117.0 million of indefinite-lived precious metal catalysts (both owned or financed as part of existing catalyst financing arrangements) as of December 31, 2023 and December 31, 2022, respectively.

The Company recorded amortization expense related to deferred turnaround costs, catalyst and intangible assets of $313.5 million, $261.5 million and $220.6 million for the years ended December 31, 2023, 2022 and 2021, respectively.

Intangible assets, net, included in “Other” above, primarily consists of permits and emission credits. Our net balance as of December 31, 2023 and December 31, 2022 is shown below:

(in millions)	December 31, 2023	December 31, 2022
Intangible assets - gross	$ 4.0	$ 4.0
Accumulated amortization	(3.5)	(3.5)
Intangible assets - net	$ 0.5	$ 0.5

7. ACCRUED EXPENSES

Accrued expenses consisted of the following:

(in millions)	December 31, 2023	December 31, 2022
Inventory-related accruals	$ 1,716.2	$ 1,417.4
Renewable energy credit and emissions obligations (a)	429.8	1,361.1
Accrued salaries and benefits	185.5	172.9
Accrued transportation costs	170.5	127.3
Excise and sales tax payable	137.3	123.8
Accrued capital expenditures	84.5	85.7
Accrued utilities	71.0	105.4
Accrued refinery maintenance and support costs	60.2	48.1
Accrued interest	32.4	20.1
Contingent Consideration	21.6	81.6
Environmental liabilities	15.7	14.1
Current finance lease liabilities	12.2	11.7
Inventory intermediation agreement (b)	—	98.3
Other	31.1	23.5
Total accrued expenses	$ 2,968.0	$ 3,691.0

(a) The Company is subject to obligations to purchase RINs required to comply with RFS. The Company's overall RINs obligation is based on a percentage of domestic shipments of on-road fuels as established by EPA. To the degree the Company is unable to blend the required amount of biofuels to satisfy its RINs obligation, RINs must be purchased on the open market to avoid penalties and fines. The Company records its RINs obligation on a net basis in Accrued expenses when its RINs liability is greater than the amount of RINs earned and purchased in a given period and in Prepaid and other current assets when the amount of RINs earned and purchased is greater than the RINs liability. In addition, the Company is subject to obligations to comply with federal and state legislative and regulatory measures, including regulations in the state of California pursuant to Assembly Bill 32 ("AB 32"), to address environmental compliance and greenhouse gas and other emissions. These requirements include incremental costs to operate and maintain our facilities as well as to implement and manage new emission controls and programs. Renewable energy credit and emissions obligations fluctuate with the volume of applicable product sales and timing of credit purchases. From time to time, the Company enters into forward purchase commitments in order to acquire its renewable energy and emissions credits at fixed prices. As of December 31, 2023, the Company had forward purchase commitments in excess of total accrued renewable energy and emissions obligations. Our RIN obligations will be settled in accordance with established regulatory deadlines. The Company's current AB 32 liability is part of an ongoing triennial period program which will be settled in 2024.

(b) The Company had the obligation to repurchase the J. Aron Products that were held in its Storage Tanks in accordance with the Third Inventory Intermediation Agreement. As of December 31, 2022, a liability was recognized based on the repurchase obligation under the Third Inventory Intermediation Agreement for the J. Aron owned inventory held in the Company's Storage Tanks, with any change in the market price being recorded in Cost of products and other. As described in "Note 4 - Inventories", the Company early terminated this agreement on July 31, 2023.

8. CREDIT FACILITIES AND DEBT

Debt outstanding consisted of the following:

(in millions)	December 31, 2023	December 31, 2022
2028 Senior Notes	$ 801.6	$ 801.6
2030 Senior Notes	500.0	—
2025 Senior Notes	—	664.5
Revolving Credit Facility	—	—
Catalyst financing arrangements	—	4.0
	1,301.6	1,470.1
Unamortized discount	(3.2)	—
Unamortized deferred financing costs	(52.5)	(35.2)
Long-term debt	$ 1,245.9	$ 1,434.9

As of December 31, 2023, the Company is in compliance with all covenants, including financial covenants, in all its debt agreements.

2028 Senior Notes

On January 24, 2020, PBF Holding entered into an indenture among PBF Holding and PBF Holding's wholly-owned subsidiary, PBF Finance Corporation (together with PBF Holding, the "Issuers"), the guarantors named therein (collectively the "Guarantors"), Wilmington Trust, National Association, as Trustee and Deutsche Bank Trust Company Americas, as Paying Agent, Registrar, Transfer Agent and Authenticating Agent, under which the Issuers issued $1.0 billion in aggregate principal amount of the 6.00% senior unsecured notes due 2028 (the "2028 Senior Notes"). The Issuers received net proceeds of approximately $987.0 million from the offering after deducting the initial purchasers' discount and offering expenses. The Company primarily used the net proceeds to fully redeem the 7.00% senior notes due 2023 (the "2023 Senior Notes"), including accrued and unpaid interest, on February 14, 2020, and to fund a portion of the cash consideration for the acquisition of the Martinez refinery and related logistics assets. The difference between the carrying value of the 2023 Senior Notes on the date they were reacquired and the amount for which they were reacquired has been classified as loss on extinguishment of debt in the Consolidated Statements of Operations.

The 2028 Senior Notes included a registration rights arrangement whereby the Issuer and the Guarantors agreed to file with the U.S. Securities and Exchange Commission and use commercially reasonable efforts to consummate an offer to exchange the 2028 Senior Notes for an issue of registered notes with terms substantially identical to the notes not later than 365 days after the date of the original issuance of the notes. This registration statement was declared effective on October 14, 2020 and the exchange was consummated during the fourth quarter of 2020. As such, the Company did not have to transfer any consideration as a result of the registration rights agreement and thus no loss contingency was recorded.

The 2028 Senior Notes are guaranteed on a senior unsecured basis by substantially all of PBF Holding's subsidiaries. The 2028 Senior Notes and guarantees are senior unsecured obligations and rank equal in right of payment with all of the Issuers' and the Guarantors' existing and future indebtedness, including the asset-based revolving credit facility ("Revolving Credit Facility") and the 7.875% senior unsecured notes due 2030 (the "2030 Senior Notes"). The 2028 Senior Notes and the guarantees rank senior in right of payment to the Issuers' and the Guarantors' existing and future indebtedness that is expressly subordinated in right of payment thereto. The 2028 Senior Notes and the guarantees are effectively subordinated to any of the Issuers' and the Guarantors' existing or future secured indebtedness (including the Revolving Credit Facility) to the extent of the value of the collateral securing such indebtedness. The 2028 Senior Notes and the guarantees are structurally subordinated to any existing or future indebtedness and other obligations of the Issuers' non-guarantor subsidiaries. In addition, the 2028 Senior Notes contain customary terms, events of default and covenants for an issuer of non-investment grade debt securities. These covenants include limitations on the incurrence of additional indebtedness, equity issuances, and payments. Many of these covenants will cease to apply or will be modified if the 2028 Senior Notes are rated investment grade.

Subsequent to February 15, 2023, the Issuers may redeem all or part of the 2028 Senior Notes, in each case at the redemption prices described in the indenture, together with any accrued and unpaid interest through the date of redemption.

During 2021, the Company made a number of open market repurchases of its 2028 Senior Notes that resulted in the extinguishment of $173.5 million in principal. Total cash consideration paid to repurchase the principal amount outstanding of the 2028 Senior Notes, excluding accrued interest, totaled $109.3 million and the Company recognized a $62.4 million gain on the extinguishment of debt during the year ended December 31, 2021.

During 2022, the Company made a number of open market repurchases of its 2028 Senior Notes that resulted in the extinguishment of $24.9 million in principal. Total cash consideration paid to repurchase the principal amount outstanding of the 2028 Senior Notes, excluding accrued interest, totaled $21.1 million and the Company recognized a $3.6 million gain on the extinguishment of debt during the year ended December 31, 2022.

2030 Senior Notes

On August 21, 2023, PBF Holding entered into an indenture among the Issuers, the Guarantors, Wilmington Trust, National Association, as Trustee and Deutsche Bank Trust Company Americas, as Paying Agent, Registrar, Transfer Agent and Authenticating Agent, under which the Issuers issued $500.0 million in aggregate principal amount of the 2030 Senior Notes, at an issue price of 99.324%. The Issuers received net proceeds of approximately $488.8 million from the offering after deducting the initial purchasers' discount and offering expenses. The Company used the net proceeds, together with cash on hand, to fully redeem the outstanding 7.25% senior unsecured notes due 2025 (the "2025 Senior Notes"), including accrued and unpaid interest, on September 13, 2023.

The 2030 Senior Notes are guaranteed on a senior unsecured basis by substantially all of PBF Holding's subsidiaries. The 2030 Senior Notes and guarantees are senior unsecured obligations and rank equal in right of payment with all of the Issuers' and the Guarantors' existing and future senior indebtedness, including the Revolving Credit Facility and the 2028 Senior Notes. The 2030 Senior Notes and the guarantees rank senior in right of payment to the Issuers' and the Guarantors' existing and future indebtedness that is expressly subordinated in right of payment thereto. The 2030 Senior Notes and the guarantees are effectively subordinated to any of the Issuers' and the Guarantors' existing or future secured indebtedness (including the Revolving Credit Facility) to the extent of the value of the collateral securing such indebtedness. The 2030 Senior Notes and the guarantees are structurally subordinated to any existing or future indebtedness and other obligations of the Issuers' non-guarantor subsidiaries.

In addition, the 2030 Senior Notes contain customary terms, events of default and covenants for an issuer of non-investment grade debt securities. These covenants include limitations on the incurrence of additional indebtedness, equity issuances, and payments. Many of these covenants will cease to apply or will be modified if the 2030 Senior Notes are rated investment grade.

At any time prior to September 15, 2026, the Issuers may on any one or more occasions redeem up to 35% of the aggregate principal amount of the 2030 Senior Notes in an amount not greater than the net cash proceeds of certain equity offerings at a redemption price equal to 107.875% of the principal amount of the 2030 Senior Notes, plus any accrued and unpaid interest through the date of redemption; provided that at least 65% of the aggregate principal amount of the notes originally issued under the indenture governing the 2030 Senior Notes remains outstanding immediately after the occurrence of each such redemption. On or after September 15, 2026, the Issuers may redeem all or part of the 2030 Senior Notes, in each case at the redemption prices described in the indenture, together with any accrued and unpaid interest through the date of redemption. In addition, prior to September 15, 2026, the Issuers may redeem all or part of the 2030 Senior Notes at a "make-whole" redemption price described in the indenture, together with any accrued and unpaid interest through the date of redemption.

2025 Senior Notes

On May 30, 2017, PBF Holding entered into an indenture among the Issuers, the Guarantors, Wilmington Trust, National Association, as Trustee, and Deutsche Bank Trust Company Americas, as Paying Agent, Registrar, Transfer Agent and Authenticating Agent, under which the Issuers issued $725.0 million in aggregate principal amount of 2025 Senior Notes. The Issuers received net proceeds of approximately $711.6 million from the offering after deducting the initial purchasers' discount and offering expenses, all of which was used to fund the cash tender offer (the "Tender Offer") for any and all of its outstanding 8.25% Senior Secured Notes due 2020 (the "2020 Senior Secured Notes"), to pay the related redemption price and accrued and unpaid interest for any 2020 Senior Secured Notes which remained outstanding after the completion of the Tender Offer, and for general corporate purposes.

During 2021, the Company made a number of open market repurchases of its 2025 Senior Notes that resulted in the extinguishment of $55.5 million in principal. Total cash consideration paid to repurchase the principal amount outstanding of the 2025 Senior Notes, excluding accrued interest, totaled $37.5 million and the Company recognized a $17.5 million gain on the extinguishment of debt during the year ended December 31, 2021.

During 2022, the Company made a number of open market repurchases of its 2025 Senior Notes that resulted in the extinguishment of $5.0 million in principal. Total cash consideration paid to repurchase the principal amount outstanding of the 2025 Senior Notes, excluding accrued interest, totaled $4.8 million and the Company recognized a $0.2 million gain on the extinguishment of debt during the year ended December 31, 2022.

During 2023, the Company exercised its rights under the indenture governing the 2025 Senior Notes to redeem all of the outstanding 2025 Senior Notes at a price of 100% of the aggregate principal amount thereof, plus accrued and unpaid interest. The aggregate redemption price for all 2025 Senior Notes approximated $664.5 million plus accrued and unpaid interest. The difference between the carrying value of the 2025 Senior Notes on the date they were redeemed and the amount for which they were redeemed was recorded as a loss on extinguishment of debt in the Consolidated Statements of Operations. The redemption was financed using proceeds from the 2030 Senior Notes and cash on hand.

2025 Senior Secured Notes

On May 13, 2020, PBF Holding entered into an indenture among the Issuers, the Guarantors, and Wilmington Trust, National Association, as Trustee, Paying Agent, Registrar, Transfer Agent, Authenticating Agent and Notes Collateral Agent, under which the Issuers issued $1.0 billion in aggregate principal amount of 9.25% senior secured notes due 2025 (the "initial 2025 Senior Secured Notes"). On December 21, 2020 PBF Holding issued an additional $250.0 million in aggregate principal amount of tack on 9.25% senior secured notes due 2025 (the "additional 2025 Senior Secured Notes"). The additional 2025 Senior Secured Notes were issued at an offering price of 100.25% plus accrued and unpaid interest from and including, November 15, 2020. The additional 2025 Senior Secured Notes were issued under the indenture governing the initial 2025 Senior Secured Notes and, together with the additional 2025 Senior Secured Notes, the ("2025 Senior Secured Notes").

During 2022, the Company exercised its rights under the indenture governing the 2025 Senior Secured Notes to redeem all of the outstanding 2025 Senior Secured Notes at a price of 104.625% of the aggregate principal amount thereof plus accrued and unpaid interest. The aggregate redemption price for all 2025 Senior Secured Notes approximated $1.3 billion plus accrued and unpaid interest. The difference between the carrying value of the 2025 Senior Secured Notes on the date they were redeemed and the amount for which they were redeemed was $69.9 million and was recorded as a loss on extinguishment of debt in the Consolidated Statements of Operations. The redemption was funded using cash on hand.

Revolving Credit Facility

On August 23, 2023, PBF Holding and certain of its wholly-owned subsidiaries, as borrowers or subsidiary guarantors, entered into an amended and restated asset-based revolving credit agreement, among PBF Holding, Bank of America, National Association as administrative agent, and certain other lenders (the "Revolving Credit Agreement"). The Revolving Credit Agreement amended and restated the previously existing revolving credit agreement dated as of May 2, 2018 (as amended from time to time, the "Prior Credit Agreement"). Among other things, the Revolving Credit Agreement extended the Revolving Credit Facility through August 2028 and increased the maximum commitment amount under the facility to $3.5 billion from $2.85 billion. The commitment fees on the unused portion, the interest rate on advances and the fees for letters of credit are generally consistent with the Prior Credit Agreement. The Revolving Credit Facility contains representations, warranties and covenants by PBF Holding and the other borrowers, as well as customary events of default and indemnification obligations that are consistent with those in the Prior Credit Agreement.

PBF Holding may from time to time by written notice to the Administrative Agent (as defined in the Revolving Credit Agreement) elect to request after the commencement of the revolving availability period and prior to the revolving maturity date, increases to the existing revolving commitments by an amount not in excess of an aggregate amount equal to the sum of (1) $500.0 million, plus (2) an amount equal to all voluntary prepayments that have resulted in permanent reductions of the revolving commitments, plus (3) solely after the use of the amount set forth in clause (1), an amount equal to suppressed availability determined as of the date of such notice. Each such notice shall specify (i) the date on which PBF Holding proposes that the increased or new revolving commitments shall be effective, which shall be a date not less than 5 business days after the date on which such notice is delivered to the Administrative Agent and (ii) the identity of each Eligible Assignee (as defined in the Revolving Credit Agreement) to whom PBF Holding proposes any portion of such increased or new revolving commitments be allocated and the amounts of such allocations; provided that any existing lender approached to provide all or a portion of the increased or new revolving commitments may elect or decline, in its sole discretion, to provide such increased or new revolving commitment.

Borrowings under the Revolving Credit Facility bear interest at the Alternative Base Rate plus the Applicable Margin or at the Term SOFR Rate plus the Applicable Margin (all as defined in the Revolving Credit Agreement). The Applicable Margin ranges from 0.25% to 1.00% for Alternative Base Rate Loans and from 1.25% to 2.00% for Term SOFR Loans, in each case depending on the Company's corporate credit rating. In addition, the LC Participation Fee ranges from 1.25% to 2.00% depending on the Company's corporate credit rating and the Fronting Fee is capped at 0.25%.

The Revolving Credit Agreement contains customary covenants and restrictions on the activities of PBF Holding and its subsidiaries, including, but not limited to, limitations on incurring additional indebtedness, liens, negative pledges, guarantees, investments, loans, asset sales, mergers and acquisitions, prepayment of other debt, distributions, dividends and the repurchase of capital stock, transactions with affiliates and the ability of PBF Holding to change the nature of its business or its fiscal year; all as defined in the Revolving Credit Agreement.

In addition, the Revolving Credit Agreement has a financial covenant which requires that if at any time Excess Availability, as defined in the Revolving Credit Agreement, is less than the greater of (i) 10% of the lesser of the then existing Borrowing Base and the then aggregate Revolving Commitments of the Lenders (the "Financial Covenant Testing Amount"), and (ii) $100.0 million, and until such time as Excess Availability is greater than the Financial Covenant Testing Amount and $100.0 million for a period of 12 or more consecutive days, PBF Holding will not permit the Consolidated Fixed Charge Coverage Ratio, as defined in the Revolving Credit Agreement and determined as of the last day of the most recently completed quarter, to be less than 1 to 1.

PBF Holding's obligations under the Revolving Credit Facility are (a) guaranteed by each of its domestic operating subsidiaries that are not Excluded Subsidiaries (as defined in the Revolving Credit Agreement) and (b) secured by a lien on (i) PBF LLC's equity interest in PBF Holding and (ii) certain assets of PBF Holding and the subsidiary guarantors, including all deposit accounts (other than zero balance accounts, cash collateral accounts, trust accounts and/or payroll accounts, all of which are excluded from the definition of collateral), all accounts receivable, all hydrocarbon inventory (other than certain inventory owned by third parties under permittable inventory intermediation or similar agreements, as applicable) and to the extent evidencing, governing, securing or otherwise related to the foregoing, all general intangibles, chattel paper, instruments, documents, letter of credit rights and supporting obligations; and all products and proceeds of the foregoing.

The Revolving Credit Agreement also allows the Company to sell certain Eligible Receivables (as defined in the Revolving Credit Agreement) derived from the sale of refined product over truck racks. Under its $300.0 million uncommitted receivables purchase facility (the "Receivables Facility"), the Company sells such receivables to a bank subject to bank approval and certain conditions. The sales of receivables under the Receivables Facility are absolute and irrevocable but subject to certain repurchase obligations under certain circumstances.

There were no outstanding borrowings under the Revolving Credit Facility as of December 31, 2023 and 2022, respectively. Issued letters of credit were $55.0 million and $576.1 million as of December 31, 2023 and 2022, respectively.

Precious Metals Financing Arrangements

During the year ended December 31, 2023, the Company settled its remaining outstanding precious metal financing arrangement, which represented a reduction of debt of approximately $3.1 million. During the year ended December 31, 2022, the Company settled certain of its precious metals financing arrangements, resulting in reductions of debt of approximately $56.2 million. Prior to the final settlement, certain subsidiaries of the Company had agreements whereby such subsidiary sold a portion of its precious metal catalysts to a commercial bank under contractual arrangements to repurchase or otherwise settle the obligation at a future specified date. The volume of the precious metal catalysts and the interest rate were fixed over the term of each financing arrangement. At maturity, the Company was required to repurchase the applicable precious metal catalysts, or otherwise settle the obligation with the counterparty, at its then fair market value. The Company treated those transactions as financing arrangements, and the related payments were recorded as interest expense over the agreements' terms. The Company elected the fair value option for accounting for the catalyst repurchase obligations as the Company's liability was directly impacted by the change in value of the underlying precious metal catalysts. The fair value of the repurchase obligations was reflected in the fair value of long-term debt outstanding table measured using Level 2 inputs.

Debt Maturities

Debt maturing in the next five years and thereafter is as follows (in millions):

Year Ending December 31,		
2024	$	—
2025		—
2026		—
2027		—
2028		801.6
Thereafter		500.0
Total debt outstanding	$	1,301.6

9. RELATED PARTY TRANSACTIONS

PBFX Merger Transaction

On November 30, 2022, PBF Energy acquired all of the publicly held common units in PBFX representing limited partner interests in the Master Limited Partnership not already owned by certain wholly-owned subsidiaries of PBF Energy and its affiliates (the "Merger Transaction"), and PBFX became an indirect wholly-owned subsidiary of PBF Energy. The Merger Transaction closed on November 30, 2022 and PBFX became an indirect wholly-owned subsidiary of PBF Energy and PBF LLC.

At the effective time of the merger, pursuant to the terms of the merger agreement (the "Merger Agreement"), each PBFX Public Common Unit was converted into the right to receive: (i) 0.27 of a share of Class A Common Stock, par value $0.001 per share, of PBF Energy, (ii) $9.25 in cash, without interest, and (iii) any cash in lieu of fractional shares of PBF Energy Common Stock to which the holder thereof became entitled upon surrender of such PBFX Public Common Units in accordance with the Merger Agreement. Such Merger Agreement consideration totaled $303.7 million in cash and resulted in the issuance of 8,864,684 PBF Energy common shares. The PBFX Common Units owned by PBF LLC and PBFX Holdings and the non-economic general partner interest remain outstanding and were unaffected by the Merger. There was no change in ownership of the non-economic general partner interest.

Transactions and agreements with PBFX

PBF Holding entered into agreements with PBFX that establish fees for certain general and administrative services, and operational and maintenance services provided by the Company to PBFX. In addition, the Company executed terminal, pipeline and storage services agreements with PBFX under which PBFX provides commercial transportation, terminaling, storage and pipeline services to the Company. These agreements with PBFX include:

Contribution Agreements

Immediately prior to the closing of certain contribution agreements, which PBF LLC entered into with PBFX (as defined in the table below, and collectively referred to as the "Contribution Agreements"), PBF Holding contributed certain assets to PBF LLC. PBF LLC in turn contributed those assets to PBFX pursuant to the Contribution Agreements. Certain proceeds received by PBF LLC from PBFX in accordance with the Contribution Agreements were subsequently contributed by PBF LLC to PBF Holding. There were no agreements entered into during the years ended December 31, 2023, 2022 and 2021.

Commercial Agreements with PBFX

PBF Holding has entered into long-term, fee-based commercial agreements with PBFX relating to assets associated with the Contribution Agreements described above, the majority of which include a minimum volume commitment ("MVC") and are supported by contractual fee escalations for inflation adjustments and certain increases in operating costs. Under these agreements, PBFX provides various pipeline, rail and truck terminaling and storage services to PBF Holding and PBF Holding has committed to provide PBFX with minimum fees based on minimum monthly throughput volumes.

The commercial agreements as of December 31, 2023 (as defined in the table below) with PBFX include:

Agreements	Initiation Date	Initial Term	Renewals (a)	MVC	Force Majeure
Transportation and Terminaling					
Toledo Storage Facility Storage and Terminaling Services Agreement- Terminaling Facility (b)	12/12/2014	10 years	2 x 5	4,400 bpd	
Delaware Pipeline Services Agreement	5/15/2015	10 years, 8 months	2 x 5	50,000 bpd	
Delaware Pipeline Services Agreement- Magellan Connection	11/1/2016	2 years, 5 months	See note (c)	See note (c)	
Delaware City Truck Loading Services Agreement- Gasoline	5/15/2015	10 years, 8 months	2 x 5	30,000 bpd	
Delaware City Truck Loading Services Agreement- LPGs	5/15/2015	10 years, 8 months	2 x 5	5,000 bpd	
East Coast Terminals Terminaling Services Agreements (d)	5/1/2016	Various (e)	Evergreen	15,000 bpd (f)	
East Coast Terminals Tank Lease Agreements	5/1/2016	Various (e)	Evergreen	350,000 barrels (g)	
Torrance Valley Pipeline Transportation Services Agreement- North Pipeline (b)	8/31/2016	10 years	2 x 5	50,000 bpd	
Torrance Valley Pipeline Transportation Services Agreement- South Pipeline (b)	8/31/2016	10 years	2 x 5	75,000 bpd (h)	
Torrance Valley Pipeline Transportation Services Agreement- Midway Storage Tank (b)	8/31/2016	10 years	2 x 5	55,000 barrels (g)	
Torrance Valley Pipeline Transportation Services Agreement- Emidio Storage Tank (b)	8/31/2016	10 years	2 x 5	900,000 barrels per month	PBF Holding or PBFX can declare
Torrance Valley Pipeline Transportation Services Agreement- Belridge Storage Tank (b)	8/31/2016	10 years	2 x 5	770,000 barrels per month	
Paulsboro Natural Gas Pipeline Services Agreement (b)	8/4/2017	15 years	Evergreen	60,000 dekatherms per day	
Knoxville Terminals Agreement- Terminaling Services	4/16/2018	5 years	Evergreen	See note (i)	
Knoxville Terminals Agreement- Storage Services	4/16/2018	5 years	Evergreen	See note (i)	
Toledo Rail Loading Agreement (b)	7/31/2018	7 years, 5 months	2 x 5	Various (j)	
Chalmette Terminal Throughput Agreement	7/31/2018	1 year	Evergreen	N/A	
Chalmette Rail Unloading Agreement	7/31/2018	7 years, 5 months	2 x 5	7,600 bpd	
DSL Ethanol Throughput Agreement (b)	7/31/2018	7 years, 5 months	2 x 5	5,000 bpd	
Delaware City Terminaling Services Agreement	1/1/2022	4 years	2 x 5	95,000 bpd	
Toledo Truck Unloading & Terminaling Agreement (b)	4/1/2022	9 months	Evergreen	See note (k)	
Crude Oil Processing Agreement	11/9/2023	6 months	Evergreen	N/A	
Storage					
Toledo Storage Facility Storage and Terminaling Services Agreement- Storage Facility (b)	12/12/2014	10 years	2 x 5	3,849,271 barrels (g)	
Chalmette Storage Agreement (b)	See note (l)	10 years	2 x 5	625,000 barrels (g)	PBF Holding or PBFX can declare
East Coast Storage Assets Terminal Storage Agreement (b)	1/1/2019	8 years	Evergreen	2,953,725 barrels (g)	

(a) PBF Holding has the option to extend the agreements for up to two additional five-year terms, as applicable.

(b) These commercial agreements with PBFX are considered leases.

(c) In connection with the inclusion of an additional destination at the Magellan connection under the Delaware Pipeline Services Agreement, PBF Holding and Delaware Pipeline Company LLC agreed to a two-year, five-month MVC (the "Magellan MVC") under the Delaware Pipeline Services Agreement. The Magellan MVC expired on March 31, 2019, subsequent to which PBFX has been billing actual throughput on the Magellan connection.

(d) Subsequent to the PBFX acquisition of the Toledo, Ohio refined products terminal assets (the "Toledo Products Terminal"), the Toledo Products Terminal was added to the East Coast Terminals Terminaling Services Agreements.

(e) The East Coast Terminals related party agreements include varying initial term lengths, ranging from one to five years.

(f) The East Coast Terminals Terminaling Services Agreements have no MVCs and are billed based on actual volumes throughput, other than a terminaling services agreement between PBFX's East Coast Terminals' Paulsboro, New Jersey location and PBF Holding's Paulsboro refinery with a 15,000 bpd MVC.

(g) Reflects the overall capacity as stipulated by the storage agreement. The storage MVC is subject to the effective operating capacity of each tank, which can be impacted by routine tank maintenance and other factors. PBF Holding's available shell capacity may be subject to change as agreed to by PBF Holding and PBFX.

(h) In connection with the acquisition of Torrance Valley Pipeline Company LLC on May 31, 2019, the Torrance Valley Pipeline Transportation Services Agreement- South Pipeline was amended and restated to increase the MVC from 70,000 bpd to 75,000 bpd.

(i) Following the expiration of the initial terms of the Knoxville Terminals Agreements, both agreements have renewed as evergreen agreements with no contracted MVCs.

(j) Under the Toledo Rail Loading Agreement, PBF Holding has minimum throughput commitments for (i) 30 railcars per day of products and (ii) 11.5 railcars per day of premium products. The Toledo Rail Loading Agreement also specifies a maximum throughput rate of 50 railcars per day.

(k) The Toledo Truck Unloading & Terminaling Agreement MVC was 5,500 bpd through December 31, 2022. Effective January 1, 2023, the MVC decreased to 1,000 bpd.

(l) The Chalmette Storage Services Agreement was entered into on February 15, 2017 and commenced on November 1, 2017.

Omnibus Agreement

In addition to the commercial agreements described above, PBF Holding entered into an omnibus agreement with PBFX, PBFX GP and PBF LLC, which has been amended and restated in connection with certain of the Contribution Agreements with PBFX, PBFX GP and PBF LLC (as amended, the "Omnibus Agreement") for the provision of executive management services and support for accounting and finance, legal, human resources, information technology, environmental, health and safety, and other administrative functions, as well as (i) PBF LLC's agreement not to compete with PBFX under certain circumstances, subject to certain exceptions, (ii) PBFX's right of first offer for ten years to acquire certain logistics assets retained by PBF Energy following the PBFX Offering, including certain logistics assets that PBF LLC or its subsidiaries may construct or acquire in the future, subject to certain exceptions, and (iii) a license to use the PBF Logistics trademark and name.

The annual fee under the Omnibus Agreement for the year ended December 31, 2023 was $7.9 million, inclusive of obligations under the Omnibus Agreement to reimburse PBF Holding for certain compensation and benefit costs of employees who devoted more than 50% of their time to PBFX for the year ended December 31, 2023. The Company currently estimates to receive an annual fee of $6.0 million, inclusive of estimated obligations under the Omnibus Agreement to reimburse PBF Holding for certain compensation and benefit costs of employees who devote more than 50% of their time to PBFX for the year ending December 31, 2024.

Services Agreement

Additionally, PBF Holding and certain of its subsidiaries entered into an operation and management services and secondment agreement with PBFX (as amended, the "Services Agreement"), pursuant to which PBF Holding and its subsidiaries provide PBFX with the personnel necessary for PBFX to perform its obligations under the commercial agreements. PBFX reimburses PBF Holding for the use of such employees and the provision of certain infrastructure-related services to the extent applicable to its operations, including storm water discharge and waste water treatment, steam, potable water, access to certain roads and grounds, sanitary sewer access, electrical power, emergency response, filter press, fuel gas, API solids treatment, fire water and compressed air. For the year ended December 31, 2023, PBFX paid an annual fee of $8.7 million to PBF Holding pursuant to the Services Agreement and is estimated to pay the same annual fee to PBF Holding pursuant to the Services Agreement for the year ending December 31, 2024.

The Services Agreement will terminate upon the termination of the Omnibus Agreement, provided that PBFX may terminate any service on 30-days' notice.

Summary of Transactions with PBFX

A summary of our affiliate transactions with PBFX is as follows:

	Year Ended December 31,		
(in millions)	**2023**	**2022**	**2021**
Reimbursements under affiliate agreements:			
Services Agreement	$ 8.7	$ 8.7	$ 8.7
Omnibus Agreement	7.9	8.3	7.3
Total expenses under affiliate agreements	347.8	319.6	304.1

Total reimbursements under the Omnibus Agreement are included in General and administrative expenses and reimbursements under the Services Agreement and expenses under affiliate agreements are included in Cost of products and other in the Company's statements of operations.

Transactions and agreements with SBR

The Company and its subsidiaries have entered into various agreements with SBR, related to the sale and purchase of environmental credits and hydrocarbon products.

Commercial and other transactions

PBF Holding has entered into commercial agreements with SBR for the purchase and sale of RINs and Low Carbon Fuel Standard ("LCFS") credits.

The Agreement for the Sale and Purchase of Renewable Identification Numbers was initiated on June 1, 2023, and the LEAP Master Agreement for Purchasing and Selling of LCFS credits was initiated on August 1, 2023. Both agreements had initial terms of three months. Upon the expiration of the initial terms, both agreements have been, and will continue to be, automatically renewed for successive three-month periods, unless earlier terminated by the Company or SBR via written notice.

For the period beginning June 27, 2023 through December 31, 2023, the Company had total sales to SBR of $9.1 million, which are included in revenues, that consist primarily of refined product sales. The Company also had purchases from SBR of $244.4 million primarily related to the commercial agreements described above, included in cost of products and other, consisting of purchases of environmental credits and hydrocarbon products.

Operating Agreement

PBF Holding entered into an operation and management services and secondment agreement (the "Operating Agreement") with SBR in June 2023, pursuant to which the Company provides SBR with the personnel necessary for SBR to operate so that it may perform its obligations under the commercial agreements. The Company charges SBR a fixed operating fee under the agreement and SBR reimburses the Company for the use of employees and the provision of certain infrastructure-related services to the extent applicable to its operations.

For the period beginning June 27, 2023 through December 31, 2023, the Company received total fees of $62.8 million under the Operating Agreement.

Additionally, the Consolidated Balance Sheet includes $22.1 million and $28.3 million recorded within Accounts receivable - affiliate and Accounts payable - affiliate, respectively, related to transactions with SBR as of December 31, 2023.

Financial Sponsors

As of December 31, 2013 PBF Energy's financial sponsors had received the full return of their aggregate amount invested in PBF LLC Series A Units. As a result, pursuant to the amended and restated limited liability company agreement of PBF LLC, the holders of PBF LLC Series B Units are entitled to an interest in the amounts received by the investment funds associated with the initial investors in PBF LLC in excess of their original investment in the form of PBF LLC distributions and from the shares of PBF Energy Class A Common Stock issuable to such investment funds (for their own account and on behalf of the holders of PBF LLC Series B Units) upon an exchange, and the proceeds from the sale of such shares. Such proceeds received by the investment funds associated with the initial investors in PBF LLC are distributed to the holders of the PBF LLC Series B Units in accordance with the distribution percentages specified in the PBF LLC amended and restated limited liability company agreement. There were no distributions to PBF LLC Series B unitholders for the years ended December 31, 2023, 2022 or 2021.

10. COMMITMENTS AND CONTINGENCIES

Other Commitments

In addition to commitments related to lease obligations accounted for in accordance with Accounting Standards Codification ("ASC") 842, *Leases* and disclosed in "Note 11 - Leases", the Company is party to third party agreements which provide for the treatment of wastewater and the supply of hydrogen, nitrogen, oxygen, chemical and steam for certain of its refineries as well as minimum volume commitments under certain affiliate agreements with PBFX.

The fixed and determinable amounts related to obligations under these agreements are as follows:

Year Ending December 31,		***(in millions)***
2024	$	162.4
2025		128.5
2026		21.7
2027		21.7
2028		21.7
Thereafter		174.0
Total obligations	$	530.0

Employment Agreements

The Company has entered into various employment agreements with members of executive management and certain other key personnel that include automatic annual renewals, unless canceled. Under some of the agreements, certain of the executives would receive a lump sum payment of between 1.50 to 2.99 times their base salary and continuation of certain employee benefits for the same period upon termination by the Company "Without Cause", or by the employee "For Good Reason", or upon a "Change in Control", as defined in the agreements. Upon death or disability, certain of the Company's executives, or their estates, would receive a lump sum payment of at least one half of their base salary.

Environmental Matters

The Company's refineries, pipelines and related operations are subject to extensive and frequently changing federal, state and local laws and regulations, including, but not limited to, those relating to the discharge of materials into the environment or that otherwise relate to the protection of the environment (including in response to the potential impacts of climate change), waste management and the characteristics and the compositions of fuels. Compliance with existing and anticipated laws and regulations can increase the overall cost of operating the refineries, including remediation, operating costs and capital costs to construct, maintain and upgrade equipment and facilities.

These laws and permits raise potential exposure to future claims and lawsuits involving environmental and safety matters which could include soil and water contamination, air pollution, personal injury and property damage allegedly caused by substances which the Company manufactured, handled, used, released or disposed of, transported, or that relate to pre-existing conditions for which the Company has assumed responsibility. The Company believes that its current operations are in compliance with existing environmental and safety requirements. However, there have been and will continue to be ongoing discussions about environmental and safety matters between the Company and federal and state authorities, including notices of violations, citations and other enforcement actions, some of which have resulted or may result in changes to operating procedures and in capital expenditures. While it is often difficult to quantify future environmental or safety related expenditures, the Company anticipates that continuing capital investments and changes in operating procedures will be required for the foreseeable future to comply with existing and new requirements, as well as evolving interpretations and more strict enforcement of existing laws and regulations.

In connection with the acquisition of the Torrance refinery and related logistics assets, the Company assumed certain pre-existing environmental liabilities. The estimated costs related to these remediation obligations totaled $114.9 million as of December 31, 2023 ($117.0 million as of December 31, 2022) and related primarily to remediation obligations to address existing soil and groundwater contamination and the related monitoring and clean-up activities. Costs related to these obligations are reassessed periodically or when changes to our remediation approach are identified. The current portion of the environmental liability is recorded in Accrued expenses and the non-current portion is recorded in Other long-term liabilities.

The aggregate environmental liability reflected in the Company's Consolidated Balance Sheets was $155.8 million and $155.6 million at December 31, 2023 and December 31, 2022, respectively, of which $140.1 million and $141.5 million, respectively, were classified as Other long-term liabilities. These liabilities include remediation and monitoring costs expected to be incurred over an extended period of time. Estimated liabilities could increase in the future when the results of ongoing investigations become known, are considered probable and can be reasonably estimated.

Applicable Federal and State Regulatory Requirements

The Company's operations and many of the products it manufactures are subject to certain specific requirements of the Clean Air Act (the "CAA") and related state and local regulations. The CAA contains provisions that require capital expenditures for the installation of certain air pollution control devices at the Company's refineries. Subsequent rule making authorized by the CAA or similar laws or new agency interpretations of existing rules, may necessitate additional expenditures in future years.

The Company is required to comply with the RFS. Pursuant to the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007, EPA has issued the RFS, implementing mandates to blend renewable fuels into the petroleum fuels produced and sold in the United States. Under the RFS, the volume of renewable fuels that obligated refineries must blend into their finished petroleum fuels historically has increased on an annual basis. In addition, certain states have passed legislation that requires minimum biodiesel blending in finished distillates. On October 13, 2010, EPA raised the maximum amount of ethanol allowed under federal law from 10% to 15% for cars and light trucks manufactured since 2007. The maximum amount allowed under federal law currently remains at 10% ethanol for all other vehicles. Existing laws and regulations could change, and the minimum volumes of renewable fuels that must be blended with refined petroleum fuels may increase. Because we do not directly produce renewable fuels, increasing the volume of renewable fuels that must be blended into our products could displace an increasing volume of our refinery's product pool, potentially resulting in lower earnings and profitability. In addition, in order to meet certain of these and future EPA requirements, we may be required to purchase RINs, which may have fluctuating costs based on market conditions. Our RINs purchase obligation is dependent on our actual shipment of on-road transportation fuels domestically and the amount of blending achieved which can cause variability in our profitability. On June 21, 2023, EPA finalized the volumes of renewable fuels that obligated refineries must blend into their final petroleum fuels for years 2023, 2024, and 2025, and finalized volume requirements and percentage standards under the RFS program for 2023, 2024, and 2025, as well as making a series of important modifications to strengthen and expand the RFS program. As a result, the Company could also experience fluctuating compliance costs in the future if the volumes finalized by EPA differ from what has been proposed.

EPA published a Final Rule to the Clean Water Act Section 316(b) in August 2014 regarding cooling water intake structures, which includes requirements for petroleum refineries. The purpose of this rule is to prevent fish from being trapped against cooling water intake screens (impingement) and to prevent fish from being drawn through cooling water systems (entrainment). Facilities will be required to implement best technology available as soon as possible, but state agencies have the discretion to establish implementation time lines. The Company has evaluated, and continues to evaluate, the impact of this regulation, and at this time does not expect this regulation to materially impact the Company's financial position, results of operations or cash flows.

The Company is subject to greenhouse gas emission control regulations in the state of California pursuant to AB 32. AB 32 imposes a statewide cap on greenhouse gas emissions, including emissions from transportation fuels, with the aim of returning the state to 1990 emission levels by 2020. AB 32 is implemented through two market mechanisms including the LCFS and Cap and Trade. The Company is responsible for the AB 32 obligations related to the Torrance refinery beginning on July 1, 2016 and the Martinez refinery beginning on February 1, 2020 and must purchase emission credits to comply with these obligations. Additionally, in September 2016, the state of California enacted Senate Bill 32 ("SB 32") which further reduces greenhouse gas emissions targets to 40 percent below 1990 levels by 2030. California Air Resources Board also amended the LCFS in 2018 to require a 20% reduction by 2030.

The Company recovers the majority of these costs from its customers, and does not expect these obligations to materially impact the Company's financial position, results of operations, or cash flows. To the degree there are unfavorable changes to AB 32 or SB 32 regulations, or the Company is unable to recover such compliance costs from customers, these regulations could have a material adverse effect on our financial position, results of operations and cash flows.

As of January 1, 2011, the Company is required to comply with EPA's Control of Hazardous Air Pollutants From Mobile Sources, or MSAT2, regulations on gasoline that impose reductions in the benzene content of its produced gasoline. In addition, the RFS mandates the blending of prescribed percentages of renewable fuels (e.g., ethanol and biofuels) into the Company's produced gasoline and diesel. These requirements, other requirements of the CAA and other presently existing or future environmental regulations may cause the Company to implement capital projects to reduce the amount of credits required to be purchased, make substantial capital expenditures as well as purchase credits at significant cost, to enable its refineries to produce products that meet applicable requirements.

The federal Comprehensive Environmental Response, Compensation and Liability Act of 1980 ("CERCLA"), also known as "Superfund," imposes liability, without regard to fault or the legality of the original conduct, on certain classes of persons who are considered to be responsible for the release of a "hazardous substance" into the environment. These persons include the current or former owner or operator of the disposal site or sites where the release occurred and companies that disposed of or arranged for the disposal of the hazardous substances. Under CERCLA, such persons may be subject to joint and several liability for investigation and the costs of cleaning up the hazardous substances that have been released into the environment, for damages to natural resources and for the costs of certain health studies. As discussed more fully above, certain of the Company's sites are subject to these laws and the Company may be held liable for investigation and remediation costs or claims for natural resource damages. It is not uncommon for neighboring landowners and other third parties to file claims for personal injury and property damage allegedly caused by hazardous substances or other pollutants released into the environment. Analogous state laws impose similar responsibilities and liabilities on responsible parties. In the Company's current normal operations, it has generated waste, some of which falls within the statutory definition of a "hazardous substance" and some of which may have been disposed of at sites that may require cleanup under Superfund.

The Company is also currently subject to certain other existing environmental claims and proceedings. The Company believes that it is unlikely that future costs related to any of these other known contingent liability exposures would have a material impact on its financial position, results of operations or cash flows.

Contingent Consideration

In connection with the acquisition of the Martinez refinery and related logistics assets, the sale and purchase agreement dated June 11, 2019 included an earn-out provision based on certain earnings thresholds of the Martinez refinery. Pursuant to the agreement, the Company will make payments to Equilon Enterprises LLC d/b/a Shell Oil Products US based on future earnings at the Martinez refinery in excess of certain thresholds, as defined in the agreement, for a period of up to four years following the acquisition closing date (the "Martinez Contingent Consideration"). The fair value of the Martinez Contingent Consideration was estimated to be $21.6 million as of December 31, 2023 and is included within Accrued expenses on the Company's Consolidated Balance Sheets. This final earn-out payment is expected to be made in the second quarter of 2024. The fair value of the Martinez Contingent Consideration was estimated to be $147.3 million as of December 31, 2022 (of which approximately $80.0 million was included within Accrued expenses and paid in April 2023).

Tax Receivable Agreement

PBF Energy (the Company's indirect parent) entered into a tax receivable agreement with the PBF LLC Series A and PBF LLC Series B unitholders (the "Tax Receivable Agreement") that provides for the payment by PBF Energy to such persons of an amount equal to 85% of the amount of the benefits, if any, that PBF Energy is deemed to realize as a result of (i) increases in tax basis, as described below, and (ii) certain other tax benefits related to entering into the Tax Receivable Agreement, including tax benefits attributable to payments under the Tax Receivable Agreement. For purposes of the Tax Receivable Agreement, the benefits deemed realized by PBF Energy will be computed by comparing the actual income tax liability of PBF Energy (calculated with certain assumptions) to the amount of such taxes that PBF Energy would have been required to pay had there been no increase to the tax basis of the assets of PBF LLC as a result of purchases or exchanges of PBF LLC Series A Units for shares of PBF Energy Class A common stock and had PBF Energy not entered into the Tax Receivable Agreement. The term of the Tax Receivable Agreement will continue until all such tax benefits have been utilized or expired unless: (i) PBF Energy exercises its right to terminate the Tax Receivable Agreement, (ii) PBF Energy breaches any of its material obligations under the Tax Receivable Agreement or (iii) certain changes of control occur, in which case all obligations under the Tax Receivable Agreement will generally be accelerated and due as calculated under certain assumptions.

The payment obligations under the Tax Receivable Agreement are obligations of PBF Energy and not of any of its subsidiaries. In general, PBF Energy expects to obtain funding for these annual payments from PBF LLC, primarily through tax distributions, which PBF LLC makes on a pro-rata basis to its owners. Such owners include PBF Energy, which holds a 99.3% interest in PBF LLC as of December 31, 2023 (99.3% as of December 31, 2022). PBF LLC generally obtains funding to pay its tax distributions by causing PBF Holding to distribute cash to PBF LLC and from distributions it receives from PBFX.

As of December 31, 2023 and December 31, 2022, PBF Energy recognized a liability of $336.6 million and $338.6 million, respectively, related to the Tax Receivable Agreement obligation, reflecting the estimate of the undiscounted amounts that PBF Energy expects to pay under the agreement, net of the impact of any deferred tax asset valuation allowance recognized in accordance with ASC 470, *Income Taxes*.

11. LEASES

Lease Position as of December 31, 2023 and December 31, 2022

The table below presents the lease related assets and liabilities recorded on the Company's Consolidated Balance Sheets as of December 31, 2023 and December 31, 2022:

(in millions)	**Classification on the Balance Sheet**	**December 31, 2023**	**December 31, 2022**
Assets			
Operating lease assets - third party	Lease right of use assets - third party	$ 731.9	$ 610.9
Operating lease assets - affiliate	Lease right of use assets - affiliate	380.8	421.6
Finance lease assets	Lease right of use assets - third party	56.3	67.4
Total lease right of use assets		$ 1,169.0	$ 1,099.9
Liabilities			
Current liabilities:			
Operating lease liabilities - third party	Current operating lease liabilities - third party	$ 131.1	$ 60.5
Operating lease liabilities - affiliate	Current operating lease liabilities - affiliate	108.7	104.5
Finance lease liabilities - third party	Accrued expenses	12.2	11.7
Noncurrent liabilities:			
Operating lease liabilities - third party	Long-term operating lease liabilities - third party	607.9	551.8
Operating lease liabilities - affiliate	Long-term operating lease liabilities - affiliate	272.1	317.2
Finance lease liabilities - third party	Long-term financing lease liabilities - third party	46.1	57.9
Total lease liabilities		$ 1,178.1	$ 1,103.6

Lease Costs

The table below presents certain information related to costs for the Company's leases for the year ended December 31, 2023 and December 31, 2022:

Lease Costs *(in millions)*	**December 31, 2023**	**December 31, 2022**
Components of total lease costs:		
Finance lease costs		
Amortization of right of use assets	$ 13.9	$ 12.6
Interest on lease liabilities	4.5	5.3
Operating lease costs	355.7	301.5
Short-term lease costs	137.7	88.0
Variable lease costs	68.9	52.4
Total lease costs	$ 580.7	$ 459.8

Other Information

The table below presents supplemental cash flow information related to leases for the year ended December 31, 2023 and December 31, 2022 (in millions):

	Years Ended December 31,	
	2023	**2022**
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows for operating leases	$ 349.3	$ 300.5
Operating cash flows for finance leases	4.5	5.3
Financing cash flows for finance leases	14.1	11.3
Supplemental non-cash quantification of assets acquired or remeasured under operating and financing leases	335.4	82.8

Lease Term and Discount Rate

The table below presents certain information related to the weighted average remaining lease term and weighted average discount rate for the Company's leases as of December 31, 2023:

Weighted average remaining lease term - operating leases	8.4 years
Weighted average remaining lease term - finance leases	4.6 years
Weighted average discount rate - operating leases	13.0 %
Weighted average discount rate - finance leases	7.2 %

Undiscounted Cash Flows

The table below reconciles the fixed component of the undiscounted cash flows for each of the periods presented to the lease liabilities recorded on the Consolidated Balance Sheets as of December 31, 2023:

Amounts due in the year ended December 31, *(in millions)*	**Finance Leases**	**Operating Leases**
2024	$ 15.8	$ 358.6
2025	13.9	292.0
2026	13.6	221.0
2027	13.6	127.1
2028	10.9	120.7
Thereafter	0.7	756.7
Total minimum lease payments	68.5	1,876.1
Less: effect of discounting	10.2	756.3
Present value of future minimum lease payments	58.3	1,119.8
Less: current obligations under leases	12.2	239.8
Long-term lease obligations	$ 46.1	$ 880.0

As of December 31, 2023, the Company has entered into certain leases that have not yet commenced. Such leases include a 3-year lease for an oil tanker, with future lease payments estimated to total approximately $38.1 million. No other such pending leases, either individually or in the aggregate, are material. There are no material lease arrangements in which the Company is the lessor.

In the normal course of business, the Company enters into certain affiliate lease arrangements with PBFX for the use of certain storage, terminaling and pipeline assets. The terms for these affiliate leases generally range from seven to fifteen years. The Company uses the same methodology for discounting the lease payments on affiliate leases as it does for third party leases as described above. For the years ended December 31, 2023 and December 31, 2022, the Company incurred operating lease costs, related to affiliate operating leases, of $136.1 million and $129.9 million, respectively.

12. EQUITY STRUCTURE

PBF Holding has no common stock outstanding. As of December 31, 2023, 100% of the membership interests of PBF Holding were owned by PBF LLC, and PBF Finance Corporation had 100 shares of common stock outstanding, all of which were held by PBF Holding. The following sections represent the equity structure of the Company's indirect and direct parents, PBF Energy and PBF LLC, respectively.

PBF Energy Capital Structure

PBF Energy Class A Common Stock

Holders of Class A common stock are entitled to receive dividends when and if declared by the Board of Directors of PBF Energy out of funds legally available therefore, subject to any statutory or contractual restrictions on the payment of dividends and to any restrictions on the payment of dividends imposed by the terms of any outstanding preferred stock. Upon PBF Energy's dissolution or liquidation or the sale of all or substantially all of the assets, after payment in full of all amounts required to be paid to creditors and to the holders of preferred stock having liquidation preferences, if any, the holders of shares of Class A common stock will be entitled to receive pro rata remaining assets available for distribution. Holders of shares of Class A common stock do not have preemptive, subscription, redemption or conversion rights.

PBF Energy Class B Common Stock

Holders of shares of Class B common stock are entitled, without regard to the number of shares of Class B common stock held by such holder, to one vote for each PBF LLC Series A Unit beneficially owned by such holder. Accordingly, the members of PBF LLC other than PBF Energy collectively have a number of votes in PBF Energy that is equal to the aggregate number of PBF LLC Series A Units that they hold.

Holders of shares of Class A common stock and Class B common stock vote together as a single class on all matters presented to stockholders for their vote or approval, except as otherwise required by applicable law.

Holders of Class B common stock do not have any right to receive dividends or to receive a distribution upon a liquidation or winding up of PBF Energy.

PBF Energy Preferred Stock

Authorized preferred stock may be issued in one or more series, with designations, powers and preferences as shall be designated by the Board of Directors.

PBF Energy Treasury Stock

During 2022, PBF Energy's Board of Directors authorized the repurchase of up to $500.0 million of PBF Energy's Class A common stock (as amended from time to time, the "Repurchase Program"). On May 3, 2023, PBF Energy's Board of Directors approved an increase in the repurchase authorization amount under the Repurchase Program from $500.0 million to $1.0 billion and extended the program expiration date to December 2025. On February 13, 2024, PBF Energy's Board of Directors approved an increase in the repurchase authorization amount under the Repurchase Program from $1.0 billion to $1.75 billion.

Treasury stock repurchases can be made from time to time through various methods, including open market transactions, block trades, accelerated share repurchases, privately negotiated transactions or otherwise, certain of which could be effected through Rule 10b5-1 plans. The timing and number of shares repurchased depends on a variety of factors, including price, capital availability, legal requirements and economic and market conditions. PBF Energy is not obligated to purchase any shares under the Repurchase Program, and repurchases could be suspended or discontinued at any time without prior notice.

The Company records PBF Energy Class A common stock surrendered to cover income tax withholdings for certain directors and employees and others pursuant to the vesting of certain awards under PBF Energy's equity-based compensation plans as treasury shares.

PBF LLC Capital Structure

PBF LLC Series A Units

The allocation of profits and losses and distributions to PBF LLC Series A unitholders is governed by the limited liability company agreement of PBF LLC. These allocations are made on a pro rata basis with PBF LLC Series C Units. PBF LLC Series A unitholders do not have voting rights.

PBF LLC Series B Units

The PBF LLC Series B Units are intended to be "profit interests" within the meaning of Revenue Procedures 93-27 and 2001-43 of the Internal Revenue Service ("IRS") and have a stated value of zero at issuance. The PBF LLC Series B Units are held by certain of the Company's current and former officers, have no voting rights and are designed to increase in value only after the Company's financial sponsors achieve certain levels of return on their investment in PBF LLC Series A Units. Accordingly, the amounts paid to the holders of PBF LLC Series B Units, if any, will reduce only the amounts otherwise payable to the PBF LLC Series A Units held by the Company's financial sponsors, and will not reduce or otherwise impact any amounts payable to PBF Energy (the holder of PBF LLC Series C Units), the holders of PBF Energy's Class A common stock or any other holder of PBF LLC Series A Units. The maximum number of PBF LLC Series B Units authorized to be issued is 1,000,000.

PBF LLC Series C Units

The PBF LLC Series C Units rank on a parity with the PBF LLC Series A Units as to distribution rights, voting rights and rights upon liquidation, winding up or dissolution. PBF LLC Series C Units are held solely by PBF Energy.

Noncontrolling Interest

In connection with the acquisition of the Chalmette refinery, PBF Holding records noncontrolling interest in two subsidiaries of Chalmette Refining. PBF Holding, through Chalmette Refining, owns an 80% ownership interest in both Collins Pipeline Company and T&M Terminal Company. For the year ended December 31, 2023 the Company recorded a noncontrolling interest in the earnings of these subsidiaries of $0.9 million. For the year ended December 31, 2022 the Company recorded a noncontrolling interest in the losses of these subsidiaries of $1.4 million.

13. STOCK-BASED COMPENSATION

Stock-based compensation expense included in general and administrative expenses consisted of the following:

	Years Ended December 31,		
(in millions)	**2023**	**2022**	**2021**
PBF Energy options	$ 11.9	$ 19.1	$ 17.3
PBF Energy restricted shares	17.9	11.6	2.8
PBF Energy performance awards	21.7	13.4	10.2
	$ 51.5	$ 44.1	$ 30.3

PBF Energy options

PBF Energy grants stock options which represent the right to purchase share of PBF Energy's common stock at its fair market value, which is the closing price of PBF Energy's common stock on the date of grant. Stock options have a maximum term of ten years from the date they are granted, and vest over a requisite service period of three years, or four years for grants prior to November 2020, subject to acceleration in certain circumstances. PBF Energy did not grant stock options during the year ended December 31, 2023. PBF Energy uses the Black-Scholes option-pricing model to estimate the fair value of stock options granted, which requires the input of subjective assumptions.

The Black-Scholes option-pricing model values used to value stock option awards granted were determined based on the following weighted average assumptions:

	December 31, 2022	**December 31, 2021**
Expected life (in years)	6.00	6.00
Expected volatility	87.6 %	83.8 %
Dividend yield	0.00 %	0.00 %
Risk-free rate of return	3.24 %	1.37 %
Exercise price	$ 29.16	$ 13.91
Weighted average fair value per option granted	$ 21.68	$ 9.84

The following table summarizes activity for PBF Energy options for 2023:

	Number of PBF Energy Class A Common Stock Options	**Weighted Average Exercise Price**	**Weighted Average Remaining Contractual Life (in years)**
Stock-based awards, outstanding at January 1, 2023	10,652,274	$ 24.50	5.96
Exercised	(2,901,250)	24.65	—
Forfeited	(297,570)	36.18	—
Outstanding at December 31, 2023	7,453,454	$ 23.98	5.26
Exercisable and vested at December 31, 2023	6,653,383	$ 24.61	5.02
Total expected to vest as of December 31, 2023	7,453,454	$ 23.98	5.26

At December 31, 2023, the total intrinsic value of stock options outstanding and exercisable were $148.9 million and $128.8 million, respectively. The total intrinsic value of stock options exercised during the years ended December 31, 2023, 2022 and 2021 was $66.1 million, $63.1 million and $0.4 million, respectively.

Unrecognized compensation expense related to PBF Energy options at December 31, 2023 was $5.1 million, which will be recognized from 2024 through 2025.

Restricted Stock Awards

The Company grants restricted stock to employees and non-employee directors. In general, restricted stock granted to our employees vest over a requisite services period of three years, subject to acceleration in certain circumstances. Restricted stock recipients who received grants subsequent to May 2017 have voting rights; however, dividends are accrued and will be paid upon vesting. Restricted stock units granted to non-employee directors are considered to vest immediately at the time of the grant for accounting purposes, as they are non-forfeitable, but are issued in equal annual installments on each of the first three anniversaries of the grant date. The non-vested shares are not transferable and are held by our transfer agent. The fair values of restricted stock are equal to the market price of our common stock on the grant date.

The following table summarizes activity for PBF Energy restricted stock:

	Number of PBF Energy Restricted Class A Common Stock	Weighted Average Grant Date Fair Value
Nonvested at January 1, 2023	705,450	$ 33.92
Granted	645,386	44.90
Vested	(290,915)	32.14
Forfeited	(7,415)	35.75
Nonvested at December 31, 2023	1,052,506	$ 41.43

Unrecognized compensation expense related to PBF Energy Restricted Class A common stock at December 31, 2023 was $22.8 million, which will be recognized from 2024 through 2026.

The following table reflects activity related to our restricted stock:

	December 31, 2023	December 31, 2022	December 31, 2021
Weighted-average grant-date fair value per share of restricted stock granted	$ 44.90	$ 35.73	$ 16.13
Fair value of restricted stock vested (in millions)	$ 11.2	$ 3.3	$ 3.1

Performance Awards

The Company grants performance share awards, which are paid in stock, and performance share unit awards, which are paid in cash, (collectively, the "performance awards") to certain key employees. Performance awards granted to employees prior to November 1, 2020 are based on a three-year performance cycle (the "performance cycle") with four measurement periods, and performance awards granted to employees after November 1, 2020, are based on a three-year performance cycle having a single measurement period. The performance awards will vest on the last day of the performance cycle, subject to forfeiture or acceleration under certain circumstances set forth in the award agreement. The number of performance awards that will ultimately vest is based on the Company's total shareholder return over the performance cycle. The number of shares ultimately issued, or cash paid under these awards can range from zero to 200% of target award amounts.

Performance Share Unit Awards

The performance share unit awards are accounted for as equity awards, for which the fair value was determined on the grant date by application of a Monte Carlo valuation model.

The grant date fair value was calculated using a Monte Carlo valuation model with the following assumptions:

	December 31, 2023	December 31, 2022	December 31, 2021
Expected life (in years)	2.86 - 3.18	3.08	3.12
Expected volatility	56.68% - 59.98%	65.16%	83.78%
Dividend yield	1.73% - 1.80%	2.18%	0.00%
Risk-free rate of return	4.40% - 4.75%	3.90%	0.87%
Weighted average grant-date fair value per PSU	$ 56.35	$ 45.91	$ 18.73

The risk-free interest rate for the remaining performance period as of the grant date is based on a linear interpolation of published yields of traded U.S. Treasury Interest-Only STRIP Bonds. The dividend yield assumption is based on the annualized most recent quarterly dividend divided by the stock price on the grant date. The assumption for the expected volatility of the Company's stock price reflects the average of PBF Energy's common stock historical and implied volatility.

The following table summarizes activity for PBF Energy performance share awards:

	Number of PBF Energy Performance Share Units ("PSUs")	Weighted Average Grant Date Fair Value
Nonvested at January 1, 2023	786,526	$ 21.02
Granted	197,404	56.35
Vested	(343,978)	8.95
Forfeited	(8,509)	32.70
Nonvested at December 31, 2023	631,443	$ 38.48

In 2023, 2022 and 2021, PSU's with a fair value of $30.9 million, $2.0 million and $1.8 million, respectively, were vested.

As of December 31, 2023, unrecognized compensation cost related to performance share unit awards was $17.4 million, which is expected to be recognized over a weighted average period of 2.48 years.

Performance Unit awards

The performance unit awards are dollar denominated with a target value of $1.00, with actual payout of up to $2.00 per unit (or 200 percent of target). The performance unit awards are settled in cash based on the payout amount determined at the end of the performance cycle. The Company accounts for the performance unit awards as liability awards which the Company recorded at fair market value on the date of grant. Subsequently, the performance unit awards will be marked-to-market at the end of each fiscal quarter by application of a Monte Carlo simulation model.

The following table summarizes activity for PBF Energy performance unit awards:

	Number of PBF Energy Performance Units
Nonvested at January 1, 2023	31,454,950
Granted	18,649,445
Vested	(6,036,460)
Forfeited	(510,774)
Nonvested at December 31, 2023	43,557,161

In 2023, 2022 and 2021, Performance Units with a fair value of $12.1 million, $1.5 million and $5.2 million, respectively, were vested.

As of December 31, 2023, unrecognized compensation cost related to performance unit awards was $24.4 million, which is expected to be recognized over a weighted average period of 2.20 years.

14. EMPLOYEE BENEFIT PLANS

Defined Contribution Plan

The Company's defined contribution plan covers all employees. Employees are eligible to participate as of the first day of the month following 30 days of service. Participants can make basic contributions up to 50 percent of their annual salary subject to IRS limits. The Company matches participants' contributions at the rate of 200 percent of the first 3 percent of each participant's total basic contribution based on the participant's total annual salary. The Company's contribution to the qualified defined contribution plans was $37.5 million, $33.4 million and $27.8 million for the years ended December 31, 2023, 2022 and 2021, respectively.

Defined Benefit and Post-Retirement Medical Plans

The Company sponsors a noncontributory defined benefit pension plan (the "Qualified Plan") with a policy to fund pension liabilities in accordance with the limits imposed by the Employee Retirement Income Security Act of 1974 and Federal income tax laws. In addition, the Company sponsors a supplemental pension plan covering certain employees, which provides incremental payments that would have been payable from the Company's principal pension plan, were it not for limitations imposed by income tax regulations (the "Supplemental Plan"). The funded status is measured as the difference between plan assets at fair value and the projected benefit obligation which is to be recognized in the Consolidated Balance Sheets. The plan assets and benefit obligations are measured as of the Consolidated Balance Sheet date.

The non-union Delaware City employees and all Paulsboro, Toledo, Chalmette, Torrance and Martinez employees became eligible to participate in the Company's defined benefit plans as of the respective acquisition dates. The union Delaware City employees became eligible to participate in the Company's defined benefit plans upon commencement of normal operations. The Company did not assume any of the employees' pension liability accrued prior to the respective acquisitions.

The Company formed the Post-Retirement Medical Plan on December 31, 2010 to provide health care coverage continuation from date of retirement to age 65 for qualifying employees associated with the Paulsboro acquisition. The Company credited the qualifying employees with their prior service under Valero Energy Corporation which resulted in the recognition of a liability for the projected benefit obligation. The Post-Retirement Medical Plan includes all corporate and refinery employees.

The changes in the benefit obligation, the changes in fair value of plan assets, and the funded status of the Company's Pension and Post-Retirement Medical Plans as of and for the years ended December 31, 2023 and 2022 were as follows:

	Pension Plans		Post-Retirement Medical Plan	
(in millions)	**2023**	**2022**	**2023**	**2022**
Change in benefit obligation:				
Benefit obligation at beginning of year	$ 357.0	$ 353.3	$ 13.9	$ 18.2
Service cost	48.1	55.6	0.5	0.8
Interest cost	17.7	7.9	0.7	0.3
Plan amendments	—	—	6.0	—
Benefit payments	(18.1)	(18.9)	(1.4)	(1.4)
Actuarial loss (gain)	25.0	(40.9)	(0.1)	(4.0)
Projected benefit obligation at end of year	$ 429.7	$ 357.0	$ 19.6	$ 13.9
Change in plan assets:				
Fair value of plan assets at beginning of year	$ 274.2	$ 306.3	$ —	$ —
Actual return on plan assets	34.8	(51.0)	—	—
Benefits paid	(18.1)	(18.9)	(1.4)	(1.4)
Employer contributions	58.4	37.8	1.4	1.4
Fair value of plan assets at end of year	$ 349.3	$ 274.2	$ —	$ —
Reconciliation of funded status:				
Fair value of plan assets at end of year	$ 349.3	$ 274.2	$ —	$ —
Less benefit obligations at end of year	429.7	357.0	19.6	13.9
Funded status at end of year	$ (80.4)	$ (82.8)	$ (19.6)	$ (13.9)

The accumulated benefit obligation for the defined benefit plans approximated $391.1 million and $321.0 million at December 31, 2023 and 2022, respectively.

Benefit payments, which reflect expected future services that the Company expects to pay are as follows for the years ended December 31:

(in millions)	Pension Benefits	Post-Retirement Medical Plan
2024	$ 31.2	$ 1.9
2025	26.8	1.9
2026	31.3	1.9
2027	35.4	1.9
2028	39.0	2.0
Years 2029-2033	234.7	9.2

The Company's funding policy for its defined benefit plans is to contribute amounts sufficient to meet legal funding requirements, plus any additional amounts that may be appropriate considering the funded status of the plans, tax consequences, the cash flow generated by the Company and other factors. The Company plans to contribute approximately $34.4 million to the Company's Pension Plans during 2024.

The components of net periodic benefit cost were as follows for the years ended December 31, 2023, 2022 and 2021:

	Pension Benefits			Post-Retirement Medical Plan		
(in millions)	**2023**	**2022**	**2021**	**2023**	**2022**	**2021**
Components of net periodic benefit cost:						
Service cost	$ 48.1	$ 55.6	$ 57.5	$ 0.5	$ 0.8	$ 1.1
Interest cost	17.7	7.9	5.3	0.7	0.3	0.3
Expected return on plan assets	(19.2)	(17.5)	(14.2)	—	—	—
Amortization of prior service cost and actuarial loss	—	0.1	0.1	0.1	0.4	0.7
Net periodic benefit cost	$ 46.6	$ 46.1	$ 48.7	$ 1.3	$ 1.5	$ 2.1

Lump sum payments made by the Supplemental Plan to employees retiring in 2023, 2022 and 2021 did not exceed the Plan's total service and interest costs expected for those years.

The pre-tax amounts recognized in other comprehensive (income) loss for the years ended December 31, 2023, 2022 and 2021 were as follows:

	Pension Benefits			Post-Retirement Medical Plan		
(in millions)	**2023**	**2022**	**2021**	**2023**	**2022**	**2021**
Prior service costs	$ —	$ —	$ —	$ 6.1	$ —	$ —
Net actuarial loss (gain)	9.5	27.6	(21.1)	(0.2)	(4.0)	(4.0)
Amortization of losses and prior service cost	(0.1)	(0.1)	(0.1)	(0.1)	(0.4)	(0.7)
Total changes in other comprehensive (income) loss	$ 9.4	$ 27.5	$ (21.2)	$ 5.8	$ (4.4)	$ (4.7)

The pre-tax amounts in accumulated other comprehensive income (loss) as of December 31, 2023 and 2022 that have not yet been recognized as components of net periodic costs were as follows:

	Pension Benefits		Post-Retirement Medical Plan	
(in millions)	**2023**	**2022**	**2023**	**2022**
Prior service costs	$ (0.4)	$ (0.5)	$ (8.7)	$ (3.5)
Net actuarial (loss) gain	(24.4)	(14.8)	10.9	11.4
Total	$ (24.8)	$ (15.3)	$ 2.2	$ 7.9

The weighted average assumptions used to determine the benefit obligations as of December 31, 2023 and 2022 were as follows:

	Qualified Plan		Supplemental Plan		Post-Retirement Medical Plan	
	2023	**2022**	**2023**	**2022**	**2023**	**2022**
Discount rate - benefit obligations	4.99 %	5.22 %	4.94 %	5.24 %	4.88 %	5.15 %
Rate of compensation increase	4.27 %	4.27 %	4.50 %	4.50 %	—	—

The weighted average assumptions used to determine the net periodic benefit costs for the years ended December 31, 2023, 2022 and 2021 were as follows:

	Qualified Plan			Supplemental Plan			Post-Retirement Medical Plan		
	2023	2022	2021	2023	2022	2021	2023	2022	2021
Discount rates:									
Effective rate for service cost	5.22%	2.80%	2.40%	5.24%	2.73%	2.26%	5.27%	2.80%	2.35%
Effective rate for interest cost	5.14%	2.33%	1.74%	5.14%	2.24%	1.53%	5.05%	1.91%	1.28%
Effective rate for interest on service cost	5.14%	2.45%	1.92%	5.12%	2.29%	1.75%	5.21%	2.65%	2.11%
Cash balance interest credit rate	4.04%	2.06%	1.57%	4.04%	2.06%	1.57%	N/A	N/A	N/A
Expected long-term rate of return on plan assets	6.75%	5.50%	5.25%	N/A	N/A	N/A	N/A	N/A	N/A
Rate of compensation increase	4.27%	4.26%	4.28%	4.50%	4.50%	4.50%	N/A	N/A	N/A

The assumed health care cost trend rates as of December 31, 2023 and 2022 were as follows:

	Post-Retirement Medical Plan	
	2023	2022
Health care cost trend rate assumed for next year	6.4 %	6.4 %
Rate to which the cost trend rate was assumed to decline (the ultimate trend rate)	4.0 %	4.0 %
Year that the rate reaches the ultimate trend rate	2046	2046

The table below presents the fair values of the assets of the Company's Qualified Plan as of December 31, 2023 and 2022 by level of fair value hierarchy. Assets consist of collective trusts and are measured at fair value based on the closing net asset value ("NAV") as determined by the fund manager and reported daily. As noted above, the Company's post-retirement medical plan is funded on a pay-as-you-go basis and has no assets.

	Fair Value Measurements Using NAV as Practical Expedient	
	December 31,	
(in millions)	2023	2022
Equities:		
Domestic equities	$ 75.0	$ 73.0
Developed international equities	46.9	34.9
Global low volatility equities	21.0	18.4
Emerging market equities	24.8	20.8
Fixed-income	159.9	106.2
Real Estate	19.7	18.9
Cash and cash equivalents	2.0	2.0
Total	$ 349.3	$ 274.2

The Company's investment strategy for its Qualified Plan is to achieve a reasonable return on assets that supports the plan's interest credit rating, subject to a moderate level of portfolio risk that provides liquidity. Consistent with these financial objectives as of December 31, 2023, the plan's target allocations for plan assets are 48% invested in equity securities, 46% fixed income investments and 6% in real estate. Equity securities include international stocks and a blend of U.S. growth and value stocks of various sizes of capitalization. Fixed income securities include bonds and notes issued by the U.S. government and its agencies, corporate bonds, and mortgage-backed securities. The aggregate asset allocation is reviewed on an annual basis.

The overall expected long-term rate of return on plan assets for the Qualified Plan is based on the Company's view of long-term expectations and asset mix.

15. REVENUES

Revenue Recognition

In accordance with FASB ASC Topic 606, *Revenue from Contracts with Customers* ("ASC 606"), revenue is recognized when control of the promised goods or services is transferred to the Company's customers, in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services.

The following table provides information relating to the Company's revenues from external customers for each product or group of similar products for the periods presented:

	Year Ended December 31,		
(in millions)	**2023**	**2022**	**2021**
Gasoline and distillates	$ 34,002.5	$ 41,465.0	$ 23,489.5
Asphalt and blackoils	1,650.1	2,123.8	1,217.8
Feedstocks and other	1,640.6	1,863.0	1,310.1
Chemicals	650.6	903.8	889.8
Lubricants	344.7	425.0	294.8
Total Revenues	$ 38,288.5	$ 46,780.6	$ 27,202.0

The majority of the Company's revenues are generated from the sale of refined products. These revenues are largely based on the current spot (market) prices of the products sold, which represent consideration specifically allocable to the products being sold on a given day, and the Company recognizes those revenues upon delivery and transfer of title to the products to our customers. The time at which delivery and transfer of title occurs is the point when the Company's control of the products is transferred to the Company's customers and when its performance obligation to its customers is fulfilled. Delivery and transfer of title are specifically agreed to between the Company and customers within the contracts. The Company also has contracts which contain fixed pricing, tiered pricing, minimum volume features with makeup periods, or other factors that have not materially been affected by ASC 606.

Deferred Revenue

The Company records deferred revenue when cash payments are received or are due in advance of performance, including amounts which are refundable. Deferred revenue was $63.6 million and $37.5 million as of December 31, 2023 and December 31, 2022, respectively. Fluctuations in the deferred revenue balance are primarily driven by the timing and extent of cash payments received or due in advance of satisfying the Company's performance obligations.

The Company's payment terms vary by type and location of customers and the products offered. The period between invoicing and when payment is due is not significant (i.e. generally within two months). For certain products or services and customer types, the Company requires payment before the products or services are delivered to the customer.

Crude Oil and Refined Product Exchanges and Matching Buy/Sell Transactions

The Company enters into buy/sell arrangements and exchange contracts where it agrees to deliver a specified quantity and quality of crude oil or refined products at a specified location and date to a particular counterparty and to receive from the same counterparty the same commodity at a specified location on the same or another specified date. The exchange receipts and deliveries are non-monetary transactions, with the exception of specific grade or location differentials settled in cash. The matching buy/sell purchase and sale transactions are settled in cash. No revenues are recorded for exchange and matching buy/sell transactions as they are accounted for as exchanges of inventory. The net difference in buy/sell transactions is recorded in Cost of Goods Sold. The exchange transactions are recognized at the carrying amount of the inventory transferred.

Significant Judgment and Practical Expedients

For performance obligations related to sales of products, the Company has determined that customers are able to direct the use of, and obtain substantially all of the benefits from, the products at the point in time that the products are delivered. The Company has determined that the transfer of control upon delivery to the customer's requested destination accurately depicts the transfer of goods. Upon the delivery of the products and transfer of control, the Company generally has the present right to payment and the customers bear the risks and rewards of ownership of the products. The Company has elected the practical expedient to not disclose the value of unsatisfied performance obligations for (i) contracts with an original expected length of one year or less and (ii) contracts for which the Company recognizes revenue at the amount to which it has the right to invoice for services performed.

16. INCOME TAXES

PBF Holding is a limited liability company treated as a "flow-through" entity for income tax purposes. Accordingly, there is generally no benefit or expense for federal or state income tax in the PBF Holding financial statements apart from the income tax attributable to two subsidiaries acquired in connection with the acquisition of Chalmette Refining and PBF Ltd. that are treated as C-Corporations for income tax purposes, with the tax provision calculated based on the effective tax rate for the periods presented.

The reported income tax expense (benefit) in the PBF Holding Consolidated Statements of Operations consists of the following:

(in millions)	December 31, 2023	December 31, 2022	December 31, 2021
Current income tax (benefit) expense	$ (1.8)	$ 0.5	$ 0.5
Deferred income tax expense (benefit)	3.7	(3.2)	(14.5)
Total income tax expense (benefit)	$ 1.9	$ (2.7)	$ (14.0)

A summary of the components of PBF Holding's deferred tax assets and deferred tax liabilities consists of the following:

(in millions)	December 31, 2023	December 31, 2022
Deferred tax assets		
Net operating loss carry forwards	$ 0.9	$ 2.2
Other	0.6	0.6
Total deferred tax assets	1.5	2.8
Valuation allowance	—	—
Total deferred tax assets, net	1.5	2.8
Deferred tax liabilities		
Property, plant and equipment	15.4	16.0
Inventory	10.9	7.8
Total deferred tax liabilities	26.3	23.8
Net deferred tax liability	$ (24.8)	$ (21.0)

17. FAIR VALUE MEASUREMENTS

The tables below present information about the Company's financial assets and liabilities measured and recorded at fair value on a recurring basis and indicate the fair value hierarchy of the inputs utilized to determine the fair values as of December 31, 2023 and 2022.

The Company has elected to offset the fair value amounts recognized for multiple derivative contracts executed with the same counterparty; however, fair value amounts by hierarchy level are presented on a gross basis in the tables below. The Company may be required to post margin collateral or reclaim cash collateral from derivative counterparties based on contractual terms. At December 31, 2023, the Company had the obligation to return cash collateral posted against its derivative obligations of $23.7 million. Cash collateral related to derivative contracts is recorded net in the Consolidated Balance Sheets. The Company has no derivative contracts that are subject to master netting arrangements that are reflected gross on the Consolidated Balance Sheets.

	As of December 31, 2023					
	Fair Value Hierarchy					
(in millions)	Level 1	Level 2	Level 3	Total Gross Fair Value	Effect of Counter-party Netting	Net Carrying Value on Balance Sheet
Assets:						
Money market funds	$ 130.3	$ —	$ —	$ 130.3	N/A	$ 130.3
Commodity contracts	80.1	—	—	80.1	(46.9)	33.2
Liabilities:						
Commodity contracts	46.9	—	—	46.9	(46.9)	—
Renewable energy credit and emissions obligations	—	429.8	—	429.8	—	429.8
Contingent consideration obligation	—	—	21.6	21.6	—	21.6

	As of December 31, 2022					
	Fair Value Hierarchy					
(in millions)	Level 1	Level 2	Level 3	Total Gross Fair Value	Effect of Counter-party Netting	Net Carrying Value on Balance Sheet
Assets:						
Money market funds	$ 106.5	$ —	$ —	$ 106.5	N/A	$ 106.5
Commodity contracts	33.8	15.7	—	49.5	(35.6)	13.9
Derivatives included within inventory intermediation agreement obligations	—	25.1	—	25.1	—	25.1
Liabilities:						
Commodity contracts	20.6	11.8	3.2	35.6	(35.6)	—
Catalyst obligations	—	4.0	—	4.0	—	4.0
Renewable energy credit and emissions obligations	—	1,361.1	—	1,361.1	—	1,361.1
Contingent consideration obligation	—	—	147.3	147.3	—	147.3

The valuation methods used to measure financial instruments at fair value are as follows:

- Money market funds categorized in Level 1 of the fair value hierarchy are measured at fair value based on quoted market prices and included within Cash and cash equivalents.
- The commodity contracts categorized in Level 1 of the fair value hierarchy are measured at fair value based on quoted prices in an active market. The commodity contracts categorized in Level 2 of the fair value hierarchy are measured at fair value using a market approach based upon future commodity prices for similar instruments quoted in active markets.
- The derivatives included with inventory intermediation agreement obligations and the catalyst obligations are categorized in Level 2 of the fair value hierarchy and are measured at fair value using a market approach based upon commodity prices for similar instruments quoted in active markets.
- Renewable energy credit and emissions obligations primarily represent the Company's liability for the purchase of (i) biofuel credits (primarily RINs in the U.S.) needed to satisfy its obligation to blend biofuels into the products the Company produces and (ii) emission credits under the AB 32 and similar programs (collectively, the cap-and-trade systems). To the degree the Company is unable to blend biofuels (such as ethanol and biodiesel) at percentages required under the biofuel programs, it must purchase biofuel credits to comply with these programs. Under the cap-and-trade systems, it must purchase emission credits to comply with these systems. The liability for environmental credits is in part based on the Company's deficit for such credits as of the balance sheet date, if any, after considering any credits acquired, and is equal to the product of the credits deficit and the market price of these credits as of the balance sheet date. To the extent that the Company has a better estimate of the cost at which it settles its obligation, such as agreements to purchase RINs at prices other than the current spot price, the Company considers those costs in valuing the remaining obligation. The environmental credit obligations are categorized in Level 2 of the fair value hierarchy and are measured at fair value using a market approach based on quoted prices from an independent pricing service.
- When applicable, commodity contracts categorized in Level 3 of the fair value hierarchy consist of commodity price swap contracts that relate to forecasted purchases of crude oil for which quoted forward market prices are not readily available due to market illiquidity. The forward prices used to value these swaps are derived using broker quotes, prices from other third party sources and other available market based data.
- The contingent consideration obligation at December 31, 2023 and 2022 is categorized in Level 3 of the fair value hierarchy and is estimated using discounted cash flow models based on management's estimate of the future cash flows related to the earn-out periods.

Non-qualified pension plan assets are measured at fair value using a market approach based on published net asset values of mutual funds as a practical expedient. As of December 31, 2023 and 2022, $18.8 million and $18.6 million, respectively, were included within Deferred charges and other assets, net for these non-qualified pension plan assets.

The table below summarizes the changes in fair value measurements categorized in Level 3 of the fair value hierarchy, which primarily includes the change in estimated future earnings related to the Martinez Contingent Consideration:

	Year Ended December 31,	
(in millions)	**2023**	**2022**
Balance at beginning of period	$ 150.5	$ 29.4
Additions	—	—
Settlements	(88.3)	(15.0)
Unrealized (gain) loss included in earnings	(40.6)	136.1
Balance at end of period	$ 21.6	$ 150.5

There were no transfers between levels during the years ended December 31, 2023 and 2022, respectively.

Fair value of debt

The table below summarizes the carrying value and fair value of debt as of December 31, 2023 and 2022.

	December 31, 2023		December 31, 2022	
(in millions)	**Carrying value**	**Fair value**	**Carrying value**	**Fair value**
2028 Senior Notes [(a)]	$ 801.6	$ 779.3	$ 801.6	$ 703.7
2030 Senior Notes [(a)]	500.0	514.8	—	—
2025 Senior Notes [(a)]	—	—	664.5	656.0
Catalyst financing arrangements [(b)]	—	—	4.0	4.0
	1,301.6	1,294.1	1,470.1	1,363.7
Less - Current debt	—	—	—	—
Unamortized discount	(3.2)	n/a	—	n/a
Less - Unamortized deferred financing costs	(52.5)	n/a	(35.2)	n/a
Long-term debt	$ 1,245.9	$ 1,294.1	$ 1,434.9	$ 1,363.7

[(a)] The estimated fair value, categorized as a Level 2 measurement, was calculated based on the present value of future expected payments utilizing implied current market interest rates based on quoted prices of the outstanding senior notes.

[(b)] Catalyst financing arrangements were valued using a market approach based upon commodity prices for similar instruments quoted in active markets and are categorized as a Level 2 measurement. The Company elected the fair value option for accounting for its catalyst repurchase obligations as the Company's liability was directly impacted by the change in fair value of the underlying catalyst.

18. DERIVATIVES

The Company uses derivative instruments to mitigate certain exposures to commodity price risk. On July 31, 2023, the Company terminated the Third Inventory Intermediation Agreement. Prior to its termination, the Third Inventory Intermediation Agreement contained purchase obligations for certain volumes of crude oil, intermediates and refined products. The purchase obligations related to crude oil, intermediates and refined products under this agreement were derivative instruments designated as fair value hedges in order to hedge the commodity price volatility of certain refinery inventory. The fair value of these purchase obligation derivatives was based on market prices of the underlying crude oil, intermediates and refined products. The level of activity for these derivatives was based on the level of operating inventories.

As of December 31, 2023, there were no barrels of crude oil and feedstocks and no barrels of intermediates and refined products outstanding under these derivative instruments designated as fair value hedges. As of December 31, 2022, there were 1,945,994 barrels of crude oil and feedstocks and 780,734 barrels of intermediates and refined products outstanding under these derivative instruments designated as fair value hedges. These volumes represent the notional value of the contract.

The Company also enters into economic hedges primarily consisting of commodity derivative contracts that are not designated as hedges and are used to manage price volatility in certain crude oil and feedstock inventories as well as crude oil, feedstock, and refined product sales or purchases. The objective in entering into economic hedges is consistent with the objectives discussed above for fair value hedges. As of December 31, 2023, there were 23,774,000 barrels of crude oil and 5,351,000 barrels of refined products (17,890,000 and 12,175,200, respectively, as of December 31, 2022), outstanding under short and long term commodity derivative contracts not designated as hedges representing the notional value of the contracts.

The Company also uses derivative instruments to mitigate the risk associated with the price of credits needed to comply with various governmental and regulatory environmental compliance programs. For such contracts that represent derivatives the Company elects the normal purchase normal sale exception under ASC 815, *Derivatives and Hedging*, and therefore does not record them at fair value.

The following tables provide information regarding the fair values of derivative instruments as of December 31, 2023 and December 31, 2022 and the line items in the Consolidated Balance Sheets in which fair values are reflected.

Description	Balance Sheet Location		Fair Value Asset
			(in millions)
Derivatives designated as hedging instruments:			
December 31, 2023:			
Derivatives included within the inventory intermediation agreement obligations	Accrued expenses	$	—
December 31, 2022:			
Derivatives included within the inventory intermediation agreement obligations	Accrued expenses	$	25.1
Derivatives not designated as hedging instruments:			
December 31, 2023:			
Commodity contracts	Accounts receivable	$	33.2
December 31, 2022:			
Commodity contracts	Accounts receivable	$	13.9

The following table provides information regarding gains or losses recognized in income on derivative instruments and the line items in the Consolidated Statements of Operations in which such gains and losses are reflected.

Description	Location of Gain or (Loss) Recognized in Income on Derivatives	Gain or (Loss) Recognized in Income on Derivatives
		(in millions)
Derivatives designated as hedging instruments:		
For the year ended December 31, 2023:		
Derivatives included within the inventory intermediation agreement obligations	Cost of products and other	$ 21.0
For the year ended December 31, 2022:		
Derivatives included within the inventory intermediation agreement obligations	Cost of products and other	$ 5.4
For the year ended December 31, 2021:		
Derivatives included within the inventory intermediation agreement obligations	Cost of products and other	$ 8.4
Derivatives not designated as hedging instruments:		
For the year ended December 31, 2023:		
Commodity contracts	Cost of products and other	$ 38.1
For the year ended December 31, 2022:		
Commodity contracts	Cost of products and other	$ (31.5)
For the year ended December 31, 2021:		
Commodity contracts	Cost of products and other	$ (83.4)
Hedged items designated in fair value hedges:		
For the year ended December 31, 2023:		
Crude oil, intermediate and refined product inventory	Cost of products and other	$ (21.0)
For the year ended December 31, 2022:		
Crude oil, intermediate and refined product inventory	Cost of products and other	$ (5.4)
For the year ended December 31, 2021:		
Crude oil, intermediate and refined product inventory	Cost of products and other	$ (8.4)

The Company had no ineffectiveness related to the fair value hedges as of December 31, 2023, 2022 and 2021.

19. SUBSEQUENT EVENTS

Dividend Declared

On February 15, 2024, PBF Energy announced a dividend of $0.25 per share on outstanding PBF Energy Class A common stock. The dividend is payable on March 14, 2024, to PBF Energy Class A common stockholders of record as of February 29, 2024. The Company may need to make cash distributions to PBF LLC to the extent necessary for PBF Energy to pay this dividend.

ITEM 16. FORM 10-K SUMMARY

Not applicable.

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.

PBF HOLDING COMPANY LLC
(Registrant)

By: /s/ Matthew C. Lucey
(Matthew C. Lucey)
President, Chief Executive Officer (Principal Executive Officer)

Date: March 1, 2024

POWER OF ATTORNEY

Each of the officers and directors of PBF Holding Company LLC, whose signature appears below, in so signing, also makes, constitutes and appoints each of Karen B. Davis, Matthew Lucey and Trecia Canty, and each of them, his or her true and lawful attorneys-in-fact, with full power and substitution, for him or her in any and all capacities, to execute and cause to be filed with the SEC any and all amendments to this Annual Report on Form 10-K, with exhibits thereto and other documents connected therewith and to perform any acts necessary to be done in order to file such documents, and hereby ratifies and confirms all that said attorneys-in-fact or their substitute or substitutes may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Thomas J. Nimbley (Thomas J. Nimbley)	Executive Chairman, Chairman of the Board of Directors	March 1, 2024
/s/ Matthew C. Lucey (Matthew C. Lucey)	President, Chief Executive Officer, Director (Principal Executive Officer)	March 1, 2024
/s/ Karen B. Davis (Karen B. Davis)	Senior Vice President, Chief Financial Officer, Director (Principal Financial Officer and Principal Accounting Officer)	March 1, 2024
/s/ Trecia Canty (Trecia Canty)	Director	March 1, 2024

Exhibit 21.1

LIST OF SUBSIDIARIES

Name	Jurisdiction of Incorporation or Organization:
PBF Services Company LLC	Delaware
PBF Investments LLC	Delaware
Delaware City Refining Company LLC	Delaware
PBF Power Marketing LLC	Delaware
Paulsboro Refining Company LLC	Delaware
Toledo Refining Company LLC	Delaware
PBF Finance Corporation	Delaware
PBF International Inc.	Delaware
PBF Rail Logistics Company LLC	Delaware
PBF Transportation Company LLC	Delaware
Chalmette Refining, L.L.C.	Delaware
MOEM Pipeline LLC	Delaware
Collins Pipeline Company	Delaware
T&M Terminal Company	Delaware
PBF Energy Western Region LLC	Delaware
Torrance Refining Company LLC	Delaware
Torrance Logistics Company LLC	Delaware
Torrance Basin Pipeline Company LLC	Delaware
Torrance Pipeline Company LLC	Delaware
PBFWR Logistics Holdings LLC	Delaware
Martinez Refining Company LLC	Delaware
Martinez Terminal Company LLC	Delaware
Martinez Pipeline Company LLC	Delaware
PBF Energy Limited	British Columbia

Exhibit 22.1

PBF Holding Company LLC
List of Guarantor Subsidiaries

The following subsidiaries of PBF Holding Company (the "Company") were, as of December 31, 2023, guarantors of the Company's 6.00% Senior Notes due 2028 and 7.875% Senior Notes due 2030:

Name:	Jurisdiction of Incorporation or Organization:
PBF Services Company LLC	Delaware
PBF Investments LLC	Delaware
Delaware City Refining Company LLC	Delaware
PBF Power Marketing LLC	Delaware
Paulsboro Refining Company LLC	Delaware
Toledo Refining Company LLC	Delaware
PBF International Inc.	Delaware
Chalmette Refining, L.L.C.	Delaware
PBF Energy Western Region LLC	Delaware
Torrance Refining Company LLC	Delaware
Martinez Refining Company LLC	Delaware

Exhibit 31.1

CERTIFICATION PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002

I, Matthew C. Lucey, certify that:

1. I have reviewed this annual report on Form 10-K of PBF Holding Company LLC;

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)) 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) 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

(c) 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: March 1, 2024

/s/ Matthew C. Lucey

Matthew C. Lucey
President and Chief Executive Officer

Exhibit 31.2

CERTIFICATION PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002

I, Karen B. Davis, certify that:

1. I have reviewed this annual report on Form 10-K of PBF Holding Company LLC;

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)) 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) 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

(c) 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: March 1, 2024

/s/ Karen B. Davis

Karen B. Davis
Senior Vice President and Chief Financial Officer

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the annual Report of PBF Holding Company LLC (PBF Holding) on Form 10-K for the year ended December 31, 2023, as filed with the Securities and Exchange Commission on the date hereof (the Report), I, Matthew C. Lucey, President and Chief Executive Officer of PBF Holding, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 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 PBF Holding.

/s/ Matthew C. Lucey
Matthew C. Lucey
President and Chief Executive Officer
March 1, 2024

A signed original of the written statement required by Section 906 has been provided to PBF Holding Company LLC and will be retained by PBF Holding Company LLC and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of PBF Holding Company LLC (PBF Holding) on Form 10-K for the year ended December 31, 2023, as filed with the Securities and Exchange Commission on the date hereof (the Report), I, Karen B. Davis, Senior Vice President and Chief Financial Officer of PBF Holding, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 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 PBF Holding.

/s/ Karen B. Davis
Karen B. Davis
Senior Vice President and Chief Financial Officer
March 1, 2024

A signed original of the written statement required by Section 906 has been provided to PBF Holding Company LLC and will be retained by PBF Holding Company LLC and furnished to the Securities and Exchange Commission or its staff upon request.